Describes the JD Edwards EnterpriseOne Warehouse Management system that controls many aspects of warehouse operations, from receiving and storing items to retrieving and shipping them.
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Welcome to the JD Edwards EnterpriseOne Applications Warehouse Management Implementation Guide.

Audience

This guide is intended for implementers and end users of the JD Edwards EnterpriseOne Warehouse Management system.

JD Edwards EnterpriseOne Products

This implementation guide refers to these JD Edwards EnterpriseOne products:

- JD Edwards EnterpriseOne Sales Order Management.
- JD Edwards EnterpriseOne Inventory Management.
- JD Edwards EnterpriseOne Procurement.
- JD Edwards EnterpriseOne Shop Floor Management.
- JD Edwards EnterpriseOne Transportation Management.
- JD Edwards EnterpriseOne Configurator.

JD Edwards EnterpriseOne Application Fundamentals

Additional, essential information describing the setup and design of the system appears in a companion volume of documentation called *JD Edwards EnterpriseOne Inventory Management Implementation Guide*.

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne minimum technical requirements. In addition, JD Edwards EnterpriseOne may integrate, interface, or work with other Oracle products. Refer to the cross-reference material in the Program Documentation at [http://oracle.com/contracts/index.html](http://oracle.com/contracts/index.html) for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products.

See Also:

- "JD Edwards EnterpriseOne Inventory Management Preface" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*. 

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**Related Information**

For additional information about JD Edwards EnterpriseOne applications, features, content, and training, visit the JD Edwards EnterpriseOne pages on the JD Edwards Resource Library located at:

http://learnjde.com

**Conventions**

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>Italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>Monospace</strong></td>
<td>Monospace type indicates commands within a paragraph. URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Introduction to JD Edwards EnterpriseOne Warehouse Management

This chapter contains the following topics:

- Section 1.1, "JD Edwards EnterpriseOne Warehouse Management Overview"
- Section 1.2, "JD Edwards EnterpriseOne Warehouse Management Integrations"
- Section 1.3, "JD Edwards EnterpriseOne Warehouse Management Implementation"
- Section 1.4, "Business Interface Integration Objects"

1.1 JD Edwards EnterpriseOne Warehouse Management Overview

JD Edwards EnterpriseOne Warehouse Management is an integral part of the manufacturing and distribution processes. It works with the JD Edwards EnterpriseOne Inventory Management and Shop Floor Management systems to manage inventory and the products that companies produce and ship. The JD Edwards EnterpriseOne Warehouse Management system does not create any accounting records of its own. Instead, the system uses records that other systems create to help keep accurate financial records of warehouse transactions. The JD Edwards EnterpriseOne Warehouse Management system minimizes the number of duplicate records and mismatched data, reduces the hardware requirements and increases the system's performance.

The JD Edwards EnterpriseOne Warehouse Management system controls many aspects of warehouse operations, from receiving and storing items to retrieving and shipping them. You can design the warehouse to make the most of the available space, employees' time, and the unique storage requirements of the goods that you stock. You can structure the warehouse in almost limitless detail, so you can know the exact location of everything, the exact quantity that you have on hand, and the exact quantity that is available. This detail enables you to maintain a continuous flow of goods and gives you the competitive edge in delivering goods to the customers quickly and efficiently.

Some of the most important features of the JD Edwards EnterpriseOne Warehouse Management system are:

- User-defined rules for stock movement.
- User-defined parameters for items and locations to control stock movement.
- Fixed and random locations for more efficient stock movement.
- Automatic shipping carton selection during picking.
- License plate processing to perform putaway, pick, or replenishment based on full pallet structures, based on a single license plate number.

- Ability to review warehouse contents using the Work With Location Utilization form, which enables you to consume nine levels of detail.

- Manual or automatic storage, picking, and replenishment of stock.

- Audit trail reporting of inventory movement.

With the JD Edwards EnterpriseOne Warehouse Management system, you can:

- Create a logical model of the warehouse in as much detail as you need by specifying such characteristics as location dimensions, temperature, humidity, and lighting.

- Create a logical model of each item in the warehouse to allow the system to match items to storage locations based on the characteristics of the items and locations.

- Control how stock is stored, picked, and replenished by setting up rules for the system to follow.

- Move stock to and from specific locations using manual input or automatic system-generated suggestions.

- Use random locations for putting items away, picking items, and replenishing items.

- Generate an audit trail of reports for each stock movement and review the information online.

- Sequence employees' trips through the warehouse to maximize their productivity.

- Confirm stock movement manually with minimal data entry keystrokes or confirm stock movement automatically.

- Share stock movement data with other JD Edwards EnterpriseOne systems to answer inquiries and improve customer service.

- Specify detailed carton and container information.

- Use carton recommendation to summarize the number and weight of pallets or cartons, and can make carton and pallet recommendations.

- Reorganize a carton's contents and its placement within a shipment before shipping.

- Process inbound and outbound label information for third-party label generation.

- Process sales orders using the pick, pack, and ship process.

> Tutorial: Click here to view recordings related to this feature.

The JD Edwards EnterpriseOne Warehouse Management system is extremely flexible because it can use more than 50 different parameters of locations, items, and rules to move the inventory. Additional features include:
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profiles of locations and items</td>
<td>For each item and location in the warehouse, you define a profile. For items, you can define parameters and characteristics that control how the system moves the item. For locations, you can define parameters and characteristics that control the location's suitability for storing, picking, or replenishing items.</td>
</tr>
</tbody>
</table>
| Rule-based storage, picking, and replenishment | The JD Edwards EnterpriseOne Warehouse Management system is rule-driven. You can set up movement rules that are based on a variety of factors, including:  
  ■ The path sequence numbers that you can assign to locations  
  ■ Each location’s purpose, and the quantity and type of items present in the location  
  ■ Location tax codes that are matched to item tax code characteristics  
You can define as many rules as you need for different business purposes. |
| Automatic replenishment of locations         | The system monitors every location in the warehouse and can trigger stock movements to replenish the picking locations automatically when you deplete stock quantities during picking to a point that you define.                                                                                           |
| Movement path sequencing                     | You can design traffic patterns in the warehouse to reduce congestion and structure stock movements to use each employee's trip through the warehouse most efficiently.                                                                                                         |
| License plate processing                     | License plate processing enables you to perform putaway, pick, or replenishments based on full pallet structures, or to perform movement suggestions for pallet or other container quantities based on a single license plate number. You assign license plate numbers at the branch/plant level by item and unit of measure. For example, a pallet of item ABC may require a license plate, but a case of item ABC may not. License plates supports mixed lots of both single and mixed items. The system checks item compatibility if items are mixed on a single license plate. |
| Radio Frequency Identification (RFID)        | RFID processing enables you to provide item cross-reference to a Global Trade Identification Number (GTIN) and define and generate electronic product codes from various applications, such as when creating carton detail from cartons and item quantity on Carton Reorganization (P4620).                          |
| Units of measure                             | You can select locations in which to store items according to the item's current unit of measure to ensure the best fit and maximization of the available warehouse space. You can also allow the system to combine or break down units of measure to speed up inventory movement or maximize the use of locations. |
| First In First Out picking                   | You can move the oldest inventory first by oldest receipt date, oldest lot expiration date, or lowest lot number.                                                                                                      |
1.2 JD Edwards EnterpriseOne Warehouse Management Integrations

The JD Edwards EnterpriseOne Warehouse Management system integrates with these JD Edwards EnterpriseOne systems from Oracle:

- Sales Order Management
- Inventory Management
- Configurator
- RFID Processor
- Procurement and Subcontract Management
- Shop Floor Management
- Transportation Management

The JD Edwards EnterpriseOne Warehouse Management system also can exchange data with the EDI system (order edit and creation for sales and procurement orders) and the ECS system (general stock movements).

We discuss integration considerations in the implementation chapters in this implementation guide.
1.2.1 JD Edwards EnterpriseOne Sales Order Management

JD Edwards EnterpriseOne Warehouse Management exchanges data with the JD Edwards EnterpriseOne Sales Order Management system in these ways:

- The system generates a picking request from these programs:
  - Sales Order Entry (P4210)
  - Held Order Release (P43070)
  - Sales Order Speed Status Update (P42040)
- The system automatically posts commitments when a sales or manufacturing commitment is reposted from:
  - Backorder Release (online or batch) (P42117)
  - Transfer Order Processing (P4242)

1.2.2 JD Edwards EnterpriseOne Inventory Management

JD Edwards EnterpriseOne Warehouse Management exchanges data with JD Edwards EnterpriseOne Inventory Management by maintaining warehouse location details using these Inventory Management programs:

- Lot Master (P4108)
- Inventory Issues (P4112)
- Cycle Count Update (R41413)
- Item Master (P4101)
- Item Branch (P41026)
- Item Ledger Inquiry (P4111)
- Inventory Adjustments (P4114)
- Inventory Transfers (P4113)
- Item Reclassifications (P4116)
- Tag Inventory Update (R41610)

1.2.3 JD Edwards EnterpriseOne Configuration Management

JD Edwards EnterpriseOne Warehouse Management exchanges data with JD Edwards EnterpriseOne Configuration Management by generating picking requests for configured items.

1.2.4 JD Edwards EnterpriseOne Procurement and Subcontract Management

Warehouse Management exchanges data with Procurement in these ways:

- When you create a receipt, the system can generate putaway requests.
- Procurement processes putaway reservations.

1.2.5 JD Edwards EnterpriseOne Shop Floor Management

The JD Edwards EnterpriseOne Warehouse Management system exchanges data with the JD Edwards EnterpriseOne Shop Floor Management system by generating picking and putaway requests using these programs:
1.2.6 **JD Edwards EnterpriseOne Transportation Management**

JD Edwards EnterpriseOne Warehouse Management exchanges data with JD Edwards EnterpriseOne Transportation Management by generating picking requests at the time of shipment approval.

1.3 **JD Edwards EnterpriseOne Warehouse Management Implementation**

This section provides an overview of the steps that are required to implement the JD Edwards EnterpriseOne Warehouse Management system.

In the planning phase of the implementation, take advantage of all JD Edwards EnterpriseOne sources of information, including the installation guides and troubleshooting information.

When determining which electronic software updates (ESUs) to install for JD Edwards EnterpriseOne Warehouse Management, use the EnterpriseOne and World Change Assistant. EnterpriseOne and World Change Assistant, a Java-based tool, reduces the time required to search and download ESUs by 75 percent or more and enables you to install multiple ESUs simultaneously.

See *JD Edwards EnterpriseOne Tools Software Updates Guide*.

1.3.1 **Global Implementation Steps**

These are the implementation steps for JD Edwards EnterpriseOne Warehouse Management:

1. Set up global user-defined codes.
   See *JD Edwards EnterpriseOne Tools Foundation Guide*.

2. Set up companies, fiscal date patterns, and business units.

3. Set up next numbers.
   See *JD Edwards EnterpriseOne Tools Foundation Guide*.

4. Set up accounts, and the chart of accounts.

5. Set up the General Accounting constants.

6. Set up multi-currency processing, including currency codes and exchange rates.
   See “Setting Up General Accounting for Multicurrency Processing” in the *JD Edwards EnterpriseOne Applications Multicurrency Processing Implementation Guide*.

7. Set up ledger type rules.

See “Setting Up Ledger Type Rules for General Accounting” in the JD Edwards EnterpriseOne Applications General Accounting Implementation Guide.

8. Enter address book records.

See "Entering Address Book Records” in the JD Edwards EnterpriseOne Applications Address Book Implementation Guide.

9. Set up inventory information such as branch/plant constants, default locations and printers, manufacturing and distribution AAIs, and document types.

See "Setting Up the Inventory Management System” in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

10. Set up shop floor calendars.

See "Setting Up Shop Floor Management” in the JD Edwards EnterpriseOne Applications Shop Floor Management Implementation Guide.

11. Set up order activity rules.


12. Set up manufacturing constants.


13. Setting up locations, fixed locations and zones, random requirements, item warehouse information, inclusion rules, order groups, unit of measure groups, storage containers, container bill of materials, shipping cartons, locations for carton recommendations, carton recommendation methods for items, carton fill percentages for items, UCC 128 processing, license plate processing.

See Setting Up Warehouse Management.

14. Setting up Movement Processing

See “Setting Up Bulk Depots” in the JD Edwards EnterpriseOne Applications Bulk Stock Inventory Implementation Guide.

15. Setting up Advanced Topics and Inquiries

See Setting Up Advanced Features.

1.4 Business Interface Integration Objects

A business interface is a set of components that implementation teams can use to create an integration between JD Edwards EnterpriseOne and an external system. Business interfaces can include one or more of these business interface components:

- Business Services
- Real-Time Events
- Batch Import and Export Programs

For additional information about business interfaces, and the business objects available for this product area, see these topics in the JD Edwards EnterpriseOne Applications Business Interface Reference Guide:
Business Interface Integration Objects

- Business Interfaces Overview
- Warehouse Suggestion
This chapter contains the following topics:

- Section 2.1, "Understanding Warehouse Setup"
- Section 2.2, "Setting Up Locations"
- Section 2.3, "Setting Up Fixed Locations and Zones"
- Section 2.4, "Setting Up Random Requirements"
- Section 2.5, "Setting Up Item Warehouse Information"
- Section 2.6, "Setting Up Inclusion Rules"
- Section 2.7, "Setting Up Order Groups"
- Section 2.8, "Setting Up Unit of Measure Groups"
- Section 2.9, "Setting Up Mixed Sequence Packing Groups"
- Section 2.10, "Setting Up Storage Containers"
- Section 2.11, "Setting Up Container Bill of Materials"
- Section 2.12, "Setting Up Shipping Cartons"
- Section 2.13, "Setting Up Locations for Carton Recommendation"
- Section 2.14, "Setting Up Carton Recommendation Methods for Items"
- Section 2.15, "Setting Up Carton Fill Percentages for Items"
- Section 2.16, "Working with Standard Pack Carton Recommendations"
- Section 2.17, "Setting Up UCC 128 Processing"
- Section 2.18, "Setting Up Label Information"
- Section 2.19, "Setting Up License Plate Processing"

### 2.1 Understanding Warehouse Setup

This section discusses:

- Setup considerations.
- Locations.
- Fixed and random locations.
- Item warehouse information.
2.1.1 Setup Considerations

To set up the warehouse and items, you must consider:

- The physical layout and characteristics of the warehouse.
- The dimensions and capacities of all storage areas, racks, and locations.

You also must determine:

- Whether to group items based on similarities, dimensions, or units of measure.
- Which factor is most important in managing the warehouse (you can change these at any time to suit the needs of the business).
- Maximizing storage capacity.
- Maximizing productivity by reducing the number of trips that employees make for putaway, picking, or replenishment of stock.
- Using other criteria that you define.

When you define the warehouse and its contents to the JD Edwards EnterpriseOne Warehouse Management system, you construct a model of the warehouse and all of the items it contains.

2.1.2 Locations

Three types of locations exist in the JD Edwards EnterpriseOne Warehouse Management system:

- Logical locations, which the system uses for reporting on particular transactions. A logical location does not physically exist in the warehouse, although it does exist as a record in the JD Edwards EnterpriseOne Warehouse Management system. An example of a logical location is the variance location, which is the location that the system uses when you are confirming a smaller quantity than the suggested quantity during putaway confirmation. The system stores the remaining (leftover) quantity in the variance location. Then the system can record the variations in quantity during movement confirmation. Another example of a logical location is the primary location.

- Physical locations, which are locations that physically exist in the warehouse or are zones that are considered to be a part of the warehouse. An example of a physical location is an aisle or bin.

- Staging locations, which are locations for temporarily holding items. Staging locations can be logical or physical locations. Examples of staging locations are a variance location (a logical location) and a receiving/shipping dock (a physical location). When you define a staging location in the Location Profile program (P46020), you do not specify any dimension or weight capacity information. The system assumes that staging locations have unlimited capacity.

When you set up locations, you first must assign attributes to each warehouse location within the Location Master table (F4100). Attributes are characteristics that describe the purpose and physical position of each location in the warehouse. To assign attributes to warehouse locations, you use the Location Profile program. The system uses the attributes during inventory movement to select locations for putaway, picking, and replenishment.

The Allow Putaway, Allow Picking, and Allow Replenishment options enable you to define which movement (putaway, picking, or replenishment) you want to allow in each location. By defining movements for locations, you can use each location for different purposes.
Before you select the options for allowing putaway, picking, and replenishment, you should verify that you have defined zones for putaway, picking, and replenishment in the Location Master program (P4100).

These are examples of locations that you use for different purposes and the options that you should use for allowing putaway, picking, and replenishment:

- **Storage location.** For a location in a storage area, you typically select all three options. By selecting the Allow Putaway option, you can store inventory in the location. By selecting Allow Picking, you enable warehouse personnel to pick items in pallets from the location. By selecting the Allow Replenishment option, you enable warehouse personnel to use the items that they pick from the storage location to replenish another location.

- **Picking location.** For a picking location, you select the Allow Picking option and do not select the Allow Putaway and Allow Replenishment options. Although you pick from this location and, therefore, must replenish inventory to it, you do not want to use the picking location to replenish another location. You also do not want to use the picking location for putaway because you want inventory to continue circulating throughout the warehouse so that sales orders are filled promptly.

- **Dormant location.** For locations that you are temporarily not using, you do not select the Allow Putaway, Allow Picking, or Allow Replenishment options. For example, you might leave a location empty because you are planning to remodel the location.

- **Multipurpose location.** For staging locations, overflow locations, holding locations, receiving locations, and shipping locations, you should select all three options-Allow Putaway, Allow Picking, and Allow Replenishment. However, for a variance location, you might select the Allow Putaway and Allow Picking options and not select the Allow Replenishment option. The variance location temporarily holds remaining quantity when you have confirmed a smaller quantity than the suggested quantity during putaway confirmation.

You must also enter sequence codes for locations. Sequence codes are numbers that the system typically uses for two purposes:

- To identify the order of locations in which warehouse personnel work
- To identify the order in which the system prints move documents

After you enter sequence codes for locations, you can build a tiebreaker table that the system uses to select between locations when the system has suggested multiple locations for putaway, picking, or replenishment. The system uses the sequence codes that you specified to select between equally suitable locations.

You can also use sequence codes to specify the order in which move documents, such as move tags, are printed. By printing move tags in the order in which locations appear in the warehouse, you can maximize the efficiency of warehouse operations.

There are several different types of picking that you define by entering sequence codes:

- **Right-hand picking**
- **Alternate picking**

Right-hand picking means that locations are sequenced so that warehouse personnel pick inventory from the right side of an aisle. When the employee reaches the end of the aisle, the employee turns around and follows the location sequence, continuing to pick from the right side of the aisle.
Although right-hand picking is usually productive, the disadvantage is that the employee has to travel through the aisle twice (one trip to the end of the aisle and one trip back to the beginning). Right-hand picking is most productive under these circumstances:

- The aisle ends at a wall.
- A conveyor belt runs in the middle of the aisle.

The aisle contains a large quantity of inventory that must be picked, thus offsetting the time that the employee spends traveling up and down the aisle.

Alternate picking means that locations are sequenced so that warehouse personnel begin picking inventory from the first location on the right side of the aisle, followed by the first location on the left side of the aisle. Then the employee returns to the right side of the aisle, picks from the second location, crosses to the left side of the aisle, and picks from the second location. The employee repeats the progression of picking from the right side followed by the left side until the employee reaches the end of the aisle.

Alternate picking is most productive when warehouse personnel use machinery such as forklifts to pick pallets in an aisle that does not end with a wall. The machinery might be too large to turn around in the aisle, although diagonal, forward movements enable warehouse personnel to pick inventory efficiently.

Alternate picking in U-shaped format means that warehouse personnel pick from multiple locations on the right side of the aisle first, and then make a U-turn to pick from the locations on the left side. Assuming that the employee is driving a piece of equipment to load the picked items, the employee stops the equipment in the middle of the aisle in a place that is central to all picking locations, completes the picking, and moves forward to repeat the same procedure.

Alternate picking in a U-shaped format is most productive under these circumstances:

- Warehouse personnel use equipment that is compact enough to turn 360 degrees in an aisle.
- The right-hand side contains a greater quantity of items to be picked so that the U-turn and picking from the left side does not impede efficiency.

Some advantages to alternate picking in U-shaped format are:

- Warehouse personnel travel once through the aisle.
- The number of stops is reduced, if the employee stops the equipment in a central location from which multiple locations can be picked.

Finally, you can define latitude, longitude, and height, which are measurements that consist of location coordinates in the warehouse. The system uses these coordinates to calculate the distance between locations. The system uses the coordinates as tiebreakers in the Movement Instructions table (F46095) and with the base picking and putaway locations that are defined in the Item Profile Revisions program (P46010).

After you specify information about latitude, longitude, and height, you can build a tiebreaker table that the system uses to select between locations when the system has suggested multiple locations for putaway, picking, or replenishment. The system uses the latitude, longitude, and height information that you specify to select between equally suitable locations.

If you have specified sequence codes and want to build a tiebreaker table, you do not specify latitude, longitude, and height information, although doing so does augment the location information that you have entered.
2.1.3 Fixed and Random Locations

Depending on the type of items that you store in the warehouse, you might use fixed or random locations or both.

In a warehouse where you store items in the same locations for the same movements (putaway, picking, or replenishment), you typically set up fixed locations for each type of movement.

In a warehouse where it is advantageous to store items in varied, multiple locations, you set up random rules. Random rules are sets of criteria that each location must meet to qualify as a location for an item. For example, assume that you have an order consisting of items that require refrigeration. After you create a random rule that requires that a location be refrigerated, you create a random locations table, which is a list of all the random locations that meet the requirements of the random rule. Assuming that you have created the tiebreaker table, which stores information about each location such as sequence number, available space, and proximity, the system suggests a series of random locations for putaway, picking, or replenishment.

You might use fixed locations in these circumstances:

- After you have received perishable foods (such as poultry or dairy products) that are not stored in the warehouse, using fixed locations enables you to move the items directly from the receiving dock to the locations from which the items are picked.
- When you routinely receive items that require specific storage conditions, such as temperature, lighting, and humidity, using fixed locations enables you to use the same locations repeatedly for the same purpose.

You might use random locations when you receive pallets. For example, random locations enable you to store the pallets in many different locations in the warehouse. Typically, pallets share the same dimensions and characteristics, which enables flexibility for where the pallets can be put away and picked in the warehouse.

2.1.4 Item Warehouse Information

The JD Edwards EnterpriseOne Warehouse Management system and the Inventory Management system are closely integrated. By using Inventory Management, you create information about items and branch/plants that provides basic information for the JD Edwards EnterpriseOne Warehouse Management system.

2.1.4.1 Item Classification Codes

An item classification code represents a group to which you must assign an item. The system uses these codes to select the movement instruction tables (for putaway, picking, or replenishment) that determine location selection. The two types of item classification codes are:

- Item dimension group, which the system can use optionally to categorize items with identical or similar dimensions. For example, if you distribute compact discs, you probably have many item numbers for all of the compact discs, and all the compact discs share the same dimensions. By defining an item dimension group called CD, you can assign all of the item numbers to this group. By defining information about size and movement for the group, you do not have to define the information for each item individually.

- Warehouse process group, which the system must use to indicate how certain items are to be handled in the warehouse. For example, if you receive refrigerated products, you might create a warehouse process group called COLD to indicate to
warehouse personnel that all items within the group are to be put away, picked, and replenished in a particular zone in the warehouse.

### 2.1.4.2 Item Profile Information

You must create an item profile for every item in the JD Edwards EnterpriseOne Warehouse Management system. The item profile contains basic information, such as:

- Whether you can store items of different types or ages in the same location.
- Whether to use one-phase or two-phase movement confirmation for putaway, picking, and replenishment.
- The default locations of the item.

One-phase movement confirmation enables you to confirm inventory movement in one step after you move the items out of the From location and into the To location.

Two-phase movement confirmation enables you to confirm inventory movement in two steps: first, when you move the items out of a From location into a temporary staging location, and second, when you move the items from the staging location to the To location.

### 2.2 Setting Up Locations

This section provides an overview of locations, lists a prerequisite, and discusses how to:

- Create the warehouse.
- Define warehouse specifications.
- Enter locations interactively.
- Define zones.
- Define the level of detail for locations.
- Set processing options for Location Master.
- Define location dimensions.
- Define location characteristics.
- Define location profile information for a single location.
- Define location profile information for multiple locations.
- Define location capacity.

### 2.2.1 Understanding Locations

A location is a place that you use to put away (store), pick (retrieve), or replenish (refill) items that you stock in the warehouse. The warehouse might consist of many locations, each with its own characteristics, such as:

- Length
- Width
- Height
- Weight capacity
- Proximity to other locations
Setting up locations is a major step in defining the warehouse. By setting up locations, you can match stock items to the locations based on this criteria:

- Item size and weight
- Maximum quantity by location
- Location characteristics
- Storage in an item’s existing location
- Storage in an empty location

When you enter locations, the system stores them in the F4100. You select the naming convention (a combination of numbers, letters, or both, such as A/3/4 or 6/B/2/A), and you use the format that you specified on Branch/Plant Constants (a separator character such as "/" or "." to name locations A/3/4 or 3.C.9). Enter locations interactively if you have only a few locations to create or if you do not want to use the batch process.

### 2.2.1.1 Warehouse Specifications
You define warehouse specifications to:

- Define the format in which the system displays a location, such as 1.A.1 or C/3/5
- Specify the inclusion rule that defines the order types and statuses for which you want the JD Edwards EnterpriseOne Warehouse Management system to create requests
- Define the default units of measure for dimensions, weight, and volume
- Define the default locations for receiving and shipping

### 2.2.1.2 Zones
You use zones to group similar locations. After you define a zone, you can use it to make inquiries without having to access each location contained in the zone. The three most common zones in a warehouse are for putaway, picking, and replenishment. For one location, you can have a putaway zone, a picking zone, and a replenishment zone. This situation enables you to use one location for different purposes.

You can also use zones to set up areas for items that require special storage conditions, such as explosion safeguards, refrigeration, low humidity, and low light.

Defining zones is optional. However, by defining zones, you can save processing time and help structure employees' movement patterns through the warehouse.

### 2.2.1.3 Level of Detail for Locations
You use levels of detail to control how the system displays storage areas for picking and replenishment, their capacities, and available space. You define what each level of detail represents (aisles, racks, bins, and so on). For example, if you use the Location Utilization inquiry program (P46220) to view the contents of the warehouse using a level of detail of 1 (warehouse level), the system displays one location (the warehouse). If you use a level of detail of 4 (rack level), for example, the system displays zones, aisles, and racks, and displays the capacities and available space for each rack.

You can create a blank location, such as / /, and assign it to a level of detail of 1. Then you can use level 1 to review the contents of the entire warehouse for reporting purposes or specify a logical warehouse named warehouse.
2.2.1.4 Location Dimensions
You define the dimensions of each location to maximize the use of warehouse space. After you specify the dimensions of a location, the system can determine which items fit best into the location with a minimum of wasted space. You can define:

- Gross and usable dimensions (width, depth, and height)
- Gross and usable volume, which the system calculates from the dimensions
- Maximum weight that a location can hold

If you do not specify a maximum storage weight, the system assumes that the location has an unlimited capacity for weight.

The system can use the location dimensions that you define to verify that the location has enough space for the item to fit. You can define a capacity method to provide the best match of an item to a location. You can use volume checking (capacity method 1), layering (capacity method 2), or quantity capacity checking (capacity method 3) when you set up item information using the Item Unit of Measure Definition program (P46011).

- In volume checking, the system compares the volume of the item that you are putting away to the available volume of space in the location. This method is most effective for items that are cubical in shape.
- In layering, in addition to performing volume checking, the system compares the length, width, and height of the item to the length, width, and height of the available space in the location. The system also can rotate the placement of the items during putaway.
- In quantity capacity checking, the system compares the quantity of the item to store to the quantity that you can still fit into the location.

If you use random locations for putaway, you must rebuild the tiebreaker table whenever you define or change the dimensions of a random location.

2.2.1.5 Location Characteristics
A characteristic is anything that makes a location (or a location group) unique. For example, you might stock items that must be kept cold to prevent spoilage, so you must identify locations, such as a refrigerator, with characteristics that include Cold. You can assign an unlimited number of characteristics to each location in the warehouse.

Important: If you want the system to select locations randomly for putaway, picking, or replenishment (instead of using fixed locations), you must define location characteristics. If you use random locations for putaway, picking, or replenishment and you change characteristics for any of those random locations, you must regenerate the Random Locations table (F46821) to ensure that the system uses a current table when it searches for random locations.

If you use random locations for putaway, you must rebuild the tiebreaker table whenever you change the characteristics of a random location.

You can select a predefined characteristic from the Select User Define Code form. If the predefined characteristics do not meet the needs of the business, you can define the new characteristic and then reference that characteristic on the Work with Location Characteristics form.
Use location characteristic groups to reduce the number of locations for which you must define characteristics by grouping them.

### 2.2.1.6 Location Profile Information

You define location profile information to attach specific attributes to each location. These attributes specify the location’s purpose, and its physical position in the warehouse. The system can use these attributes during inventory movement to select locations for putaway, picking, or replenishment, and determine what location is the best fit for the item, based on the attributes. You define attributes such as:

- Location sequences, which can form the routes that warehouse employees follow for putaway, picking, and replenishment
- Relative coordinates for each location in the warehouse, which the system uses to calculate the distance between two locations
- The maximum number of items you can have in the location
- A location dimension group for the location
- A characteristic group for the location (optional)
- Whether you can mix container types, or old and new items in the location
- Whether the location is for putaway, picking, replenishment, or for staging inventory during two-phase movement

If you use random locations for putaway, you must rebuild the tiebreaker table whenever you change the putaway sequence or proximity (latitude, longitude, or height) of a random location.

### 2.2.1.7 Location Capacity

Each location has a finite capacity to hold items (except staging locations). You can define location capacity by location dimension group, such as bin, flow rack, pallet, or bulk (according to the size of the locations). Alternatively, you can define location capacity individually by quantity. You then specify how many items can fit in each location dimension group by an item’s unit of measure.

You can define location capacity methods by setting up items to use one of these capacity checking methods:

- **Volume.** The system compares the item’s cubic dimensions with the available cubic dimensions in the location.
- **Layering.** The system performs volume checking and compares the item’s length, width, and height to the length, width, and height of the available space in the location. You must also specify whether the item’s unit of measure definition enables the system to rotate the item during putaway.
- **Quantity.** The system compares the quantity of the item to store to the quantity that you can still fit into the location.

A location dimension group only defines the volume of each location in the group. If you define an item’s unit of measure to use quantity when you verify a location’s capacity, you must use Location Capacity Definition (P46024) to define the quantity of the item that fits into a location. The system enables you to toggle between item and item dimension group format. If you use the quantity capacity checking method, defining quantities by item dimension group is faster because you do not have to define quantities and capacities for every item that you stock.
### 2.2.2 Prerequisite

Before you complete the tasks in this section, verify that you have identified the characteristics, dimensions, and physical position of each location in the warehouse.

### 2.2.3 Forms Used to Set Up Locations

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch/Plant Constants</td>
<td>W41001H</td>
<td>Warehouse System Setup (G4641), Branch/Plant Constants</td>
<td>Create warehouses. Specify whether you want the system to track locations and their contents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Branch/Plant Constants</td>
<td></td>
</tr>
<tr>
<td>Branch Location Definition</td>
<td>W41001A</td>
<td>Select a record and then select Location Def from the Row menu on Work With Branch/Plant Constants.</td>
<td>Define warehouse specifications.</td>
</tr>
<tr>
<td>Enter Location Information</td>
<td>W4100B</td>
<td>Warehouse System Setup (G4641), Location Master</td>
<td>Enter locations into the system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Location Master</td>
<td>Define zones.</td>
</tr>
<tr>
<td>Location Dimension Revisions</td>
<td>W46022B</td>
<td>Warehouse System Setup (G4641), Location Dimensions</td>
<td>Define location dimensions.</td>
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<td>Click Add on Work With Location Dimensions</td>
<td></td>
</tr>
<tr>
<td>Location Characteristics Revisions</td>
<td>W46021B</td>
<td>Warehouse System Setup (G4641), Location Characteristics</td>
<td>Define location characteristics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For a single location, click By Location in the Display section and then click Add on Work With Location Characteristics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>For a location group, click By Characteristics in the Display section and then click the Add on Work With Location Characteristics.</td>
<td></td>
</tr>
</tbody>
</table>
2.2.4 Creating the Warehouse

Access the Branch/Plant Constants form.

**Branch/Plant**
Enter an alphanumeric code that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant.

You can assign a business unit to a document, entity, or person for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business unit to track equipment by responsible department.

Business unit security might prevent you from viewing information about business units for which you have no authority.

**Address Number**
Enter a number that identifies an entry in the JD Edwards EnterpriseOne Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location.

**Location Control (Y/N)**
Select to indicate that the system uses only locations that are defined in the Location Master table. When Warehouse Control is selected, the Location Control option must also be selected.

**Warehouse Control (Y/N)**
Select to indicate the system creates warehouse transactions for the branch/plant.
See Also:
- "Setting Up Constants" in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

2.2.5 Defining Warehouse Specifications

Access the Branch Location Definition form.

Separator Character
Enter a character that divides the elements of the location. For example, you might use a / as a separator character to divide elements such as aisle, bin, and shelf in a location code. Companies commonly use a . as the separator character. Separators are not stored in the tables. However, the system uses separators to edit a location on a form or report. If you do not want to use separators, leave this field blank.

Aisle
Enter a number, 1 through 8, that identifies the number of characters to represent the tank (or aisle for packaged stock).

Specify whether the system should use left or right justification for the aisle format.

Bin
Enter a number, 1 through 8, that identifies the number of characters to represent the owner for commingled bulk stock (or bin for packaged stock).

Specify whether the system should use left or right justification for the bin format.

Code 3
Enter the number of characters to represent Code 3 in the location format specification.

Specify whether the system should use left or right justification.

Access Warehouse Control

Request Inclusion Version
Enter a user-defined code (UDC) (40/RV) that identifies an inclusion rule the system uses for this branch/plant. The JD Edwards EnterpriseOne Manufacturing and Warehouse Management systems use inclusion rules as follows:

- For Manufacturing:
  Enables multiple versions of resource rules for running MPS, MRP, or DRP.

- For Warehouse Management:
  Enables multiple versions of inclusion rules for running putaway and picking. The system processes only those order lines that match the inclusion rule for a specified branch/plant. You use the inclusion rule to define the orders for which to create requests based on the next status code that is assigned to the order.

Dimension Unit of Measure
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to display dimensions for the warehouse. The system provides the ability to establish inches, centimeters, meters, and so forth, as a measuring standard.

Volume Display UOM
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to display volume for this branch/plant. The system inputs a value in this field from Branch/Plant Constants - Page 2 (P41001). You can override this default value.
Weight Display UOM
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to indicate weight for this item. You can specify ounces, grams, kilograms, and so on, as weight standards. The system uses this unit of measure for the item or overrides it for an individual item or container.

Receiving Location
The area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

Shipping Location
The location that the system uses as the default location when you pick inventory and move the inventory for shipping. The format of the location is user-defined by branch/plant (P41001).

2.2.6 Entering Locations Interactively
Access the Enter Location Information form.

Location
Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

A location format comprises elements and, optionally, a separator character. Elements represent more specific locations in a branch/plant. The total length of all elements in this field, including separators, cannot exceed 20 characters. If you leave this field blank and do not use a separator character, the system displays the location as an asterisk. If you use a separator character, the system displays the location with the correct number of spaces for each element, followed by the separator character.

The location for a single tank can contain up to the number of characters identified in the Length of Tank/Aisle field on Branch/Plant Constants - Page 2. If the tank contains commingled stock, include the separator character defined on Branch/Plant Constants - Page 2 and identify the owner. The owner ID can contain up to the number of characters identified in the Length of Owner/Bin field on Branch/Plant Constants - Page 2.

2.2.7 Defining Zones
Access the Enter Location Information form.

Put Zone
Enter a code (46/ZN) that identifies areas in the warehouse where goods are put away or stored.

Pick Zone
Enter a code (46/ZN) that identifies an area from which items are picked for shipment.

Replen Zone
Enter a code (46/ZN) that identifies replenishment zones, which are areas in the warehouse from which items are retrieved to replenish or refill picking locations. You assign zones to locations using Location Master (P4100).

2.2.8 Defining the Level of Detail for Locations
Access the Enter Location Information form.
2.2.9 Setting Processing Options for Location Master (P4100)

Processing options enable you to specify the default processing for programs and reports.

2.2.9.1 Display

Use this processing option to specify how the system displays information.

1. Omit item location records.
   Enter 1 to omit item location records with no quantity available and no quantity inbound/outbound when calling Availability by Location.

2.2.10 Defining Location Dimensions

Access the Location Dimension Revisions form.

Loc. Dimension Group (location dimension group)

Enter a code (46/LD) that identifies a group of locations that share the same dimensions. A location dimension group defines the dimensions for all locations that belong to the group. After you set up a location dimension group, you can assign locations to the group through Location Profile Revisions (P46020).

You must define location dimensions if you plan to use volume-based putaway.

Access the Usable Cubic Dimensions section:

Width

Enter the available storage width of the location(s) defined within the location dimension group. The system uses this width only if you use one of two capacity methods to select a putaway location for an item:

- Volume checking (where the system compares the volume of the item to the usable volume of a putaway location)
- Layering (where the system compares the length, width, and depth of an item to the usable length, width, and depth of a putaway location)

The system uses the values that you enter for gross width, gross depth, and gross height as default values for the Usable Cubic Dimensions section of the form unless you enter new values.

Depth

Enter the available storage depth of the location(s) defined within the location dimension group. The system uses this depth only if you use one of two capacity methods to select a putaway location for an item:

- Volume checking (where the system compares the volume of the item to the usable volume of a putaway location)
- Layering (where the system compares the length, width, and depth of an item to the usable length, width, and depth of a putaway location)
The system uses the values that you enter for gross width, gross depth, and gross height as default values for the Usable Cubic Dimensions section of the form unless you enter new values.

**Height**
Enter the available storage height of the location(s) defined within the location dimension group. The system uses this height only if you use one of two capacity methods to select a putaway location for an item:

- Volume checking (where the system compares the volume of the item to the usable volume of a putaway location)
- Layering (where the system compares the length, width, and depth of an item to the usable length, width, and depth of a putaway location)

The system uses the values that you enter for gross width, gross depth, and gross height as default values for the Usable Cubic Dimensions section of the form unless you enter new values.

**Maximum Weight**
Enter a number that indicates the maximum weight that is allowed for this location.

---

**Note:** If maximum weight is left blank, the system allows unlimited weight for the location.

---

**See Also:**

- Defining Warehouse Specifications.

2.2.11 Defining Location Characteristics

Access the Location Characteristics Revisions form.

**Location Characteristic**
Enter a code (46/DF) defines a characteristic for a location or location group. You can define unlimited characteristics (such as Cold, Dark, Dry, Heavy, and Secure) for any location or location group.

**Characteristic Group**
Enter a code (46/LC) that identifies a group of locations that share the same characteristics. A location characteristics group defines the characteristics for all locations that belong to the group. After you set up a location characteristics group, you can assign locations to the group through Location Characteristics (P46021).

**See Also:**

- Setting Up Random Requirements.

2.2.12 Defining Location Profile Information for a Single Location

Access the Location Profile Revisions form.

**Level of Detail**
Enter a code that summarizes or classifies locations and provides a hierarchy of locations for review purposes. For example, you can assign aisles to level 2, and individual bins within the aisle as level 3.
Freeze Rule
Enter a code (H46/HR) that indicates what putaway restrictions you want to place on a location during the pick process. Values are:

Leave blank and the system does not perform any automatic restrictions.

Enter 1: to freeze when empty. Do not put away to this location after you pick the location empty.

Enter 2: to freeze when picked (auto reset). Do not put away to this location after picking. When you pick the location empty, the system automatically resets the putaway flag to allow putaway to this location.

Enter 3: to freeze when picked (manual reset). Do not put away to this location after picking. When you pick the location empty, you must manually reset the putaway flag to allow putaway to this location.

Maximum Items
Enter a number from 1 to 99 that specifies the maximum number of different items that can be stored in this location simultaneously.

If you leave the field blank or enter 0, the system does not limit the number of different items in the location.

Tax Code
Enter a code (46/LT) that indicates whether the location contains tax-paid inventory (in-bond versus duty paid). If an item has an assigned tax code, the system puts the item away only in locations with the same tax code.

You assign tax codes to items through Item Profile (P46010).

Minimum Put Percent (minimum putaway percentage)
Enter the minimum percentage of the total location capacity the system uses during putaway. You specify a minimum putaway percentage when you want an item to fill at least this percentage of an empty putaway location.

Minimum Pick Percent (minimum pick percentage)
Enter the minimum percentage of the total location capacity the system uses during picking. If you use this minimum percentage, the system first determines how many of the items fit in the location. It divides the quantity of the item being picked by the maximum quantity that fits in the location and compares the result to the minimum pick percentage. The system performs this check only if you defined the pick movement instructions to have the system do so.

Verification Code
Enter a two-character code that uniquely identifies a location. The Movement Confirmations program uses the code that you enter to verify that the system used the correct location during putaway or picking.

Container Code
Enter a code (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

Dimension Group
Enter a code (46/LD) that identifies a group of locations that share the same dimensions. A location dimension group defines the dimensions for all locations that
belong to the group. After you set up a location dimension group, you can assign locations to the group through Location Profile Revisions (P46020).

You must define location dimensions if you plan to use volume-based putaway.

**Characteristics Group**
Enter a code (46/LC) that identifies a group of locations that share the same characteristics. A location characteristics group defines the characteristics for all locations that belong to the group. After you set up a location characteristics group, you can assign locations to the group through Location Characteristics (P46021).

**Staging Locn (staging location)**
Select to indicate the location is a staging location, where you hold items temporarily before moving them somewhere else. Staging locations (such as the receiving and shipping docks) do not require a group definition for dimensions, volume, or weight, because they have unlimited capacity. Clear to indicate this location is not a staging location.

**Recommend Crtn (recommend cartons)**
Select to have the system recommend shipping cartons when picking from this location. The system recommends a carton only if you have set up the Carton Recommendation Method for the item. Clear and the system does not make carton recommendations when picking from this location.

**Mix Containers**
Select to indicate you want to allow multiple types of storage containers for an item to be stored in the location. Clear to indicate you do not allow multiple types of containers in this location.

You can also set up the item profile to allow mixing of containers.

You use Allowed Containers (P46026) to define which containers are allowed in the location.

**Mix Dates**
Select to indicate you want the system to store items with different receipt dates in the same location. Clear to indicate you do not store items with different receipt dates in the same location.

You must set up the location profile and the item profile in the JD Edwards EnterpriseOne Warehouse Management system to allow the mixing of dates.

**Allow Putaway**
Select to indicate the location is valid for putaway selection. Clear to indicate the location is not valid for putaway.

**Allow Pick**
Select to indicate this location is valid for picking. Clear to indicate this location is not valid for picking.

**Allow Replenish**
Select to indicate you allow replenishment from a location. Clear to indicate that you do not allow replenishment from a location.

2.2.13 Defining Location Profile Information for Multiple Locations
Access the Enter Location Profile Information form.
**Putaway Sequence**
Enter a number that you assign to a location to determine its place in the putaway sequence. Putaway is the movement of inventory to storage after receipt. A sequence of locations describes the path that warehouse employees follow through the warehouse during movement tasks. You can specify in the Movement Instructions (P46095) whether the system uses the putaway sequence as a tiebreaker when there are multiple locations selected for putaway. For example, you can establish sequencing for the most efficient putaway routing.

**Picking Sequence**
Enter a number that you assign to a location to determine its place in the picking sequence. Picking is the movement of inventory from storage to satisfy an order. A sequence of locations describes the path that warehouse employees follow through the warehouse during movement tasks. You can specify in the Movement Instructions (P46095) whether the system uses the picking sequence as a tiebreaker when there are multiple locations selected to pick from. For example, you can establish sequencing for the most efficient pick routing.

**Replenish Sequence**
Enter a number that you assign to a location to determine its place in the replenishment sequence. Replenishment is the movement of inventory from storage locations to picking locations. A sequence of locations describes the path that warehouse employees follow through the warehouse during movement tasks. You can specify in the Movement Instructions (P46095) whether the system uses the replenishment sequence as a tiebreaker when there are multiple locations selected to replenish from. For example, you can establish sequencing for the most efficient replenishment routing.

**Distance Latitude**
Enter a value for the X or latitude coordinate of a location in the warehouse. The system can use latitude, longitude, and height as a tiebreaker when suggesting locations for putaway and picking.

**Distance Longitude**
Enter a value for the Y or longitude coordinate of a location in the warehouse. The system can use latitude, longitude, and height as a tiebreaker when suggesting locations for putaway and picking.

**Maximum Items**
Enter a number from 1 to 99 that specifies the maximum number of different items that can be stored in this location simultaneously.

Enter a number. If you leave the field blank (or zero), the system does not limit the number of different items in the location.

### 2.2.14 Defining Location Capacity

Access the Location Capacity Revisions form.

**Loc. Dimension Group (location dimension group)**
Enter a code (46/LD) that identifies a group of locations that share the same dimensions. A location dimension group defines the dimensions for all locations that belong to the group. After you set up a location dimension group, you can assign locations to the group through Location Profile Revisions (P46020).

You must define location dimensions if you plan to use volume-based putaway.
Item Dim Grp (item dimension group)
Enter a code (41/01) that identifies a group of items that share the same dimensions. An item dimension group defines the dimensions for all items that belong to the group. After you set up an item dimension group, you can assign items to the group through Classification Codes (P4101).

UOM (unit of measure)
Enter a UDC (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).

Container Code
Enter a code (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

Maximum Capacity
Enter the maximum of an item or item dimension group that can fit in the specified location dimension group. You can also define a storage container to limit the quantity.

2.3 Setting Up Fixed Locations and Zones
This section provides an overview of fixed locations and zones, lists a prerequisite, and discusses how to:
- Set up fixed putaway locations.
- Set up fixed picking locations.
- Set up fixed replenishment zones.

2.3.1 Understanding Fixed Locations and Zones
A fixed location is a place that you use for the same purpose, such as putaway, picking, and replenishment for a given item. A zone is a group of locations that you use for a particular purpose. For example, a flow rack near the shipping dock always holds the same item for picking, and a bulk location near the receiving dock always holds pallets of the same item. You use a fixed zone as one large location from which to replenish fixed picking locations.

2.3.1.1 Fixed Putaway Locations
You set up fixed putaway locations to use the same locations consistently for storing a given item. This consistency enables you to segregate putaway locations for certain items from other locations, or to keep putaway locations near their picking and replenishment locations. Often, the fixed putaway locations are the same as the fixed picking locations.

2.3.1.2 Fixed Picking Locations
You set up fixed picking locations to use the same locations consistently for picking a given item. This consistency enables you to segregate picking locations from other locations, or to keep certain items’ picking locations near their putaway and replenishment locations. Often, the fixed picking locations are the same as the fixed putaway locations.
You might not want to create replenishment suggestions with a quantity that exceeds the quantity that a location can hold. Before you set up a fixed picking location, verify that the sum of each picking location's normal replenishment quantity and maximum replenishment quantity do not exceed the location's maximum capacity quantity. If they do exceed the location's maximum capacity quantity, the system prints movement documents to replenish a greater quantity than the location can hold because the system does not perform any capacity checking. You might not be able to store all of the items in the picking location.

You must set up fixed picking locations if you intend to use replenishment. Replenishment is the process by which the system refills picking locations in which items are depleted.

2.3.1.3 Fixed Replenishment Zones
You set up one or more fixed replenishment zones to connect replenishment locations with picking locations. The replenishment locations then refill the same picking locations consistently. This process enables you to segregate replenishment zones from other locations or to keep the replenishment locations for certain items near their picking locations.

If you have not set up a fixed replenishment zone for a picking location, the system searches for a replenishment zone that is attached to a picking zone. If you have not set up a picking zone, the system displays an error.

2.3.2 Prerequisite
Before you complete the tasks in this section, verify that the appropriate movement instruction table can access fixed locations.

2.3.3 Forms Used to Set Up Fixed Locations and Zones

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Putaway Location Revisions</td>
<td>W46012B</td>
<td>Warehousing Movement Rules (G46311), Fixed Putaway Locations Click Add on Work With Fixed Locations.</td>
<td>Set up fixed putaway locations.</td>
</tr>
<tr>
<td>Fixed Picking Location Revisions</td>
<td>W46012B</td>
<td>Warehousing Movement Rules (G46311), Fixed Picking Locations Click Add on Work With Fixed Locations.</td>
<td>Set up fixed picking locations.</td>
</tr>
<tr>
<td>Fixed Replenishment Zone Revisions</td>
<td>W46051C</td>
<td>Warehousing Movement Rules menu (G46311), Fixed Replenishment Zones Click Add on Work with Fixed Replenishment Zones.</td>
<td>Set up fixed replenishment zones.</td>
</tr>
</tbody>
</table>

2.3.4 Setting Up Fixed Putaway Locations
Access the Fixed Putaway Location Revisions form.
Location
Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

2.3.5 Setting Up Fixed Picking Locations
Access the Fixed Picking Location Revisions form.

Maximum Pick Quantity
Enter a number to indicate the maximum quantity to be picked for an item in a specific unit of measure at a location. The system does not suggest this location if the quantity to be picked exceeds the maximum pick quantity you define in this field.

Max Replenishment Quantity
Enter a number to specify the maximum quantity to be replenished to a fixed picking location. You must enter a quantity in this field if you are implementing economic replenishment. You specify in the processing options for the Location Selection Driver program (R46171) for automatic, or online, replenishment and in the processing options for the Batch Replenishment program (P461601) to perform economic replenishment.

Normal Replenishment Point
Enter a number to indicate the normal level of inventory at a fixed picking location that the system uses during batch replenishments to generate replenishment requests. You can have the system perform replenishment when the quantity in a fixed picking location reaches either the normal replenishment point or the minimum replenishment point. During automatic, or online, replenishment, the system uses the minimum replenishment point. For batch replenishment, you specify in the processing options of the Batch Replenishment program (P461601) which replenishment point you want the system to use.

Min Replenishment Point
Enter a number to indicate the minimum quantity of inventory at a fixed picking location that the system uses to generate an online replenishment request. You can have the system perform replenishment when the quantity in a fixed picking location reaches either the normal replenishment point or the minimum replenishment point. During automatic, or online, replenishment, the system uses the minimum replenishment point. For batch replenishment, you specify in the processing options of the Batch Replenishment program (P461601) which replenishment point you want the system to use.

2.3.6 Setting Up Fixed Replenishment Zones
Access the Fixed Replenishment Zone Revisions form.

Replenishment Zone
A code (46/ZN) that identifies replenishment zones, which are areas in the warehouse from which items are retrieved to replenish or refill picking locations. You assign zones to locations using Location Master (P4100).

2.4 Setting Up Random Requirements
This section provides an overview of random requirements and discusses how to:

- Define location characteristics by location or group.
- Assign characteristic groups to locations.
2.4.1 Setting Up Random Requirements

- Set up random rules.
- Create the Random Locations table.
- Build the tiebreaker table.

### 2.4.1.1 Understanding Random Requirements

A random requirement is a set of instructions that determine how the system builds random locations in the warehouse. Random requirements allow you to use warehouse space more efficiently because the system selects locations randomly. By creating this flexibility in storage, you enable the process of location selection to operate in a more efficient manner.

### 2.4.1.2 Location Characteristics

You define location characteristics to create random requirements. The system uses the random requirements to create random locations, which are groups of locations that correspond to a random rule. The random rule then can be assigned to the movement instructions.

For example, assume that you have an order that consists of items that require refrigeration and are stored in liquid form. Two of the characteristics that you would define might be cold and wet.

### 2.4.1.3 Characteristic Groups

You can assign characteristic groups to locations to create random rule requirements. You may also assign characteristics to a location using the Location Characteristics program (P46021).

For example, assume that you have created a characteristic group for an order that consists of refrigerated items that are stored in liquid form. You must specify locations in the warehouse that are suitable in temperature and space for storing the items.

### 2.4.1.4 Random Rules

You use random rules to make location selection more efficient by randomly distributing items throughout the warehouse instead of using fixed locations for putaway, picking, and replenishment. You create a random rule using random requirements that are based on location characteristics.

After you set up a random rule, you can include that random rule in a putaway, picking, or replenishment instruction table.

After you add or change a random rule or a location characteristic, you must build the Random Locations table using the Build Random Location Table program (R46821). If you do not run the Build Random Location Table program, the first putaway request that attempts to use the random rule causes the system to automatically rebuild the F46821 table. The rebuild might result in slower processing of the movement request.

### 2.4.1.5 Random Locations Table

The F46821 table contains a list of all the random locations for a rule. You run the Build Random Location Table program after you change the random rule requirements or after you change the characteristics of random locations.

When you run the Build Random Location Table program, the system matches location characteristics with random rule characteristics and updates the Random Locations table.
2.4.1.5 Tiebreaker Table
Whenever you move inventory, the system uses information from the F46095 table to suggest locations for picking, putaway, or replenishment. If several locations meet the criteria, the system uses the information stored in a tiebreaker table to select the optimum location. To determine tiebreaker information for putaway to random locations, you must create a tiebreaker table that stores this information about every location in the warehouse:

- Sequence number
- Available space
- Proximity to a base location

You build a tiebreaker table using a program that selects locations and calculates their proximity and available space. You can use the generic program to build a tiebreaker table for all locations in the warehouse, or you can modify the program to create a table with fewer locations.

You must rebuild the tiebreaker table whenever you change any of this data:

- Putaway, Picking, or Replenishment Sequence Codes
- Location characteristics
- Location dimensions
- Location proximity (latitude, longitude, or height)

2.4.2 Forms Used to Set Up Random Requirements

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Characteristics Revisions</td>
<td>W46021B</td>
<td>Warehouse System Setup (G4641), Location Characteristics Click Add on Work With Location Characteristics.</td>
<td>Define location characteristics by location or group.</td>
</tr>
<tr>
<td>Location Profile Revisions</td>
<td>W46020B</td>
<td>Warehouse System Setup (G4641), Location Profile Select a location and then select Profile Revisions from the Row menu on Work with Location Profiles.</td>
<td>Assign characteristic groups to locations.</td>
</tr>
</tbody>
</table>
### 2.4.3 Defining Location Characteristics by Location or Group

Access the Location Characteristics Revisions form.

### 2.4.4 Assigning Characteristic Groups to Locations

Access the Profile Revisions form.

### 2.4.5 Setting Up Random Rules

Access the Random Requirements Revisions form.

**Random Rule**

Enter a code (46/SR) that identifies a random requirements table. If you use Random, Empty or Existing locations for the movement method, you can enter a random rule code to consider only locations whose characteristics match the random rule. You can leave Random Rule blank to have the system consider all locations for each movement method.

**Sequence**

Enter a number that ranks optional characteristics in a random rule. During random putaway, picking, and replenishment, the system selects locations with characteristics that match the random rule's characteristics, according to the random characteristic sequence. If a characteristic is required, the system does not use the random sequence.

**Rel. (relationship)**

Enter a code (H46/PU) that indicates what location characteristics should be included or excluded when choosing locations with a random rule. Each characteristic specified on a random rule must have a relationship code. You assign relationships on Random Tables (P46822). Values are:

- Enter **EQ**: to search for locations with characteristics that equal the random rule characteristics
- Enter **NE**: to search for locations with characteristics that do not equal the random rule characteristics
**Setting Up Item Warehouse Information**

**R O (required or optional)**

Enter a code (H46/RQ) that indicates whether a location characteristic is required or optional for a random rule to select the location. The random rule selects locations that have characteristics matching the random rule's required characteristics. The random rule does not necessarily select locations matching the random rule's optional characteristics. Values are:

- Enter **R**: to use only locations that have this required characteristic
- Enter **O**: to use locations that have this optional characteristic, if possible

**Characteristic**

A code (46/DF) defines a characteristic for a location or location group. You can define unlimited characteristics (such as Cold, Dark, Dry, Heavy, and Secure) for any location or location group.

---

### 2.4.6 Creating the Random Locations Table

Select Advanced & Technical Ops (G4631), Build Random Location Table.

### 2.4.7 Building the Tiebreaker Table

Select Advanced & Technical Ops (G4631), Build Tiebreaker Information.

### 2.5 Setting Up Item Warehouse Information

This section provides an overview of item warehouse information, and discusses how to:

- Define unit of measure structures.
- Set processing options for Item Master (P4101).
- Define item classification codes.
- Set up item profiles.
- Set up item unit of measure and capacity definitions.
- Set processing options for Item Unit of Measure Definition.

#### 2.5.1 Understanding Item Warehouse Information

You must provide warehouse information about each item before the system can process items. For example, you can classify items by their size or the demand for them. You must set up units of measure such as each and box; and define a unit of measure structure that describes the relationship of each unit of measure to the other units of measure. You also must specify default locations for items and whether items can mix with different items in the same locations.

#### 2.5.1.1 Unit of Measure Structures

You must define a unit of measure structure to process an item in the JD Edwards EnterpriseOne Warehouse Management system. A unit of measure structure describes the relationship between the smallest unit of measure and larger units of measure, such as each to box, box to case, and case to pallet. For example, if you lack bulk floor space and you receive a pallet of 500 items, the unit of measure structure enables you to convert a pallet to a smaller unit of measure automatically and to store the items in smaller locations. The system uses the unit of measure structure to select the most efficient unit of measure for picking, putaway, and replenishment.
You can define an unlimited number of unit of measure conversions for an item. For example, you can define conversions such as 24 items per case, 16 cases per pallet, and so on. However, the system limits the structure to 5 unit of measure levels. You assign a code (1 through 5) to each unit of measure level in the structure.

Each item must have a primary unit of measure. The primary unit of measure is the smallest unit of measure that the system can track. You should assign a structure code of 1 to the largest unit of measure, such as a pallet. The system automatically assigns the highest numeric structure code for an item (up to five unit of measure levels) to the primary (smallest) unit of measure.

The system uses the unit of measure conversions based on how you set the unit of measure conversion in System Constants. You can use conversions that were defined for the item in a specific branch/plant, or you can define conversions for an item that apply to all branch/plants. If you do not set the unit of measure conversion, the system searches for the item’s conversion in the Item Master table.

The system overrides the Unit of Measure structures for each item that is tracked in the system by a serial number. For these items, the primary unit of measure is always in level one, with a quantity of one. The system tracks serial numbers using one record for each serial number. You cannot merge these records.

### 2.5.1.2 Item Classification Codes

An item classification code is a group to which you assign an item. During inventory movement (putaway, picking, and replenishment), the system uses these codes to select the movement tables that determine location selection. You use two types of item classification codes for the warehouse:

- Item dimension group
- Warehouse process groups

For example, you can assign a compact disc to the item dimension group DISK and to the warehouse process group FAST because it is a popular item and does not remain in stock very long.

### 2.5.1.3 Item Profiles

Every item that you process through the warehouse must have an item profile. The item profile contains basic information such as:

- Whether you can store items of different types or ages in the same location.
- Whether to use one or two-phase movement for putaway, picking, and replenishment.
- The item’s various default locations.

For example, you can set up a profile for item Compact Disc to:

- Allow mixing with other items.
- Use two-phase putaway, picking, and replenishment.
- Use location V/ / as its default variance location.

### 2.5.1.4 Item Unit of Measure and Capacity Definitions

You define information about each item’s units of measure, such as each, box, and case, to allow the system to perform putaway, picking, and replenishment of that item. You define the item’s units of measure when you create the Item Master record for the item. Each item's unit of measure definition includes information such as:
- The default storage container.
- A switch that controls license plate tracking for that unit of measure when license plates are activated.
- The dimensions that the system uses to calculate volume.

A unit of measure structure describes the relationship of eaches to boxes, boxes to cases, cases to pallets, and so on. If you use a unit of measure structure, you define each unit of measure in the structure during the creation of the basic Item Master record for the item. If you do not use a unit of measure structure, you must define the primary unit of measure for the item.

You use the Work With Item Unit of Measure Definition form to define the unit of measure’s dimensions and how the system processes each unit of measure for an item’s structure. You can define units of measure by item or item dimension group, and the system enables you to specify whether to display item or item dimension group information.

You select an item dimension group from UDCs. If the predefined item dimension groups do not meet the needs of the business, you can define a new item dimension group on the User Defined Codes form and then reference that group on Unit of Measure Group Revisions.

If you set up an item unit of measure definition, it always overrides an item group unit of measure definition. The item unit of measure is specific to that item, whereas you use the item group unit of measure to supply the unit of measure information for all items in the group during inventory movement. You can set up an item dimension group and then set up item unit of measure definitions for items that vary from the normal dimensions of the group.

### 2.5.2 Forms Used to Set Up Item Warehouse Information

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Unit of Measure</td>
<td>W41002D</td>
<td>Warehouse System Setup (G4641), U/M Definition by Item</td>
<td>Define unit of measure structures.</td>
</tr>
<tr>
<td>Conversions</td>
<td></td>
<td>Select a record and then select UOM from the Row menu on Work With U/M</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Definition by Item</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Item Unit of Measure Conversions.</td>
<td></td>
</tr>
<tr>
<td>Category Codes</td>
<td>W41026G</td>
<td>Warehouse System Setup (G4641), Item Branch</td>
<td>Define item classification codes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Category Codes from the Row menu on Work</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>With Item Branch</td>
<td></td>
</tr>
</tbody>
</table>
### 2.5.3 Setting Processing Options for Item Master (P4101)

Processing options enable you to specify the default processing for programs and reports.

#### 2.5.3.1 Defaults

These processing options define the default information that the system uses, such as unit of measure.

1. **Primary Unit of Measure**
   Identify the primary unit of measure (00/UM) that the system uses. If you leave this processing option blank, the system uses EA (each).

2. **Weight Unit of Measure**
   Identify the unit of measure (00/UM) for weight that the system uses. If you leave this processing option blank, the system uses LB (pounds).

3. **Volume Unit of Measure**
   Enter a UDC (00/UM) that indicates the unit of measure by metric conversion for ambient volume. For example, the unit of measure code for a gallon might be GL, or for a liter it might be LT.

4. **Template**
   Enter a template name that you can use when entering items on Item Master Revisions (P4101). This name is case sensitive. If you use any capital letters in the template name when you add it, you must enter those letters in capitals whenever you search for or attach the template to Item Master Revisions.

#### 2.5.3.2 Process

These processing options enable you to specify the effective from and thru dates that the system uses in the Item Notes table and whether the system displays certain forms when you add or change information on the Item Master Revisions form.

1. **Notes From Date**
   Specify the effective from date that the system uses in the Print Messages table (F4016). If you leave this processing option blank, the system uses the system date.
2. Notes Thru Date
Specify the effective through date that the system uses in the Print Messages table (F4016). If you leave this processing option blank, the system uses the last day of the default century.

3. Category Codes
Specify whether the system displays the Category Codes form when you add or change information on the Item Master Revisions form. Values are:

Leave blank and the system does not display the form.
Enter 1: to display the form.

4. Additional System Information
Indicate whether the system displays the Additional System Information form when you add or change information on the Item Master Revisions form. Values are:

Leave blank and the system does not display the form.
Enter 1: to display the form.

5. Storage/Shipping
Specify whether the system displays the Storage/Shipping form when you add or change information on the Item Master Revisions form. Values are:

Leave blank and the system does not display the form.
Enter 1: to display the form.

6. Cost Revisions (Conditional)
Specify whether the system displays the Cost Revisions form when you add or change information on the Item Master Revisions form. Values are:

Leave blank and the system does not display the form.
Enter 1: to display the form.

Note: In order for the system to display the Cost Revisions form, you must also set the value for the Inventory Cost Level field to 1 on the Item Master Revisions form.

7. Price Revisions (Conditional)
Specify whether the system displays the Price Revisions form when you add or change information on the Item Master Revisions form. Values are:

Leave blank and the system does not display the form.
Enter 1: to display the form.

Note: In order for the system to display the Price Revisions form, you must also set the value for the Sales Price Level field to one on the Item Master Revisions form.

8. Unit Of Measure Conversions (Conditional)
Specify whether the system displays the Unit of Measure form when you add or change information, and when the system performs the unit of measure conversations at the item level. Values are:

Leave blank and the system does not display the Unit of Measure form.
Enter 1: and the system displays the Unit of Measure form.

9. Item Branch
Specify whether the system displays the Item Branch form when you add or change information on the Item Master Revisions form. Values are:
- Leave blank and the system does not display the Item Branch form.
- Enter 1: to display the Item Branch form, but return to the Item Master form.
- Enter 2: to display and remain on the Item Branch form.

10. Attachments
Specify whether the system displays the Item Notes form when you select a media object on the Work With Item Master Browse form. Values are:
- Leave blank and the system displays only the internal attachments.
- Enter 1: to display the Item Notes form.

11. Use Templates
Specify whether you want to use templates for segmented items. Values are:
- Leave blank and the system does not use templates.
- Enter 1: to use templates.

2.5.3.3 Global Update
This processing option enables you to update changes made to the second or third item numbers to records in selected tables.

1. Transfer Changes
Specify which tables that the system updates when you have made changes to item numbers in the item branch records. You use the UDC (40/IC) to compile the list of tables. Values are:
- Leave blank and the system does not update any tables.
- Enter 1: and the system updates only those tables that contain item branch information with changes to the second and third item numbers.
- Enter 2: and the system updates only selected tables that contain item branch information with changes to the second and third item numbers.

2.5.3.4 Versions
These processing options enable you to specify the versions for various programs that you access from the Item Master program. Versions control how the system processes and displays information. Therefore, you must set the processing options to meet the specific needs of the business.

1. Item Availability (P41202)
Specify the version that the system uses for the Item Availability program (P41202). If you leave this processing option blank, the system uses version ZJDE0001.

2. Item Branch (P41026)
Specify the version that the system uses for the Item Branch program (P41026). If you leave this option blank, the system uses version ZJDE0001.
3. Cost Revisions (P4105)
Specify which version that the system uses when you access the Cost Revisions program (P4105). If you leave this processing option blank, the system uses version ZJDE0001.

4. Segmented Item Availability (P41206)
Specify which version that the system uses when you access the Segmented Item Availability program (P41206). If you leave this processing option blank, the system uses version ZJDE0001.

5. Item Segment Selection (P410015)
Specify which version that the system uses when you access the Item Segment Selection (P410015). If you leave this processing option blank, the system uses version ZJDE0001.

2.5.3.5 Interop
These processing options allow you to specify whether the system performs outbound interoperability processing and whether the system creates a record of a transaction before changes to the transaction.

1. Transaction Type
Enter the type of document, UDC (00/TT), for which you want the system to search. This UDC identifies the type of transaction, such as an invoice or a sales order. You can either enter the transaction type or select it from the Select User Define Code form. The system uses the transaction type as the default value.

Note: If you leave this processing option blank, the system does not perform export processing.

2. Before/After Image Processing
Specify whether the system creates a record of a transaction after the transaction is changed, or whether the system creates records of a transaction before and after a transaction is changed. Values are:

Leave blank to create a record of a transaction after changes.
Enter 1: to create two records: one record before changes and one record after changes.

2.5.4 Defining Unit of Measure Structures
Access the Item Unit of Measure Conversions form.

From UoM (from unit of measure)
Enter a UDC (00/UM) that identifies the unit of measure for an item. For example, it can be eaches, cases, boxes, and so on.

Quantity
Enter the factor that the system uses to convert one unit of measure to another unit of measure.

To UoM (to unit of measure)
Enter a UDC (00/UM) that indicates a secondary unit of measure.

Structure Code
A code that determines the hierarchy of items in containers or pallets.
For example:

**Unit of Measure**

- 1 Pallet = 24 Cases: **structure code 1**
- 1 Case = 12 Interpacks: **structure code 2**
- 1 Interpack = 3 Boxes: **structure code 3**
- 1 Box = 6 Eaches: **structure code 4**

Assign structure code 1 to the largest unit of measure, with smaller units assigned to codes 2, 3, and 4.

Given the previous structure example, when one item is stored in the warehouse the location detail (F4602) would have a structure of:

1 Pallet/ with 24 Cases on the Pallet/ with 12 Interpacks in each Case/ with 3 Boxes in each Interpack/ with 6 Eaches in each Box

---

**Note:** It is not necessary to define the primary unit of measure within a structure. The default value is always the lowest level. Or, if you are changing the structure in a program, the system verifies that the primary is present in the structure and is the lowest level.

---

### 2.5.5 Defining Item Classification Codes

Access the Category Codes form.

**Item Dimension Group**

Enter a UDC (41/01) that identifies a group of items that share the same dimensions. An item dimension group defines the dimensions for all items that belong to the group. After you set up an item dimension group, you can assign items to the group through Classification Codes (P4101).

**Warehouse Process Grp 1**

Enter a UDC (41/02) that identifies a group of items to move the same way. A process group determines what movement instructions the system uses for putaway, picking, and replenishment. You use the Classification Codes program (P4101) to assign items to process groups.

**Warehouse Process Grp 2**

Enter a UDC (41/02) that identifies a group of items to move the same way. A process group determines what movement instructions the system uses for putaway, picking, and replenishment. You use the Classification Codes program (P4101) to assign items to process groups.

**Warehouse Process Grp 3**

Enter a UDC (41/02) that identifies a group of items to move the same way. A process group determines what movement instructions the system uses for putaway, picking, and replenishment. You use the Classification Codes program (P4101) to assign items to process groups.

**See Also:**

- Defining Process Selection.
2.5.6 Setting Up Item Profiles

Access the Item Profile Revisions form.

**Overflow Location**
Enter a code that identifies the location that the system uses when an item cannot fit into the suggested putaway locations. You can monitor movement suggestions for the overflow location by accessing the audit report (P46175) or by inquiring on the location detail (F4602).

**Variance Location**
Enter a code that identifies the location that the system uses when you confirm a smaller quantity than the suggested quantity during putaway confirmation. You do this through Change/Split Suggestion during putaway confirmation, where you enter a quantity that is smaller than the suggested quantity, and confirm with a variance to the suggested quantity. The system places the variance (remaining) quantity in the variance location.

**Holding Location**
Enter a code that identifies the location that the system uses when you confirm a larger quantity than the suggested pick quantity during pick confirmation. You do this through Change/Split Suggestion during pick confirmation, where you enter a quantity that is greater than the suggested quantity, and confirm with a variance to the suggested quantity. The system places the variance (extra) quantity in the holding location.

**Base Putaway Location**
Enter a code that identifies the base putaway location that the system uses to calculate proximity when you specify proximity as the tiebreaker in a putaway instruction. If you use a tiebreaker that sequences locations according to proximity, the system ranks the locations based on their distance from this base putaway location. The system calculates distance based on the coordinates (longitude, latitude, and height) you defined in the location profile (P46020).

**Base Picking Location**
Enter a code that identifies the base picking location that the system uses to calculate proximity when you specify proximity as the tiebreaker in a picking instruction. If you use a tiebreaker that sequences locations according to proximity, the system ranks the locations based on their distance from this base picking location. The system calculates distance based on the coordinates (longitude, latitude, and height) you defined in the location profile (P46020).

**1 or 2 Phase Putaway**
Enter a UDC (H46/PT) that indicates whether you use 1- or 2-phase confirmation during putaway.

- 1-phase confirmation means the process is confirmed as one step after goods have moved from the starting location to the destination location.
- 2-phase confirmation means the process is confirmed in two steps: the first when the goods have moved from the starting location to the staging location, and the second when the goods have moved from the staging location to the destination location.

If you use 2-phase confirmation, you can specify whether the confirmation is logical or physical.

- Logical 2-phase confirmation generates one document and does not indicate physical movement to the staging location.
Physical 2-phase confirmation generates two documents: the first indicates movement from the starting location to the staging location, and the second indicates movement from the staging location to the destination location.

Values are:
I: Use 1-phase confirmation
L: Use logical 2-phase confirmation
P: Use physical 2-phase confirmation

1 or 2 Phase Picking
Enter a UDC (H46/PK) that indicates whether you use 1- or 2-phase confirmation during picking.

- 1-phase confirmation means the process is confirmed as one step after goods have moved from the starting location to the destination location.
- 2-phase confirmation means the process is confirmed in two steps: the first when the goods have moved from the starting location to the staging location, and the second when the goods have moved from the staging location to the destination location.

If you use 2-phase confirmation, you can specify whether the confirmation is logical or physical.

- Logical 2-phase confirmation generates one document and does not indicate physical movement to the staging location.
- Physical 2-phase confirmation generates two documents: the first indicates movement from the starting location to the staging location, and the second indicates movement from the staging location to the destination location.

Values are:
I: Use 1-phase confirmation
L: Use logical 2-phase confirmation
P: Use physical 2-phase confirmation

1 or 2 Phase Replenishment
Enter a UDC (H46/RP) that indicates whether you use 1- or 2-phase confirmation during replenishment.

- 1-phase confirmation means the process is confirmed as one step after goods have moved from the starting location to the destination location.
- 2-phase confirmation means the process is confirmed in two steps: the first when the goods have moved from the starting location to the staging location, and the second when the goods have moved from the staging location to the destination location.

If you use 2-phase confirmation, you can specify whether the confirmation is logical or physical.

- Logical 2-phase confirmation generates one document and does not indicate physical movement to the staging location.
- Physical 2-phase confirmation generates two documents: the first indicates movement from the starting location to the staging location, and the second indicates movement from the staging location to the destination location.

Values are:
I: Use 1-phase confirmation
L: Use logical 2-phase confirmation
P: Use physical 2-phase confirmation

Mix Items (Y/N)
Select to indicate you want the system to store different items in the same location.

Mix Dates/Lots (Y/N)
Select to indicate you want the system to assign items to a location.

You must set up the location profile and the item profile in the JD Edwards EnterpriseOne Warehouse Management system to allow the mixing of dates.

Split Lines (Y/N)
Select to indicate the system can split a purchase order line when you create a putaway suggestion for the order line.

2.5.7 Setting Processing Options for Item Unit of Measure Definition (P46011)
Processing options enable you to specify the default processing for programs and reports.

2.5.7.1 Display
Use these processing options to specify how the system displays information.

1. Select Item Dimension Group
Enter a UDC (46/IG) to display information about item numbers or item dimension groups. Values are:
Leave blank or enter 0: to display item dimension group information.
Enter 1: to display item number information.

2. Item UOM Definition Tab to Display
Leave blank to display the Process Rules Tab or enter 1 to display the Capacity Requirements Tab when working with Item Unit Of Measure revisions.

2.5.8 Setting Up Item Unit of Measure and Capacity Definitions
Access the U/M Definition by Item Revisions form.

2.5.8.1 Process Rules
Select Process Rules.

Default Pack Code
Enter a code (46/PK) that identifies the packing materials to use (such as opaque shrink wrap, or foam nuggets) if repacking is required before putaway. If you set the Repack (Y/N) field to Y, you must enter a code in this field.

Container Code
Enter a code (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box).
Capacity Method
A code that indicates the capacity method the system uses to calculate whether the quantity to be put away fits in a location. Values are:

1: Volume checking. The system compares the available cubic dimensions of a location to the cubic dimensions of the item to be put away.

2: Layering. The system compares the item’s dimensions to the usable dimensions of the location. This method lets you layer goods in a location. If you specify this capacity method, you must also specify whether the item can be rotated. If there is enough available volume, and the item’s dimensions fit in the location, the system suggests the location for putaway.

3: Quantity checking. The system examines the quantity of the item that should fit in the location, as you defined it through Location Capacity Definition (P46024).

U/M Usage
A code that indicates whether the default storage container assigned to the specified item in this unit of measure is an open, pallet-type container or a closed, box-type container. The system calculates the item’s volume and weight based on container type. Valid codes are:

1: The container is an open, pallet-type container. The system calculates its volume and weight as follows:
   \[ \text{Height} = \text{the height of the container plus the height of the items on the container} \]
   \[ \text{Weight} = \text{the weight of the container plus the weight of the items on the container} \]
   \[ \text{Width} = \text{the larger of the width of the container or the items on the container} \]
   \[ \text{Depth} = \text{the larger of the depth of the container or the items on the container} \]

2: The container is a closed, box-type container. The system calculates its volume and weight as follows:
   \[ \text{Weight} = \text{The weight of the container plus the weight of the goods in the container} \]
   Height, width, and depth are pulled from Container and Carton Code (P46091) information, where you also define the container’s weight.

---

Note: If you do not specify a default container for the specified item in this unit of measure, the system uses the height, width, depth, and weight defined on this form.

Carton Rcmd Method
A code that indicates the method that the system uses to recommend a carton for the specified item in this unit of measure. Values are:

Blank: Do not recommend cartons for the specified item in this unit of measure.

1: Recommend shipping cartons for the specified item in this unit of measure based on the volume of the item and the volume of the shipping carton.

2: Recommend shipping cartons for the specified item in this unit of measure based on the percentage of the shipping carton that the item and unit of measure occupy.

3: Recommend shipping cartons for the specified item in this unit of measure based on the warehouse standard pack of the item and unit of measure.

Putaway Tag Method
A code that indicates the number of move tags that the system prints for putaway of this item. Valid codes are:

N: Do not print move tags for putaway

T: Print one move tag per putaway trip
1: Print a move tag for each unit of this unit of measure for putaway

**Picking Tag Method**
A code that indicates the number of move tags that the system prints for picking of this item. Valid codes are:

N: Do not print move tags for picking
T: Print one move tag per picking trip
1: Print a move tag for each unit of this unit of measure for picking

**Replen Tag Method**
A code that indicates the number of move tags that the system prints for replenishment of this item. Valid codes are:

N: Do not print move tags for replenishment
T: Print one move tag per replenishment trip
1: Print a move tag for each unit of this unit of measure for replenishment

**License Plate**
Indicate whether you want the system to automatically create a license plate number for the specified item or item dimension group in this unit of measure.

**Breakdown**
Indicate whether you allow the system to break a unit of measure (such as a pallet) down into smaller units of measure (such as cases).

**Rollup**
Indicate whether you allow rollup during picking.

**Repack**
Indicate whether the specified item in this unit of measure should be repacked before putaway.

---

**Note:** You must also specify a packing method by entering a code in the Default Pack Code field.

---

**Allow Rotation**
A code that indicates whether you allow the system to rotate an item 90 degrees to determine whether the item fits into a location.

---

**Note:** You must enter a code in this field if you use capacity method 2 (layering).

---

### 2.5.8.2 Capacity Requirements
Select Capacity Requirements.

**Gross Dimensions**
Enter the gross width of the location as defined within the:

- Location dimension group.
- Unit Of Measure Definition form (by item or group).
- Storage container or shipping container.
Setting Up Inclusion Rules

The unit of measure can be defined on the Branch/Plant Constants - Location Definition form.

**Gross Weight**

Enter the gross weight of one unit of the item in this unit of measure, or the weight of an empty storage container or shipping carton. The system enters these as the default values in the F4602 and uses the values in maximum weight calculations for specified locations during putaway.

### 2.6 Setting Up Inclusion Rules

This section provides an overview of inclusion rules, and discusses how to:

- Define inclusion rules.
- Set processing options for Supply/Demand Inclusion Rules (P34004).

#### 2.6.1 Understanding Inclusion Rules

An inclusion rule specifies which order type, line type, and status combinations that you process through the warehouse. The inclusion rules therefore determine the steps at which the system creates putaway requests (during purchase order receipts entry) or picking requests (during sales order processing).

You must define the inclusion rule and include the order type, next status, and line type for the order for which you want to create a putaway or picking request.

#### 2.6.2 Forms Used to Set Up Inclusion Rules

<table>
<thead>
<tr>
<th>Form Name</th>
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</tr>
</thead>
</table>

#### 2.6.3 Setting Processing Options for Supply/Demand Inclusion Rules (P34004)

Processing options enable you to specify the default processing for programs and reports.

**2.6.3.1 WO Types**

Use this processing option to indicate which line of the data dictionary column title the system uses for the text description of this data item.

1. **Work Order Document Types.**
   Enter 1: to indicate the system uses the first line of the Data Dictionary column title for the text description of this data item. Enter 2: indicates the system uses the second line of the Data Dictionary column title for the text description. If this field is blank, the system uses the Data Dictionary row description. These can be stacked up one after another for multiple document types. If you leave this processing option blank, the system uses WO.

#### 2.6.4 Defining Inclusion Rules

Access the Work With Supply/Demand Inclusion Rules form.
2.7 Setting Up Order Groups

This section provides an overview of order groups, and discusses how to set up order groups.

2.7.1 Understanding Order Groups

An order group is a set of document types, such as purchase orders or sales orders, that you use as a group to select movement instructions for putaway, picking, and replenishment. You define the order group to identify which putaway, picking, or replenishment instruction table to select during process selection.

You can use a blank name for the most commonly used order group.

You must assign each order type that you use to an order group. For replenishment, you must assign document type IQ to each order group that you use. Additionally, you must set up order groups to perform online replenishment.

2.7.2 Forms Used to Set Up Order Groups

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
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<th>Usage</th>
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</thead>
<tbody>
<tr>
<td>Order Group Revisions</td>
<td>W46092B</td>
<td>Warehouse System Setup (G4641), Order Groups</td>
<td>Set up order groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work with Order Groups.</td>
<td></td>
</tr>
</tbody>
</table>

2.7.3 Setting Up Order Groups

Access the Order Group Revisions form.

**Order Group**

Enter a UDC (46/DT) that identifies a group of order types to process as one for putaway, picking, and replenishment transactions.

You set up order group codes on the User Defined Codes form, then add order types to the code on Order Groups (P46092). You specify an order group on Picking Instructions (P46095) to limit the order types that trigger replenishment after picking.

**Order Type**

A code (00/DT) that identifies the type of document, such as an order or an invoice.

2.8 Setting Up Unit of Measure Groups

This section provides an overview of unit of measure groups, and discusses how to set up unit of measure groups.

2.8.1 Understanding Unit of Measure Groups

A unit of measure group is a set of units of measure the system processes in the same way during putaway, picking, and replenishment. This method saves you time during warehouse setup. You can use unit of measure groups by assigning the groups to movement instruction tables to control inventory movement.

You can assign a unit of measure to only one unit of measure group.
2.8.2 Forms Used to Set Up Unit of Measure Groups

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Measure Group Revisions</td>
<td>W46096B</td>
<td>Warehouse System Setup (G4641), Unit of Measure Groups</td>
<td>Set up unit of measure groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work with Unit of Measure Groups.</td>
<td></td>
</tr>
</tbody>
</table>

2.8.3 Setting Up Unit of Measure Groups

Access the Unit of Measure Group Revisions form.

**Unit of Measure Group**

Enter a UDC (46/UG) that identifies a group of units of measure the system process as one for putaway, picking, and replenishment transactions.

You use unit of measure groups to set up movement instructions for putaway, picking, or replenishment.

2.9 Setting Up Mixed Sequence Packing Groups

This section provides an overview of mixed sequence packing groups and discusses how to setup mixed sequence packing groups.

2.9.1 Understanding Mixed Sequence Packing Groups

A mixed sequence packing group is a group of items the system processes in the same container for use with a standard pack rule.

2.9.2 Forms Used to Set Up Mixed Sequence Packing Groups

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work With Mixed Item Packing Group</td>
<td>W460151A</td>
<td>Shipping and Packaging Setup (G46412), Mixed Sequence Packing Groups</td>
<td>Inquire on mixed item packing groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Find on Work With Mixed Item Packing Group.</td>
<td></td>
</tr>
<tr>
<td>Mixed Item Packing Group Revisions</td>
<td>W460151A</td>
<td>On Work With Mixed Item Packing Group click Add.</td>
<td>Set up mixed item packing groups.</td>
</tr>
</tbody>
</table>

2.9.3 Setting Up Mixed Sequence Packing Groups

Access the Mixed Item Packing Group Revisions form.

**Mixed Package Group**

Enter a UDC (46/MP) value that identifies a group of item numbers that can be packaged in a mixed sequenced standard pack.
2.10 Setting Up Storage Containers

This section provides an overview of storage containers, and discusses how to:

- Define storage containers.
- Set up allowed containers for each location.
- Set up item standard packs.
- Set up processing options for Item Standard Packs (P460131).
- Set up pallet standard packs.

2.10.1 Understanding Storage Containers

You can use storage containers, such as boxes, canisters, or pallets, to store items while they are in the warehouse. You set up storage containers to specify how much space that the container requires in the storage location. You can also specify which containers are allowed in a particular location. The system uses this information to select locations during putaway.

Two types of storage containers are available:

- Open or pallet-type containers, which you can overfill to exceed the container’s dimensions to create storage space on top of the container
- Closed or box-type containers, which you cannot overfill

You define the dimensions, weight, capacity, and purpose (for example, whether a storage container is shippable) of each container to use in the warehouse. You can also define container pieces and enter Advance Ship Notice information about a shipping container. The system uses this information when choosing locations for putaway and also for transactions that involve other JD Edwards EnterpriseOne systems.

The system contains predefined container codes that identify various storage containers or shipping cartons, such as codes for packaging, pieces, or expendable containers. If the container codes do not meet the needs of the business, you can add codes on the User Defined Codes form.

The system enables you to put any type of container in a location. However, you can restrict the container types allowed in a location. You can enter a single container code, or you can define a list of allowed containers.

To calculate the space that you need for a storage container, you must define whether the item’s container is pallet-type (open) or box-type (closed) on the Item U/M Definition - Capacity Requirements form.

2.10.1.1 Item Standard Packs

The required quantity of items is called the item standard pack. You can set up the quantity of items in a carton, based on the customer and the item’s unit of measure. Using the Item Standard Packs application, you can set up item standard pack information by specifying the highest or largest item unit of measure that the system places in the first shipping container to be tracked.

You can also set up item standard packs for a group of similar items by using the mixed item packaging group. You use the Select Item Group processing option on the Process tab to specify the default display. When locating records on the Work With Item Standard Packs form (W460131A), you can also select whether to view item numbers or the item dimension group and packing groups.
Note: You specify an item's dimension group on the Category Codes form (W4101B) in the Item Master or Item Branch (P41026) applications.

The system uses standard pack information to create the carton detail for the Advance Ship Notice. Because a standard pack can vary by Sold To and Ship To values, you can set up item standard packs by Sold To and Ship To values, or both.

You can also enter a recommendation sequence for alternate cartons, which is informational only. If you print labels for a shipment, the system generates a label for each layer that is set up.

The system uses the Standard Pack Recommendation Rules table (F460131) to process standard pack information.

### 2.10.1.2 Pallet Standard Packs

You can use the Pallet Standard Packs application (P460132) to specify standard pack quantities for other types of packaging, such as the number of cartons on a pallet. Because a standard pack can vary by Sold To and Ship To values, you can set up pallet standard packs by Sold To and Ship To values, or both.

The system uses the Standard Pack Recommendation Rules table to process standard pack information.

### 2.10.2 Forms Used to Set Up Storage Containers

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container and Carton Codes Revisions</td>
<td>W46091B</td>
<td>Shipping and Packaging Setup (G46412), Container and Carton Codes</td>
<td>Define storage containers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Container and Carton Codes.</td>
<td></td>
</tr>
<tr>
<td>Allowed Containers by Location - Revisions</td>
<td>W46026B</td>
<td>Warehouse System Setup (G4641), Allowed Containers by Location</td>
<td>Set up allowed containers for each location.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Allowed Containers by Location.</td>
<td></td>
</tr>
<tr>
<td>Work With Item Standard Packs</td>
<td>W460131A</td>
<td>Shipping and Packaging Setup (G46412), Item Standard Packs</td>
<td>Access various forms to set up storage container information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Item Standard Packs.</td>
<td></td>
</tr>
<tr>
<td>Item Standard Pack Revisions</td>
<td>W460131C</td>
<td>Click Add on Work With Item Standard Packs.</td>
<td>Set up item standard packs.</td>
</tr>
</tbody>
</table>
Setting Up Storage Containers

2.10.3 Defining Storage Containers

Access the Container and Carton Codes Revisions form.

Container Code
Enter a UDC (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

Dimensionless Container
Select to specify that the carton dimensions are not used when calculating the size of the piece. For the calculations of the size of the piece, the system uses Item/UOM Dimensions.

You can set up the carton as a dimensionless carton. You can create cartons such as own or shrink wrap.

Clear and the system uses the carton to determine the size of the piece.

Width
Enter the gross width of the location as defined within the:

- Location dimension group.
- Unit Of Measure Definition form (by item or group).
- Gross width of a storage container or shipping container.

The unit of measure can be defined on the Branch/Plant Constants - Location Definition form.

Depth
Enter the gross depth of the location as defined within the:

- Location dimension group.
- Unit Of Measure Definition form (by item or group).
- Storage container or shipping container.

The unit of measure can be defined in Branch/Plant Constants - Location Definition.
Height
Enter the gross height of the location as defined within the:
  ■ Location dimension group.
  ■ Unit Of Measure Definition form (by item or group).
  ■ Storage container or shipping container.
The unit of measure can be defined on the Branch/Plant Constants - Location Definition form.

Cubes
Enter the gross cubic dimensions of the locations defined within the:
  ■ Location dimension group.
  ■ Unit Of Measure Definition form (by item or group).
  ■ Storage or shipping container.
The unit of measure is defined in Branch/Plant Constants - Page 2 (P41001).

Dimension UM
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to display dimensions for the warehouse. The system provides the ability to establish inches, centimeters, meters, and so forth, as a measuring standard.

Cubes UM
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to display volume for this branch/plant. The system inputs a value in this field from Branch/Plant Constants - Page 2 (P41001). You can override this default value.

Weight
Enter the gross weight of one unit of the item in this unit of measure, or the weight of an empty storage container or shipping carton. The system enters these as the default values in the F4602 and uses the values in maximum weight calculations for specified locations during putaway.

Weight UM
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to indicate weight for this item. You can specify ounces, grams, kilograms, and so on, as weight standards. The system uses this unit of measure for the item or overrides it for an individual item or container.

Maximum Weight
Enter the maximum weight of a carton, including the weight of the carton itself and its contents. You define the maximum weight in the Container and Carton Codes program (P46091). The system uses the defined maximum weight during warehouse cartonization. In addition, the system gives you a warning during the Carton Reorganization process (P4620) if a carton exceeds its maximum weight.

2.10.3.1 Cartonization
Select Cartonization.

Tolerance Percent (tolerance percentage)
Enter the minimum percentage of a shipping carton that must be filled before it can be shipped. If the content of the carton does not reach this percentage, the system recommends a smaller carton. The default minimum percentage is 85 percent.
Setting Up Storage Containers

**Note:** For standard packs the requirement is 100 percent.

---

**Ship Priority**

Enter a number that identifies this shipping carton’s place in the priority list that the system uses to make carton recommendations. When the system makes a carton recommendation, it uses shipping priority to determine which carton it should select first, second, and third. If you want the system to look from large to small containers (downsizing), you should assign priority 1 to the largest container and priority 2 to the next largest.

**Available Container**

Select to specify this container is available as a shipping carton for packing picked items. The system uses available containers during carton recommendation.

**Shipping Container**

Select to use this container as a shipping carton.

---

**Note:** A container can be either a Shipping Container or a Tote Container, but not both.

---

**Tote Container**

Select to use this container as a non-shippable tote.

---

**Note:** A container can be either a Shipping Container or a Tote Container, but not both.

---

**None**

Select if you do not want to use this container as a shipping carton or tote container.

---

### 2.10.3.2 Ship Notice

Select Ship Notice.

**Packaging Code**

Enter a UDC (41/X1) corresponding to accepted values in the EDI X12 definition for data element 103. It is a combination of a Packaging Form (3 chars) and a Packaging Material (2 digits).

**Package Terms**

Enter a UDC (47/PT) that identifies packaging terms and conditions.

**Pkg Responsibility**

Enter a UDC (47/PR) that identifies the agency that is responsible for packaging.

**Expendable Container**

Select to specify a container is expendable and can incur a sales order charge.

**Container Piece**

Select to specify a container is a piece of a parent container.

**Create Sales Order Charge**

Select to specify the system creates a charge on the sales order for cartons. The charge is based on carton quantity (which is calculated from carton detail information) and
the price setup for the item number that is assigned to the carton.

2.10.3.3 License Plate
Select License Plate.

Container UM
Enter a UDC (00/UM) to indicate the unit of measure in which to express a container, for example, CS (case) or BX (box). The system uses this UM to populate the license plate UM field that resolves conflicts during identification of movement instructions for mixed item license plates.

Container Process Grp 1
Enter a UDC (41/02) that identifies the default Process Group for a License Plate when the Process Groups of the items on the license plate do not match. The system uses the default Process Group to determine which movement instructions to use for putaway, picking and replenishment.

Container Process Grp 2
Enter a UDC (41/02) that identifies the default Process Group for a License Plate when the Process Groups of the items on the license plate do not match. The system uses the default Process Group to determine which movement instructions to use for putaway, picking and replenishment.

Container Process Grp 3
Enter a UDC (41/02) that identifies the default Process Group for a License Plate when the Process Groups of the items on the license plate do not match. The system uses the default Process Group to determine which movement instructions to use for putaway, picking and replenishment.

2.10.3.4 Associated Item

Item Number
Enter a number that the system assigns to an item. It can be in short, long, or third item number format.

2.10.4 Setting Up Allowed Containers for Each Location
Access the Allowed Containers by Location - Revisions form.

2.10.5 Setting Processing Options for Item Standard Packs (P460131)
Processing options enable you to specify the default processing for programs and reports.

2.10.5.1 Display
Use this processing option to display an item dimension group.

1. Select Item Dimension Group
Specify the default value for displaying information about item numbers, item dimension groups, or mixed sequence packing groups. Values are:

   Blank: Display item number information.
   1: Display item dimension group information.
   2: Display mixed sequence packing group information.
2.10.5.2 Versions
Specify the version of Item Unit of Measure Definitions.

1. Item Unit of Measure Definitions (P46011)
Specify the version of Item Unit Of Measure Definition (P46011) you use as the default display for the application. Leave blank to use ZJDE0001.

2.10.6 Setting Up Item Standard Packs
Access the Work With Item Standard Packs form (W460131A).

Display Item Number
Select this button to display Item Number information.

Display Item Dimension Group
Select this button to display Item Dimension Group information.

Display Mixed Package Group
Select this button to display Mixed Package Group information.

On this form you can launch several programs from the Row menu to process standard pack information.

<table>
<thead>
<tr>
<th>Row Exit</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container Codes</td>
<td>Launches the Container and Carton Codes application (P46091). You define the dimensions, weight, capacity, and purpose (for example, whether a storage container is shippable) of each container to use in the warehouse. You can also define container pieces and enter Advance Ship Notice information about a shipping container.</td>
</tr>
<tr>
<td>UOM Conversion</td>
<td>Launches the Unit of Measure Conversions - Item application (P41002). You can define a unit of measure structure to process an item. A unit of measure structure describes the relationship between the smallest unit of measure and larger units of measure, such as eaches to boxes, boxes to cases, and cases to pallets.</td>
</tr>
<tr>
<td>Container BOM</td>
<td>Launches the Container Bill of Material application (P46098). You can specify the pieces that constitute a container. The system uses this information on the Advance Ship Notice.</td>
</tr>
<tr>
<td>Pallet Standard Pack</td>
<td>Launches the Pallet Standard Packs application. You can specify standard pack information for higher-level packaging, such as pallets.</td>
</tr>
<tr>
<td>Item UOM Definition</td>
<td>Launches the Item Unit of Measure Definition application. When the system creates an item standard pack row, it also creates a row in the Item Unit Of Measure Definition table (F46011) for the related item and unit of measure to calculate the gross weight.</td>
</tr>
<tr>
<td>Mixed Sequence</td>
<td>Launches the Mixed Item Packing Group application. You can assign items to a user-defined mixed item packing group.</td>
</tr>
</tbody>
</table>

Access the Item Standard Pack Revisions form.

Item Number
A number that the system assigns to an item. It can be in short, long, or third item number format.
Item Dimension Group
A code (system 41/type 01) that identifies a group of items that share the same dimensions. An item dimension group defines the dimensions for all items that belong to the group. After you setup an item dimension group, you can assign items to the group through Classification Codes (P4101).

Mixed Package Group
The unique identifier for a group of item numbers that can be packaged in a mixed sequenced standard pack.

Container Code
Enter a UDC (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

Customer Carton ID
Enter a code that the customer uses to represent a carton in the system.

Standard Pack
Enter a number that indicates the standard quantity within a container.

Recommendation Sequence
Enter a number that indicates the order in which the system chooses a carton. The system selects the carton with the lowest recommendation sequence first.

Note: The Item Number, Item Dimension Group, and Mixed Package Group fields are not displayed on this form at the same time. The field displayed is based upon the respective option selected on the Work With Item Standard Packs form.

See Also:
- Setting Up Item Warehouse Information.
- Defining Location Capacity.

2.10.7 Setting Up Pallet Standard Packs
Access the Pallet Standard Pack Revisions form.

Inner Carton
Enter a code that identifies the container the item is stored on or in when in a location in the warehouse. If an item is stored on or in a container when it is picked, you must update this field for the system to be able to make recommendations for shipping cartons.

Outer Carton
Enter a UDC (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.
Customer Carton
Enter a code that the customer uses to represent a carton in the system.

2.11 Setting Up Container Bill of Materials

This section provides an overview of container bill of materials, and discusses how to set up container bill of materials.

2.11.1 Understanding Container Bill of Materials

A container bill of material makes up the pieces of a container, such as drawers, shelves, dividers, and so on. These pieces may also be parent pieces that contain child pieces. For example, a tote may contain drawers, and each drawer may have dividers.

You set up a container bill of material by the branch/plant and container. If the pieces differ by a customer or Ship To value, you must set up separate container codes for each configuration. The system uses the container pieces when processing the Advance Ship Notice.

The Work With Container Bill of Material form (W46098C) displays the container bill of material in a tree structure. The container is the first node, and expanding the node displays the pieces for a container. Because a piece can be made up of one of more pieces, you can continue expanding the tree until the last piece is displayed.

The detail area provides this type of information about the container piece:

- Container description
- Container code for the piece
- Piece description
- Quantity
- Branch/Plant

You can delete the child pieces of a container, but if you delete the top node, the system deletes the entire bill of material for the container. Deleting a child piece that contains associated child pieces does not delete those associations. Deleting the container or piece for the bill of material does not delete it from container and carton codes.

The system uses the Container Bill of Material table (F46098) to process information.

2.11.2 Forms Used to Set Up Container Bill of Materials

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container Bill of Material Revisions</td>
<td>W46098C</td>
<td>Shipping and Packaging Setup (G46412), Carton Bill of Material</td>
<td>Set up container bill of materials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Container Bill of Material</td>
<td></td>
</tr>
</tbody>
</table>

2.11.3 Setting Up Container Bill of Materials

Access the Container Bill of Material Revisions form.
Setting Up Shipping Cartons

**Container Code**
Enter a (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

**Container Piece Code**
Enter a code that identifies a piece in a parent container.

### 2.12 Setting Up Shipping Cartons

This section provides an overview of shipping cartons, and discusses how to set up shipping cartons.

### 2.12.1 Understanding Shipping Cartons

You set up shipping cartons to define what cartons exist, which cartons are available, and the percentage of space in the carton that an item can fill. The system uses this information to recommend shipping cartons during picking.

After you have set up a carton and after the carton has been picked, you have the option of reorganizing its contents and its placement within a shipment before shipping. The Carton Reorganization program (P4620) not only enables you to reorganize a carton's contents, but also enables you to create and organize new cartons.

**Tutorial:** Click here to view a recording on this feature.

### 2.12.2 Forms Used to Set Up Shipping Cartons

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container and Carton Codes Revisions</td>
<td>W46091B</td>
<td>Warehouse System Setup (G4641), Container and Carton Codes</td>
<td>Set up shipping cartons.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Container and Carton Codes.</td>
<td></td>
</tr>
</tbody>
</table>

### 2.12.3 Setting Up Shipping Cartons

Access the Container and Carton Codes Revisions form.

**Maximum Weight**
Enter a number that indicates the maximum weight of a carton, including the weight of the carton itself and its contents. The system uses the defined maximum weight during warehouse cartonization. In addition, the system gives you a warning during the Carton Reorganization process (P4620) if a carton exceeds its maximum weight.

See *Working with Standard Pack Carton Recommendations*. 
2.13 Setting Up Locations for Carton Recommendation

This section discusses how to set up locations for carton recommendations.

2.13.1 Forms Used to Set Up Locations for Carton Recommendations

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Profile Revisions</td>
<td>W46020B</td>
<td>Warehouse System Setup (G4641), Location Profile</td>
<td>Set up locations for carton recommendations.</td>
</tr>
</tbody>
</table>

Select a record and then select Profile Revisions from the Row menu on Work with Location Profiles.

2.13.2 Setting Up Locations for Carton Recommendations

Access the Location Profile Revisions form.

Recommend Crtn (recommend carton)
Select to recommend cartons when picking from this location. The system recommends a carton only if you have set up the Carton Recommendation Method for the item.

See Working with Standard Pack Carton Recommendations.

2.14 Setting Up Carton Recommendation Methods for Items

This section lists a prerequisite, and discusses how to set up carton recommendation methods for items.

You must set up each item’s carton recommendation method in that item’s unit of measure definition. You can recommend cartons by item volume or by the percentage of the carton that the item fills.

> Tutorial: Click here to view a recording of this feature.

2.14.1 Prerequisite

Before you complete the tasks in this section, verify that you have set the processing option in the Task and Trip Creation program (R46471).

2.14.2 Forms Used to Set Up Carton Recommendation Methods for Items

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>U/M Definition by Item Revisions</td>
<td>W46011B</td>
<td>Warehouse System Setup (G4641), U/M Definition by Item</td>
<td>Set up carton recommendation methods for items.</td>
</tr>
</tbody>
</table>

Select a record and then select Revisions from the Row menu on Work With U/M Definition by Item.
2.14.3 Setting Up Carton Recommendation Methods for Items

Access the U/M Definition by Item Revisions form.

**Carton Rcmd Method (carton recommendation method)**
Enter a code that indicates the method the system uses to recommend a carton for the specified item in this unit of measure. Values are:

Leave blank and the system does not recommend cartons for the specified item in this unit of measure

Enter 1: to recommend shipping cartons for the specified item in this unit of measure based on the volume of the item and the volume of the shipping carton

Enter 2: to recommend shipping cartons for the specified item in this unit of measure based on the percentage of the shipping carton that the item and unit of measure occupy

Enter 3: to recommend shipping cartons for the specified item in this unit of measure based on the standard pack for the item.

You define the dimensions of the carton through Container and Carton Codes (P46091).

See Working with Standard Pack Carton Recommendations.

2.15 Setting Up Carton Fill Percentages for Items

This section provides an overview of carton fill percentages for items, lists a prerequisite, and discusses how to set up carton fill percentages for items.

2.15.1 Understanding Carton Fill Percentages for Items

Each item can fill a portion of each available shipping carton. If you select cartons according to the percentage of the carton that an item occupies, you must define how much of each carton’s space that a particular item can fill.

If you store the item in a container, you must specify each valid container. The fill percentage that you enter should consider the dimensions of the item’s container.

> Tutorial: Click here to view a recording on this feature.

2.15.2 Prerequisite

Before you complete the tasks in this section, verify that you have set the processing option for carton recommendation in the Task and Trip Creation program.
2.15.3 Forms Used to Set Up Carton Fill Percentages for Items

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item/Carton Recommendation Rules Revisions</td>
<td>W46013B</td>
<td>Warehousing Movement Rules (G46311), to set up an individual item select Item/Carton Setup by Item</td>
<td>Set up carton fill percentages for items.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Warehousing Movement Rules (G46311), to set up an item dimension group select Item/Carton Setup by Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Rules Revisions from the Row menu on Work with Item/Carton Recommendation Rules.</td>
<td></td>
</tr>
</tbody>
</table>

2.15.4 Setting Up Carton Fill Percentages for Items

Access the Item/Carton Recommendation Rules Revisions form.

Fill Percentage
Enter the percentage of space in a carton that a single quantity of the unit of measure occupies. If the item is in a container when you pick it, this percentage indicates how much space the container takes up in the carton.

The system uses the fill percentage if you use fill percentage as the carton recommendation method for the item’s unit of measure. You define an item’s carton recommendation method through Unit of Measure Definition by Item/Item Group (P46011).

2.16 Working with Standard Pack Carton Recommendations

This section provides overviews of standard pack carton recommendations and carton charges for expendable containers, lists prerequisites, and discusses how to:

- Activate standard pack recommendations.
- Revise standard pack carton recommendations.
- Revise carton quantities.
- Calculate round to standard pack.
- Set processing options for Standard Pack Carton Recommendations (P4615).
- Add cartons to a shipment.
- Reorganize cartons and items in a shipment.
- Review carton detail information.
- Set processing options for Carton Reorganization (P4620).
- Run the Carton Recommendations report (R46151).
2.16.1 Understanding Standard Pack Carton Recommendations

You can use the Standard Pack Carton Recommendations application to generate carton detail when you set the Version of Carton Reorganization processing option. A carton recommendation summarizes the number and weight of pallets or cartons, and can make carton and pallet recommendations.

If an item is packed in two different types of cartons there are two separate lines for the item on the Work With Carton Recommendations form. This form summarizes on each detail row the shipment number, item, and the innermost and outermost carton. The row for the outer most carton has a blank outer carton.

For example, a carton recommendation would list this information on the Carton Hierarchy form:

- Shipment number
- Type of cartons
- Total number of cartons and pallets needed
- Weight of items and cartons
- Customer carton ID

When using expendable or alternate packaging, you can manually change the recommendations. You can manually change recommendations using Standard Pack Carton Recommendations if the system has not created carton detail for the shipment. No automatic changes can occur to carton recommendations after you have manually changed a carton recommendation.

Packaging is based on the rules for standard pack. Recommendations are across all sales orders on a shipment, meaning, a carton can hold the same item number from multiple sales orders and a pallet can hold cartons from multiple sales orders.

The system does not recommend mixed cartons. Unless you use mixed packed groups, only parts with the same item number are put in an innermost carton. If the system does not find standard pack information for an item, the system adds the item as a loose piece on the shipment (based on the transaction unit of measure). If an inventory storage container is set up for the item in the warehouse management module, it is the default container for the loose piece but it does not have a customer carton number.

---

**Note:** Carton recommendations impact the Transportation Management, Sales Order Management, and Demand Scheduling systems. The system creates carton recommendations during the shipment creation process and updates recommendations automatically when a shipment changes.

The JD Edwards EnterpriseOne Warehouse Management system does not recognize the carton recommendations created for standard packs, and you can process standard packs with the JD Edwards EnterpriseOne Warehouse Management system on or off. To ensure that sales orders remain out of the JD Edwards EnterpriseOne Warehouse Management system, you can set up a separate status flow for the order types that use standard pack recommendations. You should exclude the order type status from the inclusion rules used to create warehouse requests.
Working with Standard Pack Carton Recommendations

The system generates the recommendation when creating shipments, based on the type of order established in the Document Type Master table (F40039) and whether you have activated carton recommendation processing for the document type in the Document Type Maintenance application (P40040). When you activate carton recommendations, you can:

- Select standard pack recommendations. The system recommends the innermost carton and any additional packaging layers that are set up in standard pack rules.
- Specify the Carton Creation Status. This is the status for recommendations created by the system.
- Specify the Carton Change Status. The status for recommendations that have been manually changed or Carton Detail has been created. Once the carton is at this status, the system does not automatically re-calculate packaging recommendations if the sales order quantity is changed for an item.
- Specify shipment sequencing. The system indicates that the document type enables manual entry of production sequencing fields Job Number (PSJOBNO) and Job Sequence (JOBSQ).

The system also uses these tables for processing carton recommendations:

- Carton Recommendations (F4615)
- Carton Detail Information (F4620)
- Container and Carton Codes (F46091)
- Shipment Header (F4215)
- Shipment Detail (F4942)
- Document Type Master (F40039)
- Standard Pack Recommendation Rules (F460131)
- Mixed Sequenced Packing Groups (F460151)

### 2.16.1.1 Partial Cartons and Pallets

You can use partial cartons when you are not using standard pack rounding for demand scheduling. Cartons may contain smaller cartons or items, but you cannot mix items in the same immediate carton unless you are using mixed sequence standard packs.

The system considers pallets as any packaging that is in addition to the innermost carton. If you create carton detail using carton recommendations, you can set the Allow Partial Pallets for Carton Detail processing option on the Process tab to prohibit the creation of partial pallets. If you do not allow partial pallets, the system does not create a pallet if there are not enough cartons to make a full pallet. In this case, the system creates cartons as loose pieces on the shipment. The pieces can be put on a pallet later during staging using the Carton Reorganization application. This option is useful when loose pieces are built onto a mixed pallet. However, this option should not be used with mixed sequence pallets.

These scenarios are examples of partial pallet processing when you do not allow partial pallets:

- If there are ten cartons per pallet but only five cartons are being shipped, the system uses carton detail to create five loose cartons, and the pallet would not be written to carton detail.
If there are two boxes per carton and ten cartons per pallet, but only nineteen boxes are being shipped, the system creates nine cartons with two boxes per carton, for a total of eighteen boxes and one loose box. The system does not write the pallet to carton detail because there are not enough cartons to make a full pallet. A carton was not created to hold the loose box because it would have been a partial carton.

### 2.16.1.2 Carton Hierarchy
You can review in a tree structure the contents of a carton for a shipment. The first line represents the carton type you entered. If the carton type has a plus sign, you can navigate to the next container, and do so until the lowest container is displayed. The form displays additional information about the container on the selected line, such as:

- Standard pack
- Inner carton code
- Inner carton quantity
- Item number
- Item description
- Item quantity
- Unit of measure
- Customer carton ID
- Branch plant
- Mixed Packaged Group

### 2.16.1.3 Round to Standard Pack
You can use the Standard Pack Calculator form (W4615E) to display standard pack information for items or cartons and change their quantities. You can override the values for the standard pack and produce useful planning calculations to review how the system builds standard packs and how pallets are affected when you change quantities.

You calculate the number of cartons and pallets that are necessary based on these values:

- Sold To
- Ship To
- Item
- Unit of measure
- Quantity

### 2.16.1.4 Carton Detail
You can expand a carton recommendation and revise the details when you set the Version of Carton Reorganization processing option of Standard Pack Carton Recommendations program. For example, suppliers use expendable containers when they run out of returnable containers. Typically the cost is charged to the customer. You can add additional packaging costs to a sales order and override carton detail with the changed information. The container information (including any expendables) must be reported on the ASN.
Carton detail includes information such as the label serial number, shipment number, carton type, standard pack quantity, and sales order lines that form the carton. The detail also describes the relationship between shipping cartons, such as which cartons are on a specific pallet.

After you make changes to carton detail, the system displays the number of cartons that you added at the bottom of the shipment’s list of contents.

When you add cartons, the cartons that you add are empty. You must reorganize the other cartons or items within the shipment so that the new cartons have contents. Otherwise, when you confirm the reorganization, the system automatically deletes any empty cartons from the shipment.

When you create carton detail, the system expands the carton recommendation and builds detail records for each carton. The system allocates items to sales order lines and links the data to the transportation tables.

### 2.16.1.5 Sales Order

This table is an example of a sales order:

<table>
<thead>
<tr>
<th>Order</th>
<th>Line</th>
<th>Shipment</th>
<th>Item</th>
<th>UOM</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1234</td>
<td>210</td>
<td>EA</td>
<td>20</td>
</tr>
</tbody>
</table>

### 2.16.1.6 Standard Pack Carton Recommendations (P4615, F4615)

This table is an example of carton detail:

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Item</th>
<th>UOM</th>
<th>Carton Type</th>
<th>Pieces</th>
<th>Standard Pack</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>210</td>
<td>EA</td>
<td>Carton</td>
<td>4</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>1234</td>
<td>-</td>
<td>-</td>
<td>Pallet</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

### 2.16.1.7 Carton Reorganization (P4620) (Carton Detail Information (F4620))

This table continues the example:

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Serial #</th>
<th>Carton Type</th>
<th>Item</th>
<th>Quantity</th>
<th>Order</th>
<th>Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>1213</td>
<td>Pallet</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1234</td>
<td>4213</td>
<td>Carton</td>
<td>210</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1234</td>
<td>4214</td>
<td>Carton</td>
<td>210</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1234</td>
<td>2214</td>
<td>Pallet</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1234</td>
<td>4315</td>
<td>Carton</td>
<td>210</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1234</td>
<td>4316</td>
<td>Carton</td>
<td>210</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

You can create carton detail using these methods:

<table>
<thead>
<tr>
<th>Method</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scanning</td>
<td>You can use third-party or custom modification used for data collection and scanning to automatically create carton detail.</td>
</tr>
</tbody>
</table>
The system uses information from carton detail to generate the Demand Scheduling Bill of Lading (R49116), label data and ASN information. The system uses these tables to process carton detail:

- Carton Detail Information (F4620)
- Carton Recommendations (F4615)
- Sales Order Detail File (F4211)
- Shipment Header (F4215)
- Sales Order Detail – Tag File (F49211)

### 2.16.1.8 Reorganization

After you have set up a carton and after the carton has been picked, you have the option of reorganizing its contents and its placement within a shipment before shipping. The Carton Reorganization program not only enables you to reorganize a carton’s contents, but also enables you to create and organize new cartons, and allocate carton quantities to sales orders.

When you are working with cartons, you might reorganize the cartons in many ways, including:

- Adding new cartons to a shipment
- Consolidating one carton into another carton
- Splitting the contents of one carton into two cartons
- Changing the level of one carton to another carton level (for example, you might change a box to a pallet)
- Updating the carton status reconciliation

When you are working with the contents of a carton, you might reorganize items in one of these ways:

- Move items from one existing carton to another within a shipment (for example, you might move a group of items onto a pallet)
- Move an entire quantity, in a particular unit of measure, to another carton (for example, you might move one case of canned goods from one carton to another)
- Move a partial quantity, in a particular unit of measure, to another carton (for example, you might move half a case of canned goods from one carton to another)
- Move items from an existing carton to a new carton (for example, you might remove four tires from a pallet and place them inside a carton)
- Remove a carton from a parent carton and designate the removed carton as another parent-level carton
- Remove an item from a carton, leaving the item outside of any cartons

The system automatically calculates weight limit information when you reorganize a carton. If you set the appropriate processing option, the system displays a warning if the carton that you have reorganized exceeds its weight limit.

When you are moving items within a shipment, you can set the appropriate processing option in the Carton Reorganization program to allow you to specify the quantity of the item that you are moving. If you leave the processing option blank, the system moves the entire quantity of the item.

It is recommended that you set the appropriate processing options in the Carton Reorganization program to create or update these tables:

- F4620
- SO Pack Confirm Detail (F4216)
- Shipment Pieces (F4943)
- Shipment Reference Numbers (F4217)

These tables contain detailed information about cartons, their contents, and the shipping and tracking information that must be created or updated every time you create or reorganize a carton. For example, by setting the appropriate processing options, you ensure that you are maintaining current UCC 128 compliance information in the system and can provide customers with ASNs (advance ship notices) and bar-coded shipping container labels. ASNs communicate the contents of a shipment to a customer. When the customer receives the shipment, the customer scans the bar-coded container labels on the contents of the shipment and matches the contents to the ASN as part of an automated receipts process.

After you create or reorganize cartons in a shipment, you also might want to review carton detail information. The Carton Detail Inquiry program (P4621) enables you to review this type of carton detail information:

- Carton identification information
- Item information
- Weight and dimension information
- Related sales order information
- UCC 128 information

When you revise carton details, the system calculates accurate weight values and updates the carton detail status. Use the processing options on the Status tab in the Carton Reorganization to specify how the system processes the statuses.

You can use the Form menu on Carton Reorganization to confirm sales order lines. You can correct carton data if the line level reconciliation fails or a change is made to quantity shipped during confirmation.

If you want to send an ASN to the customer, first add the appropriate statuses to the order activity rules for order type S4S in the Order Activity Rules program (P40204).
2.16.1.9 Carton Recommendations Report

You can run the Carton Recommendations Report to analyze and review carton recommendations and specific shipment information. The system displays separate pages with header information for each shipment number when processing multiple shipment numbers.

You can run this report either during the pack pick slip process or as a standalone batch application. The system uses the F4615 or F4620 table for processing this report.

See Also:

- Confirming Shipment.
- Setting up Label Information.

2.16.2 Understanding Carton Charges for Expendable Containers

You can set up billable charges for expendable cartons and track the cartons as inventory, similar to tracking a stock item. At shipment confirmation, the system creates a sales order line for each line on the order that has an item packed in a carton with the Create Sales Order Charge (CSOC) field set to 1. You assign this field value to a carton type in the Container and Carton Codes application. The system carries this value forward to the carton detail.

You can base the charge on either the item quantity or the number of expendable containers used. This table describes how the system processes carton-based and item-based charges.

<table>
<thead>
<tr>
<th>Charges Based On</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carton Quantity</td>
<td>The system writes a sales order line using the line type Carton (CA). This line type enables you to relieve the carton as inventory at sales update while excluding the carton in the data selection for the ASN, which prevents the carton charge from being extracted to the ASN as a line item. To prevent the carton charge lines from being placed onto a new shipment, ensure that you do not include this order type/line type combination in UDC 49/SD. The order quantity reflects the number of cartons being shipped. Because outer cartons do not always contain sales order information, this information comes from the first inner carton record found with populated sales order information. Additionally, when a carton contains multiple sales order lines, the system associates the charge with the first sales order line found in the carton detail.</td>
</tr>
</tbody>
</table>
The system records the charge lines in the Related Order Cross Reference table (F4080) to provide a link between the carton charge sales order lines and the item's sales order line. This link enables the system to roll up charges for the ASN. The system includes the charge on the Advanced Ship Notice (ASN), but does not extract the charge to the ASN when running the EDI Advanced Ship Notice Extraction program (R47032). The system receives this number on the inbound 850 document for purchase orders.

You must set up these versions for Sales Order Entry (P4210) to process expendable containers.

<table>
<thead>
<tr>
<th>Version</th>
<th>ZJDE0019</th>
<th>ZJDE0020</th>
<th>ZJDE0021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version Title</td>
<td>Carton Charges by Carton Quantity</td>
<td>Carton Inventory Relief based on Item Quantity</td>
<td>Carton Charges by Item Quantity</td>
</tr>
<tr>
<td>Description</td>
<td>Writes sales order lines based on carton quantities.</td>
<td>Relieves carton inventory based on item quantity.</td>
<td>Writes sales order lines based on item quantity.</td>
</tr>
<tr>
<td>Order Type</td>
<td>S4</td>
<td>S4</td>
<td>S4</td>
</tr>
<tr>
<td>Line Type</td>
<td>CA</td>
<td>CI</td>
<td>CC</td>
</tr>
<tr>
<td>Override Next Status</td>
<td>580</td>
<td>620</td>
<td>580</td>
</tr>
<tr>
<td>Line Number Increment</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Status Code Limit for Changes</td>
<td>560</td>
<td>560</td>
<td>560</td>
</tr>
<tr>
<td>Inventory Commitment Checking</td>
<td>Blank = Bypass Availability Checking</td>
<td>Blank = Bypass Availability Checking</td>
<td>Blank = Bypass Availability Checking</td>
</tr>
</tbody>
</table>

The system uses these tables for processing carton charge information:

- F4620
- F46091
- F4080

### 2.16.2.1 Example: Carton Charges Based on Carton Quantity

This table displays the F4211 table after the system creates carton charges at shipment confirmation when the charge is based on carton quantity. The outer carton does not contain sales order information, and therefore the system retrieves this information from the sales order information found on the first inner carton.
<table>
<thead>
<tr>
<th>Order Number</th>
<th>Line Number</th>
<th>Line Type</th>
<th>Item Number</th>
<th>Order Quantity</th>
<th>Location</th>
<th>Price</th>
<th>Extended Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000</td>
<td>S</td>
<td>Item A</td>
<td>750</td>
<td>1.A.1</td>
<td>25.00</td>
<td>18,750</td>
</tr>
<tr>
<td>1</td>
<td>1.010</td>
<td>CA</td>
<td>7890</td>
<td>1</td>
<td>-</td>
<td>5.00</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>1.020</td>
<td>CA</td>
<td>8741</td>
<td>1</td>
<td>-</td>
<td>5.00</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>2.000</td>
<td>S</td>
<td>Item A</td>
<td>250</td>
<td>1.B.1</td>
<td>25.00</td>
<td>6,250</td>
</tr>
<tr>
<td>1</td>
<td>2.010</td>
<td>CA</td>
<td>7890</td>
<td>1</td>
<td>-</td>
<td>5.00</td>
<td>5</td>
</tr>
</tbody>
</table>

The CA (Carton) line type indicates that the line type is identical to the stock line type. This line type enables you to relieve the carton as inventory at sales update and to exclude the charge from the EDI Advanced Ship Notice Extraction. The system writes these lines using the sales order entry version for carton-based quantities.

After the system writes the sales order lines, the lines and parent lines are added to the F4080 table when you run the EDI Advanced Ship Notice Extraction program.

In this example, the Related Order Cross Reference table would appear as follows:

<table>
<thead>
<tr>
<th>Related Order Set ID</th>
<th>Related Order ID</th>
<th>Order ID</th>
<th>Product Code</th>
<th>Order</th>
<th>Order Line Number</th>
<th>Item Number (Carton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>42</td>
<td>1</td>
<td>1.000</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>42</td>
<td>1</td>
<td>1.010</td>
<td>7890</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>42</td>
<td>1</td>
<td>1.020</td>
<td>8741</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>42</td>
<td>1</td>
<td>2.000</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>42</td>
<td>1</td>
<td>2.010</td>
<td>7890</td>
</tr>
</tbody>
</table>

2.16.2.2 Example: Carton Charges Based on Item Quantity

This table displays the F4211 table after the system creates carton charges at shipment confirmation when the charge is based on item quantity.

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Line Number</th>
<th>Line Type</th>
<th>Item Number</th>
<th>Order Quantity</th>
<th>Location</th>
<th>Price</th>
<th>Extended Price</th>
<th>Price Override</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000</td>
<td>S</td>
<td>Item A</td>
<td>750</td>
<td>1.A.1</td>
<td>25.00</td>
<td>18,750</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>1.010</td>
<td>CI</td>
<td>7890</td>
<td>1</td>
<td>-</td>
<td>0.00</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1.020</td>
<td>CI</td>
<td>8741</td>
<td>1</td>
<td>-</td>
<td>0.00</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>1.030</td>
<td>CC</td>
<td>7890</td>
<td>250</td>
<td>-</td>
<td>5.00</td>
<td>1,250</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>1.040</td>
<td>CC</td>
<td>8741</td>
<td>750</td>
<td>-</td>
<td>5.00</td>
<td>3,750</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2.000</td>
<td>S</td>
<td>Item A</td>
<td>250</td>
<td>1.B.1</td>
<td>25.00</td>
<td>6,250</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2.010</td>
<td>CI</td>
<td>7890</td>
<td>1</td>
<td>-</td>
<td>0.00</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>2.020</td>
<td>CC</td>
<td>7890</td>
<td>250</td>
<td>-</td>
<td>5.00</td>
<td>1,250</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2.030</td>
<td>CC</td>
<td>8741</td>
<td>250</td>
<td>-</td>
<td>5.00</td>
<td>1,250</td>
<td>-</td>
</tr>
</tbody>
</table>

The CI (Carton Inventory) line type (a user-defined value) indicates that the carton is identical to the stock line type. A CI line type enables you to relieve the carton as
inventory at sales update and to exclude the charge from the EDI Advanced Ship Notice Extraction process. The system writes these lines using the inventory-relief sales order version for carton-based quantities.

For the non-stock lines containing the carton charge, the system writes the lines using the inventory-relief sales order version for item-based quantities. After the system writes the sales order lines, the lines and parent lines are added to the F4080 table when you run the EDI Advanced Ship Notice Extraction program.

In this example, the Related Order Cross Reference table would appear as follows:

<table>
<thead>
<tr>
<th>Related Order Set ID</th>
<th>Related Order ID</th>
<th>Order ID</th>
<th>Product Code</th>
<th>Order Number</th>
<th>Order Line Number</th>
<th>Item Number (Carton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>42</td>
<td>1</td>
<td>1.000</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>42</td>
<td>1</td>
<td>1.030</td>
<td>7890</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>42</td>
<td>1</td>
<td>1.040</td>
<td>8741</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>42</td>
<td>1</td>
<td>2.000</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>42</td>
<td>1</td>
<td>2.020</td>
<td>7890</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>42</td>
<td>1</td>
<td>2.030</td>
<td>8741</td>
</tr>
</tbody>
</table>

See Also:
- Confirming Shipment.

2.16.3 Prerequisites

Before you complete the tasks in this section:
- Ensure that you have set up the UDC Carton Status (46/RS).
- Activate the Enable Creation of Sales Order Lines for Carton Charge processing option on the Process tab of the confirmation source, such as:
  - Transportation Shipment Confirmation (P49645)
  - Batch Transportation Shipment Confirmation (R49500)
  - Transportation Load Confirmation (P49640)

2.16.4 Forms Used to Use Standard Pack Carton Recommendations

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Type Revisions</td>
<td>W40040B</td>
<td>Inventory Setup (G4141), Document Type Maintenance Click Add on Work With Document Type.</td>
<td>Activate standard pack recommendations.</td>
</tr>
<tr>
<td>Form Name</td>
<td>Form ID</td>
<td>Navigation</td>
<td>Usage</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Standard Pack Recommendation Revisions</td>
<td>W4615C</td>
<td>Shipping and Packaging Management (G4615), Carton Recommendations</td>
<td>Revise standard pack carton recommendations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Locate a record and click Select on Work With Carton Recommendations.</td>
<td></td>
</tr>
<tr>
<td>Carton Recommendation Fix/Inspect</td>
<td>W4615F</td>
<td>Select Change Carton or Add Parent from the Row menu on Standard Pack</td>
<td>Revise carton quantities or add a parent carton.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recommendation Revisions.</td>
<td></td>
</tr>
<tr>
<td>Delete Carton Recommendation</td>
<td>W4615G</td>
<td>Select Delete Carton from the Row menu on Standard Pack Recommendation</td>
<td>Delete a carton. You can delete only cartons that have no parents or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revisions.</td>
<td>children. Deleting a carton leaves loose items on the shipment.</td>
</tr>
<tr>
<td>Carton Hierarchy</td>
<td>W4615D</td>
<td>Locate a record and select Carton Tree from the Row menu on Work With Carton</td>
<td>Review carton hierarchy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recommendations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recommendations.</td>
<td></td>
</tr>
<tr>
<td>Carton Reorganization</td>
<td>W4620C</td>
<td>Select a record and select Carton Detail from the Row menu on the Work With</td>
<td>Create carton detail. Reorganize cartons and items in a shipment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carton Recommendations.</td>
<td></td>
</tr>
<tr>
<td>Carton Detail Add/Update</td>
<td>W4620B</td>
<td>Shipping and Packaging Management (G4615), Carton Reorganization</td>
<td>Add cartons to a shipment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on Work with Shipment Cartons.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click OK on Carton Recommendations - Processing Shipment #.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on the Carton Reorganization form.</td>
<td></td>
</tr>
</tbody>
</table>
### 2.16.5 Activating Standard Pack Recommendations

Access Shipment on the Document Type Revisions form.

#### Carton Creation Status

Enter a UDC (46/RS) that specifies which status the system uses when creating cartons in the Carton Recommendations table (F4615).

#### Carton Change Status

Enter a UDC (46/RS) that specifies which status the system uses when changing cartons in the Carton Recommendations table (F4615).

If a recommendation has been changed, the system does not automatically re-calculate recommendations when a sales order is changed.

#### Recommend Standard Packs

Select to activate carton recommendations for standard packs at the order type level.

#### See Also:

- "Setting Up Document Type Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide."
2.16.6 Revising Standard Pack Carton Recommendations


**Qty Of Cartons (quantity of cartons)**

Enter the number of pieces, pallets, containers, and so forth which constitute a shipment.

For shipments that do not have piece information defined in the Pieces table (F4943), the system calculates the estimated piece count by converting the quantity in the transaction unit of measure to the shipping unit of measure.

To obtain the whole piece number, the system rounds the unit of measure down.

The weight and volume of the leftover quantities from all detail lines are added and the sum total is divided by the maximum piece weight and volume.

The system rounds the resulting piece weight or volume up to the next whole number.

This number is added to the whole piece number to obtain the piece count.

**Carton Type**

Enter a code (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

**Standard Pack Qty (standard pack quantity)**

Enter a number that indicates the standard quantity within a container.

**Inner Carton Quantity**

Enter the total quantity in primary unit of measure for this location detail.

**Inner Carton**

Enter a code that indicates whether a carton is located inside a larger carton.

**Item Quantity**

Enter the total quantity in primary unit of measure for this location detail.

**UM (unit of measure)**

Enter a UDC (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).

**Item Number**

Enter a number that the system assigns to an item. It can be in short, long, or third item number format.

**Net Weight**

Enter the weight of goods currently in a location. The system calculates this amount from the weight from the item/unit of measure profile and the weight of the container if the level 1 unit of measure for this location detail has a storage container.

**Tare Weight**

Enter the gross weight of one unit of the item in this unit of measure, or the weight of an empty storage container or shipping carton. The system enters these as the default values in the F4602 and uses the values in maximum weight calculations for specified locations during putaway.
Gross Weight
Enter the gross weight of one unit of the item in this unit of measure, or the weight of an empty storage container or shipping carton. The system enters these as the default values in the F4602 and uses the values in maximum weight calculations for specified locations during putaway.

Wt UOM (weight unit of measure)
Enter a UDC (00/UM) that identifies the unit of measure that the system uses to indicate weight for this item. You can specify ounces, grams, kilograms, and so on, as weight standards. The system uses this unit of measure for the item or overrides it for an individual item or container.

Customer Carton
Enter a code that the customer uses to represent a carton in the system.

Carton Item Number
Enter a number that identifies a carton as an item. When you specify an item number, the system creates a relationship between the item number and the carton code for tracking and pricing purposes.

Rec Status (recommendation status)
Enter a UDC (46/RS) that indicates the status of standard pack recommendations.

Branch Plant
Enter a code that identifies a separate entity within a business for which you want to track items and costs. This entity might be a warehouse location, job, project, work center, or branch/plant. The Branch/Plant field is alphanumeric.

2.16.7 Revising Carton Quantities
Access the Carton Recommendation Fix/Inspect form.

2.16.8 Calculating Round to Standard Pack
Access the Standard Pack Calculator form.

UM (unit of measure)
Enter a UDC (00/UM) that indicates the quantity in which to express an inventory item, for example, CA (case) or BX (box).

Item Quantity
Enter the total quantity in primary unit of measure for this location detail.

Item
Select to view calculated packaging based on the item information.

Carton
Select to view calculated packaging based on the type of carton.

2.16.9 Setting Processing Options for Standard Pack Carton Recommendations (P4615)
Processing options enable you to specify the default processing for programs and reports.
2.16.9.1 Process
Specify whether to allow partial pallets when creating carton detail.

1. Allow Partial Pallets for Carton Detail
Leave blank and the system does not allow partial pallet processing when you are working with carton detail information.
Enter 1: to allow partial pallet processing.

2.16.9.2 Versions
Specify the version for Carton Reorganization (P4620).

1. Version of P4620 Carton Reorganization
Specify which version of the Carton Reorganization program (P4620) the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

2.16.9.3 Display
Use these processing options to specify whether to display the shipment status.

1. From Shipment Status
Specify a start value for the range of a shipment status code. The system uses this value for data selection when loading records to the detail area. If you leave this processing option blank, the system does not perform data selection that is based upon shipment status.

2. To Shipment Status
Specify an end value for the range of a shipment status code. The system uses this value for data selection when loading records to the detail area. If you leave this processing option blank, the system does not perform data selection that is based upon shipment status.

2.16.10 Adding Cartons to a Shipment
Access the Carton Detail Add/Update form.

To add cartons to a shipment:

1. Enter values in these fields:
   – Carton Code
   – Number of Cartons

2. To manually assign a pack number, select Serial Number and enter a value in the Serial Number field.

3. To have the system automatically assign tare and pack numbers, select either or both of these options:
   – Generate Tare SSCC
   – Generate Pack SSCC

4. To manually assign an EPC, select Type in an EPC and enter a value in the EPC field.

5. To have the system automatically assign an EPC, select Generate EPC.

6. Click OK.
7. On Carton Reorganization, review the cartons that you added.

- **Carton Code**
  Enter a UDC (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

- **Number of Cartons**
  Enter the number of units that the system applies to the transaction.

- **Serial Number**
  Select this option and enter a value in the Serial Number field for the system to apply to the carton.

- **Generate Tare SSCC**
  Select this option and the system generates a new Pack SSCC number to apply to the carton.

- **Generate Pack SSCC**
  Select this option and the system generates a new Pack SSCC number to apply to the carton.

- **Generate Label Next Number**
  Select this option and the system generates a new Label Next Number to apply to the carton.

- **Type in an EPC**
  Select this option and enter a value in the EPC field for the system to apply to the carton.

- **Generate EPC**
  Select this option and the system generates a new EPC number to apply to the carton.

2.16.11 Setting Processing Options for Carton Reorganization (P4620)

Processing options enable you to specify the default processing for programs and reports.

2.16.11.1 Processing

Use these processing options to create transportation information.

1. **Create Transportation Shipping Pieces table (F4943).**
   Leave blank and the system does not create Transportation Shipping Pieces.
   Enter 1: to create Transportation Shipping Pieces.

2. **Create Shipment Tracking Numbers (F4217).**
   Leave blank and the system does not create Shipment Tracking Numbers.
   Enter 1: to create Shipment Tracking Numbers.
Note: The Create Transportation Shipping Pieces table (F4943) processing option must be activated to use this processing option.

3. Use Label Serial Number Preference values instead of values defined on the Serial Number tab.
Enter 1: to use the Label Serial Number Preference (Advanced Preference #38)Leave blank and the system does not use Label Serial Number Preference.

2.16.11.2 Defaults
Use these processing options to select default information.

1. Allow partial quantity Item Moves.
Leave blank and the system assume item moves are for the entire quantity of the item and UOM.
Enter 1: to prompt for a quantity when performing Item Moves.

2. Allow Carton Code changes.
Leave blank and the system does not allow carton code changes.
Enter 1: to allow carton code changes.

3. Error if carton is over weight.
Leave blank and the system issues a warning.
Enter 1: and the system issues a hard error.

4. Allow Add Items to Carton Detail for a shipment.
Allow items to be added to carton detail. The sales order must be updated separately.
Leave blank and the system does not allow addition of items to carton detail.
Enter 1: to allow addition of items to carton detail. The sales order must be updated separately.

5. Allow Remove Items from the Carton Detail for a shipment.
Allow removal of items from carton detail. The sales order must be updated separately.
Leave blank and the system does not allow removal of items from carton detail. The sales order must be updated separately.
Enter 1: to allow removal of items from carton detail. The sales order must be updated separately.

2.16.11.3 Status
Use these processing options to select status information

1. Enter the Shipment Status at or beyond which changes cannot be made to cartons.
Enter a UDC (41/SS) for the shipment status representing a status at or beyond which changes cannot be made to cartons. Statuses typically refer to events, for example confirmed or hold.

2. Enter the Sales Order Line Status at or beyond which changes cannot be made to
**Working with Standard Pack Carton Recommendations**

**3. Enter the Carton Status to update cartons to.**
Enter a UDC (46/CS) that the system assigns to a carton. Each status code represents a different stage in the distribution cycle.

**4. Enter the Carton Status at or beyond which changes cannot be made to cartons.**
Enter a UDC (46/CS) that the system assigns to a carton representing a status at or beyond which changes cannot be made to cartons. Each status code represents a different stage in the distribution cycle.

**5. Enter the Carton Status for Reconciled Cartons.**
Enter a UDC (46/CS) to specify the status for reconciled cartons.

**2.16.11.4 Serial Number**

**1. Serial Number Creation process value.**
Enter a code that indicates what type of serial number the system generates for cartons. Values are:

- Leave blank and the system does not create serial numbers for cartons.
- Enter 1: to create serial numbers based on the UCC-128 standard.
- Enter 2: to create serial numbers from next numbers setup in P4625 Label Next Numbers.
- Enter 3: to create serial numbers based on Electronic Product Code, EPC, standard.
- Enter 4: to create two serial numbers, one after the UCC-128 SSCC standard and the other after the Electronic Product Code, EPC, standard.
- Enter 5: to create two serial numbers, one after the setup in P4625 Label Next Numbers and the other after the Electronic Product Code, EPC, standard.

**2. Company UCC Code to use for SSCC Number generation.**
Enter a UDC (41/UC) to indicate what type of Company UCC Code to use for SSCC Number generation. Leave blank and the system uses the first UDC entry for 41/UC.

**3. Document Type to use to retrieve the Serial Number for SSCC Number generation.**
Enter a UDC (00/DT) that identifies the origin and purpose of the transaction. Several prefixes are reserved for document types, such as vouchers, invoices, receipts, and timesheets. The reserved document type prefixes for codes are:

- Leave blank to use next number 40/08.

**4. Document Key Company to use to retrieve the Serial Number for the SSCC number generation.**
Enter a number that, along with order number and order type, uniquely identifies an order document (such as a purchase order, a contract, a sales order, and so on).

If you use the Next Numbers by Company/Fiscal Year facility, the Automatic Next Numbers program (X0010) uses the order company to retrieve the correct next number for that company. If two or more order documents have the same order number and order type, the order company lets you locate the desired document.
If you use the regular Next Numbers facility, the order company is not used to assign a next number. In this case, you probably would not use the order company to locate the document.

Leave blank to use next number 40/08.

5. Function to use for SSCC number generation. Function Generate SSCC Number is available.
Enter GenerateSSCCNumber to generate SSCC numbers.
Leave blank and the system does not generate SSCC numbers.

6. Function Name to use for SSCC number validation. Function Calculate UCC128 Check Digit is available.
Enter CalculateUCC128CheckDigit to generate SSCC names.
Leave blank and the system does not generate SSCC names.

Enter 1: to use the Carton Label Preference (Advanced Preference #39). You can use the Carton Label Preference to determine which carton types (setup in P46091) are assigned serial numbers. If the preference is not being used, serial numbers are assigned to all cartons. If UCC-128 SSCC numbers are being created, the preference can be set up to generate either a Tare or Pack SSCC for the carton type.
Leave blank and the system does not use Carton Label Preference.

2.16.12 Reorganizing Cartons and Items in a Shipment

Access the Carton Reorganization form.

**Note:** If the system generates an EPC number, this form also displays an EPC Column.

To reorganize cartons and items in a shipment:

1. Perform any of these tasks:
   - To place a carton or item inside another carton, click the carton you want to move. Drag and drop the carton on top of the parent carton. Click the plus sign next to the parent carton to review its contents.
   - To remove a carton or item from one carton and place it in another carton, click the plus sign next to the parent carton, click the carton or item to remove, and drag and drop the carton or item on top of the new parent carton. If you are moving an item and have set the Allow Partial Quantity Item Moves processing option on the Defaults tab of Carton Reorganization to allow movement of partial quantities of an item, you must specify the quantity of the item you want to move on the Item Move Quantity form. If this processing option is left blank, the system moves the entire quantity and does not display the Item Move Quantity form.
   - To remove a carton or item from a parent carton and place the carton or item at a parent level, drag and drop the carton or item on top of the shipment button at the top of the shipment contents list. The system places the carton or item at the bottom of the shipment contents list. If you are moving an item and have set the Allow Partial Quantity Item Moves processing option on the Defaults tab of Carton Reorganization to allow movement of partial quantities...
of an item, you must specify the quantity of the item to be moved on the Item Move Quantity form. If this processing option is left blank, the system moves the entire quantity and does not display the Item Move Quantity form.

2. To update a carton, shipment, or item, select the item and click Select.
3. On Carton Detail Add/Update, enter a value in the Carton Code field.
4. Select the Type in a Serial Number option and enter a value in the Serial Number field.
5. select one of these options and click OK:
   - Generate Tare SSCC
   - Generate Pack SSCC
   - Generate Label Next Number
6. select one of these options and click OK:
   - Type in an EPC. Enter a value in the EPC field.
   - Generate EPC Number
7. Click Confirm.

On Carton Reorganization, the system displays the updated information. The packing structure is only modified when the user saves changes.

### 2.16.13 Reviewing Carton Detail Information

Access the Carton Detail form.

**Carton ID**
Displays a system-assigned number that identifies each carton. The system uses this number for the picking, packing, and shipment processes.

**Item Number**
Displays a number that the system assigns to an item. It can be in short, long, or third item number format.

**Order Number**
Displays a number that identifies a document. For example, the document can be a purchase order, invoice, or sales order.

**UPC**
Displays the Universal Product Code number which must conform to the UCC structure for UPC numbers.

### 2.16.14 Setting Processing Options for Generate Sequenced Cartons (R46474)

Processing options enable you to specify the default processing for programs and reports.

#### 2.16.14.1 Process

1. View Only
   Enter blank to create carton detail information, and print the report.
   Enter 1: to only print the report based on existing carton detail information.
2.16.14.2 Versions

1. Version for P4620 (Carton Reorganization) = ZJDE0001
   Enter the version of Carton Reorganization (P4620) that the system launches. Leave blank to launch version ZJDE0001.

2.16.15 Generating Sequenced Cartons (R46474)
   Select Warehouse Movement Documents (G4621), Generate Sequenced Cartons.

2.16.16 Setting Processing Options for Carton Recommendations Report (R46151)
   Processing options enable you to specify the default processing for programs and reports.

   2.16.16.1 Process
   Use this processing option to determine whether to generate packing instructions.

   1. Generate carton detail packing instructions (F4620)
      Leave blank if you do not want to generate packing instructions.
      Enter 1 to generate packing instructions.

   2.16.16.2 Version
   Use this processing option to indicate which version of the Carton Reorganization program the system uses.

   1. Version of Carton Reorganization (P4620)
      Enter the version of Carton Reorganization the system to runs. Leave blank to run version ZJDE0001.

2.16.17 Running the Carton Recommendations Report (R46151)
   Select Shipping and Packaging Management (G4615), Carton Recommendations Report.
   If you are creating many F4620 records you can use this report instead of processing them through the Work With Shipments process.

2.16.18 Setting Up Carton Charges for Expendable Containers
   Access the Carton Charge Reference Setup Revisions form.

   Customer Purchase Order
   Enter an alphanumeric value used as a cross-reference or secondary reference number. Typically, this is the customer number, supplier number, or job number.

   Charge Reference
   Enter a number that identifies the charge amount.

   Carton Quantity
   Select to indicate the system calculates the carton charges using the number of cartons that are shipped.
Item Quantity
Select to indicate the system calculates the carton charges using the number of items that are shipped inside the cartons.

See Also:
- Defining Storage Containers.
- Setting Processing Options for Sales Order Entry (P4210).

2.17 Setting Up UCC 128 Processing
This section provides an overview of UCC 128 processing, lists prerequisites, and discusses how to:
- Set up hierarchical configurations.
- Set up ship notice/manifest requirements.
- Set up item information.

2.17.1 Understanding UCC Identification Codes
Each company can assign product identification codes. The Uniform Code Council (UCC), the Electronic Commerce Council of Canada (ECCC), and the EAN (outside of Canada and the United States) assign member companies the company identification. In the company identification codes, the first digit is the region code. For North America, the region code is 0. Therefore, the company identification can be seven digits if you include the first digit 0. Because each UCC code contains the company number, all numbers are unique.

2.17.1.1 Universal Product Code (UPC)
Each company can assign the Universal Product Code (identified as UPC in North America and EAN-13 outside of North America) to both a consumer unit and the lowest saleable unit for a specific product. For example, a can of soda would have the UPC identification on the can because it can be sold individually. The UPC code is a fixed code that identifies one unit of a specific product.

This graphic illustrates the structure of UPC code:

*Figure 2–1  UPC/EAN-13 Code Structure*

<table>
<thead>
<tr>
<th>Company ID</th>
<th>Product ID</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 12 11 10 9 8 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The UPC code is made up of a:
- Single-digit check character.
- 5-digit Product ID assigned by the company.
Setting Up UCC 128 Processing

- 7-digit company (or manufacturer) ID that is assigned by the UCC/EAN. For North American companies, 6 characters represent the company ID because the leading 7th digit is always 0 and can be left off the code.

Typically, a company maintains its own product identification codes for internal use but does cross-reference the internal product identification codes to the UPC code.

2.17.1.2 Shipping Container Code (SCC)
Companies assign the SCC (identified as the SCC-14 in North America and EAN-14 outside of North America) to an intermediate pack for a specific product. For example, cans of soda are sold in various configurations. One possible configuration is four six-packs in each case. Therefore, the case would have an intermediate pack identifier (SCC-14) on it.

The SCC, like the UPC, is a fixed code that identifies the specific number of consumer packs of a specific product. The SCC code on the case of soda represents four consumer packs, each with six sodas or a total of 24 sodas.

The SCC-14 code is made up of a:
- Single-digit check character.
- 5-digit Product ID assigned by the company.
- 7-digit company (or manufacturer) ID assigned by the UCC/EAN.
- Single-digit Packaging Indicator that identifies the packaging. This identifier is assigned by the company and may vary from product to product. This identifier is fixed and has these values:
  - 0 indicates that the Product ID on the SCC is different from the product identification on the UPC codes contained within the package.
  - 1 - 8 indicates company-defined packaging. For example, for soda, a 1 might mean a case containing six packs and a 2 might mean a case containing 12-pack boxes. When you set up item information, you can enter UPCs and SCCs with product identifiers 1-8.
  - 9 indicates that the amount of product inside the package varies from package to package even though there is the same product identification in the UPC codes of the consumer pack contained within the package.

In the system, an SCC code is equivalent to an item code for a specific unit of measure. For any item, there would be one UPC code but several SCC codes.

2.17.1.3 Serial Shipping Container Code (SSCC)
SSCC (SSCC-18) is a unique serial number that is assigned to cartons or shipping containers, including entire truckloads or shipments.

The SCC code is a variable code that can be a hierarchical structure of SCCs and UPCs. The code is a key to a database record. For example, an SSCC may be put on a pallet that has 10 cases of soda and 10 cases of juice.

This graphic illustrates the structure of SSCC-18 code:
The SSCC-18 code is made up of:

- Single-digit check character.
- 9-digit serial number that identifies the shipping method that is assigned by the company.
- 7-digit company (or manufacturer) ID that is assigned by UCC/EAN.
- Single-digit packaging type. This identifier is fixed and has these values:
  - 0 indicates the shipping container is a case or carton.
  - 2 indicates that shipping container is a pallet (larger than a case).
  - 3 indicates the shipping container is undefined.
  - 4 indicates the shipping container that you use internally for intra-company use.
  - 5 - 9 are reserved for future use.

To process orders that comply to UCC 128 specifications, you must set up customer and item information. For example, you can define customer preferences for transmitted information and standard identification codes for products.

### 2.17.1.4 Customer Information

You must set up customer specifications that are maintained for UCC 128 Compliance. These specifications might include the customer-specific format for transmitted information and additional UCC 128 processing information, such as transportation equipment, routing, and reference numbers.

### 2.17.1.5 Hierarchical Configurations for Customer Information

When you transmit order information, you can establish a format that relays the information about the shipment, the orders within the shipment, and the items within the order. You define hierarchical configurations to transmit information that meets customers' needs.

You can set up any structure based on the needs of the business. These are examples of hierarchical structures:

<table>
<thead>
<tr>
<th>Structure</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pick and Pack</td>
<td>This is the most flexible configuration because you can combine products at the tare and pack levels.</td>
</tr>
<tr>
<td>Standard Carton Pack</td>
<td>Within this configuration, there can only be one UPC present in subordinate tare and pack levels.</td>
</tr>
</tbody>
</table>
Within the configurations, you can define hierarchies based on the customer preferences. These are examples of configuration levels:

<table>
<thead>
<tr>
<th>Level</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipment (S)</td>
<td>There can only be one Shipment level in each transaction set that is transmitted. This contains information such as the bill of lading number, ship to, and sold from information.</td>
</tr>
<tr>
<td>Order (O)</td>
<td>The order level contains information related to the supplier’s sales order and the customer’s purchase order.</td>
</tr>
<tr>
<td>Tare (T)</td>
<td>The optional tare level contains information related to pallets and other large product collections.</td>
</tr>
<tr>
<td>Pack (P)</td>
<td>The optional pack level contains information related to intermediate packs.</td>
</tr>
<tr>
<td>Item (I)</td>
<td>The item level contains information about the product that is shipped, such as UPC number and quantity.</td>
</tr>
</tbody>
</table>

One customer may need shipment, order, item information, in that order, while another may prefer shipment, order, tare, pack, item information, in that order. You define hierarchical configurations to transmit information that meet customer’s needs.

This diagram illustrates the hierarchical configurations for pick and pack structures:

**Figure 2–3 Hierarchical Configurations/Pick and Pack Structure**

2.17.1.6 Item Information

You must provide the system with information about the items that you stock. When you enter item master information, you provide the system with details such as:

- Item identifiers
2.17.1.7 Using Package Indicators

If you are setting up the SCC, use these Packaging Indicators to identify the type of packaging:

- **0** indicates that the Product ID on the SCC is different from the product identification on the UPC contained within the package. You can use this product identifier for kits.

- **1-8** indicates company-defined packaging. For example, for soda, a 1 might mean a case containing six packs and a 2 might mean a case containing 12-pack boxes.

- **9** indicates that the amount of product inside the package varies from package to package even though there is the same product identification in the UPC of the consumer pack contained within the package. The system does not support variable unit of measures.

2.17.1.8 Setting Up Aggregate SCCs

You can set up aggregate SCCs to represent kits with non-inventory components. A kit is a collection of inventory items, called components, that are associated with a description name, called a parent item. The aggregate SCC represents the parent item. You can access the Item Cross-Reference Revisions form to assign component UPCs to the aggregate SCC for the kit. You only enter cross-reference information for non-inventory items. For example, you do not stock bandages, an item for which you do not record inventory or UPCs. You do sell first aid kits, which include bandages. Depending on customer requirements, you can enter the aggregate SCC for the first aid kit and item cross-reference information for the components, such as bandages, that comprise the first aid kit.

If the components are inventory items, you do not have to enter cross-references. When you enter an order for a kit, the system retrieves the kit information, which includes the component UPCs, from the Item Master table (F4101).

To set up identification for kits with non-inventory items, you can set up an SCC with a product identifier equal to 0, which indicates that the SCC is different from the product identification on the UPCs it contains. To assign the UPCs to the aggregate, you can enter information in the Item Cross-Reference field.

On Item Cross Reference, you must enter the cross-reference type, UP, to indicate UPCs. The cross-reference item number is the UPC code and the cross-reference description is the unit of measure.

2.17.2 Prerequisites

Before you complete the tasks in this section:

- Set up the UCC-assigned vendor number in UDC (41/UC).

- Verify that you have set up the shipping document types in UDC (49/SD).
See Also:

- "Planning Transportation Shipments" in the *JD Edwards EnterpriseOne Applications Transportation Management Implementation Guide*.
- "Setting Up Item Cross-References" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

### 2.17.3 Forms Used to Set Up UCC 128 Processing

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchical Configuration Definition Revisions</td>
<td>W47HLD</td>
<td>Shipping Notice (G47215), Hierarchical Configuration Definition</td>
<td>Set up hierarchical configurations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Hierarchical Configuration Definition.</td>
<td></td>
</tr>
<tr>
<td>Customer Master Revision</td>
<td>W03013B</td>
<td>Sales Order Management Setup (G4241), Customer Billing Instructions</td>
<td>Set up ship notice/manifest requirements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on Work With Customer Master. Select the Customer Ship Notice tab.</td>
<td></td>
</tr>
<tr>
<td>Storage/Shipping</td>
<td>W4101D</td>
<td>Inventory Master/Transactions (G4111), Item Master</td>
<td>Set up item information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and select Storage/Shipping from the Row menu on Work With Item Master Browse.</td>
<td></td>
</tr>
<tr>
<td>Item Cross Reference Revisions By Item</td>
<td>W4104C</td>
<td>Select Item Cross Ref. from the Form menu on Storage/Shipping.</td>
<td>Assign UPCs for non-inventory components to the aggregate SCC.</td>
</tr>
</tbody>
</table>

### 2.17.4 Setting Up Hierarchical Configurations

Access the Hierarchical Configuration Definition Revisions form.

**Address Number**

Enter a number that identifies an entry in the Address Book system, such as employee, applicant, participant, customer, supplier, tenant, or location.
**Hierarchical Configuration**
Enter the EDI 856 transaction set hierarchy configuration codes that specify the levels present in the Ship Notice/Manifest. This field is made up of a combination of 2 character Hierarchical Level Codes (HLC) (values from the X12 specification for data element 735 - HLC). There can be up to 9 combinations of HLCs in this field.

**Hierarchical Structure Code**
Enter a code indicating the hierarchical application structure of an EDI transaction set that utilizes the HL segment to define the structure of the transaction set.

**Level**
Displays a number used to organize the table into a logical group for online viewing and reporting.

**Field Name**
Enter a UDC (47/FD) for the data dictionary item name. Examples include F#MMCO or F#CO for company; F#MMCU or F#MCU for business unit; and F#RP01-30 for business unit category codes 01 through 30.

Special characters are not allowed as part of the data item name, except #, @, $.

If you want to create protected data names that software updates do not overwrite, use $xxx and @xxx, where xxx is user-defined.

**Ascending Descending**
Enter an A: to designate ascending sorting sequence or D: for descending sorting sequence.

---

**Note:** For use within OPNQRYF command to designate the UNIQUEKEY parameter. The number of key sequence fields specified with these codes represent the number assigned to the UNIQUEKEY parameter. This parameter eliminates duplicate records for the specified keys.

---

**U:** Ascending

**V:** Descending

**Total Level**
Enter a level break, not to be confused with Account Master or Business Unit Master level of detail concept. You might specify the level of totaling to place on this field. Up to 9 levels of totals are permissible. If levels of totals are not specified in an order consistent with the sequence parameters, unpredictable results may occur.

For example:

Level 01 - Department Totals - Sort Sequence 03
Level 02 - Branch Totals - Sort Sequence 03
Level 03 - Division Totals - Sort Sequence 01
Level 10 - Grand Totals

If you specify the same totaling level on multiple data fields, you must enter a 1 in the 1st position of total level for all secondary fields.

For example:

Level 01 - Business Unit (description comes from here)
2.17.5 Setting Up Ship Notice/Manifest Requirements
Access the Customer Master Revision form.

2.17.6 Setting Up Item Information
Access the Storage/Shipping form.

UPC
Enter the unit of measure at the Universal Product Code level. (The lowest consumer-saleable package.)

UPC Number
Enter the Universal Product Code number which must conform to the UCC structure for UPC numbers

SCC(PI=1) through SCC(PI=8)
Enter a UDC (00/UM) for the unit of measure that is associated with an SCC pack with a packaging indicator of 1 through 8.

Default Aggregate UPC UOM
Enter the unit of measure code to use for each universal product code (UPC) quantity that is contained in the aggregate service class code (SCC) pack.

SCC(PI=0)
Enter the unit of measure that is associated with an SCC pack that has a Packaging Indicator of 0.

2.18 Setting up Label Information
This section provides an overview of label information, lists prerequisites, and discusses how to:

■ Set up additional outbound label information.
■ Set up label next numbers.

2.18.1 Understanding Label Information
The system and third parties can exchange detailed carton information that describes the physical shipment. Third parties must send inbound label information describing the physical shipment such as label serial number, relationship of packaging (such as cartons on a pallet), and carton type.

You generate outbound label data from system tables to a third-party for formatting and printing. The outbound label information includes the Ship To address, EDI data and demand scheduling data, such as the supplier or plant code (Party Type 1 and 2).

You can produce label output as follows:

■ From demand scheduling by using CUM Maintenance (P40R12)
■ From Carton Detail Inquiry if the carton detail has been created from carton recommendations or other methods
■ From Sales Order Entry if you are not using demand scheduling
Note: If you specify output for a carton or sales detail, the label data is for the entire shipment.

Then the third-party labels, stages or builds pallets, assigns labels to shipments and performs tasks such as label verification during scanning.

The third-party sends data generated from the label process back to the JD Edwards EnterpriseOne system. The system stores the label data in the F4620 table. This table must be updated with accurate information from the physical shipment, because the system uses this information to create packaging information on the ASN and the Bill of Lading.

Through shipment carton reconciliation you can use scanning to verify that the shipment item quantity matches the carton detail item quantity, and then correct discrepancies.

You can add or update label serial numbers that are unusable because of errors or damages in packaging. The system uses the Unusable Label Numbers table (F4622) to process unusable label information.

2.18.1.1 What If the Scanned Carton Quantity is Less Than the Sales Order Quantity?
Changes to carton detail are not reflected in the sales detail and vice versa.

To pass reconciliation, you can:
- Decrease the sales quantity by changing demand
- Decrease sales quantity in shipment confirmation
- Add cartons to carton detail

2.18.1.2 What If the Scanned Carton Quantity is Greater Than the Sales Order Quantity?
To pass reconciliation, you can:
- Increase sales quantity by changing Demand
- Increase sales quantity in ship confirm
- Remove cartons from carton detail

The system uses these tables for processing label information:
- Additional Demand Label Data (F40R31)
- F4622
- Label Next Numbers (F4625)
- Demand Detail (F40R11)
- F4211
- F4215
- F4620

2.18.1.3 Outbound and Label Processing
For outbound label information, the system provides label information for the GM1724 label standard. You can specify whether to generate label serial numbers from label
next numbers, or they can be generated externally. You set up label next numbers by branch/plant or use a default branch/plant value. The system sends the label number in the outbound label data but does not store this information in the system until after third-party scanning, when creating the carton detail. The third-party stores and validates the label serial number.

The system does not format data for a label, print the label or create the barcode that is printed on the label. It is up to the third parties to determine if that data describes what is physically on the pallet and whether to use that information on the label. Third parties are responsible for carton counts on labels, label format, printing, barcode, pallet staging, and label verification.

You can use the Additional Label Data application (P40R31) to set up additional data for the outbound label message. This data includes the branch/plant, Sold To and Ship To values, the column name and table name that contains the column to use for the label, and supplemental data for categorizing values such as approval steps or requisition requirements.

2.18.2 Prerequisites

Before you complete the tasks in this section:

- Set up the UDCs for Additional Label Tables (40R/TN) and Additional Label Supplemental DB Codes (46/AL).

  **Note:** The display mode for the supplemental data type must be C.

- Set up UDC Unusable Label Reason Code (46/UL).

2.18.3 Forms Used to Set Up Label Information

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Label Data</td>
<td>W40R31B</td>
<td>Shipping and Packaging Setup (G46412), Additional Label Data</td>
<td>Set up additional label</td>
</tr>
<tr>
<td>Revision</td>
<td></td>
<td>Click Add on Work With Additional Label Data.</td>
<td>outbound information.</td>
</tr>
<tr>
<td>Label Next Number Revision</td>
<td>W4625B</td>
<td>Shipping and Packaging Setup (G46412), Label Next Numbers</td>
<td>Set up label next numbers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Label Next Numbers.</td>
<td></td>
</tr>
</tbody>
</table>

2.18.4 Setting Up Additional Outbound Label Information

Access the Additional Label Data Revision form.

Table Name

Enter a UDC (40R/TN) that represents the name of the table containing the column that the system uses for a label.
Column Name
Enter a descriptive remark for the label.

SDB Code (supplemental database code)
Enter a UDC (00/SD) that sets up databases for groups of related supplemental data types. This code differentiates the supplemental data types for various systems. For example, the Employee (E) supplemental database contains data types that you use to track additional employee information, such as education and job skills.

If you specified that the Supplemental Data table (F00092) is a table name for UDC 40R/TN, complete this field; otherwise this field must remain blank.

Ty Dt (type data)
Enter a code that you assign to supplemental data so that you can group data by categories. Values include:
- A: Approval steps
- B: Requisition requirements
- C: Interview process
- N: Requisition notes

SDB Code Name (supplemental database name code)
Displays a SDB code name.

2.18.5 Setting Up Label Next Numbers
Access the Label Next Number Revision form.

2.19 Setting Up License Plate Processing
This section provides an overview of license plate processing and discusses how to:
- Activate license plate processing for a UOM and item dimension group.
- Activate license plate processing for a UOM and item.
- Set up license plate numbering constants.
- Set up segment definitions for license plate numbers (LPN).

2.19.1 Understanding License Plate Setup
You can track large units of measure, such as a pallet, by assigning an LPN when you create a movement request. For example, you can assign an LPN to a pallet of stereo equipment to locate it easily.

If you use license plate tracking for a particular item or unit of measure combination, the system generates one tracking number for each unit of measure of that item. You should use license plate tracking only for an item's Level 1 unit of measure, the largest in the unit of measure structure, such as a pallet.

You can assign LPNs at the branch/plant level by item, unit of measure or both. For example, a pallet of item ABC may influence a license plate, but a case of item ABC may not. License plates supports mixed lots of both single and mixed items. The system checks item compatibility if items are mixed on a single license plate. You can set up multilevel parent/child license plate nesting structures, such as a license plate within a license plate after the items are on hand in the branch/plant. You can add
items to a license plate manually at any time, including after purchase order receipts and manufacturing completions processes.

**Note:** You can activate license plates for a Branch/Plant only if there are no F4602 records in the table for that Branch/Plant.

You use these JD Edwards EnterpriseOne applications to set up license plate processing:

**2.19.1.1 Item Unit of Measure Definition**
You can activate license plate functionality for creating LPN automatically for a UOM and item dimension group relationship (or definition), or for a UOM and item relationship (or definition). You can set up several UOMs in the structure with automatic LPN generation.

**Note:** Automatic License Plate creation can only occur if you are not using manual numbering and the item is not a Dual UOM item. It only occurs in certain applications (Adjustments, To Side of Transfers, PO Receipts (Inbound ASN and Receipt Routing included), and WO Completions) and can be turned off for each of these applications, even if the item UOM definition has it turned on.

**2.19.1.2 License Plate Numbering Constants (P46L001)**
You activate license plate functionality and set up constants for processing, such as default container code and the generation method for numbering.

**Note:** Storage unit numbers are no longer known as license plate numbers in this version of the JD Edwards EnterpriseOne Warehouse Management system and can no longer be created.

**2.19.1.3 License Plate Segment Definition (P46L010)**
You can set up segment definitions for LPNs. Segment details include the sequence and the length, which combined, form the license plate number. You also specify which segment types appear and in which order. Segment types include hard coded values, look up types such as container codes, next numbers, or check digits.

You can set up complicated formulas or simple formulas. Formulas are made up of segments. An example of a simple segment would be using Next Numbers. Or, you can set up any combination of hard coded, Next Number, look-up types, container-based UDC, and check digit segments, up to a length of 40. An example might be to set up a hard-code value to identify the branch/plant followed by a next number range.

**2.19.1.4 Container and Carton Codes**
You can set up default License Plate container type processing groups and associate the default License Plate unit of measure to a container type, such as a case or box, dimensions, weight, and maximum weight. All of these groups are important to license plates and their default values.

See Defining Storage Containers.
2.19.1.5 Tables Used for License Plate Processing

The system can use these tables for license plate processing:

- License Plate Numbering Constants (F46L001)
- License Plate Segments (F46L010)
- License Plate Next Numbers (F46L011)
- LPN Supplier Inbound ASN Levels (F46L060)
  For future use.
- LPN Supplier Cross Reference (F46L070)
  For future use.
- License Plate Master (F46L10)
- License Plate Item Detail (F46L11)
- License Plate Commitment (F46L12)
- License Plate Cross Reference (F46L20)
- Location Capacity (F46L30)
- License Plate Cycle and Tag Count (F46L42)
- License Plate History (F46L99)

You must set up these UDCs for license plate processing:

- 46L/SC (License Plate Status Code)
- 46L/RC (License Plate Reason Code)
- 46L/CR (Cross Reference Type)
- 46L/CT (Commitment Type)
- 46L/LG LP (Generation Method)
- 46L/LT LP (Lookup Type)
- 46L/TT (Transaction type)
- 46L/ST (Segment Type)
- 46L/LS (Location Capacity Status)
- 46L/IA (Inbound ASN DD Column)

2.19.2 Prerequisites

Before you complete the tasks in this section ensure that you convert or remove existing data before activating license plates.

See Converting Existing Data.
### 2.19.3 Forms Used to Set Up License Plate Processing

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>U/M Definition by Group Revisions</td>
<td>W46011B</td>
<td>License Plate Setup (G46L41), U/M Definition by Group.</td>
<td>Activate license plate processing for a UOM and item dimension group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select an item group, or click Add on Work With U/M Definition by Group.</td>
<td></td>
</tr>
<tr>
<td>U/M Definition by Item Revisions</td>
<td>W46011B</td>
<td>License Plate Setup (G46L41), U/M Definition by Item.</td>
<td>Set up LPNs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select an item, or click Add on Work with U/M Definition by Item.</td>
<td>Activate license plate processing for a UOM and item.</td>
</tr>
<tr>
<td>License Plate Numbering Constants</td>
<td>W46L001B</td>
<td>License Plate Setup (G46L41), License Plate Numbering Constants</td>
<td>Set up license plate numbering constants for the Branch/Plants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Find on License Plate Numbering Constants.</td>
<td></td>
</tr>
<tr>
<td>License Plate Segment Revisions</td>
<td>W46L010D</td>
<td>License Plate Setup (G46L41), License Plate Segment Definition.</td>
<td>Set up segment definitions for generation of license plate numbers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work with License Plate Segment Definitions.</td>
<td></td>
</tr>
</tbody>
</table>

### 2.19.4 Activating License Plate Processing for a UOM and Item Dimension Group or UOM and Item

Access the U/M Definition by Item Revisions form.

**License Plate**

Select to specify the system creates a license plate number automatically for the item/UOM or item dimension group/UOM in this unit of measure.

### 2.19.5 Setting Up License Plate Numbering Constants

Access the License Plate Numbering Constants form.

**Note:** This numbering method is the default value. You can override this number at any time when creating the license plate and during certain transactions, such as PO Receipts, work order completion, PO receipt routing, inventory adjustments, and inventory transfers. Also, data collections can also scan or read the LPNs and send them into the system to create the license plates.

**LPN Switch**

Enter 0: and the system does not use LPNs for the Branch/Plant.
Enter 1: to use LPNs for the Branch/Plant.

**LPN Method**

Enter the value, UDC (46L/LG), to indicate what license plate number generation method the system uses for the branch/plant. Values are:

Enter 01: for manual entry. The system does not automatically create LPNs. You must manually create the license plate number.

Enter 02: to create using a user-defined formula. A user-defined formula enables you to specify how the system creates LPNs. This method is similar to that of the tracking numbering used in pick, pack, and ship. To use this method at any time, you must set up the formula at the branch/plant level in License Plate Segment Definition (P46L010).

Enter 03: to create EPC (electronic product code) number. The system uses the Electronic Product Code processes to create the license plate number.

**2.19.5.1 LPN Master Settings**

**LPN Process On/Off**

Select to specify whether the system uses LPNs for the Branch/Plant.

**LPN Default Container Code**

Enter a UDC (46/EQ) that identifies a storage container or a shipping carton.

For license plates, the specified container code is the default container code for every license plate containing mixed items. Non-mixed LPNs use the container code setup for the specific Item/UOM in Item Unit of Measure Definition (P46011) and not by creating building automatically or a UOM structure. You can override this default container code for a license plate only if it was created automatically or by UOM structure.

**LPN Generation Method**

Enter the value, UDC (46L/LG), to indicate what license plate number generation method the system uses for the branch/plant. Values are:

Enter 01: for manual entry. The system does not automatically create LPNs. You must manually enter the license plate number.

Enter 02: to create using a user-defined formula. A user-defined formula enables you to specify how the system creates LPNs. This method is similar to that of the tracking numbering used in pick, pack, and ship. To use this method at any time, you must set up the formula at the branch/plant level in License Plate Segment Definition (P46L010).

Enter 03: to create EPC (electronic product code) number. The system uses the Electronic Product Code processes to create the license plate number.

**License Plate Status Code**

Enter a UDC (46L/SC) to set a License Plate Status Code for the License Plate Number. Examples of possible UDC status codes are 01 for open and 02 for close.

**2.19.6 Set Up Segment Definitions for LPNs**

Access the License Plate Segment Revisions form.
**LP Segment Sequence**
Enter a number that specifies what sequence this segment is to appear in the license plate number. For example, if the sequence is 1, then the segment appears first when the license plate number is constructed.

**Segment Length**
Enter the number that specifies the length of this segment of the license plate. A single segment must be from 1 to 40 characters long. The total length of all segments for a branch/plant numbering formula cannot exceed 40 characters.

**Segment Type**
Select an option to specify the type of license plate segment.

- Hard Coded Value
- Lookup Type
- Container Code Based UDC
- Next Number
- Check Digit (segment length must be 1 character)
- User Defined Function (must be the only segment for the branch/plant numbering formula)

**Product Code**
Enter a UDC (98/SY) defined for license plate segments. The values should match the segment type selected. The system retrieves a UDC value based on the segment type and uses the UDC description as the value for the segment. If the segment is defined with a length of 10, then the system uses the first ten characters of the UDC description to populate the segment.

**User Defined Code**
Enter a UDC (98/SY) defined for license plate segments. The values should match the segment type selected. The system retrieves a UDC value based on the segment type and uses the UDC description as the value for the segment. If the segment is defined with a length of 10, then the system uses the first ten characters of the UDC description to populate the segment.
Working with License Plate Information

This chapter contains the following topics:

- Section 3.1, "Understanding License Plates"
- Section 3.2, "Converting Existing Data"
- Section 3.3, "Managing License Plate Information"

3.1 Understanding License Plates

You can use license plates to distinguish each product carton or item with a unique license plate number (LPN). The system stores the itemized part numbers, quantity, inventory status, location, lot number and creation date in the LPN record. Simply scanning a carton label, which contains the LPN in text and barcode form, enables you to completely identify goods in transactions, such as receiving, moving, production or shipping. Using license plates substantially reduces the number of scans necessary to enter a transaction since only one barcode must be scanned to identify all of the product information.

These JD Edwards EnterpriseOne applications process license plate information:

3.1.1 License Plate Workbench (P46L10)

You can set up and maintain license plate records and review all of the information associated with the license plate record. For example, you can locate parent/child records, review characteristics and dimensions, review history, review hierarchy information of containers, and items. You can also perform full license plate inventory transfers and full license plate inventory issues using the workbench. Use the processing options on the Security tab to specify whether to allow issues and transfers, and the processing options on the Versions tab to specify which versions of the system should use.

3.1.2 Assign/Remove Items to License Plate (P46L30)

You can search across branch/plant, item, location, and lot information, to assign or remove items to/from new or existing license plate records. You can use this application to build license plate records based on the unit of measure structure of the item, add or remove items from an existing license plate record, or create new license plate records.

Note: Some dimensions can be overridden when items are added to an existing license plate.
3.1.3 Assign/Remove Child License Plate (P46L31)

You can search across branch/plant and location information and build the record by assigning license plate records to a parent license plate record. You can also use this application to create new parent license plates or to remove a child license plate from a parent license plate.

3.1.4 Location Capacity Workbench (P46L40)

You can locate location capacity records to view or manage the storage location’s volume and weight information.

3.1.5 License Plate Cross Reference (P46L20)

You can cross-reference LPNs with a different number and cross-reference type, based on the user-defined code (UDC) CR (License Plate Cross-Reference Type). You can also access the workbench and history information from this program and use it to search for LPNs by their other cross-referenced numbers.

3.1.6 License Plate History (P46L99)

You can review historical activity for license plate records and various characteristics, such as dimensions, item information and audit information.

3.1.7 Batch License Plate Putaway Request (R46L140)

You create full license plate putaway requests for outermost parent license plates. You base data selection on License Plate Master (F46L10) information.

See Creating Putaway Requests by Batch.

3.1.8 Batch Putaway Request (R46140)

This should not be part of this section since it deals with processes when you do not have License Plates to be processed.

You can create item putaway requests for items not on license plates. You can use this program with or without the license plates. You base data selection on Item Location (F41021) information.

See Creating Putaway Requests by Batch.

3.1.9 F4602 License Plate Conversion (R46L820)

You can convert and remove item Location Detail Information (F4602) records when you activate license plates. This program converts existing storage unit numbers (STUNs) into license plate records. Before activating license plates for the branch/plant, run this program to remove all item Location Detail Information (F4602) records. You base data selection on the F4602 table.

---

Note: Use this program once during the conversion and do not use it again while using any other license plate programs.
3.1.10 Location Capacity Build (R46L830)

You can create Location Capacity Build (F46L30) records for license plates. This program creates or updates the used and reserved volume and weight of the locations you select. You base data selection on Location Master (F4100) information.

Note: This program should be run before activating license plates. You can run the program multiple times and you can run it before or after running the F4602 License Plate Conversion program.

3.1.11 Inventory Issues (P4112)

When you perform inventory issues, you can use the Inventory Issues program to enter the LPN from which to remove the inventory.

See “Issuing Inventory” in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

3.1.12 Inventory Transfers (P4113)

When you perform inventory transfers, you can enter the LPN from which to transfer inventory. If license plates are active for the To Branch/Plant, you use the processing options and license plate branch/plant constants to process license plate information for the To Location. This includes generating new LPNs or you can manually create license plates for the new To location.

See “Transferring Inventory” in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

3.1.13 Inventory Adjustments (P4114)

Use the processing options and license plate branch/plant constants to process license plate information for addition of inventory to the Location. This includes generating new LPNs or you can manually create license plates for the new To location.

See “Adjusting Inventory” in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

3.1.14 Cycle Count Entry (P4141) and Tag Count Entry (P41604)

You can specify counted quantity on certain license plates. You access the LPN Detail Entry (P46L42) form using the Cycle Count Entry (P4141) or Tag Status Review (P41604) programs.

See “Entering Counted Quantity on an Existing License Plate” in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

3.1.15 Request Inquiry (P4600)

You the From License Plate field to inquire on and locate license plate information on the Putaway Requests Inquiry form. The From License Plate field is not a filter on the Manual Putaway Location Planner form. For full License Plate Putaway requests, the From License Plate field displays in the header and impacts the processes options for which the screen can be used. You can also inquire using the From License Plate field on Replenishments as well. Replenishment Full License Plate Requests have the same functionality as the Manual Replenishment Location Planner screens.

See Locating Existing Putaway Requests.
3.1.16 Warehouse Movement Confirmations (P4617)
You use the Warehouse Movement Confirmations program to confirmation, cancel, and override movement for LPNs. You use the From License Plate and To License Plate fields to locate license plate information.
See Confirming Putaway Suggestions.

3.1.17 Manual Replenishments (P46100)
You use the Manual Replenishments program to create putaway and replenishment requests for items and license plates.
See Working with Replenishment.

3.1.18 Purchase Order Receipts (P4312)
You use the processing options on the Warehousing Tab and license plate branch/plant constants to process license plate information before adding inventory to the location. You can have the system generate new LPNs or you can manually create license plates for a new location.

3.1.19 Movement and Disposition (P43250)
You use the Receipts by Purchase Order processing option on the Versions tab and the license plate branch/plant constants to process license plate information before adding inventory to the location. You can have the system generate new LPNs or you can manually create license plates for a new location.
See "Setting Processing Options for Receipt Routing Movement and Disposition (P43250)" in the JD Edwards EnterpriseOne Applications Procurement Management Implementation Guide.

3.1.20 Work Order Completions (P31114)
You use the processing options on the Warehouse Management tab and license plate branch/plant constants to process license plate information before adding inventory to the location. You can have the system generate new LPNs or you can manually create license plates for a new location.
See "Setting Processing Options for the Work Order Completions Program (P31114)" in the JD Edwards EnterpriseOne Applications Shop Floor Management Implementation Guide.

3.1.21 EDI Receiving Advice Edit/Create – Purchasing (R47071)
You use the Receipts by PO (P4312) processing option on the Version tab and license plate branch/plant constants to process license plate information before adding inventory to the location. You can have the system generate new LPNs or you can manually create license plates for a new location.
See "Receiving Advice Documents into Purchasing" in the JD Edwards EnterpriseOne Applications Data Interface for Electronic Data Interchange Implementation Guide.

3.1.22 Prerequisite
Before you complete the tasks in this section, ensure that you have set up license plate processing.
See Setting Up License Plate Processing.
3.2 Converting Existing Data

This section provides an overview of converting existing data and discusses how to:
- Convert existing Location Detail (F4602) records.
- Create new location capacity records.
- Set processing options for F4602 License Plate Conversion (R46L820).

3.2.1 Understanding Converting Existing Data

If you are using a previous release of the JD Edwards EnterpriseOne Warehouse Management system and want to use existing data in the system, you must remove existing location detail records before using license plates. Storage Unit Numbers (STUNs) (which were also referred to as License Plates) are obsolete when you use the latest release of JD Edwards EnterpriseOne Warehouse Management system. If you are not converting existing records and want to use licence plates, then you only set up the system.

**Note:** You cannot have any open suggestions when you begin the conversion process.

You must remove existing records in the Location Detail table (F4602) before you create new license plates numbers in the License Plate Master table (F46L10) and Location Capacity table (F46L30). You can also convert the Build Location Detail (R46820) records before the running the Location Detail Conversion (R4620) program with the processing option set to remove all existing LPNs. If you are not using STUNs, the Location Detail Conversion program deletes all of the F4602 records and updates the F46L30 table. You complete the conversion process as many times as necessary before you begin using license plates. After you run the Location Detail Conversion program, run the Location Capacity Build program, as many times as necessary, to create new location capacity records in the F46L30 table. The system uses data in the F41021 and the F4602 tables for the data in the Location Capacity Build program. The system also uses any existing records in the F46L10.

3.2.2 Forms Used to Convert Existing Data

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with Batch Versions – Available Versions</td>
<td>W98305WA</td>
<td>License Plate Advanced &amp; Technical Ops (G46L31), F4602/License Plate Conversion.</td>
<td>Convert and remove item location detail information.</td>
</tr>
</tbody>
</table>
3.2.3 Converting Existing Location Detail (F4602) records

Access the Work with Batch Versions – Available Versions form.

3.2.4 Creating New Location Capacity Records

Access the Work with Batch Versions – Available Versions form.

3.2.5 Setting Processing Options for F4602 License Plate Conversion (R46L820)

Processing options enable you to specify the default processing for programs and reports.

3.2.5.1 Branch/Plant

Use these processing options to specify branch/plant, license plate status codes, and container codes for processing.

1. Branch/Plant to Be Converted

Specify the branch/plant the system uses for conversion.

Use this field with the data selection to convert data for the Branch/Plant.

2. License Plate Status Code

Enter a UDC (46L/SC) to attach a License Plate Status Code to the new License Plate Number. You use this processing option only when you convert any STUNs to new License Plate records. Examples include:

01 for Open.

02 for Close.

3. License Plate Container Code

Enter a UDC (46/EQ) to identify a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

You use this processing option only when you convert any STUNs to new License Plate records.

3.3 Managing License Plate Information

This section discusses how to create, modify, and manage license plate information.

- Assign items to a license plate record.
Assign child license plates to parent records.
Add license plate cross-references.
Set processing options for the License Plate Workbench (P46L10).
Manage license plate information.
Revise location, volume, and weight information.
Review license plate history.

3.3.1 Understanding License Plate Processing

Item identification and processing characteristics are the basic information elements that are specific to individual items across a company. LPNs are assigned to groups of items, lots, and serial numbers. The processing and identification of the group is greatly simplified by referring to the LPN. Industry users also require the ability to receive, store, move, and ship goods using LPNs. This eases the administrative burden of processing inventory movements by item or lot. License plating enables you to perform putaway, pick, or replenishments, or to perform movement suggestions for pallet or other container quantities based on a system-generated or manually generated LPNs.

3.3.2 Forms Used to Manage License Plate Information

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign/Remove Items</td>
<td>W46L30B</td>
<td>License Plate Daily Processing (G46L10), Assign/Remove Items to License Plate</td>
<td>Assign items to a new or existing license plate.</td>
</tr>
<tr>
<td>To License Plate</td>
<td></td>
<td>Enter values in any of the fields and click Find on Assign/Remove Items to License Plate</td>
<td>Remove items from an existing license plate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select Create New LP or Use Existing LP.</td>
<td>Select the LPN Item tab to review item information for existing License Plates or the item changes made to the license plates.</td>
</tr>
<tr>
<td>Assign/Remove Items</td>
<td></td>
<td>Select a row and click Build on Assign/Remove Items to License Plate.</td>
<td></td>
</tr>
<tr>
<td>To License Plate</td>
<td></td>
<td>Select an item, enter a value in the Quantity field and click Add.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Remove to remove an item and a quantity from a license plate.</td>
<td></td>
</tr>
<tr>
<td>Form Name</td>
<td>Form ID</td>
<td>Navigation</td>
<td>Usage</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>Assign/Remove Child LPN From LPN</td>
<td>W46L31A</td>
<td>License Plate Daily Processing (G46L10), Assign/Remove Child License Plate</td>
<td>Assign or remove license plates to/from parent license plates.</td>
</tr>
<tr>
<td>License Plate Cross-Reference</td>
<td>W46L20C</td>
<td>License Plate Daily Processing (G46L10), License Plate Cross Reference</td>
<td>Add license plate cross-references.</td>
</tr>
<tr>
<td>License Plate Workbench – View License Plate Information</td>
<td>W46L10C</td>
<td>License Plate Daily Processing (G46L10), License Plate Workbench</td>
<td>Manage license plate inventory.</td>
</tr>
<tr>
<td>License Plate Workbench – View License Plate Hierarchy</td>
<td>W46L10B</td>
<td>Select a record and select LP Hierarchy from the Row menu on License Plate Workbench – View License Plate Information.</td>
<td>Review hierarchical license plate structures of containers and items.</td>
</tr>
</tbody>
</table>
3.3.3 Assigning Items to a License Plate Record

Access the Assign/Remove Items To License Plate form.

Create New LP
Select to create an original license plate number.

Use Existing LP
Select to use an existing plate number.

License Plate Number
Enter a new license plate number or leave blank if you want the system to generate the new license plate number.

Enter an existing license plate number or select a number from the License Plate Workbench — View License Plate Information form.

The license plate number is a unique value that identifies a collection of items and other license plates. The license plate number is typically used to simplify movements and inventory transactions.

3.3.3.1 LP Information
Select LP Information.

Parent License Plate Number
Displays a parent license plate number is a unique value that identifies a collection of license plates. The license plate number is typically used to simplify movements and inventory transactions.

Container Code
Enter a UDC (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

License Plate Status Code
Enter a UDC that enables you to set a License Plate Status Code for the License Plate Number. Examples of UDC Status Codes are:

01 for Open.

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>License Plate History</td>
<td>W46L99A</td>
<td>License Plate Daily Processing (G46L10), License Plate History</td>
<td>Review license plate transaction history.</td>
</tr>
<tr>
<td>– View History</td>
<td></td>
<td>Click Find on License Plate History – View History.</td>
<td></td>
</tr>
<tr>
<td>Location Capacity</td>
<td>W46L40B</td>
<td>License Plate Daily Processing (G46L10), Location Capacity Workbench.</td>
<td>Revising used or reserved volume and weight information.</td>
</tr>
<tr>
<td>Workbench - Edit Location Capacity</td>
<td></td>
<td>Select a record on Location Capacity Workbench — Inquiry.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>License Plate Daily Processing (G46L10), Location Capacity Workbench.</td>
<td></td>
</tr>
</tbody>
</table>

License Plate History – View History
Click Find on License Plate History – View History.

License Plate Daily Processing (G46L10), Location Capacity Workbench.
Select a record on Location Capacity Workbench – Inquiry.
Managing License Plate Information

02 for Close.

**License Plate Reason Code**
Enter a UDC to document the reason for the change in the License Plate Status. Examples of UDC reason codes are:

01 for damaged.

02 for scraped parts.

03 for error.

**Cross Referenced LPN Type**
Enter a UDC that further qualifies the cross-referenced license number.

**Cross Referenced LPN**
Enter the cross-reference number for the license plate number. This value enables you to identify the internal license plate with a different number.

### 3.3.4 Assigning Child License Plates to Parent Records

Access the Assign/Remove Child LPN From LPN form.

**Create New LP**
Select to create an original license plate number.

**Use Existing LP**
Select to use an existing plate number. You can use the visual assist to access the workbench and locate an existing license plate number.

**Parent License Plate Number**
Enter the existing parent license plate number.

Enter a new parent license plate number or leave blank if you want the system to generate the new parent license plate number.

This number is a unique value that identifies a collection of license plates. The license plate number is typically used to simplify movements and inventory transactions.

### 3.3.5 Adding License Plate Cross References

Access the License Plate Cross-Reference form.

**Internal License Plate Number**
Enter the internal license plate number. This number is a unique value that identifies a collection of items and other license plates. The license plate number is typically used to simplify movements and inventory transactions.

**Cross Referenced LPN Type**
Enter a UDC (46L/CR) that further qualifies the cross-referenced license number.

For example, you might want to cross-reference the vendor’s license plate number to the JD Edwards EnterpriseOne License Plate number.

**Cross-Referenced License Plate Number**
Enter a cross-referenced license plate that you use to identify the internal license plate with a different number.
3.3.6 Setting Processing Options for the License Plate Workbench (P46L10)

Processing options enable you to specify the default processing for programs and reports.

3.3.6.1 Security

Use these processing options to specify the level of security for status and reason codes, inventory transfers, and issues.

1. Status and Reason Codes Security

Specify whether to permit changes to status and reason codes. Values are:

Leave blank and the system does not permit changes.

Enter 1: to permit changes.

2. Inventory Issue

Specify whether full license plate inventory issues are permitted. Values are:

Leave blank and the system does not permit full license plate issues.

Enter 1: and the system permits full license plate issues.

3. Inventory Transfer

Specify whether a full license plate inventory transfer are permitted. Values are:

Leave blank and the system does not permit full license plate transfers.

Enter 1: and the system permits full license plate transfers.

3.3.6.2 Versions

Use these processing options to specify the versions for inventory transfers and issues.

1. Inventory Issue (P4112)

Enter the version of the Inventory Issue Processing program (P4112) the system uses. If you leave this blank, the system uses ZJDE0001.

2. Inventory Transfer (P4113)

Enter the version of the Inventory Transfer Processing program (P4113) the system uses. If you leave this blank, the system uses ZJDE0001.

3.3.7 Managing License Plate Information

Access the View License Plate Information form.

3.3.8 Revising Location, Volume, and Weight Information

Access the Location Capacity Workbench - Edit Location Capacity form.

Used Volume

The actual cubic volume that you can use for storage in a location. You define usable location space through Location Dimensions (P46022), and assign it to individual locations using Location Profile Detail (P460201). The unit of measure is defined in Branch/Plant Constants - Page 2 (P41001).

Used Weight

Enter the current used weight for the location. The unit of measure is defined in Branch/Plant Constants (P41001).
**Reserve Volume**
Enter the current reserved volume for the location.
Reserved volume is defined as the volume of the inventory/license plates that are committed to come into the location either through a movement suggestion or a warehouse reservation. The unit of measure is defined in Branch/Plant Constants (P41001).

**Reserve Weight**
Enter the current reserved weight of the location.
Reserved weight is defined as the weight of the inventory/license plates that are committed to come into the location either through a movement suggestion or a warehouse reservation. The unit of measure is defined in Branch/Plant Constants (P41001).

**Max Volume**
The system enables this field for editing, but none of the fields on this screen are required to be changed.

**Maximum Weight**
The system enables this field for editing, but none of the fields on this screen are required to be changed.

**Volume U/M**
This field is disabled. The unit of measure is defined in Branch/Plant Constants (P41001).

**Weight U/M**
This field is disabled. The unit of measure is defined in Branch/Plant Constants (P41001).

### 3.3.9 Reviewing License Plate Hierarchy
Access the License Plate Workbench – View License Plate Hierarchy form.

### 3.3.10 Reviewing License Plate History
Access the License Plate History — View History form.
Working with Radio Frequency Identification (RFID) Processing

This chapter contains the following topics:

- Section 4.1, "Understanding the GTIN"
- Section 4.2, "Understanding EPCs"
- Section 4.3, "Understanding EPC Numbers for Outbound Shipments"
- Section 4.4, "Understanding EPC Inbound Processing"
- Section 4.5, "Prerequisites"
- Section 4.6, "Setting Up RFID Processing Information"

4.1 Understanding the GTIN

The GTIN enables you to identify items in the standard EAN.UCC System. The GTIN is a product number that uniquely identifies the item, level of packaging, and manufacturer. Level of packaging refers to a standard quantity of units of the item which the unit of measure represents.

The system uses the RFID user-defined code (UDC) value for Number Type (46R/NT) for setting up the GTIN. This value is hard-coded. However, you can set up different unique product numbering types as needed in this UDC such as National Drug Code (NDC).

4.2 Understanding EPCs

The EPC is a simple, compact "license plate" that uniquely identifies objects (items, cases, pallets, locations, and so on) in the supply chain. The EPC is built around a basic hierarchical idea that expresses a wide variety of different, existing numbering systems, like the EAN.UCC System Keys, UID, VIN, and other numbering systems. Like many current numbering schemes used in commerce, the EPC is divided into numbers that identify the manufacturer and product type. But, the EPC uses an extra set of digits, a serial number, to identify unique items. The EPC is the key to the information about the product it identifies that exists in the EPCglobal Network. When you create EPCs, ensure that you are complying to the standards for EPCglobal. The example in the table describes some common segments which relate to the version of the EPC Tag Data Standards called General Identifier (GID-96):

**Header**

The header segment provides the version number of the standard and identifies the length, type, and structure of the EPC. You must set up the header segment before
setting up the segment definitions, manager, and serial number. Segment lengths combined, including header length, must match the overall length in the header definition.

**General Manager**
The general manager segment, also called the Domain, represents the manufacturer or brand owner manager number.

**Object Class**
The object class segment represents the manufacturer’s stock keeping units (SKU), to identify the item.

**Serial Number**
The serial number is a unique number of an item within an object class of the EPC.

The length of each segment is defined by how many bits are required to fill that segment. This example describes the bit lengths per segment of an EPC:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Header</th>
<th>Manager</th>
<th>Class</th>
<th>Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-bit</td>
<td>8</td>
<td>28</td>
<td>24</td>
<td>36</td>
</tr>
</tbody>
</table>

This example is a typical EPC:

<table>
<thead>
<tr>
<th>Header</th>
<th>Manager</th>
<th>Class</th>
<th>Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>0000A89</td>
<td>00016F</td>
<td>000169DC0</td>
</tr>
</tbody>
</table>

The system represents and stores the header value, manager code, and EPC serial number in decimal format. Lengths are represented in bits. The system converts the decimal values (base 10) to bits (base 2) and generates and stores the EPC number in hexadecimal (base 16) format.

You set up the EPC for GID-96 based on the values for customer ship to/sold to and carton type. The system stores the EPC number in the Carton Serial Number field in the Carton Detail Information - (P4620).

You can use the Label Serial Numbers (Preference Type 38) preference in combination with the Carton Label (Preference Type 39) preference and the Carton Reorganization (P4620) processing options to specify how the system processes EPCs. If you do not specify a preference type and indicate to use the preference, the system uses the value established in the Serial Number Creation processing option on the Serial Number tab in the processing option for Carton Reorganization (P4620).

You can use an EPC number in addition to a UCC-128 or label next number.

### 4.3 Understanding EPC Numbers for Outbound Shipments

You can generate an outbound EPC from these applications:

#### 4.3.1 Carton Reorganization (P4620)

You can generate EPC numbers when creating carton detail from cartons and item quantity on Carton Reorganization (P4620). The system creates EPC numbers at the carton level. For example, the EPC may be created for cases of a certain type for the specified customer on the shipment.
After you create or reorganize cartons in a shipment, you also might want to review carton detail information. The Carton Detail Inquiry program (P4621) enables you to review this type of carton detail information:

- Carton identification information.
- Item information.
- EPC.
- Weight and dimension information.
- Related sales order information.
- UCC 128 information.

### 4.3.2 Standard Pack Carton Recommendations (P4615)
You can automatically assign EPC numbers for outbound shipping cartons when creating carton detail from carton recommendations.

### 4.3.3 Inbound Labels
The third-party can send data generated from label processing back to the JD Edwards EnterpriseOne system. This data can include the EPC, but if it does not include EPC (or carton serial number) information, you can generate that information as a step in this process. The system stores the label data in the Carton Detail Information table (P4620). This table must be updated with accurate information from the physical shipment because the system uses this information to create packaging information on the ASN and the Bill of Lading.

You generate outbound label data from system tables to a third-party for formatting and printing. The outbound label information includes the Ship To address, EDI data, and demand scheduling data, such as the supplier or plant code (Party Type 1 and 2), and can include the EPC.

See [Setting up Label Information](#).

### 4.3.4 Create Task and Trip (R46471)
You can generate EPC numbers when you create task and trips for suggestions. The system can create the EPC number at the carton level when you create carton detail.

See [Creating Tasks and Trips](#).

### 4.3.5 Warehouse Movement Confirmations (P4617)
You can generate EPC numbers during pick confirmation over confirmed item quantity on pick suggestions. The system can create the EPC number at the carton level when you create or update carton detail.

See [Confirming Putaway Suggestions](#).

### 4.3.6 ASN Packaging Revisions (P470371)
You can generate EPC numbers when running this program.
4.4 Understanding EPC Inbound Processing

The system processes RFID information during the inbound ASN (Advance Ship Notice) process. The system can carry the EPC number inbound through to the receipt file and it displays on some receipt routing forms. Carton Serial Number field (EPC) exists in these tables:

- EDI Shipping Notice Detail – Inbound (F47032)
- EDI Receiving Advice Detail – Inbound (F47072)
- Purchase Order Receiver (F43121)

These programs also process the EPC:

- Status Inquiry Revisions (P47030). You can edit this field on the Inbound EDI Shipping Detail Revisions form.
- Receipt Routing Movements and Disposition. On the Receipt Routing Movement form, the EPC exists as a filter field in the header and detail area.

Note: The system does not display the EPC field on the Receipt Routing Movement form if you enter 1 in the Show Shipment and Pack Information processing option on the Display tab.

- Routing Ledger Inquiry (P43252). On the Work With Receipt Routing Ledger (W43252D) form the EPC Number field exists as a header filter field and for QBE functionality.
- EDI Shipping Notice Edit/Create (R47031). The system displays the EPC information on this report.
- Inbound Receiving Advice Edit/Update (R47071). The system creates license plate data from inbound advance ship notices (ASN) for on-hand quantities received.

Note: You can process only one entire inbound ASN batch of records at a time.

- License Plate Management (46L). You can generate EPC numbers for items when processing license plate information.

4.5 Prerequisites

Before you complete the tasks in this section:

- Set up the RFID Outbound UDC for the EPC Header (46R/HD).
- If you are not using the Label Serial Numbers (Preference Type 38), set up the method for generating EPC numbers. To do so, enter a value in the Serial Number Creation Process Value processing option on the Serial Number tab in the Carton Reorganization (P4620) application.

Note: If you are using the Label Serial Numbers (Preference Type 38) preference, you must set up the processing options for Carton Reorganization to specify that you are using the preference.
- Create a transportation shipment.

### 4.6 Setting Up RFID Processing Information

This section discusses how to:
- Set up unique product numbers.
- Set up EPC header values and segments.
- Set up EPC partition definition.
- Generate EPC numbers when creating carton detail.

#### 4.6.1 Forms Used to Process RFID Information

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Product Number Setup</td>
<td>W41013A</td>
<td>RFID Setup (G464112), Unique Product Table. Enter unique product number details on Unique Product Number Setup.</td>
<td>Enter unique product number details. You can also copy, or delete product number details.</td>
</tr>
<tr>
<td>EPC Setup</td>
<td>W46R010C</td>
<td>RFID Setup (G464112), EPC Setup Select the empty row in the grid to enable the fields in the Details group on EPC Setup.</td>
<td>Set up EPC segment information, including header values, segment definition, managers, serial numbers, and company length.</td>
</tr>
<tr>
<td>Search for EPC Partition Definition</td>
<td>W46R060A</td>
<td>On the EPC Setup form, Header tab, click EPC Partition Definition.</td>
<td>Define EPC Partition values, reference bits, and reference digits; and company prefix bits and prefix digits</td>
</tr>
<tr>
<td>Carton Detail Add/Update</td>
<td>W4620B</td>
<td>Shipping and Packaging Management (G4615), Carton Reorganization. Locate a record and click Select on Work with Shipment Cartons. Select a shipment and click Add or, click the carton in the carton tree on Carton Reorganization.</td>
<td>Specify whether to automatically generate an EPC along with outbound shipping carton detail.</td>
</tr>
</tbody>
</table>

#### 4.6.2 Setting Up Unique Product Numbers

Access the Unique Product Number Setup form.

**Number Type**

Enter a UDC 46R/NT. In this case, GTIN. You can enter other types of numbers in this field, such as the National Drug Code (NDC) or EAN-8.
Enter EPCOC to set up the object class code to be used in the manual EPC configuration.

**Item Number**
Enter the item number.

**Unit of Measure**
Enter a UDC (00/UM). If you do not enter a value, the item’s primary unit of measure is the default value. If the item has a dual unit of measure, and the Picking processing option is set, then the system uses the item’s secondary unit of measure as the default value.

**Address Number**
(Optional) Enter the customer’s address book number.

**Unique Product Number**
Enter the unique product number. This is up to a 30-digit alphanumeric value. The system validates the uniqueness of the product number. If you specify that the number type is GTIN, this value must adhere to the GTIN valid format, and the system validates that the number is 14 decimal digits long and the check digit is correct. If you specify that the number type is EPCOC, the system validates this value in decimal format.

### 4.6.3 Setting Up EPC Header Values and Segments

This section discusses how to:

- Set up EPC header.
- Set up EPC segment definition.
- Set up EPC manager.
- Set up EPC serial number.
- Set up EPC company length

#### 4.6.3.1 Setting Up EPC Header

Access the EPC Setup form, and then select the Header tab.

**Header Version**
Enter a UDC 46R/HD to specify the EPC version. Use this code to associate the EPC header attributes, such as total EPC length and header value, with an EPC segment definition.

**EPC Length (Bits)**
Enter the total binary (base 2) length of the EPC. This value represents the entire length, in bits, of the EPC.

**Header Length (Bits)**
Enter the header binary length of the EPC header segment. This value represents the length, in bits, of the header segment of the EPC.

**Header Value**
Enter the value of the EPC header. You enter this value in decimal format. The system converts the value into bits when generating EPC numbers. When converted to bits, the length of the value cannot exceed the header length.
4.6.3.2 Setting Up EPC Segment Definition
Access the EPC Setup form, and then select the Segment Definition tab.

**Date Created**
Displays the current date.

**Effective Date**
Enter the date which this record becomes available for use in EPC number generating transactions.

**Configuration**
Specify the configuration for the EPC construction. The EPC is a combined value of the header, manager, object class, and serial number.

**Manager Level**
Specify the level at which the EPC manager value is associated with internal entities. The manager identifies the manufacturer or brand owner, and is assigned by EPCglobal. You can specify to have the manager associated with the company, branch/plant, or customer of the transaction that is generating the EPC number. For GTIN or SSCC, the manager uses defaults to company.

**Current Total Length (Bits)**
Displays the entire length of the EPC, in binary based on the current segment definition lengths. The system validates the total length against the header definition.

**Manager Code Length (Bits)**
Enter a value can be between 8 and 64 characters. Manual configuration enables you to populate the length of the EPC manager segment, in bits.

**Object Class Length (Bits)**
Enter a value can be between 8 and 64 characters. The Manual configuration enables you to populate the length of the EPC Object Class code, in bits.

**Serial Number Length (Bits)**
Enter the EPC serial number length. The length value can be between 8 and 64.

**Current**
Click Current to display the currently effective segment definition.

4.6.3.3 Setting Up EPC Manager
Access the EPC Setup form, then select the Manager tab.

**Reference Type**
Enter a UDC 46R/ML to specify the level at which the EPC managers are associated with internal entities, such as company, branch/plant, or customer.

**Reference Number**
Enter a reference number associated with an EPC manager reference type. For example, if you use a reference type of Company, enter the Company value that is associated with the Manager Code. Then, during transactions that generate EPC numbers, the system uses the Company value to determine the Manager Code for the EPC number.

**Manager Code**
Enter the manager code in decimal format. This number is assigned to the manufacturer or brand owner by EPCglobal.
4.6.3.4 Setting Up EPC Serial Number
Access the EPC Setup form, and then select the Serial Number tab.

Manager Code
(Optional) Enter the EPC manager code in decimal format. Use this code when you want to associate a range of EPC serial numbers with a specific manager code.

Item Number
(Optional) Enter the number that the system assigns to an item. The format can be a short, long, or third item number. Use this number when you want to assign a specific range of EPC serial numbers by item.

Serial Number
Enter the starting value of the EPC serial number in decimal format.

Increment
Enter the increment factor for the EPC serial number. Each time the system uses this EPC serial number, it increments the next EPC serial number by this value to maintain uniqueness.

4.6.3.5 Setting Up EPC Company Length
Access the EPC Setup form, and then select the Company Length tab. This is only required when setting up GTIN or SSCC.

Order Company
A number that, along with order number and order type, uniquely identifies an order document (such as a purchase order, a contract, a sales order, and so on).

Address Number (Optional)
A number that identifies an entry in the JD Edwards EnterpriseOne Address Book system, such as customer.

EPC Company Prefix Length
The decimal length of the EPCglobal assigned Company Prefix

4.6.4 Setting Up EPC Partition Definition
Access the EPC Setup form, Header tab, and then select EPC Partition Definition. This is only required when setting up GTIN or SCC

Partition value
An indicator value of where the Company Prefix is divided from the corresponding reference value.

Company prefix bits
The number of bits representing the Company Prefix.

Company prefix digits
The decimal length of the EPCglobal assigned Company Prefix.

Partition reference bits
The number of bits representing the reference value corresponding to the identity type for the EPC number. For example, the item reference for SGTIN-96 or the serial reference for SCC-96.
Partition reference digits
The decimal length representing the reference value corresponding to the identity type for the EPC number. For example, the item reference for SGTIN-96 or the serial reference for SSCC-96.

4.6.5 Generating EPC Numbers When Creating Carton Detail
Access the Carton Detail Add/Update form.

Type in an EPC
Select this option to manually enter an EPC value to apply to this carton.

Generate EPC
Click Generate EPC to automatically generate the EPC and apply it to this carton.
This chapter contains the following topics:

- Section 5.1, "Understanding Movement Processing"
- Section 5.2, "Defining Process Selection"
- Section 5.3, "Defining Movement Instructions"
- Section 5.4, "Running the Summary Document Program"
- Section 5.5, "Running the Move Tags Program"

5.1 Understanding Movement Processing

Movement processing controls how the system moves items to locations in the warehouse during putaway, picking, and replenishment. You automate inventory movement through the warehouse by defining process selection rules that match items to movement instructions. Movement instructions control which locations that the system suggests for putaway, picking, and replenishment.

You define process selection rules to determine which movement instruction table to use during putaway, picking, and replenishment. You also define process selection rules to determine whether the system maximizes space or employee productivity.

You define movement instructions to create settings that the system uses to refine the list of potential locations to the smallest possible number. These parameters can include whether to select fixed or random locations, and whether to limit the search to a specific zone.

5.2 Defining Process Selection

This section provides an overview of process selection, lists a prerequisite, and discusses how to:

- Set processing options for Process Selection (P46093).
- Define process selection rules.

5.2.1 Understanding Process Selection

Process selection matches the warehouse process groups that are defined for the item in the item/branch category codes screen and an order group to a specific process selection rule. The process selection rule points to a particular movement instruction table. The selection of a table is based on the item's warehouse process group, the order group that you have specified, and the source of the request, such as a purchase...
Defining Process Selection

order receipt, a sales order, or a replenishment. You define process selection by assigning process groups and order groups to specific movement instruction tables.

Process selection takes place after you create a movement request but before you create movement suggestions.

When you define process selection rules, you also specify the process mode, which describes whether you want the system to:

- Maximize space by filling locations to their maximum capacity and emptying partially filled locations as quickly as possible.
- Maximize productivity by minimizing the number of trips that employees make through the warehouse.
- Use other criteria that you define.

You specify the process mode for each movement instruction table that you include in the process selection table.

5.2.2 Prerequisite

Before you complete the tasks in this section, set up order groups.

5.2.3 Form Used to Define Process Selection

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Selection Revisions</td>
<td>W46093C</td>
<td>Warehousing Movement Rules (G46311), Putaway Selection, Picking Selection, or Replenishment Selection</td>
<td>Define process selection rules.</td>
</tr>
</tbody>
</table>

5.2.4 Setting Processing Options for Process Selection (P46093)

Processing options enable you to specify the default processing for programs and reports.

5.2.4.1 Movement Option

Although processing options are set up during JD Edwards EnterpriseOne implementation, you can change processing options each time you run a program.

1. Type of Movement Information to Display

Enter 1: to specify putaway information, 2: to specify picking information, or 3: to specify replenishment information.

5.2.5 Defining Process Selection Rules

Access the Process Selection Revisions form.

Warehouse Process Group

A user defined code (41/02) that identifies a group of items for movement purposes. The system uses a process group to determine which movement instructions it uses to
process putaway, picking, and replenishment transactions.

**Order Group**
A user defined code (46/DT) that identifies a group of order types the system processes as one for putaway, picking, and replenishment transactions. You set up order group codes on User Defined Codes, then add order types to the code on Order Groups (P46092). You specify an order group on Picking Instructions (P46095) to limit the order types that trigger replenishment after picking.

**Putaway Table**
A user defined code (46/IT) that identifies a putaway table. The putaway table defines how the system selects locations for putaway. You use the Putaway Instructions (P46095) program to create putaway tables.

**Picking Table**
A user defined code (46/IT) that identifies a picking table. The picking table defines how the system selects locations for picking. You use the Picking Instructions (P46095) program to create picking tables.

**Replenishment Table**
A user defined code (46/IT) that identifies a replenishment table. The replenishment table defines how the system selects locations for replenishment. You use the Replenishment Instructions (P46095) program to create replenishment tables.

**Putaway Process Mode**
A user defined code (46/PC) that determines the putaway processing method. Values are:

- **P**: Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips.
- **S**: Space maximization mode. The system maximizes the use of space by topping off partially filled locations. This mode also minimizes inventory fragmentation.

**Picking Process Mode**
A code (46/PC) that identifies a picking processing method. Values are:

- **P**: Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips. The system minimizes the number of replenishment trips by replenishing from the fewest locations possible.
- **S**: Space maximization mode. The system maximizes space use by topping off partially filled locations to minimize inventory fragmentation.

**Replenishment Process Mode**
A code (46/PC) that identifies a replenishment processing method. Values are:

- **P**: Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips. The system minimizes the number of replenishment trips by replenishing from the fewest locations possible.
- **S**: Space maximization mode. The system maximizes space use by topping off partially filled locations to minimize inventory fragmentation.

**Putaway Program**
A number that specifies the program you can write to determine valid putaway locations. The system uses this program instead of the JD Edwards EnterpriseOne program.
Picking Program
A number that specifies the program you can write to determine valid pick locations. The system uses this program instead of the JD Edwards EnterpriseOne program.

Replenishment Program
A number that specifies the program you can write to determine valid replenishment locations. The system uses this program instead of the JD Edwards EnterpriseOne program.

Picking (Primary Unit of Measure)
Select this option to indicate that the system picks items in the process group based upon the item’s primary unit of measure.

Note: This option is available only when the branch plant is defined as a license plate warehouse.

Replenishment (Primary Unit of Measure)
Select this option to indicate that the system replenishes items in the process group based upon the item’s primary unit of measure.

Note: This option is available only when the branch plant is defined as a license plate warehouse.

See Also:
- Setting Up Item Warehouse Information.
- Setting Up Order Groups.

5.3 Defining Movement Instructions
This section provides an overview of movement instructions, lists a prerequisite, and discusses how to:

- Define common movement instruction criteria.
- Define specific movement instruction criteria.
- Set processing options for the Movement Instructions program (P46095).

5.3.1 Understanding Movement Instructions
You define movement instructions to control which locations that the system suggests for putaway, picking, and replenishment. A movement instruction table contains many parameters that you specify to refine the list of potential locations to the smallest possible number.

When you set up movement instructions, you define this information:

- Whether to use fixed or random locations.
- Which random rule to use if you use random locations.
- Whether to restrict the movement to a zone.
- Which zone to use for the location search if you use zones.
- Which tiebreaker method to use to rank equally suitable locations.
- Whether to use minimum and maximum percentages for putaway and picking.

You can also define specific movement instructions. For putaway, you can define:

- Whether to select empty locations or locations that contain the same items as those you must store.
- Whether the system converts larger units of measure into smaller units of measure.
- Whether to completely fill partially filled locations.
- Whether to completely fill or top off partial units of measure, such as half-filled pallets.

For picking and replenishment movements, you can define:

- Whether to move the oldest items in a location first to avoid spoilage or obsolescence.
- Whether the system converts smaller units of measure into larger units of measure, such as combining cases to comprise a pallet.

You define a fixed location to use for one purpose. Conversely, a random location is any location that matches the criteria that you define, such as:

- The location characteristics specified in the random rule.
- Whether the location characteristic is required or optional.
- The priority of the optional characteristic.
- Whether the item should include or exclude the specified location characteristic for the search.

When you search for locations, the system identifies many locations that match the search criteria. You can use tiebreakers to select the best location from all the matching locations. You can also specify the process mode to use. You can select to:

- Maximize warehouse space.
- Maximize employee productivity.
- Use other criteria that you define.

### 5.3.1.1 Process Mode

Warehouses generally have limited space, so you must use the available space as efficiently as possible. You also must make each employee’s trip through the warehouse as efficient as possible to maximize the quantity of items that each employee moves per trip.

You set the process mode to direct the system to a movement instruction table that:

- Maximizes space by filling locations to their maximum capacity and emptying partially filled locations as quickly as possible.
- Maximizes productivity by minimizing the number of putaway, picking, and replenishment trips in the warehouse.
- Uses other criteria that you define to optimize warehouse space and employee efficiency.
5.3.1.2 Common Movement Instruction Criteria

Putaway, picking, and replenishment instructions share many of the same parameters. You set these parameters to refine the list of potential locations to the smallest possible number.

For items that have serial numbers, the system tracks movement on an individual basis in the primary unit of measure. You cannot group the items into greater units of measure unless you are working with memo lots. During the putaway, picking, and replenishment processes, all movement reports and transactions for items with serial numbers display one item for each detail line.

On the movement instruction tables, you must set the From Quantity to 1 or 0. The system does not allow you to use breakdown, top off, or minimum utilization percentages with items that have serial numbers.

5.3.1.3 Specific Movement Instruction Criteria

Putaway, picking, and replenishment have parameters that are specific to each movement type. These parameters further refine the list of potential locations.

When the system processes movement criteria for picking and replenishment, it excludes locations that do not have adequate available quantity or adequate inbound inventory.

If you are cross docking inventory, you must define the movement criteria for picking so that the system selects inventory from the receiving location first.

5.3.1.4 License Plate Movement Instructions

You can use the Process Selection (P46093) program to enable a license plate warehouse to process transactions only in the primary unit of measure. During processing, the system does not look at the license plate unit of measure equal to the instruction unit of measure, but rather considers all license plates regardless of the unit of measure and performs breakdown of multilevel license plates.

If the license plate warehouse is set to process picking or replenishment transactions in the primary unit of measure, the following applies:

- The Movement Instructions program (P46095) displays the License Plate Sequence grid column. You can use this column to indicate how the system sequences license plates. The License Plate Sequence grid column accepts three values:
  - Blank: Sequence by ascending license plate number.
  - 1: Sequence by ascending quantity.
  - 2: Sequence by descending quantity.
- The system sets the FIFO flag to Y and is disabled to prevent any changes to the value. The system also disables the Unit of Measure Group field.

See Appendix B, "FIFO Processing for Primary UOM in a License Plate Warehouse"

5.3.2 Prerequisite

Before you complete the tasks in this section, set up unit of measure groups.

See Also:
- Setting Up Fixed Locations and Zones.
- Setting Up Unit of Measure Groups.
5.3.3 Forms Used to Define Movement Instructions

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putaway Movement Instructions Revisions</td>
<td>W46095E</td>
<td>Warehouse Movement Rules (G46311), Putaway Instructions</td>
<td>Define common or specific movement instruction criteria.</td>
</tr>
<tr>
<td>Picking Movement Instructions Revisions</td>
<td>W46095E</td>
<td>Warehouse Movement Rules (G46311), Picking Instructions</td>
<td>Define common or specific movement instruction criteria.</td>
</tr>
<tr>
<td>Replenishment Movement Instructions Revisions</td>
<td>W46095E</td>
<td>Warehouse Movement Rules (G46311), Replenishment Instructions</td>
<td>Define common or specific movement instruction criteria.</td>
</tr>
</tbody>
</table>

5.3.4 Defining Common Movement Instruction Criteria

Access the Putaway Movement Instructions Revisions form.

The system displays the Match Lot Date column for putaway movement instructions in License Plate branches. You can use the Match Lot Date value to enable grouping of lots into a location based on matching lot dates.

**Note:** The system displays the Match Lot Date column only when you select the Putaway radio button on the Work With Movement Instructions form.

When you enter Y in the Match Lot Date column, the system uses the location with the matching dates for putaway. Once this location is full, the system uses the next matching date location. To determine the date to be matched, the system uses the Commitment Date Method (CMDM) field in the Item Branch (F4102) record. Valid date values are Expiration Date, Sell By Date, Best Before Date and User Defined Date 1 through 5.

When you enter N in the Match Lot Date field, the system does not enable grouping of lots into a location.

If the system reviews all locations sequenced by the tiebreaker and does not find any matching lot dates, it starts at the beginning of the sequenced locations and puts away the quantity without checking for matching lot dates.

**See also:**
- Section 2.4.1.5, "Tiebreaker Table"
5.3.5 Defining Specific Movement Instruction Criteria

Access the appropriate Movement Instructions Revisions form. The system displays the appropriate fields depending on which revisions form you access.

Complete these fields on the Putaway Movement Instructions Revisions form.

**Putaway Zone**
Enter a UDC (46/ZN) that identifies areas in the warehouse where goods are put away or stored.

**Putaway TB (putaway tiebreaker)**
Enter a number that identifies the tiebreaker you want to use for this putaway rule when multiple locations satisfy the criteria. The system uses the tiebreaker to rank the tied locations. Tiebreakers are hard coded and the values are:

1: Sequence locations by the putaway sequence number. If you do not assign sequence numbers, and you use this tiebreaker, the system selects between equal locations based on their alphanumeric sequence. You define sequences using Location Profile (P46020).

2: Sequence locations by greatest available space. The system uses locations that can hold the greatest quantity of the item in the specified unit of measure and container first.

3: Sequence locations by least available space. The system uses locations that can hold the least quantity of the item in the specified unit of measure and container first.

4: Sequence locations by least available space, but minimize the number of locations used. This code equals tiebreaker 3, except the system tries to use the least number of locations.

5: Sequence locations by proximity from the sending location (usually the receiving dock), using the closest locations first.

6: Sequence locations by proximity to the base putaway location, using the closest locations first.

7: Sequence locations by proximity to the base picking location, using the closest locations first.

**Min Putaway (minimum putaway)**
Enter a value that indicates whether the system suggests a location if putaway does not fill that location to at least the minimum percentage capacity defined through Location Profile Detail (P460201). Valid codes are:

Y: Use the minimum utilization percentage when searching for putaway locations.

N: Do not use the minimum utilization percentage when searching for putaway locations.

**Max Putaway (maximum putaway)**
Enter a value to indicate whether you want the system to suggest locations according to the maximum quantity of an item in the specified unit of measure that you can put away in a zone. You define maximum quantities for items in a specified unit of measure using Maximum Quantity by Zone (P46025).

Y: Yes, use the maximum quantity permitted in a zone to suggest locations, and if the quantity in a zone exceeds the maximum, suggest another location for the remaining quantity.

N: No, do not use maximum quantity when suggesting locations.
**B D (breakdown)**
Enter a Y: to enable breakdown into smaller units of measure. For example, a pallet into cases. Enter an N: and the system does not enable breakdown into smaller units of measure.

**Top Off**
Enter a value to indicate whether you want the system to attempt to complete an incomplete unit of measure (such as a half-filled pallet) in an existing location during putaway. Values are:
- Y: Yes, search for locations with incomplete units of measure to top them off.
- N: No, do not search for locations with incomplete units of measure.

**A P (allow partial)**
Enter a value to indicate whether you want the system put away partial units of measure. You must also specify on Unit of Measure Definition by Item (P46011) that you allow breakdown. If you set Allow Partial Units to N, you must also set Breakdown to N. Values are:
- Y: Yes, put away partial units of measure.
- N: No, do not put away partial units of measure.

Complete these additional fields on the Picking Movement Instructions Revisions form.

**Picking Zone**
Enter a UDC (46/ZN) that identifies areas from which items are picked for shipment.

**Pick TB (pick tiebreaker)**
Enter a number that identifies the picking rule tiebreaker the system uses when several locations satisfy the criteria. The system uses the tiebreaker rank for tied locations. Tiebreakers are hard-coded and the values are:
- 1: The system uses the locations containing the smallest available quantity first.
- 2: The system uses the locations that contain the least residual quantity when the pick is complete.
- 3: The system uses the location containing the greatest available quantity first. If not enough quantity exists to fill the request, the system suggests additional locations, but only the least number of locations that are necessary to complete the request.
- 4: The system uses the picking sequence number. If you do not assign sequence numbers and you use this tiebreaker, the system selects between equal locations based on their alphanumeric sequence. You define sequences using the Location Profile application (P46020).
- 5: The system sorts locations according to proximity to the shipping location, using the closest locations first. For each tiebreaker, the system suggests the location if the available quantity equals a full unit of measure (UOM) for that instruction line.

**Max Picking (maximum picking)**
Enter a value that indicates whether you want the system to suggest locations according to the maximum quantity of an item that you can pick from a location. You use maximum pick quantity only for fixed locations, which you define through Fixed Locations (P46012). Values are:
- Y: Yes, use the maximum quantity that you can pick from a location to suggest locations, and if the quantity requested exceeds the maximum pick quantity for the location, search for another location.
N: No, do not use the maximum picking quantity when suggesting picking locations

R P (replenishment)
Enter a value to indicate whether you allow replenishment from a location.

Complete these additional fields on the Replenishment Movement Instructions Revisions form.

Replen Zone (replenishment zone)
Enter a UDC (46/ZN) that identifies replenishment zones, which are areas in the warehouse from which items are retrieved to replenish or refill picking locations. You assign zones to locations using Location Master (P4100).

Repl TB (replenishment tiebreaker)
Enter a number that identifies the tiebreaker you want to use for this replenishment rule when multiple locations satisfy the criteria. The system uses the tiebreaker to rank the tied locations. Tiebreakers are hard coded and the values are:

1: Sequence locations using "pick to clear" logic. The system uses the locations containing the smallest available quantity first.

2: Sequence locations using "pick from fewest with best fit" logic. The system uses the locations that contain the least residual quantity when the replenishment is complete.

3: Sequence locations using "pick from fewest" logic. The system uses the location containing the smallest available quantity first. If there is not enough quantity to fill the request, the system suggests additional locations, but only the least number of locations that are necessary to complete the request.

4: Sequence locations according to the replenishment sequence number. If you do not assign sequence numbers, and you use this tiebreaker, the system selects between equal locations based on their alphanumeric sequence. You define sequences on Location Profile (P46020).

5: Sequence locations according to proximity to the shipping location, using the closest locations first.

Max Replenishment (maximum replenishment)
Enter a value that indicates whether you want the system to suggest locations according to the maximum quantity of an item that you can pick from a location. You use maximum picking quantity only for fixed locations, which you define through Fixed Locations (P46012). Values are:

Y: Yes, use the maximum quantity that you can pick from a location to suggest locations, and if the quantity requested exceeds the maximum pick quantity for the location, search for another location

N: No, do not use the maximum picking quantity when suggesting picking locations

5.3.6 Setting Processing Options for Movement Instructions (P46095)
Processing options enable you to specify the default processing for programs and reports.

5.3.6.1 Display
Although processing options are set up during JD Edwards EnterpriseOne implementation, you can change processing options each time you run a program.
1. Type of Movement Information to Display
   Enter 1: to specify putaway information, 2: to specify picking information, or 3: to specify replenishment information.

5.4 Running the Summary Document Program

You can run the Move Slips program (R46472) to print a summary document that contains information for all the suggestions that you create. The summary document is also referred to as a move document or move slip. This report page breaks by the task number. The summary document includes information such as:

- Trip number.
- To and From locations.
- Item Number and Description.
- Quantity Information.
- Unit of measure information.

After you create and review the summary document, you can print move tags, which enable warehouse personnel to plan the movement of inventory throughout the warehouse.

5.4.1 Setting Processing Options for Move Slips (R46472)

Processing options enable you to specify the default processing for programs and reports.

5.4.1.1 Report Display

1. Global Print Message for each Move Slip
   Specify the global print message the system prints for each move slip.

2. Print Associated Text.
   Specify whether the system prints associated text for each move slip. Values are:
   Blank: Do not print associated text.
   1: Print associated text.

3. Print U/M (unit of measure) structure
   Specify whether the systems prints the unit of measure structure for each move slip.
   Values are:
   Blank: Do not print unit of measure structure.
   1: Print unit of measure structure.

4. Print Mark For Address on Move Slip and Move Tag (Future)

5. Print Options for Move Tags
   Specify which print option the system uses to print move tags and move slips. Values are:
   Blank: Print move slips only.
   1: Print move tags only.
   2: Print move tags and the summary move slip.
3: Print summary move slip and move tags with output in a single PDF file.

6. **Print Ship To Contact**
Specify whether the system prints the Ship To contact. Values are:

- Blank: Do not print Ship To contact.
- 1: Print Ship To contact.

5.4.1.2 **Print**

1. **Number of copies**
Specify the number of copies the system prints.

2. **Bar Code Symbology**
Specify which bar code type the system uses for printing. Values are:

- Blank: none
- 1: Code 39 (3 of 9)
- 2: Code 128

3. **Item/Location quantity to be printed on the tags:**
Specify the item and location quantity the system prints on the move tags. Values are:

- Blank: Do not print a quantity.
- 1: Print the on-hand quantity.
- 2: Print the on-hand quantity + inbound quantity - outbound quantity - committed quantity.

5.4.1.3 **Version**

1. **Version for R46473 (Move Tags)**
Specify which version of the Move Tags program (R46473) the system uses. If you leave this processing option blank, the system uses version XJDE0001.

5.5 **Running the Move Tags Program**
When you run the Move Tags program (R46473), the system creates move tags for the suggested location during putaway, picking, and replenishment. A move tag contains information such as:

- The item that warehouse personnel are moving.
- The item unit of measure.
- To and From locations.

You can print tags for each trip or for each unit of measure moved on the trip, depending on the definition of the item on Item Unit of Measure Definition Revisions. You can scan the move tags to facilitate movements, storage, confirmation, and other downstream material handling and counting operations.

5.5.1 **Setting Processing Options for Move Tags (R46473)**
Processing options enable you to specify the default processing for programs and reports.
5.5.1.1 Report Display

1. Print Ship To Contact
Specify whether the system prints the Ship To contact. Values are:
Blank: Do not print Ship To contact.
1: Print Ship To contact.
This chapter contains the following topics:
- Section 6.1, "Understanding Putaway Requests"
- Section 6.2, "Creating Putaway Requests"
- Section 6.3, "Locating Existing Putaway Requests"
- Section 6.4, "Creating Putaway Requests by Batch"

6.1 Understanding Putaway Requests

You create putaway requests to store items that you receive in the warehouse. A putaway request contains information about the item, such as:
- Branch/plant
- Item number
- Unit of measure
- Quantity
- Transaction document information

The system uses this information to create suggestions for putaway, based on the putaway movement instructions and other information that you define.

You can also create putaway requests using manufacturing systems.

6.2 Creating Putaway Requests

This section provides an overview of creating putaway requests, lists prerequisites, and discusses how to:
- Create putaway requests interactively.
- Override the unit of measure structure.
- Set processing options for PO Receipts (P4312).
- Set processing options for Work Order Completions (P31114).
- Cross dock with the workbench.
6.2.1 Understanding Putaway Request Creation

As you receive the items on a purchase order, you can create a putaway request to generate suggestions for putaway locations and then store the items. This procedure is the most common method of creating putaway requests.

You can set the processing options in the PO Receipts program (P4312) to determine whether you:

- Create requests only.
- Create requests and process them through the subsystem into suggestions.
- Do not create any requests.

If you create putaway requests only, you must create location suggestions and confirm location suggestions separately; however, you can automatically confirm location suggestions during location selection.

If you do not create putaway requests through purchase order receipts, items that you receive remain in the location where you receive them. You can then create putaway requests by reversing the receipt of the order, setting the program’s processing options to create putaway requests, and receiving the order again.

During receipt of a purchase order, you can override the item’s default unit of measure structure, if the item’s actual unit of measure structure is different. You cannot override the item’s default unit of measure structure if you are using license plates. For example, you might remove the largest unit of measure, such as a pallet, from the incoming item’s unit of measure structure and use the next-largest unit of measure for putaway. You might do this to avoid occupying pallet space in the warehouse with cases. This reduces the efficient use of space. For example, if you receive a partial pallet of compact discs, you can override the pallet’s unit of measure and use cases or eaches for putaway.

After you change a unit of measure structure, the system verifies:

- The last level that you specified in the structure is the primary unit of measure.
- The units of measure are listed in order from largest to smallest and are part of the defined UOM structure for the item.
- The structure uses whole number conversions between units of measure.
- Each unit of measure contains only one partial quantity for that unit.

The system overrides unit of measure structures for items with assigned serial numbers. These items are listed individually (quantity of 1) in Level 1 as the primary unit of measure.

You can also override the quantity, containers, weight, repack code, and tax code for each level of the unit of measure structure. This override alters the item characteristics and can change the location that you use for putaway.

The system displays warehouse overrides only if you activate warehouse control in Branch/Plant Constants (P41001) and license plates are not activated. After you activate warehouse control, the system inputs the receipt location (which you enter on the Branch Location Definition form) when you enter a purchase order.
If you use receipt routing in the JD Edwards EnterpriseOne Procurement system, the system can create a putaway request when you move the items to the on-hand step, which creates a receipt.

Items with assigned serial numbers are tracked individually in the primary unit of measure, and you cannot group them into greater units of measure. The system creates one putaway request for each item with a serial number.

You also can use the Manual Replenishments and Batch Putaway Request programs to create a putaway request.


6.2.1.1 Putaway Requests through JD Edwards EnterpriseOne Manufacturing Systems

You can set up manufacturing systems so that the completion of a work order triggers the creation of a putaway request for the manufactured product.

After you create a putaway request through manufacturing systems, you process the putaway request normally through the JD Edwards EnterpriseOne Warehouse Management system. After you create and confirm location suggestions, you reduce the on-hand quantity in the manufacturing location and increase the on-hand quantity in the putaway location where you store the item.

6.2.1.2 Cross Docking

Cross docking enables you to receive and distribute products directly from the dock of a distribution center. Cross docking eliminates moving quantities to a storage location before picking and enables you to fulfill orders directly.

There are two methods for cross docking:

- When you receive the items that are included on an inbound purchase order, the system retrieves the quantity on backorder, creates cross docking putaway requests when the backorders are released, and then creates pick requests with the receiving location as the suggested pick location.

  Note: Cross docking putaway requests have a special status code, 295 (46/PS), that differentiates them from other putaway requests. The system uses requests with a status of 295 for audit purposes and does not create suggestions for them.

- When you receive a sales order, you can use the Planned Cross Docking Workbench program (P4614) to plan the allocation of inbound products based on receipt dates and shipping dates and can prioritize the allocation. Also, you can update shipment dates based on supply and demand and schedule the shipments.

Additionally, when you receive a sales order, you can use the Planned Cross Docking Workbench program (P4614) to specify the priority number for each cross dock movement. You can also indicate that a line on a sales order must be cross docked in
Creating Putaway Requests

anticipation of incoming supply, and schedule both inbound and outbound shipments. The system displays sales order lines (including backordered sales order lines depending on setup) as demand and purchase order lines and work orders as supply, with the quantity that is available for each line.

You can use the JD Edwards EnterpriseOne Sales Order Management, Procurement, and Work Orders systems to perform cross docking. For example, you can use a specific purchase order number or work order number to fulfill sales orders. By associating a sales order line with a specific purchase order number or work order number, you can establish priority for fulfilling the sales order line and use the Shipment Confirmation program (P4205) to indicate that the sales order line is ready to be picked and shipped directly from the receiving location.

If you use the JD Edwards EnterpriseOne Warehouse Management system, the system uses standard movement processing. The system records the movement of cross docked inventory as an override to standard picking suggestions and creates a pick suggestion, which you must confirm.

When you perform planned cross docking, the system performs these actions in this order:

- Determines whether there are any sales orders that contain a cross docking order number that matches either the purchase order that you are receiving or the work order that you are completing. If there are associated purchase orders or work orders, the system allocates inventory and hard commits the quantity to those sales orders first.

- Allocates the remaining inventory according to the cross docking priority based on the scheduled pick date of a sales order line. If the scheduled pick up date precedes or equals the receipt date and if you have indicated in the Sales Order Entry program (P4210) or through the Cross Docking Workbench (P4614) that the sales order line is eligible for cross docking, then the system sorts the sales order lines in ascending order by date.

- Allocates inventory until either no inventory remains or no more sales order lines must be cross docked. inventory is moved to either the receiving location or completions location through standard movement processing the system creates a putaway request. If there is inadequate inventory for fulfilling a sales order line, then the system splits the sales order line, fulfills and hard-commits the quantity requested, and advances the sales order line’s status to make it eligible for shipment. The remaining sales order line remains unfulfilled, and you can adjust the order dates and priorities to ensure that the sales order line is eventually fulfilled.

6.2.2 Prerequisites

Before you complete the tasks in this section:

- Set up the inclusion rule for the order for which you want to create a putaway request.
- In the PO Receipts program (P4312) or the Work Order Completions program (P31114), set the appropriate processing options on the Cross Docking tab.
- In the Document Type Maintenance program (P40040), set up document types.
- In the Supply/Demand Inclusion Rules program (P34004), set up inclusion rules.
- For cross docking:
– Verify you have defined the movement instructions for picking so that the system selects the receiving location first.

– Verify you have set the processing options for the PO Receipts program (P4312) to display backordered sales orders and perform cross docking.

– For new items to be eligible for cross docking, in the Item Master program (P4101), select the option for cross docking on the Item Master Revisions form’s Additional Information tab.

**Note:** The system automatically transfers the cross docking setting to the item branch information; you do not have to select the option for cross docking in the Item Branch program (P41026). However, if you do select the option for cross docking in the Item Branch program, then you must manually select the option for cross docking in the Item Master program.

– For existing items to be eligible for cross docking, select the option for cross docking in the Item Master program (P4101).

**Note:** The system does not automatically transfer the cross docking setting to the item branch information; you must select the cross docking option for each item/branch combination in the Item Branch program (P41026).

See Also:

- Setting Up Inclusion Rules.

### 6.2.3 Forms Used to Create Putaway Requests

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work With Purchase Orders to Receive</td>
<td>W4312F</td>
<td>Inbound Warehousing Operations (G4611), Purchase Order Receipts</td>
<td>Locate a purchase order to receive.</td>
</tr>
<tr>
<td>Additional Selection Criteria</td>
<td>W3121F</td>
<td>Locate a record and select P.O. Detail from the Row menu on Work With Purchase Orders to Receive.</td>
<td>Create a putaway request interactively.</td>
</tr>
</tbody>
</table>
Creating Putaway Requests

6.2.4 Creating Putaway Requests Interactively

Access the Additional Selection Criteria form.

6.2.5 Overriding the Unit of Measure Structure

Access the Warehouse Overrides form.

**Note:** You can only override the UOM if you select LPN Process Off for the Branch Plant.

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse Overrides</td>
<td>W46UOMA</td>
<td>Select a record and click Select on Work With Purchase Orders to Receive.  Select a record and then select Warehouse Override from the Row menu on Purchase Order Receipts.</td>
<td>Override the unit of measure structure.</td>
</tr>
<tr>
<td>Planned Cross Docking Workbench Revisions</td>
<td>W4614B</td>
<td>Outbound Warehousing Operations (G4612), Planned Cross Docking Workbench Select a record and click Select on Work With Planned Cross Docking Workbench.</td>
<td>Cross dock with the workbench.</td>
</tr>
</tbody>
</table>

**Level 1 Quantity**

Enter the total quantity of the item in the item's level 1 unit of measure. You use the Unit of Measure Conversion Information program (P41002) to define unit of measure levels. When you define a unit of measure structure, define the largest unit of measure as level 1, and the smallest, or primary, unit of measure as the last or lowest level. The system supplies an item's unit of measure structure to a location's detail information (F4602) during inventory movement, but you can override the structure, if necessary.

**UM 1 (unit of measure level 1)**

Enter the item's level 1 unit of measure. You use Unit of Measure Conversion Information (P41002) to define an item's unit of measure structure. You define the largest unit of measure in the structure as the level 1 unit of measure.

The smallest unit of measure, which is also the primary unit of measure, depending if the item is Dual UOM, highest number, is the last or lowest level in the structure.

An example of a unit of measure structure might be:

Level Unit of Measure
1: Pallet
2: Box, where 10 boxes equal 1 pallet.
3: Case, where 5 cases equal 1 box.
4: Interpack, where 8 interpacks equal 1 case.
5: Each, where 10 eaches equal 1 interpack.

In this example, the level 1 unit of measure is a pallet, and the level 5 unit of measure is an each, which is the primary unit of measure for the item in the example.

You can have up to five levels in an item’s unit of measure structure.

**Container 1**
Enter a user-defined code (UDC) (46/EQ) that identifies the storage container for this item in its level 1 unit of measure. A storage container can be:

- An open container, where items are stored on the container (for example, a pallet)
- A closed container, where items are stored in the container (for example, a box)

You use the Container Codes program (P46091) to define storage containers. You use the Unit of Measure Definition by Item or Group program (P46011) to assign a storage container to an item in a specific unit of measure.

6.2.6 **Setting Processing Options for PO Receipts (P4312)**

Processing options enable you to specify the default processing for programs and reports.

**6.2.6.1 Warehousing**

These processing options control how the PO Receipts (P4312) interfaces with the JD Edwards EnterpriseOne Warehouse Management system.

1. **Putaway Mode**
Specify how the system processes putaway requests.

Enter 1: to create a putaway request only. You must create location suggestions and confirm location suggestions separately.

Enter 2: to create a putaway request and process the request into suggestions using the subsystem.

Enter 3: to receive goods directly into the reserved locations, and do not create requests or suggestions.

Leave blank and the system does not create a putaway request. If you do not create putaway using the Purchase Order Receipts program (P4312), the items that you receive remain in the location to which they were received. Then you can create putaway requests manually or create them by reversing the receipt of the purchase order, setting this processing option to create putaway requests by reversing the purchase order receipt, and receiving the purchase order again.

2. **License Plate Number Generation Method**
Enter a UDC (46L/LG) to specify the license plate generation method. Values are:

- **00**: Use license plate constants.
- **01**: Manual entry.
- **02**: Create a user-defined formula.
- **03**: Create Electronic Product Code.
3. **Build default UOM structure**
Specify which UOM structure the system uses to create license plate numbers automatically. The system creates license plates only for item UOM that have the license plate flag turned on in the U/M definition application P46011. Values are:

- **Blank**: The system uses the default item UOM structure.
- **1**: The system uses the default item UOM structure and excludes levels higher than the transaction UOM.

4. **Assign Items to License Plate Window (P46L30)**
Leave blank and the system assigns license plate numbers automatically. Enter 1 to allow license plate numbers to be entered manually.

This processing option applies only if you are using license plate functionality in the JD Edwards EnterpriseOne Warehouse Management system and license plate numbers are not created automatically by the system.

6.2.6.2 **Cross Docking**

1. **Cross Docking**
Leave blank and the system does not cross dock.

   - Enter 1: to use opportunistic.
   - Enter 2: to use planned.
   - Enter 3: to use both planned and opportunistic.

2. **Pick Request**
Specify whether the system creates a pick request when performing planned cross docking during the purchase order receipts process. Values are:

   - Leave blank and the system does not create a pick request.
   - Enter 1: for the system creates a pick request.

3. **Override Next Status for Sales Orders**
Specify the default next status code (40/AT) for the sales order only if you are using planned cross docking during the purchase order receipts process. If you leave this processing option blank, the system uses the normal sales order next status that is contained in the order activity rules.

4. **From Sales Order Status**
Specify the from status code (40/AT) for the sales order to which to process planned cross docking only if you are using planned cross docking during the purchase order receipts process.

5. **Thru Sales Order Status**
Specify the through status code (40/AT) for the sales order to which to process planned cross docking only if you are using planned cross docking during the purchase order receipts process.

6.2.7 **Setting Processing Options for Work Order Completions (P31114)**
Processing options enable you to specify the default processing for programs and reports.
6.2.7.1 Warehouse Mgt

These processing options determine how the program processes putaway requests for Warehouse Management integration.

1. Putaway Requests

Specify whether putaway requests are processed. For mode 2, you must specify the version of the subsystem program that the system uses in the Location Selection Driver processing option (R46171) on the Versions tab. Values are:

Leave blank and the system does not process putaway requests.

Enter 1: to process putaway requests only.

Enter 2: to process putaway requests when it accesses the subsystem.

2. License Plate Number Generation Method

Enter a UDC (46L/LG) to specify whether the system assigns license plate numbers automatically or you to specify the value. Values are:

Enter 00: to use license plate constants.

Enter 01: to assign license plate numbers manually.

Enter 02: to use a user-defined formula.

Enter 03: to use the electronic product code.

3. Build default UOM structure

Enter a code to indicate the UOM Structure to be used to create license plate number automatically. License plates are only created for item UOM that have the license plate flag turned on in the U/M definition application P46011. Values are:

Enter 1: to use the default item UOM Structure, excluding levels higher than the transaction UOM.

Leave blank for the default item UOM structure.

4. Assign Items to License Plate Window (P46L30)

Specify whether the system automatically displays the assign items to license plate number window (P46L30). This processing option applies only if you are using license plate functionality in the JD Edwards EnterpriseOne Warehouse Management system and license plate numbers are not created automatically by the system. Values are:

Leave blank and the system does not automatically display the assign items to license plate window.

Enter 1: and the system automatically displays the assign items to license plate window.

6.2.8 Cross Docking with the Workbench

To perform cross docking with the workbench:

1. Review the sales order lines, purchase order lines, and work order lines in the detail area.

Note: You can enter or change the values in the fields in the detail area for sales orders only. For purchase orders or work orders, the fields are view only.
2. Locate the row that contains the sales order line to cross dock and enter a value in the Cross Docked field.

3. To associate a sales order line with a purchase order number or work order number, click the search button in the Cross Dock Order Number field.

4. On the Planned Cross Docking Inbound Search & Select form, select the row that contains the order number to associate with the sales order line and click Select.

5. On the Planned Cross Docking Workbench Revisions form, review the information in the detail area and click Resort to update the detail area with the sales order lines prioritized by ascending promised date and priority.

   **Note:** If you must update detailed sales order line information, purchase order line information, or work order line information, you can select the appropriate option from the Row menu.

6. To further prioritize sales orders for cross docking, complete the Cross Dock Priority field and click Resort.

   The system sorts the order lines by ascending promised date and then priority. If the promised dates for two or more order lines are the same, then the system sorts the order lines only by priority.

7. When you are finished prioritizing and resorting the order lines, click OK.

**Cross Docked**

Enter 1 to activate cross docking, or leave this field blank and cross docking is inactive. This field associates items or order lines with the cross-dock processing. The value might indicate whether an item or an order line is eligible for cross-docking, whether it was cross docked, or whether it must be cross docked. When it is assigned to an item or item-branch, the value indicates that the item or the item in the branch/plant is eligible for cross docking. When it is assigned to an order line, the value indicates that the order line must be cross docked.

**Cross Dock Priority**

Enter a priority value. This value indicates the priority that the cross-docking system follows when assigning supply quantity to the sales orders. This priority indicates the sequence in which cross-docked sales orders are fulfilled for a given date. Sales order lines with a lower value receive a higher priority than lines with a higher value. The system performs only numeric edits on this value. If you do not specify a priority, or if the same priority is given to multiple order lines, the orders are fulfilled in the sequence of order number and order type.

**See Also:**

- "Understanding Sales Order Detail Information" in the *JD Edwards EnterpriseOne Applications Sales Order Management Implementation Guide.*
- "Locating Quantity Information" in the *JD Edwards EnterpriseOne Applications Sales Order Management Implementation Guide.*
- "Entering Order Detail Information" in the *JD Edwards EnterpriseOne Applications Procurement Management Implementation Guide.*
- "Creating Work Orders" in the *JD Edwards EnterpriseOne Applications Work Orders Implementation Guide.*
6.3 Locating Existing Putaway Requests

This section provides an overview of locating existing putaway requests, and discusses how to:

- Set processing options for Request Inquiry (P4600).
- Locate putaway requests.

6.3.1 Understanding Existing Putaway Requests

To verify that you have created a putaway request for an incoming item, you locate the request using unique criteria, such as an order number, a document type, or an item number.

You also can cancel a putaway request and stop further processing. For example, if the items that you received are damaged, you cancel the putaway request. If the putaway request that you are canceling has associated suggestions that are being confirmed, you must first cancel the suggestions and then cancel the request.

6.3.2 Forms Used to Locate Existing Putaway Requests

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Putaway Requests Inquiry</td>
<td>W4600A</td>
<td>Inbound Warehousing Operations (G4611), Putaway Requests</td>
<td>Locate putaway requests.</td>
</tr>
</tbody>
</table>

6.3.3 Setting Processing Options for Request Inquiry (P4600)

Processing options enable you to specify the default processing for programs and reports.

6.3.3.1 Defaults

Use the processing option to specify the request status for the system to use.

1. Default Request Status

Enter the default request status, UDC (46/PS), to filter by. If you leave this processing option blank, the system filters by the default status of 200 (Ready to Suggest).

6.3.3.2 Display

Specify the types of requests for the system to display.

1. Type of Requests to view

Specify the request types to review. Values are:

- Leave blank or enter 1: for putaway requests.
- Enter 2: for picking requests.
- Enter 3: for replenishment requests.

6.3.3.3 Manual Planner

Use these processing options to specify the planning information for the system to use. Manual Planner provides a way to manually select a To location for the putaway request.
1. **Auto Location Selections**
Specify whether the system automatically assigns a location to an item. Values are:
Leave blank and the system does not automatically assign locations.
Enter 1: to automatically assign locations.

2. **Immediate Task/Trip Assignment**
Specify whether the system assigns trips and tasks when you confirm the creation of suggestions and leave the screen. Values are:
Leave blank and the system does not assign trips and tasks.
Enter 1: to assign trips and tasks.

3. **Task/Trip Assignment Version**
Specify the version the system uses for task and trip assignment. If you leave this processing option blank, the system uses version XJDE0001.

4. **Ship Ascending Date**
Determine whether the system displays a warning or an error message for the ascending date rule check. Values are:
Leave blank to display a warning.
Enter 1: to display an error.

6.3.3.4 **Picking Options**
Use these processing options to specify the shipping information for the system to use.

1. **Next Status Code Sales Orders**
Enter a UDC (40/AT) to override the next status for sales order lines when requests are canceled.

2. **Shipping Location**
Specify whether the system enables you to override shipping locations. Values are:
Leave blank and the system does not enable overrides.
Enter 1: to enable overrides.

**6.3.4 Locating Putaway Requests**
Access the Putaway Requests Inquiry form.

**Request Batch Number**
Enter the batch number assigned to one set of putaway, picking, or replenishment requests. This number comes from next numbers for system 46.

**From License Plate**
Enter the From license plate number that identifies a collection of items or other license plates that are transferred from a specific location.

**6.4 Creating Putaway Requests by Batch**
This section discusses how to:
- Run the Batch License Plate Putaway Request (R46L140).
- Set processing options for Batch License Plate Putaway Request (R46L140).
Run the Batch Putaway Request (R46140).

Set processing options for Batch Putaway Request (R46140).

### 6.4.1 Running the Batch License Plate Putaway Request (R46L140)

You can create full license plate putaway requests for parent license plates. Requests are not created for license plates that have open requests or contain items that are committed on suggestions.

**Note:** You base data selection on License Plate Master (F46L10) information. Typically, you would select by branch/plant and the desired “from” location to putaway license plates.

Select Warehouse Move Documents (G4621), Batch License Plate Putaway Requests

### 6.4.2 Setting Processing Options for Batch License Plate Putaway Request (R46L140)

Processing options enable you to specify the default processing for programs and reports.

#### 6.4.2.1 Processing

Use these processing options to specify how the system processes batch license plate putaway requests.

1. **Process Requests through Subsystem**
   Specify whether to process requests through the subsystem. Values are:
   - Enter 1: to process requests through the subsystem.
   - Leave blank and the system does not process records through the subsystem.

2. **Subsystem Version of R46171 Location Selection Version**
   Enter the version of Location Selection R46171 to be used if you are processing requests through the subsystem. If you leave this processing option blank, the system uses XJDE0001.

### 6.4.3 Running the Batch Putaway Request

You can create item putaway requests for items not on license plates. Item quantity on an open request and quantity that is committed are excluded from the new request. You create a separate request by branch/plant, location, item, and lot for the items in the data selection.

**Note:** You can use this program with or without the license plates. Data selection is based on Item Location (F41021) information.

Select Warehouse Move Documents (G4621), Batch Putaway Requests

### 6.4.4 Setting Processing Options for Batch Putaway Request (R46140)

Processing options enable you to specify the default processing for programs and reports.
6.4.4.1 Processing
Use these processing options to specify how the system processes batch putaway requests.

1. Process Requests through Subsystem
Specify whether to process requests through the subsystem. Values are:
   - Enter 1: to process requests through the subsystem.
   - Leave blank and the system does not process records through the subsystem.

2. Subsystem Version of R46171 Location Selection Version
Specify the version of Location Selection R46171 to be used if you are processing requests through the subsystem.
This chapter contains the following topics:

- Section 7.1, "Understanding Putaway Reservations"
- Section 7.2, "Creating Putaway Reservations"
- Section 7.3, "Changing Existing Putaway Reservations"

7.1 Understanding Putaway Reservations

You can create putaway reservations to reserve space for incoming items. You can receive incoming items directly into specific locations that you reserve, or you can use the putaway location selection process to use the reservation. This makes putaway more efficient because space is reserved for the items before receipt. You can create a reservation for all the items on a purchase order line, and you can split the line into multiple location reservations.

Working with reservations is an optional task during warehouse putaway processes.

7.1.1 Interactive Method

You create putaway reservations interactively using the Online Putaway Reservations program (P46130). This program enables you to reserve space in locations for incoming items. For example, you create a reservation interactively for one item in an incoming shipment. You can enter location reservations directly online. When you create putaway reservations online, if the item quantity is too large to fit in one location, the system might suggest multiple locations. If the system cannot create a suggestion for a purchase order line, it displays an error message. You can create reservations manually for any lines on the purchase order. If an error relates to only part of the purchase order line's quantity, you can still make reservations for the remaining line quantity. The system displays an error message only for the quantity in error.

You can also use the Online Putaway Reservations program to cancel reservations. You cancel reservations to make the reserved location's space available again.

When you access the Online Putaway Reservations program, the system displays both purchase orders that have a corresponding reservation and purchase orders that do not have corresponding reservations. You can differentiate between purchase orders that do and do not have reservations by reviewing open quantity information on the Online Putaway Reservations form. If a purchase order has a corresponding reservation, no open quantity exists because the quantities have been assigned to a reserved location. Conversely, if a purchase order does not have a corresponding reservation, the open quantity exists.
reservation, open quantity exists for which the system can suggest a location to reserve.

### 7.1.2 Batch Method

You can reduce the system processing time required for creating reservations by creating them in a batch for many purchase orders simultaneously.

When you run the Batch Putaway Reservations program (R461301), the system can:

- Create putaway reservations.
- Print an audit report.

You control which functions the system performs by setting processing options in the Batch Putaway Reservations program.

### 7.1.3 Alternate Reservations

You can create alternate putaway reservations if you do not agree with the system’s suggestions for reserved putaway locations.

As you create alternate suggestions for reserved locations, the system displays new locations for possible reservations. The system also can display the previously reserved location if there have not been any changes to either the putaway movement instructions or the inventory levels.

### 7.2 Creating Putaway Reservations

This section lists a prerequisite and discusses how to:

- Create putaway reservations for individual or all order lines.
- Create putaway reservations by batch.
- Create alternate putaway reservations.
- Set processing options for Online Putaway Reservations (P46130).

### 7.2.1 Prerequisite

Before you complete the tasks in this section, review the processing options for the Online Putaway Reservations program (P46130) to ensure that you have specified the types and statuses of purchase orders that the system displays.
7.2.2 Forms Used to Create Putaway Reservations

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Putaway Reservations Detail</td>
<td>W46130B</td>
<td>Inbound Warehousing Operations (G4611), Putaway Reservations</td>
<td>Create putaway reservations for order lines.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on the Online Putaway Reservations form.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Suggest All to create putaway reservations for all order lines on Online Putaway Reservations Detail.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Suggest Row from the Row menu to create putaway reservations for individual order lines and create alternate reservations on Online Putaway Reservations Detail.</td>
<td></td>
</tr>
</tbody>
</table>

7.2.3 Creating Putaway Reservations for Individual or All Order Lines

Access the Online Putaway Reservations Detail form.

7.2.4 Creating Putaway Reservations by Batch

Select Inbound Warehousing Operations (G4611), Batch Reservations.

7.2.5 Creating Alternate Putaway Reservations

Access the Online Putaway Reservations Detail form.

7.2.6 Setting Processing Options for Online Putaway Reservations (P46130)

Processing options enable you to specify the default processing for programs and reports.

7.2.6.1 Defaults

Use these processing options to specify the order type and statuses for the system to use.

1. Order Type
   Enter a UDC (00/DT) for the default order type of the purchase orders that the system displays.

2. From Status
   Enter a UDC (40/AT) for the default value from status of the purchase orders that the system displays.
3. To Status
Enter a UDC (40/AT) for the default value to status of the purchase orders that the system displays.

7.3 Changing Existing Putaway Reservations

This section provides an overview of changing putaway reservations, and discusses how to:
- Change existing reservations by splitting order lines to multiple locations.
- Change existing reservations manually.

7.3.1 Understanding Putaway Reservation Changes

You can manually change a reserved putaway location to a different location. You would do this if you wanted to change the current reserved location to one that is more convenient for employees or is closer to locations containing other similar items.

The system does not verify that the total item quantity for which you have reserved locations equals the total item quantity for the purchase order line With Online Putaway Reservations.

7.3.2 Forms Used to Change Existing Putaway Reservations

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Putaway Reservations Detail</td>
<td>W46130B</td>
<td>Inbound Warehousing Operations (G4611), Putaway Reservations</td>
<td>Change existing reservations by splitting order lines to multiple locations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on the Online Putaway Reservations form.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Copy.</td>
<td></td>
</tr>
</tbody>
</table>

7.3.3 Changing Existing Reservations by Splitting Order Lines to Multiple Locations

Access the Online Putaway Reservations Detail form.

7.3.4 Changing Existing Reservations Manually

Access the Online Putaway Reservations Detail form.

**Quantity Reserved**
The quantity of units affected by this transaction.
Working with Putaway Suggestions

This chapter contains the following topics:

- Section 8.1, "Prerequisites"
- Section 8.2, "Creating Putaway Suggestions"
- Section 8.3, "Creating Task and Trip Assignment and Move Documents"
- Section 8.4, "Confirming Putaway Suggestions"

8.1 Prerequisites

Before you complete the tasks in this chapter:

- Verify that you have set up order groups and process groups for the stock items.
- Verify that you have set up putaway instruction tables to designate specific locations based on the items' order and process groups.
- Verify that you have set up putaway instruction tables to designate specific locations based on Fixed Locations, Random Rules, Max Quantities by Zone, Location dimensions, and so forth.

8.2 Creating Putaway Suggestions

This section provides an overview of creating putaway suggestions, and discusses how to:

- Create alternate putaway suggestions.
- Create putaway suggestions interactively.
- Create putaway suggestions by batch.
- Set processing options for Location Selection Driver (R46171).

8.2.1 Understanding Putaway Suggestion Creation

After you create putaway requests, you create putaway suggestions to move the items to warehouse locations.

You can create putaway suggestions by batch using the Location Selection Driver program (R46171). You also can create alternate putaway suggestions by running a version of the Location Selection Driver program with the appropriate processing options selected for other suggestions. This version of the program enables you to replace existing suggestions with alternate suggestions. The suggestions may be
different from previous suggestions if you have changed movement instructions or other related setup or if the inventory levels have changed.

8.2.1.1 Batch Method

You create putaway suggestions by batch to process putaway requests and move inventory on a regular basis. You can compensate for a large volume of putaway requests by creating putaway suggestions several times each day or using the subsystem to process them immediately. You typically run batch programs during off-peak hours when more system resources are available.

When you run the Location Selection Driver program (R46171), the system can:

- Select all outstanding putaway requests based on data selection.
- Update each request’s status in the Warehouse Requests table (F4600).
- Create putaway location movement suggestions.
- Assign tasks and trips.
- Print movement tags and slips.
- Print audit reports.
- Confirm putaway suggestions.
- Create carton recommendations.
- Update carton detail information.

You control which of these functions the system performs by setting processing options for the Location Selection Driver program (R46171).

8.2.1.2 Interactive Method

You can create suggestions interactively to select locations for putaway. Either you can have the system suggest a location or you can manually specify putaway information such as the quantity, the unit of measure, and the location.

There are two methods to have the system suggest locations automatically. You can select records and query the system for auto suggestions or you set the Auto Location Selections processing option on the Manual Planner tab for the Request Inquiry program (P4600). The system prompts you to confirm the suggestions and displays the suggestion on the Manual Putaway Location Planner form.

8.2.1.3 Alternate Putaway Suggestions

You can create alternate putaway suggestions if you do not agree with the system's suggestions for putaway locations. You create alternate suggestions you set the Resuggest processing option on the Location Selection Driver program (R46171) for other suggestions.

Creating alternate suggestions replaces any previous location suggestions. With alternate suggestions, you can access new inventory locations that you might have added since you created the first suggestions.

If you have not changed inventory locations in the warehouse, and you want to create suggestions for locations that differ from previous suggested locations, you must change the putaway instructions table. For example, you could change the putaway instructions table to select a new putaway zone or use a different tiebreaker rule to select locations. If you do not change the putaway instructions, process selection, fixed locations, max or min quantities/percentages, the Location Selection Driver program suggests the same locations as in the previous suggestions.
When you run the Location Selection Driver program, the system can:

- Delete existing putaway suggestions and reset the commitments caused by or related to the original suggestions in the F41021 and F4602/F46L12.
- Reset each request’s status in the Warehouse Requests table (F4600).
- Create alternate putaway location movement suggestions.

You control which functions the system performs by setting processing options in the Location Selection Driver program (R46171).

### 8.2.2 Prerequisites

Before you complete the tasks in this section:

- Set the Resuggest processing option for the Location Selection Driver program (R46171) for the system to create alternate putaway suggestions.
- Set the Auto Location Selections processing option on the Manual Planner tab for the Request Inquiry program (P4600) for the system to create interactive suggestions.

### 8.2.3 Forms Used to Create Putaway Suggestions

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Putaway Location Planner</td>
<td>W4600B</td>
<td>Inbound Warehousing Operations (G4611), Putaway Requests</td>
<td>Create putaway suggestions interactively.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and select Manual Planner from the Row menu on the Putaway Requests Inquiry form. To have the system create a suggestion: Select a record and select Auto Suggestion from the Form menu. Click OK on the Putaway Requests – Warning form. Review the suggestion and click OK. Select a row on the Putaway Requests Inquiry form, and click Select. Click OK on the Putaway Requests – Warning form. Review the suggestion and click OK. To manually create a suggestion, select a row, enter values in the detail area, and click OK.</td>
<td></td>
</tr>
</tbody>
</table>
8.2.4 Creating Putaway Suggestions Interactively

Access the Manual Putaway Location Planner form.

**Quantity**
Enter the quantity of units affected by this transaction.

**UM (unit of measure)**
Enter a user-defined code (UDC) (00/UM) that indicates the quantity in which to express an inventory item, for example, CA (case) or BX (box).

**Location**
Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

8.2.5 Creating Putaway Suggestions by Batch

Select Inbound Warehousing Operations (G4611), Process Putaway Requests.

8.2.6 Creating Alternate Putaway Suggestions

Select Inbound Warehousing Operations (G4611), Process Putaway Requests.

8.2.7 Setting Processing Options for Location Selection Driver (R46171)

Processing options enable you to specify the default processing for programs and reports.

**8.2.7.1 Task and Trip**
Use these processing options to specify whether the system assigns tasks and trips and the version of the Task and Trip Assignment program.

1. **Immediate Task and Trip Assignment**
Leave blank and the system does not assign any tasks and trips.

Enter 1: to assign tasks and trips immediately.

2. **Task and Trip Creation (R46471) Version**
Specify the version of the Task and Trip Creation program (R46471) the system uses. If you leave this processing option blank, the system uses version XJDE0001.

**8.2.7.2 Audit**
Specify the audit report generation.

1. **Audit Report**
Leave blank and the system does not produce an audit report

Enter 1: to generate the audit report.

Enter 2: to generate the audit report and include a glossary for any message.

Enter 3: to generate the audit report and include a complete glossary in the report.

**8.2.7.3 Confirmation**
Use these processing options to specify whether to have the system automatically confirm suggestions and the version of the Batch Confirmation program to use.
1. Confirm Suggestions
Leave blank and the system does not automatically confirm suggestions.
Enter 1: to automatically confirm suggestions.

2. Version of the Batch Confirmation Program
Specify which version of the Batch Confirmations program (R4617) the system uses. If you leave this processing option blank, the system uses XJDE0001.

8.2.7.4 Resuggestions
Specify how the system processes movement requests.

1. Resuggest Requests
Leave blank to process only new, non-processed requests.
Enter 1: to resuggest movement requests.

8.2.7.5 Replenishment
Specify the method to use for replenishment quantities.

1. Method to Use for Replenishment Quantities
Leave blank or enter 2 to use the maximum replenishment method. The quantity to replenish is the quantity that fills the location.
Enter 1 to use the economic replenishment method. The quantity to replenish is retrieved from the fixed location.

2. Task and Trip Creation (R46471) Version for Replenishment
Specify which version of the Task and Trip Creation program (R46471) the system uses for replenishment. If you leave this processing option blank, the system uses XJDE0003.

8.2.7.6 Edits
Specify the allowed lot status group to validate.

1. Enter Allowed Lot Status Group to validate
Enter a lot group name to allow this application to process lots whose lot status code is defined within the specified Lot Group Name.

8.3 Creating Task and Trip Assignment and Move Documents
This section provides an overview of task and trip assignments and move documents, and discusses how to:
- Create tasks and trips.
- Set processing options for Task and Trip Creation (R46471).

8.3.1 Understanding Task and Trip Assignment and Move Documents
After you have created suggestions for putaway, picking, or replenishment, you can create task/trip assignments (if you have not done so when creating suggestions) and create customized move documents to help the warehouse personnel efficiently move inventory through the warehouse.
8.3.1.1 Tasks and Trips
The system can assign task and trip numbers to suggestions when you create and process suggestions. A task is a group of suggestions, and a trip is each suggestion in the task.

If the system did not assign task and trip numbers to suggestions when you created and processed suggestions, you can run a batch process for task and trip number assignment.

When you run the Task and Trip Creation program (R46471), it is important to activate data sequencing so that you can verify the information that the system uses to assign task and trip numbers.

When you run the Task and Trip Creation program, you can specify this information:

- Maximum quantity information, such as the maximum number of tasks and trips.
- Whether you want the system to run the Move Slips program (R46472), which prints the supporting documents with the task and trip assignments.

After you run the Task and Trip Creation program, you can print a supporting documents such as Move Slips (Summary Document) or the Move Tags to review task and trip assignments.

8.3.1.2 Summary Document
Use the Move Slips program (R46472) to print a summary document that contains information for all the suggestions that you created. The summary document is also referred to as a move document or move slip. This report page breaks by the task number. The summary document includes information such as:

- Trip number.
- To and From locations.
- Item number and description.
- Quantity information.
- Unit of measure information.

After you create and review the summary document, you can print move tags, which enable warehouse personnel to plan the movement of inventory throughout the warehouse.

8.3.1.3 Move Tags
When you run the Move Tags program (R46473), the system creates move tags for the suggested location during putaway, picking, and replenishment. A move tag contains information such as:

- The item that warehouse personnel are moving
- The item unit of measure
- To and From locations

You can print tags for each trip or for each unit of measure moved on the trip, depending on the definition of the item on Item Unit of Measure Definition Revisions. You can scan the move tags to facilitate movements, storage, confirmation, and other downstream material handling and counting operations.

Examples of other Warehouse Management programs from which you can automatically print move tags are:
Creating Task and Trip Assignment and Move Documents

- Batch Putaway Reservations (R461301)
- Location Selection Driver (R46171)
- Move Slips (R46472)
- Warehouse Movement Confirmations (P4617)

8.3.2 Prerequisites

Before you complete the tasks in this section:
- Verify that the system has created suggestions.
- Create the summary document.
- Create the move tags.

8.3.3 Creating Tasks and Trips

Select Warehouse Move Documents (G4621), Create Tasks and Trip.

8.3.4 Setting Processing Options for Task and Trip Creation (R46471)

Processing options enable you to specify the default processing for programs and reports.

8.3.4.1 Task Control

Use these processing options to specify the limits for the system to use.

1. Maximum number of Tasks
Enter a numeric digit that specifies the maximum number of tasks to be created in the run of the program. Enter zero to specify no limit.

2. Maximum number of Trips
Enter a numeric digit that specifies the maximum number of trips to be created in the run of the program. Enter zero to specify no limit.

3. Maximum number of Units
Enter a numeric digit that specifies the maximum number of units of items to be processed in the run of the program. Enter zero to specify no limit.

4. Maximum number of Trips per Task
Enter a numeric digit that specifies the maximum number of trips per task. Enter zero to specify no limit.

5. Maximum number of Units per Task
Enter a numeric digit that specifies the maximum number of units per task. Enter zero to specify no limit.

6. Maximum Weight per Task
Enter a numeric digit that specifies the maximum combined weight per task. Enter zero to specify no limit.

7. Weight Unit of Measure
Enter the weight unit of measure from the Maximum Weight per Task processing option.
8. Maximum Volume per Task
Enter a limit for the maximum combined volume per task. Enter zero to specify no limit.

9. Volume Unit of Measure
Enter the volume unit of measure from the Maximum Volume per Task processing option.

8.3.4.2 Print
Use these processing options to specify the printing defaults for the system to use.

1. Print Move Documents
Leave blank and the system does not print move documents.
Enter 1: to print move documents.

2. Data Item for Page Breaking
Enter the Data Item from Data Sequencing that causes page breaking to occur. This permits data items following the page break to be included in the sequencing, but not affect page breaking for the tasks written.

8.3.4.3 Versions
Use these processing options for specify the versions for the system to use.

1. Version for Move Slips (R46472)
Specify which version of the Move Slips program (R46472) the system uses. If you leave this processing option blank, the system uses XJDE0001.

2. Version for Carton Reorganization (P4620)
Specify which version of the Carton Reorganization program (P4620) the system uses. If you leave this processing option blank, the system uses ZJDE0001.

3. Version for Generate Sequenced Carton Recommendations (R46474)
Specify which version of the Generate Sequenced Carton Recommendations program (R46474) the system uses. If left blank the system uses ZJDE0001.

8.3.4.4 Process
Use these processing options to specify how the system processes cartons.

1. Perform Carton Recommendation
Leave blank and the system does not perform carton recommendation.
Enter 1: to perform carton recommendation.

2. Carton Detail Information
Leave blank and the system does not generate carton detail information.
Enter 1: to generate carton detail information for both sequenced and non-sequenced suggestions
Enter 2: to generate carton detail information only for non-sequenced suggestions
Enter 3: to generate carton detail for both sequenced and non-sequenced suggestions, and use R46474 for sequenced suggestions

3. Cartonize to Totes
Specify whether the system recommends only those cartons that are designated as totes. A carton can be designated as a shippable container, a tote container, or neither
in the Container and Carton Codes program (P46091). Values are:
Leave blank and the system recommends only shippable cartons.
Enter 1: to recommend only tote containers.

8.3.5 Creating the Summary Document
Select Warehouse Move Documents (G4621), Summary Document.

8.3.6 Creating Move Tags
Select Warehouse Move Documents (G4621), Move Tags.

8.4 Confirming Putaway Suggestions
This section provides an overview of putaway suggestion confirmation, and discusses how to:
- Confirm putaway suggestions interactively.
- Confirm putaway suggestions by batch.
- Override putaway suggestions.
- Set processing options for Warehouse Movement Confirmations (P4617).

8.4.1 Understanding Putaway Suggestion Confirmation
If you agree with the system's suggestions for putaway locations, you confirm them interactively or by batch. If you do not agree, you can override the suggestions and specify a location of choice, or you can cancel the existing suggestions and stop further processing.

When you confirm suggestions for putaway, you:
- Reduce on-hand inventory in the receiving location
- Increase on-hand inventory in the putaway location

Putaway confirmation ensures that the system's records match actual inventory movements by updating these tables:
- Item Location File (F41021)
- Location Detail Information (F4602)
- Item Ledger File (F4111)
- Warehouse Requests (F4600)
- Warehouse Suggestions (F4611)
- Warehouse Task Header (F4601)
- License Plate Master (F46L10)
- Location Capacity (F46L30)
Note: The F4602 table is only updated for branch/plants that do not have license plates activated. All tables that contain license plate data (F46L) are only updated for the branch/plants that have license plates activated. Other license plate tables that are updated during this process are: License Plate Item Detail F46L11, License Plate History F46L99, and License Plate Commitment F46L12

8.4.1.1 Interactive Method
If you agree with the system’s suggestions for putaway locations, you confirm them interactively using the Warehouse Movement Confirmations program (P4617).

8.4.1.2 Batch Method
You can confirm putaway suggestions by batch when you run the Batch Confirmations program (R4617). However, before you confirm putaway suggestions by batch, you should review and override suggestions as necessary. After you run the Batch Confirmations program, you cannot reverse the confirmations.

The system automatically confirms suggestions if there are no errors during the confirmation process, and prints all the suggestions that were not confirmed. If you set the appropriate processing option, the system prints the corresponding description of the error on the report after processing all suggestions.

8.4.1.3 Overrides
You can override putaway suggestions and specify a location of choice, or you can split a suggestion into two locations. You also can cancel the existing suggestions and stop further processing.

8.4.2 Forms Used to Confirm Putaway Suggestions

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movement Confirmations</td>
<td>W4617A</td>
<td>Inbound Warehousing Operations (G4611), Putaway Confirmation</td>
<td>Confirm putaway suggestions interactively.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Confirm from the Row menu on Work With Warehouse Confirmations. Select Process from the Form menu and then click Cancel.</td>
<td></td>
</tr>
<tr>
<td>Override Suggestion</td>
<td>W4617C</td>
<td>Select a record and then select Override from the Row menu on Work With Warehouse Confirmation.</td>
<td>Override putaway suggestions.</td>
</tr>
</tbody>
</table>
8.4.3 Setting Processing Options for Warehouse Movement Confirmations (P4617)

Processing options enable you to specify the default processing for programs and reports.

8.4.3.1 Display
Use these processing options to specify how the system displays the information.

1. Program Mode
Enter the program mode. Values are:
Leave blank or enter 1: for putaway confirmation.
Enter 2: for pick confirmation.
Enter 3: for replenishment confirmation.

2. Phase Control Code
Enter the phase control code. Values are:
Leave blank or enter 1: as the default display for the first phase of a two-phase confirmation
Enter 2: as the default display for the second phase of a two-phase confirmation

3. Default Suggestion Status
Specify the default suggestion status that the system uses for the display. If you leave this processing option blank, the system uses 340 (Suggestion Printed).

4. Shipping Location
Specify whether you permit overrides to shipping locations. Values are:
Leave blank and the system does not permit overrides.
Enter 1: permit overrides.

8.4.3.2 Prompts
Use these processing options to specify how the system processes movement.

1. Location Verification
Specify whether you are required to enter the location verification code for movement confirmation. Values are:
Leave blank and the system does not require entry of the location verification code.
Enter 1: to require entry of the location verification code.

2. Auto Inquire
Specify if the system performs an automatic inquiry when you select the appropriate menu selection. Values are:
Leave blank and the system does not perform automatic inquiry.
Enter 1: to perform automatic inquiry.

8.4.3.3 Move Tags
Use these processing options to specify what the system prints and the version to use.

1. Move Tag
Specify if the system reprints a move tag whenever the quantity or location of a suggestion is changed. Values are:
Leave blank and the system does not reprint the move tag.
Enter 1: to reprint the move tag.

2. Bar Code
Specify if the system prints bar code information. Values are:
Leave blank and the system does not print bar code information.
Enter 1: to print bar code information.

3. Unit of Measure
Specify if the system prints the unit of measure structure. Values are:
Leave blank and the system does not print the unit of measure structure.
Enter 1: to print the unit of measure structure.

4. Item/Location Quantity to be Printed on the Tag
Specify if the system prints the item and location quantities on the tags. Values are:
Leave blank and the system does not print a quantity.
Enter 1: to print the on-hand quantity.
Enter 2: to print on-hand quantity plus inbound quantity minus outbound quantity minus committed quantity.

5. Enter the number of Duplicate Copies to be printed for each tag
Enter the number of duplicate copies that the system prints for each tag.

6. Version of the move tags to be used for the printer overrides
Specify the version of the Move Tags program (R46473) the system uses. If you leave this processing option blank, the system uses XJDE0001.

8.4.3.4 Picking
Use these processing options to specify how the system processes information and which version of the Pack Confirmation program (P4216) to use.

1. Override Next Status for Sales Order Lines when Suggestions are Confirmed
Enter a UDC (40/AT) for the next override status that the system uses for sales order lines when it confirms suggestions.

2. Override Next Status for Sales Order Lines when Suggestions are Cancelled
Enter a UDC (40/AT) for the next override status that the system uses for sales order lines when it cancels suggestions.

3. Warning/Error Display for Ship Ascending Date Rule Checking
Specify if the system displays a warning or an error message for the ascending date rule check. Values are:
Leave blank and the system displays a warning.
Enter 1: to display an error.

4. Version of Pack Confirmation P4216
Specify the version of the Pack Confirmation program the system uses.

8.4.3.5 Bulk Printing
Use these processing options to specify how the system uses the Bulk Pick Detail Report program (R46210) and which version to use.
1. **Bulk Detail Report**
Specify if the system generates the Bulk Pick Detail report (R46210) when it confirms bulk pick suggestions. Values are:

Leave blank and the system does not generate the Bulk Pick Detail report when confirming bulk pick suggestions.

Enter 1: to generate the Bulk Pick Detail report when confirming bulk pick suggestions.

2. **Bulk Pick Detail Report (R46210) Version**
Specify which version of the Bulk Pick Detail report (R46210) the system uses. If you leave this processing option blank, the system uses XJDE0001.

### 8.4.3.6 Carton Detail
Use these processing options to specify how the system uses the Carton Reorganization program (P4620) and which version to use.

1. **Carton Detail Information**
Specify whether the system generates the carton detail information. Values are:

Leave blank and the system does not generate carton detail information.

Enter 1: to generate carton detail information.

2. **Version of Carton Reorganization (P4620) to Use for Generating Carton Detail Information**
Enter the version of the Carton Reorganization program (P4620) the system uses for generating carton detail information. If you leave this processing option blank, the system uses ZJDE0002.

### 8.4.3.7 Edits
Specify which Lot Status Group to validate.

1. **Enter Allowed Lot Status Group to Validate**
Lot Group is the name of a user-defined list of allowed non-blank lot status codes. Entry of a Lot Group name in the Processing Option allows this Application to process lots whose lot status code is defined within the specified Lot Group Name.

### 8.4.4 Confirming Putaway Suggestions Interactively
Access the Process Transactions form.

### 8.4.5 Running the Batch Putaway Confirmations Program (R4617)
Select Inbound Warehousing Operations (G4611), Batch Putaway Confirmations.

### 8.4.6 Setting Processing Options for Batch Putaway Confirmations (R4617)
Processing options enable you to specify the default processing for programs and reports.

1. **Confirmation of Two Phase Suggestions**
Specify the number of phases in which the system confirms suggestions. Values are:
Blank or 1: Confirm the first phase only.
2: Confirm both phases.

2. Print Glossary Text for Error Messages
Specify whether the system prints the glossary text for the error message. Values are:
Blank: Do not print glossary text.
1: Print glossary text.

8.4.6.2 Picking

1. Override Next Status for Sales Order Lines when suggestions are confirmed
Specify the next override status that the system assigns to sales order lines when it confirms suggestion.

8.4.6.3 Bulk Picking

1. Bulk Detail Report
Specify whether the system generates the Bulk Pick Detail report (R46210) when it confirms bulk pick suggestions. Values are:
Blank: Do not generate Bulk Pick Detail report.
1: Generate Bulk Detail report.

2. Bulk Pick Detail Report (R46210) Version
Specify which version of the Bulk Pick Detail report (R46210) the system uses. If you leave this processing option blank, the system uses version XJDE0001.

8.4.6.4 Carton Detail

1. Carton Detail Information
Specify whether the system generates carton detail information. Values are:
Blank: Do not generate carton detail information.
1: Generate carton detail information.

2. Carton Reorganization (P4620) Version
Specify which version of the Carton Reorganization program (P4620) the system uses for generating carton detail information. If you leave this processing option blank, the system uses version ZJDE0002.

8.4.6.5 Versions

1. Warehouse Movement Confirmation (P4617) Version
Specify which version of the Movement Confirmation program (P4617) the system uses for confirming carton detail information. If you leave this processing option blank, the system uses version ZJDE0001.

8.4.7 Overriding Putaway Suggestions
Access the Override Suggestion form.

Task Number
Displays the task number which is a unique number assigned to a grouping of suggestions.
Level 1 Total Quantity
Displays the total quantity of the item in the item’s level 1 unit of measure. You use Unit of Measure Conversion Information (P41002) to define unit of measure levels. When you define a unit of measure structure, define the largest unit of measure as level 1, and the smallest, or primary, unit of measure as the last/lowest level. The system supplies an item’s unit of measure structure to a location’s detail information (P4602) during inventory movement, but you can override the structure, if necessary.

Level 1 Container
Displays a code (46/EQ) that identifies the storage container for this item in its level 1 unit of measure. A storage container can be:

- An open container, where items are stored on the container (for example, a pallet)
- A closed container, where items are stored in the container (for example, a box)

You use Container Codes (P46091) to define storage containers. You use Unit of Measure Definition by Item or Group (P46011) to assign a storage container to an item in a specific unit of measure and indicate whether it is an open or closed container for this item at the UOM.
This chapter contains the following topics:

- Section 9.1, "Understanding Picking"
- Section 9.2, "Working with Pick Requests"
- Section 9.3, "Working with Pick Suggestions"
- Section 9.4, "Working with Carton Detail"

9.1 Understanding Picking

Picking is the process of removing items from stock and moving them to the shipping dock to be shipped. The shipping dock is usually the default location for the outgoing items that you have defined on Branch/Plant Constants (P41001).

You create a pick request in response to a sales order (or a parts list, for manufacturing systems). You use pick requests to generate suggestions for locations from which to pick items. The system tracks the items in each location. You can find locations containing the items that you must ship and then create suggestions to pick from those locations.

After you create suggestions, you confirm movement of the items from the chosen picking location to the shipping dock and to update the system's inventory records. Then, you confirm shipment to indicate that you shipped the items to the customer.

9.2 Working with Pick Requests

This section provides an overview of pick requests, lists a prerequisite, and discusses how to:

- Create pick requests interactively.
- Set processing options for Sales Order Entry (P4210).
- Set processing options for Work Order Parts List (P3111).
- Set processing options for Order Processing (R31410).
- Create pick requests by batch.
- Create the parts list interactively.
- Create the parts list by batch
- Create bulk pick requests.
- Locate existing pick requests.
9.2.1 Understanding Pick Requests

You create pick requests to pick and ship items for a sales order. A pick request contains information about the item, such as:

- Branch/plant
- Item number
- Unit of measure
- Quantity
- Transaction document information

The system uses this information to create suggestions for picking, based on the picking instruction tables that you define.

You can also create pick requests using manufacturing systems.

9.2.1.1 Interactive Method

As you enter a sales order, you can create a pick request to fill the sales order, which is the most common method of creating pick requests. You use these pick requests to create suggestions for picking locations.

You set the processing options for the Sales Order Entry program to determine whether you:

- Create requests only
- Create requests and process through subsystem
- Do not create requests

If you create pick requests only, you must create and confirm location suggestions separately.

In addition to using the Sales Order Entry program to generate pick requests, you also can use these Sales Order Management and Transportation Management programs to generate pick requests, if you have set the processing options accordingly:

- Backorder Release and Report (R42118)
- Backorder Release (P42117)
- Sales Order Speed Status Update (P42040)
- Held Order Release (P43070)
- Transfer Order Processing (P4242)
- Work with Shipments (P4915)
- Load Building (P4960)

To review warehouse information about a specific sales order line for which you are creating a pick request, you can use the Customer Service Inquiry form. Use the appropriate exits from the Customer Service Inquiry form to review this information:

- The quantity requested for picking.
- The date and time that the request was created.
- Whether the request has suggested picking locations.
The current request status.

The total number of picking trips that are either canceled or confirmed for the sales order line.

If a sales order line is being processed by the JD Edwards EnterpriseOne Warehouse Management system, the Hold Code field on the form contains two asterisks (**).

### 9.2.1.2 Batch Method

If you do not create sales order pick requests during interactive sales order processing, you must create the sales order pick requests by batch. Run the Batch Picking Requests program (R46150) to select orders and create pick requests for them. You typically run the batch program during off-peak hours when more system resources are available.

When you run the Batch Picking Requests program, the system can:

- Create pick requests from existing sales orders according to information that you specify in the data selection.
- Create suggestions by setting the Subsystem Processing processing option.
- Process orders based on preferences that you activate on the Preference Selection form.
- Update the status of each sales order detail line in the Sales Order Detail table (F4211) for which you create a pick request.

Whether you create the sales order pick request interactively or through batch processing, you cannot make changes to the order after you begin processing it using the JD Edwards EnterpriseOne Warehouse Management system.

### 9.2.1.3 Pick Requests through Manufacturing Systems

You can set up manufacturing system so that the creation of a parts list triggers the creation of a pick request for the necessary parts.

Some items that in the manufacturing process might be out of stock temporarily, so they are not eligible for picking. The items that are ineligible for picking can be backordered.

After you create a pick request using manufacturing systems, you process the pick request normally through the JD Edwards EnterpriseOne Warehouse Management system. After you create and confirm location suggestions, you also update the parts list in the manufacturing systems. Finally, you reduce the on-hand quantity in the From location and increase the on-hand quantity in the manufacturing area’s To location where manufacturing employees retrieve the parts and build the product.

The system identifies manufacturing pick requests as originating from a work order instead of a sales order.

### 9.2.1.4 Parts List

To create a pick request through manufacturing systems, you must create a parts list that identifies the items to pick. You can create a parts list:

- Interactively, through work order entry
- By batch, with an order processing program
9.2.1.5 Interactive Method
As you enter a work order, you identify the parts to include in the work order parts list. You use this method if you have not defined the product's component parts or if the product must contain nonstandard items.

9.2.1.6 Batch Method
You create a parts list by batch with the Order Processing program (R31410). You typically run the batch program during off-peak hours when more system resources are available.

9.2.1.7 Processing Options in Manufacturing Programs
To create picking requests through manufacturing programs, set the Pick Requests processing option on the Warehouse Tab for Order Processing (R31410) and the Parts List (P3111) processing option on the Versions Tab for the Manufacturing Work Order Processing (P48013) programs.

You can check for item availability at the staging location when you create a pick request.

If the item is attached to a work center, the system does not create a pick request if a sufficient quantity of the item exists in the work center to complete the work order.

The system does create a pick request if there is not enough quantity of the item in the work center to complete the work order. The system splits the parts list line into a commitment for the amount that is available in the work center and a soft commitment for the unavailable quantity. You specify in Manufacturing Constants (P3009) whether the commitment for the work center quantity is hard (committed to a specific location) or soft (committed to the item's primary location).

If the item is not attached to a work center and if you have set the manufacturing order entry program's processing options to check the staging location for item availability, the system does not create a pick request if a sufficient quantity of the item exists in the staging location to complete the work order.

The system creates a pick request if there is not enough quantity of the item in the staging location to complete the work order. The system creates a hard or soft commitment to the default staging location that you specified in the processing options. If you did not specify a default staging location, the system creates a soft commitment to the item’s primary location.

9.2.1.8 Bulk Pick Requests
If you have multiple pick requests that require warehouse personnel to pick the same items from the same locations on a regular basis, you can consolidate the pick requests by items from multiple requests into one bulk picking request. Warehouse personnel can do one pick for the same items, increasing the efficiency of the warehouse.

Using the data selection for Create Bulk Pick Requests (R46200), you can specify the criteria that the system uses to consolidate regular pick requests into a bulk pick request.

When you create a bulk pick request, the system changes the status of individual sales order pick requests from 200 (Request Created) to 298 (Closed Upon Consolidation). This change prevents the system from processing the sales order pick requests twice for the same quantities. Before you create and confirm bulk pick suggestions, you can either remove individual pick requests or all pick requests from the bulk pick request and restore them to their original status (200).
9.2.1.9 Existing Pick Requests

To verify that you have created a pick request for an item specified on a sales order, you locate the request using unique criteria such as an order number, a document type, or an item number.

You also may have to locate an existing pick request to override the shipping location (specified in either Branch/Plant Constants or the preference profile for shipping/receiving locations). For example, the carrier might have arrived at a different shipping dock than you had expected. You can override the shipping location on the Picking Requests Inquiry form if these conditions are met:

- The system has not created a suggestion for the pick request.
- You have set up the warehouse to accommodate multiple shipping locations.
- You have set the Shipping Location processing option on the Picking Option Tab in the Request Inquiry program (P4600) to allow location overrides.

For bulk pick requests, you must review and verify the individual sales order pick requests that are part of the bulk request, so that you can either continue processing the bulk pick request, or remove any or all sales order pick requests from it.

See Understanding Pick Suggestions.


You also can cancel a pick request and stop further processing. For example, to cancel the sales order, when the sales order lines are not being processed by the JD Edwards EnterpriseOne Warehouse Management system, you first cancel the pick request.

9.2.2 Prerequisite

Before you complete the tasks in this section, verify that you have set up inclusion rules on Branch Location Definition to select the steps in the order activity rules for the order type to process. Only the steps that you select can generate pick requests.

9.2.3 Forms Used to Work with Pick Requests

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Service Inquiry</td>
<td>W4210E</td>
<td>Outbound Warehousing Operations (G4612), Sales Order Entry</td>
<td>Create pick requests interactively.</td>
</tr>
<tr>
<td>Picking Requests Inquiry</td>
<td>W4600A</td>
<td>Outbound Warehousing Operations (G4612), Pick Requests</td>
<td>Locate existing pick requests.</td>
</tr>
<tr>
<td>Work Order Parts List</td>
<td>W3111A</td>
<td>Daily Order Preparation - Discrete (G3111), Enter/Change Order</td>
<td>Create the parts list interactively. Identify ineligible items by reviewing the Material Status field.</td>
</tr>
</tbody>
</table>
9.2.4 Creating Pick Requests Interactively

Access the Customer Service Inquiry form.

9.2.5 Setting Processing Options for Sales Order Entry (P4210)

Processing options enable you to specify the default processing for programs and reports.

9.2.5.1 Warehouse

Use these processing options with the JD Edwards EnterpriseOne Warehouse Management system. If you use Warehouse Management, you can specify the mode for pick request processing, and the version of the Location Selection Driver program (R46171).

1. Request Processing Mode

Create a pick request in the JD Edwards EnterpriseOne Warehouse Management system. If you use Warehouse Management, the system can generate a pick request, then process the request into suggestions through the subsystem. You use a pick request to create a suggestion to pick the inventory from a particular location for an order. Values are:

- Leave blank and the system does not generate pick requests.
- Enter 1 and the system generates requests only.
- Enter 2 and the system generates requests and creates the pick request through the subsystem.

2. Subsystem Print Pick Request

Use this processing option if you generate warehouse management pick requests through the subsystem. Specify the version of Print Pick Request (P46171) that is set up for subsystem processing. If no version is specified, the system uses version XJDE0007.

3. Override Next Status

Enter a code (UDC 40/AT) to identify an alternative step in the order process. You must specify a code that has been set up in the Order Activity Rules based on the order type and the line type that you are using. The combination of the beginning status and
the override status must be a valid last status/next status combination in the Order Activity Rules table.

### 9.2.6 Setting Processing Options for Work Order Parts List (P3111)

Processing options enable you to specify the default processing for programs and reports.

#### 9.2.6.1 Warehousing

Use these processing options with the JD Edwards EnterpriseOne Warehouse Management system.

1. **Request Process Mode**
   Specify whether the system generates a warehouse pick request for the items on the parts list.

   **Note:** To use this processing option, all warehouse setup must be complete and warehouse control must be turned on in the Branch/Plant Constants program (P41001).

   Leave blank and the system does not generate a pick request. Enter 1 to generate a request only. Enter 2 to generate a request and process using subsystem

2. **Location Selection Version**
   Specify the version of the Location Selection Driver program (R46171) that the system uses. If the Request Process Mode processing option is set to 2, you should enter a version here. If you leave this processing option blank, the system uses version ZJDE0007 of the Location Selection Driver program. The version controls how the Location Selection Driver program displays information.

3. **Default Staging Location**
   Enter the default staging location for releasing warehouse goods. When the Request Process Mode processing option is set to generate pick requests, the pick requests are staged at the location you enter here.

4. **Check Default Staging Location for Availability**
   Specify whether the system verifies part availability in the default staging location. If the part is available at the staging location, the system does not generate a request for the part.

   **Note:** This processing option applies to parts with no work center location assigned.

   Values are: Leave blank and the system does not verify part availability in the default staging location. Enter 1 to verify part availability in the default staging location.

#### 9.2.7 Setting Processing Options for Order Processing (R31410)

Processing options enable you to specify the default processing for programs and reports.
9.2.7.1 Warehouse Mgt
Use these processing options with the JD Edwards EnterpriseOne Warehouse Management system.

1. Pick Requests
Specify the directed putaway mode for the system to use. Values are:

Enter 1: and the system processes putaway requests only.

Enter 2: and the system processes putaway requests by using the subsystem.

Leave blank and the system does not process putaway requests.

**Note:** If you enter 2, enter the version of the subsystem for the system to use in the Location Driver Processing Version processing option.

2. Location Driver Processing Version (R46171)
Specify the version of the Location Driver Processing program (R46171) for the system to use when processing putaway requests.

**Note:** If you entered 2 in the Pick Requests processing option, you must enter a version in this processing option.

Leave blank and the system uses the XJDE0007 version of the Location Driver Processing program.

Versions control how the Location Driver Processing program displays information. Therefore, you must set the processing options to specific versions to meet needs.

3. Staging Location
Specify the default staging location for moving goods out of the warehouse or select it from the Item/Branch Locations form. The parts picked from the warehouse are staged at this location before use within manufacturing.

4. Staging Location Availability
Specify whether the system checks the staging location for availability. If a part is not available at the staging location, the system does not generate a request. This option only applies to parts without work center locations. Values are:

Enter 1 and the system checks the staging location for available parts.

Leave blank and the system does not check for availability.

9.2.8 Creating Pick Requests by Batch
Select Outbound Warehousing Operations (G4612), Batch Picking Requests.

9.2.9 Creating the Parts Lists Interactively
Access the Work Order Parts List form.

**Component Item No**
Enter the short identifier for the component item number.
Order Quantity
Enter the quantity of units affected by this transaction.

UM
Enter a UDC (00/UM) that identifies the unit of measurement for an amount or quantity. For example, it can represent a barrel, box, cubic meter, liter, hour, and so on.

9.2.10 Creating the Parts List by Batch
Select Daily Order Preparation - Discrete (G3111), Order Processing.

See Also:
■ "Entering Kit Information" in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

9.2.11 Creating Bulk Pick Requests
Select Outbound Warehousing Operations (G4612), Create Bulk Pick Requests.

9.2.12 Locating Existing Pick Requests
Access the Picking Requests Inquiry form.

9.2.13 Locating Existing Bulk Pick Requests
Access the Work With Bulk Request form.

9.3 Working with Pick Suggestions
This section provides an overview of pick suggestions, lists prerequisites, and discusses how to:
■ Create pick suggestions interactively.
■ Create pick suggestions by batch.
■ Create alternate pick suggestions.
■ Confirm pick suggestions interactively.
■ Confirm pick suggestions by batch.
■ Review bulk pick suggestions.
■ Override pick suggestions.
■ Override shipping locations.
■ Create tasks and trips.
■ Create the summary document.
■ Create move tags.
■ Confirm shipment.
■ Set processing options for Shipment Confirmation (P4205).

9.3.1 Understanding Pick Suggestions
After you create pick requests, you create pick suggestions to move items from storage locations to the shipping location. Using versions of the Location Selection Driver
program (R46171) that you create, you can create pick suggestions by batch and you can create alternate pick suggestions to replace existing suggestions with which you do not agree.

9.3.1.1 Batch Method
You normally create pick suggestions by batch to process pick requests on a regular basis. You can compensate for a large volume of sales orders by creating pick suggestions several times each day. You can also compensate for a large volume by running the Picking Location Selection program in Subsystem Parallel Processing. You typically run batch programs during off-peak hours when more system resources are available.

While processing pick suggestions, the system excludes all locations that do not have adequate available inventory or inbound inventory.

**Note:** If you are using license plates, the system does not consider inbound quantities.

9.3.1.2 Interactive Method
You can create suggestions interactively to select locations for picking. You can either allow the system to suggest a location or manually specify picking information such as the quantity, the unit of measure, and the location.

If you want the system to suggest locations automatically when you access the Manual Planner form, you must set the Auto Location Selections processing option on the Manual Planner tab for the Request Inquiry (P4600) program.

When you run the Location Selection Driver program, the system can:

- Select all outstanding pick requests based on data selection
- Update each request’s status in the Warehouse Requests table (F4600)
- Create picking location movement suggestions
- Print audit reports
- Print move documents.

You control which functions that the system performs by setting processing options in the Location Selection Driver (R46171) program. You can also set processing options in these programs:

- Task and Trip Creation (R46471)
- Move Slips (R46472)
- Move Tags (R47463)

If you are using automatic replenishment, as you create suggestions for picking locations, the system runs the appropriate programs to create and process replenishment requests for depleted picking locations.

9.3.1.3 Alternate Pick Suggestions
You can create alternate pick suggestions if you do not agree with the system’s suggestions for picking locations. You create alternate suggestions by running a version of the Location Selection Driver program. You set the Resuggest Requests processing option on the Resuggestions Tab and the appropriate data selection.
Creating alternate suggestions replaces any previous location suggestions. With alternate suggestions, you can access new inventory locations that you might have added since you created the first suggestions or new inventory that has become available in existing locations.

If you have not changed inventory locations in the warehouse, or the inventory levels have not changed and you want to create suggestions for locations that differ from previous suggested locations, you must change the picking instructions table or other setup information, such as Process Selection, Fixed Locations, Max or Min quantities/percentages, and so on. For example, you could change the picking instructions table to select a new pick zone or to use a different tiebreaker rule to select locations. If you do not change the picking instructions, the Location Selection Driver program suggests the same locations as in the previous suggestions.

When you run the Location Selection Driver program for resuggestions, the system can:

■ Delete existing pick suggestions for the request and resets the commitments caused by or related to the original suggestions in the Item Location (F41021), Location Detail Information (F4602), and License Plate Item Commitments (F46L12) files.
■ Reset each request’s status in the F4600
■ Create alternate picking location suggestions
■ Print audit reports

You control which functions the system performs by setting processing options in the Location Selection Driver program. For interactive and batch methods, the system picks the License Plates LPN first, then loose items and lastly, items of an LPN.

**9.3.1.4 Pick Suggestion Confirmation**

If you agree with the system’s suggestions for picking locations, you confirm them interactively or by batch. If you do not agree, you can override the suggestions and specify a location of choice, or you can cancel the existing suggestions and stop further processing.

You must confirm suggestions for picking, packing, and shipping for items and for cartons.

When you confirm suggestions for picking, you:

■ Reduce on-hand inventory in the picking location
■ Relieve the commitment of inventory in the picking location
■ Increase on-hand inventory in the shipping location
■ Commit inventory to the shipping location

Pick confirmation ensures that the system’s records match actual inventory movements by creating and updating these files:

■ F41021
■ Item Ledger File (F4111)
■ F4600
■ Warehouse Suggestions (F4611)
■ Warehouse Task Header (F4601)
■ Sales Order Detail File for sales order picking
Working with Pick Suggestions

- S.O. Detail Ledger File (F42199) for sales order picking
- WO Parts List File (F3111) for work order picking
- Pack Confirm File (F4216)
- Carton Detail File (F4620)

Additionally, if license plates are activated for the branch/plant the system creates or updates records in these files:

- F4602
- License Plate Master File (F46L10)
- License Plate Item Detail File (F46L11)
- F46L12
- License Plate History File (F46L99)

If you use pick/pack/ship functionality and you are picking sales orders the system also creates or updates records in these files:

- F4620
- Location Capacity (F46L30)

When you are working with pick suggestions for cartons, you can set the Carton Detail Information processing option on the Carton Detail Tab for the system to update the F4620. The F4620 table contains detail information about the contents of a carton and the system updates this table with the most current carton detail information each time you perform pick confirmation for a task (a task is a group of suggestions).

Before you confirm the pick suggestions for cartons, you also can specify the version of the Carton Reorganization program (P4620) to use.

For bulk pick suggestions, you can review the sales order detail lines in the bulk pick suggestion during the confirmation process before you actually confirm the bulk pick suggestion. After you confirm the bulk pick suggestion, you can run Bulk Pick Detail Report (R46210), which lists each sales order detail line from the bulk pick suggestion that you confirmed. Typically, you use the information to assist you in filling each sales order.

9.3.1.5 Batch Confirmation

You can confirm pick suggestions by batch when you run the Batch Confirmations program (R4617). However, before you confirm pick suggestions by batch, you should review and override suggestions as necessary because after you confirm suggestions, you cannot reverse the confirmations.

The system automatically confirms suggestions if there are no errors during the confirmation process and prints all the suggestions that were not confirmed. If you set the appropriate processing option, the system prints the corresponding description of the error on the report after processing all suggestions.

9.3.1.6 Commitment Swap

You can use the Pick Confirmation (P4617) application to swap commitments. You can swap commitments when two conditions are met:

- The license plates you want to swap are in the same location with the same lot expiration date.
- The license plate is a full license plate.
If the conditions are met, the system displays a warning message indicating that the system is swapping commitments for the license plate suggested with another suggestion’s license plate’s commitments. Click Confirm to allow the commitment swapping of license plates.

If the conditions are not met, the system does not allow you to swap commitments and displays an error message specifying why swap commitments are not allowed.

When you confirm a swapped license plate suggestion, the system updates the suggestion containing the original license plate with the swapped license plate from another suggestion and updates the suggestion where the swapped license plate was committed, with the license plate from the original suggestion.

The system also updates the License Plate Commitment table to reflect the change for both license plate numbers.

The system updates the pick suggestions with the swapped license plates to reflect the license plate swapping. To fulfill demand, you can swap one license plate with multiple uncommitted license plates that have smaller quantities.

### 9.3.1.7 Shipping Locations

If you have set up the warehouse to accommodate multiple shipping locations and have set the Shipping Location processing option on the Display Tab for the Warehouse Movement Confirmations program (P4617) to allow shipping locations to be overridden, you can override shipping locations that the system has suggested. You also can override the shipping location for a single suggestion, override the shipping location for the entire request, shipment, load, and so.

**Note:** When you override the shipping location, the change occurs immediately in the system, even if you cancel the change on the Movement Confirmation form.

### 9.3.1.8 Technical Considerations for Choosing an Option

When you override a shipping location, the system can update the appropriate tables with the new location. On the Override Shipping Location form, various options allow you to select which tables the system updates with the new location. You select the appropriate option based on the system and program from which you access the Override Shipping Location form. The options include:

<table>
<thead>
<tr>
<th>Option</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipment Number</td>
<td>When you select this option, the system uses the shipment number contained in the Shipment Routing Steps table (F4941) for data selection. The system also updates location information contained in the F4941, the F4600, and the F4611. If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Transportation Management system’s Work With Shipments program or Work With Loads program (P4960) and select this option, the system updates the routing step with the new location.</td>
</tr>
<tr>
<td>Load Number</td>
<td>When you select this option, the system uses the load number contained in the F4941 for data selection. The system also updates location information contained in the F4941, the F4600, and the F4611. For the JD Edwards EnterpriseOne Transportation Management system’s Work With Shipments program and Work With Loads program, the system updates the routing step with the new location.</td>
</tr>
<tr>
<td>Option</td>
<td>Usage</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Carrier Number</td>
<td>If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Transportation Management system’s Work With Shipments program or Work With Loads program and select this option, the system uses the ship to address contained in the F4941 for data selection and updates the location information in the F4941, the F4600, and the F4611. If you accessed the Override Locations form from the JD Edwards EnterpriseOne Warehouse Management system’s Request Inquiry program and select this option, the system uses the ship to address that is contained in the F4600 for data selection. The system updates location information in the F4600 and the F4611. If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Warehouse Management system’s Warehouse Movement Confirmations program and select this option, the system uses the ship to address that is contained in the F4611 and updates location information only in that table.</td>
</tr>
<tr>
<td>Original Location</td>
<td>If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Transportation Management system’s Work With Shipments program or Work With Loads program and select this option, the system uses the original location that is contained in the F4941 for data selection and updates the location information in the F4941, F4600, and F4611. If you accessed the Override Locations form from the JD Edwards EnterpriseOne Warehouse Management system’s Request Inquiry program and select this option, the system uses the original location that is contained in the F4600 for data selection. The system updates location information in the F4600 and the F4611. If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Warehouse Management system’s Warehouse Movement Confirmations program and select this option, the system uses the original location that is contained in the F4611 and updates location information only in that table.</td>
</tr>
<tr>
<td>Ship To Address</td>
<td>If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Transportation Management system’s Work With Shipments program or Work With Loads program and select this option, the system uses the carrier number that is contained in the Shipment Header table (F4215) for data selection. The system updates location information that is contained in the F4215, F4600, and F4611. If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Warehouse Management system’s Request Inquiry program and select this option, the system uses the carrier number that is contained in the F4600 for data selection. The system updates location information in the F4600 and the F4611. If you accessed the Override Shipping Location form from the JD Edwards EnterpriseOne Warehouse Management system’s Warehouse Movement Confirmations program and select this option, the system uses the carrier number that is contained in the F4611 and updates location information only in that table.</td>
</tr>
<tr>
<td>Requests Number</td>
<td>If you accessed the Override Locations form from the JD Edwards EnterpriseOne Warehouse Management system’s Request Inquiry program and select this option, the system uses the requests number that is contained in the F4600 for data selection. The system updates location information in the F4600 and the F4611.</td>
</tr>
</tbody>
</table>
These options do not apply to bulk pick requests. To create a bulk pick request, you consolidate all pick requests into one bulk pick request so that the personnel who perform the picking can pick items for many sales orders in a single trip rather than having to make multiple trips. Therefore, you cannot override the To location information for a bulk pick request unless the locations are the same. You also cannot override the location for the orders, shipments, and loads in a bulk pick request unless the corresponding sets of information are the same. Finally, you cannot override the location for a bulk pick request or a regular request with a status equal to or greater than 255 (Bulk Request in Confirmation). However, you can override the location by creating a new suggestion.

9.3.1.9 Task and Trip Assignment and Move Documents

After you have created suggestions for putaway, picking, or replenishment, you can create task and trip assignments (if you have not done so when creating suggestions) and customized move documents to help the warehouse personnel move inventory efficiently through the warehouse.

The system can assign task and trip numbers to suggestions when you create and process suggestions. A task is a group of suggestions, and a trip is each suggestion in the task.

When you run the Task and Trip Creation program (R46471), it is important to activate data sequencing so that you can verify the information that the system uses to assign task and trip numbers. Data sequencing is also useful for determining how to separate the tasks for the selected suggestion.

The Task and Trip Creation program interacts with these programs:

- Move Slips (R46472)
- Move Tags (R47463)

When you run the Task and Trip Creation program, you can specify this information:

- Maximum quantity information, such as the maximum number of tasks and trips (by leaving the default value of blank or zero, you can specify an unlimited number of tasks and trips).
- Whether you want the system to print the supporting documents (R46472) with the task and trip assignments.
- Whether you want the system to recommend cartons during picking.
- Whether the system generates the F4620, which contains detailed information about the contents of each carton.
- Which version of the Carton Reorganization program the system uses.
After you run the Task and Trip Creation program, you can print a summary document to review task and trip assignments.

9.3.1.10 Summary Document
Use the Move Slips program to print a summary document that contains information for all the suggestions that you created. The summary document is also referred to as a move slip. This report page breaks by the task number. The summary document includes information such as:

- Trip numbers
- To and From locations
- Item numbers and descriptions
- Quantity information
- Unit of measure information
- Carton recommendation information

After you create and review the summary document, you can print move tags that enable warehouse personnel to plan the movement of inventory throughout the warehouse.

9.3.1.11 Move Tags
When you run the Move Tags program (R46473), the system creates move tags for the suggested location during putaway, picking, and replenishment. A move tag contains information such as:

- The item that warehouse personnel are moving
- The item unit of measure
- To and From locations

You can print tags for each trip or for each unit of measure moved on the trip, depending on the definition of the item on Item Unit of Measure Definition Revisions. You can scan the move tags to facilitate movements, storage, confirmation, and other downstream material handling and counting operations.

Examples of other Warehouse Management programs from which you can automatically print move tags (by setting processing options or by choosing row exits or form exits) are:

- Batch Putaway Reservations (R461301)
- Location Selection Driver
- Move Slips
- Warehouse Movement Confirmations

9.3.1.12 Shipment Confirmation
After you finish processing a pick suggestion, you must indicate that the items have left the warehouse for shipment to the customer.

**Important:** You must actually ship the item and relieve the inventory when you confirm shipment to avoid balance discrepancies between system inventory records.
You must list the sales order document type (for example, SO) in the user-defined codes table 40/IU to permit the system to update the inventory records when you confirm shipment. The system then ensures that records match actual inventory movements by updating these tables:

- F41021
- F4602

Before you confirm shipment for a carton, you have the option of reorganizing its contents and its placement within a shipment before shipping. The Carton Reorganization program not only enables you to reorganize a carton's contents, but also enables you to create and organize new cartons.

You can use the Shipment Confirmation Carton Status and the Reconcile Carton Detail to Shipment Detail processing options on the Carton Detail tab to ensure that cartons have passed the necessary edits before you confirm shipment. For example, after all the labels have been assigned to the shipment, you can change the carton status to indicate that carton detail has been reconciled to shipment detail. If all cartons for the shipment are not at that status, the system cannot confirm the shipment. This process is optional, because you can leave the status blank to proceed without checking the carton status.

You can also perform this function using the batch version of Shipment Confirmation (R42500). The batch version retrieves the values from the processing options of the interactive version specified in its processing options.

### 9.3.2 Prerequisites

Before you complete the tasks in this section:

- Verify that you have set up order groups and process groups for stock items.
- Verify that you have set up picking instruction tables to designate specific locations based on the items' order and process groups.
- Verify that the system has created suggestions before you create summary documents.
- Verify that the system has created suggestions before you create move tags.

### 9.3.3 Forms Used to Work with Pick Suggestions

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Picking Location Planner</td>
<td>W4600B</td>
<td>Outbound Warehousing Operations (G4612), Pick Requests</td>
<td>Create pick suggestions interactively.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on Picking Requests Inquiry. Enter the</td>
<td>Note: If you have set the processing option on the Manual Planner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>appropriate quantity, unit of measure, and location.</td>
<td>tab to automatically suggest locations, you do not select the row to create suggestions.</td>
</tr>
</tbody>
</table>

---

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### 9.3.4 Creating Pick Suggestions Interactively

Access the Manual Picking Location Planner form.

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Transactions</td>
<td>W4617</td>
<td>Outbound Warehousing Operations (G4612), Pick Confirmation</td>
<td>Confirm pick suggestions interactively.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Confirm from the Row menu on Work With Warehouse Confirmations. Click Process.</td>
<td></td>
</tr>
<tr>
<td>Bulk Pick Detail</td>
<td>W4617D</td>
<td>Select a record and then select Bulk Pick Detail from the Row menu on Work With Warehouse Confirmations. Complete the Priority field to indicate the order in which you want the system to process each pick request.</td>
<td>Review each pick request in the bulk pick requests before confirming the bulk pick suggestion.</td>
</tr>
<tr>
<td>Override Suggestion</td>
<td>W4617C</td>
<td>Select a record and then select Override from the Row menu on Work With Warehouse Confirmations.</td>
<td>Override pick suggestions.</td>
</tr>
<tr>
<td>Override Shipping Location</td>
<td>W460501A</td>
<td>For multiple suggestions, select a record and then select Override All To Loc from the Form menu on Work With Warehouse Confirmations. For single suggestions, select a record and then select Override To Locn from the Row menu on Work With Warehouse Confirmations.</td>
<td>Override the shipping location suggestions.</td>
</tr>
<tr>
<td>Shipment Confirmation</td>
<td>W4205K</td>
<td>Outbound Warehousing Operations (G4612), Ship Confirmation</td>
<td>Confirm shipment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on Work with Shipment Confirmation.</td>
<td></td>
</tr>
</tbody>
</table>
9.3.5 Creating Pick Suggestions by Batch
Select Outbound Warehousing Operations (G4612), Process Pick Requests.

9.3.6 Creating Alternate Pick Suggestions
Select Outbound Warehousing Operations (G4612), Process Pick Requests.

9.3.7 Confirming Pick Suggestions Interactively
Access the Movement Confirmation form.

9.3.8 Confirming Pick Suggestions by Batch
Select Outbound Warehousing Operations (G4612), Batch Picking Confirmations.

9.3.9 Reviewing Bulk Pick Suggestions
Access the Bulk Pick Detail form.

9.3.10 Overriding Pick Suggestions
Access the Override Suggestion form.

9.3.11 Overriding Shipping Locations
Access the Override Shipping Location form.

9.3.12 Creating Tasks and Trips
Select Warehouse Move Documents (G4621), Create Tasks and Trip.

9.3.13 Creating the Summary Document
Select Warehouse Move Documents (G4621), Summary Document.

9.3.14 Creating Move Tags
Select Warehouse Move Documents (G4621), Move Tags.

9.3.15 Confirming Shipment
Access the Shipment Confirmation form.
To confirm shipments:
1. Revise these fields as necessary, and click OK:
   - Quantity Shipped
   - Location
   - Lot/Serial
   - Quantity Backordered
   - Quantity Canceled
   - Carrier Number
   - Actual Ship Date
2. On Work with Shipment Confirmation, confirm detail lines by choosing:
   - Confirm Shown Rows from the Form menu, to confirm all order detail lines
     that the system displays according to search criteria.
   - A row and then select Confirm Line from the Row menu, to confirm an order
detail line.

3. On Shipment Confirmation, to select order detail lines for confirmation, enter a
   value in the Sel = 1 field.
   If you have activated the processing option to automatically select order detail
   lines, the system automatically selects all detail lines for confirmation.

4. To change the line default information, select Line Defaults from the Form menu.

5. On Shipment Confirmation Line Defaults, enter values in these fields and click
   OK.
   - Container ID
   - Carrier Number
   - Actual Ship Date
   - Actual Ship Time

6. On Shipment Confirmation, to select alternative locations or assign serial
   numbers, select the row and then select Select Location from the Row menu.

7. On Select Multiple Locations, enter values in these fields and click OK:
   - Location
   - Lot/Serial

8. On Shipment Confirmation, click OK to confirm the selected order detail lines.
   Based on the processing option selection, the system might display the Additional
   Line Items form.

9. On Additional Line Items, you can enter additional non-inventory lines and click
   OK.
   Depending on the processing option selection, the system might display the Pack
   Confirm Detail Revisions form.

See Working with Standard Pack Carton Recommendations.
See Reorganizing Cartons and Items in a Shipment.

9.4 Working with Carton Detail

This section provides an overview of carton detail and discusses how to:
- Work with carton detail.
- Work with label information.

9.4.1 Understanding Carton Detail

Carton detail provides the ability to create and update container information, serial
number information, shipment pieces information, and shipment tracking number
information during cartonization, pick confirmation, pack confirmation and carton
reorganization.
Note: Both the Warehouse Management and Transportation Management systems must be activated.

You use the Carton Reorganization program for these four distinctive processes that can be used as a group or individually:

- Cartonization and carton reorganization
- Shipment pieces
- Tracking number
- Serial Numbers

9.4.1.1 Cartonization and Carton Reorganization

When you use this process you can:

- Reorganize cartons and items for the shipment.
- Pack items in a carton or tote.
- Mix different items in a carton or permit only one item per carton to support shipping items stored in the warehouse in shippable containers.
- Add weight restrictions to warehouse cartonization
- Create dimensionless (generic) cartons.

When you use the cartonization process, the system considers all available shipping containers and utilizes the maximum capacity of each container. The system recommends the shipping container and items to pack in the shipping container. After you enter a sales order and the shipment is approved, the system creates move slips recommending the container and items in each container for each order. You can use the Carton Detail Inquiry (P4621) program to locate a particular order or shipment and display all the details for each individual container.

The Carton Detail Information (F4620) table, uses data from the Warehouse Suggestions (F4611), SO Pack Confirm Detail (F4216), Shipment Pieces (F4943), and Shipment Reference Numbers (F4217) tables.

You use the Carton Reorganization (P4620) program to move items into existing or new cartons, combine items into one carton, combine cartons on a pallet, or remove items from a carton. If you have enabled UCC 128 processing, you can manually enter UCC-128 information or have the system enter it for you.

When you set up dimensionless containers, cartons, containers, and totes do not have to be defined with dimensional information if they do not attribute to the space availability calculation for a warehouse location. The dimensionless carton automatically have the dimensions of the item UOM you set up in the Item Unit Of Measure Definition (P46011) program. You can use the same carton for different items and different UOMs using the item UOM dimensions. When the system uses a dimensionless carton, the carton information is not stored in the Container field in the Warehouse Suggestions (F4611) table and it does not display on the Move Slips (R46472). You access the carton information on the Carton Detail Inquiry (P4621) program. The carton is available for reorganization using the Carton Reorganization program after the suggestion has been confirmed in the Warehouse Movement Confirmations (P4617) program.
9.4.1.2 Shipment Pieces
The system can automatically generates shipment pieces through the Carton Reorganization program based on the carton details in the Carton Detail Information (F4620) table. Carton Reorganization updates the Container ID in the Shipment Pieces (F4943) record if the processing option is set to update. You must enter 1 in the Create Transportation Shipping Pieces table (F4943) processing option in the Carton Reorganization program.

The number of shipment pieces is contained in the total number of shipment pieces record for that shipment. A shipment piece is the largest shipping unit. If the F4620 contains several carton details and during the carton reorganization process the system places all of the containers on a pallet, then the pallet is one shipment piece. Therefore, the system creates only one record in the Shipment Pieces (F4943) table.

9.4.1.3 Tracking Number
The system can automatically generate shipment tracking numbers. You issue the shipment tracking number to the customer and this enables them to track the progress of the shipment. Since there are a wide variety of tracking numbers used in the transportation industry, you have the ability to control the type and structure of the tracking number that the system generates. You must enter 1 in the Create Shipment Tracking Numbers (F4217) and Create Transportation Shipping Pieces table (F4943) processing options in the Carton Reorganization program. You must also set up the individual tracking number generation specifications for each carrier and mode of transportation. The Work With Generating Tracking Numbers (P49005) program enables you to enter specifications for each individual segment of the tracking number the system generates. A tracking number can consist of one or many segments. When you run the Carton Reorganization program, the reference number and the qualifier are updated in the Shipment Reference Numbers (F4217) records. The reference qualifier is a value from the 41/X6 UDC table that describes the type of reference number (B/L, AWB, Shipping Label). The shipment tracking number appears in the Reference Number field on the Shipment Pieces Revision form.


9.4.1.4 Carton Serial Numbers
Carton serial numbers include:

- UCC 128 numbers
- EPC numbers
- Label numbers

You can create unique numbers that identify a specific carton in a shipment. These numbers are placed on labels and attached to the cartons they identify. The numbers represent the carton on the ASN and are arranged in a hierarchy. The system automatically creates serial numbers for cartons based on the UCC 128 standard. Although the system creates and stores two layers, Tare and Pack, the system creates only one layer of cartons. If you create any additional layers manually, such as putting a case on a pallet, the original Tare or Pack numbers might be overwritten.

The process of using Advanced Ship Notices (ASN) with serialized shipping container labels is commonly known as UCC 128 compliance. An Advanced Ship Notices (ASN) is an EDI document sent by the supplier to the customer when goods are shipped. It identifies what was shipped and how it was shipped. This EDI transaction in combination with a bar code serialized shipping container label (applied by the
supplier before shipment), automates the receipt process. As the customer receives the goods, the shipping labels are scanned and then matched to the Advanced Ship Notices (ASN) to generate internal transaction records.

Using the Carton Reorganization program, the system generates carton ID numbers to track nested, serialized containers (cartons) of either mixed or homogeneous product within larger unit loads. The carton ID becomes the header number for a record. The record contains the carton’s inventory data, which includes content information, gross weight and the net weight of the contents of each carton.

Electronic Product Codes (EPC) work with Radio Frequency Identification (RFID) Processing. They are a unique product code comprising varying numbers of different segments, each with varying lengths. The system processes EPCs for outbound and inbound shipment processing. You can use an EPC number in addition to a UCC-128 or label next number. The system generates EPCs when you run the Carton Reorganization program.

See [Understanding EPC Numbers for Outbound Shipments](#).

You use the label preferences to generate label numbers. You can set up these advanced preferences for processing label information:

<table>
<thead>
<tr>
<th>Preference</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label Processing (Preference Type 37)</td>
<td>You use this preference to activate label processing at the branch/plant level. You specify the party ID (values for Party Type 1 and 2) in the Demand Addresses table (F40R14) to retrieve for outbound label data. An example of a party ID is the supplier code or plant code. For inbound label data, you specify the version for Carton Reorganization, and specify whether to automatically allocate sales order quantity to cartons. You must also specify the response function, which is the name of the third-party that processes the XAPI response.</td>
</tr>
<tr>
<td>Label Serial Numbers (Preference Type 38)</td>
<td>You use this preference to specify the label next number for outbound and inbound labels, and UCC128 information for inbound labels, including:</td>
</tr>
<tr>
<td></td>
<td>■ Company UCC code</td>
</tr>
<tr>
<td></td>
<td>■ SSCC document company</td>
</tr>
<tr>
<td></td>
<td>■ SSCC document type</td>
</tr>
<tr>
<td></td>
<td>■ Label generation function</td>
</tr>
<tr>
<td></td>
<td>■ Label validation function</td>
</tr>
<tr>
<td>Carton Label (Preference Type 39)</td>
<td>You use this preference to specify which cartons have a serial number assigned to them and whether the system creates a SSCC Tare style or a Pack style UCC 128 serial number. You use this preference any time the system automatically creates carton serial numbers, for example from the Task and Trip, Pick Confirmation, Standard Pack Recommendations programs, and the Carton Reorganization (P4620) processing option is set to use the Carton Label Preference. If the system creates UCC 128 serial numbers and the carton label preference is not active, the system creates labels for all cartons and uses the labels as default values for pack style numbers. <strong>Note:</strong> You cannot use Items and Item Groups with this preference.</td>
</tr>
</tbody>
</table>

---

Working with Picking 9-23
Note: You also use preferences to activate automatic sales order allocation. If this processing is not active, you can allocate sales order information after scanning is complete but before shipment confirmation by using the Allocate Sales Orders to Cartons by Shipment program or through an option in Carton Reorganization.

9.4.2 Working with Labels

Labels are an integral piece of the packing and shipping process. You create numbers to identify cartons in a shipment. These numbers are placed on labels and attached to the cartons they identify.

You can use the Purge Unusable Label Numbers program (R4622P) to delete rows from the F4622. Use data selection to configure how the system purges the records.

After third-party scanning process is complete, you can automatically allocate the quantity of a sales order to cartons by running the Allocate Sales Orders to Cartons program (R46155). Running this program links a sales order line for the Advance Ship Notice and carton tracking. You can use the processing options to specify whether to allocate all quantities or allocate remaining quantities and whether to update the F4620 table. You can also use this program to reconcile cartons against the shipment.

You reconcile shipments to compare item quantities on the shipment to the item quantities in the carton detail. During reconciliation, the system automatically advances the carton status in carton detail to the next user-defined status, such as Complete. You can use the carton status to enforce the shipment to pass reconciliation before confirming the shipment. Reconciling is an optional step.

Places where you can begin reconciliation include:

- Third-party reconciliation performed after scanning.
- Manual reconciliation using the Allocate Sales Orders to Cartons by Shipment program.
- Carton Reorganization application.

You can reconcile shipments when you begin scanning the labels for the shipment. The labels are linked to the carton detail, and the system retrieves the detail row that matches the shipment number, item, ship to, and quantity.

If you find discrepancies while reconciling shipments, you can add or remove sales order lines from the shipment or adjust item quantities using the Carton Reorganization program. After the item quantities have been balanced, you can perform the reconciliation again to update the carton status. Review the work center for messages containing the specific items that failed. The shipment is reconciled when the carton status is at Complete. You can use the Enter the Carton Status for Reconciled Cartons processing option on the Status tab in the Carton Reorganization program to set the reconciled carton status.

The system uses the F4620 table to process information when you reconcile shipments.

9.4.3 Prerequisites

Before you complete the tasks in this section, ensure you have set up UCC 128 processing.
9.4.4 Forms Used to Work with Carton Detail

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carton Reorganization</td>
<td>W4620C</td>
<td>Shipping and Packaging Management (G4615), Carton Reorganization</td>
<td>Reorganize cartons by adding or removing items.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a row and click Select on Work With Shipment Cartons.</td>
<td>Create shipment pieces.</td>
</tr>
<tr>
<td>Carton Detail Inquiry</td>
<td>W4621A</td>
<td>Shipping and Packaging Management (G4615), Carton Detail Inquiry</td>
<td>Review carton detail information.</td>
</tr>
<tr>
<td>Unusable Label Number Revision</td>
<td>W4622B</td>
<td>Shipping and Packaging Management (G4615), Unusable Label Numbers</td>
<td>Enter unusable label information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and click Select on the Work With Unusable Label Numbers.</td>
<td></td>
</tr>
<tr>
<td>Work With Shipment Cartons</td>
<td>W4620A</td>
<td>Shipping and Packaging Management (G4615), Carton Reorganization</td>
<td>Reconcile a shipment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Reconcile Detail from the Row menu on Work With Shipment Cartons.</td>
<td></td>
</tr>
</tbody>
</table>

9.4.5 Creating Carton Detail
Access the Carton Reorganization form.

9.4.6 Reviewing Carton Detail
Access the Carton Detail Inquiry form.

9.4.7 Entering Unusable Label Information
Access the Unusable Label Number Revisions form.

**Label Data Identifier**
Enter a value that specifies the type of label for the advance ship notice (ASN).

**Reason Code**
Enter a UDC (46/UL) that explains why a label serial number is unusable.

**Container Code**
Enter a UDC (46/EQ) that identifies a storage container or a shipping carton. A storage container can be an open container where items are stored on the container (for
example, a pallet), or a closed container where items are stored in the container (for example, a box). You use the Container and Carton Codes program (P46091) to define storage containers.

**Customer Carton ID**
Enter a code that the customer uses to represent a carton in the system.

**Container Item Number**
Enter a number that the system assigns to an item. It can be in short, long, or third item number format.

### 9.4.8 Running the Purge Unusable Label Numbers program (R4622P)
Select Shipping and Packaging Management (G4615), Purge Unusable Label Numbers.

### 9.4.9 Running the Allocating Sales Orders to Carton by Shipment program (R46155)
Select Shipping and Packaging Management (G4615), Allocate Sales Orders to Cartons.

### 9.4.10 Setting Processing Options for Allocate Sales Orders to Cartons by Shipment (R46155)
Processing options enable you to specify the default processing for programs and reports.

#### 9.4.10.1 Processing
Use these processing options to specify how the system allocates sales order quantities and reconciles carton detail.

1. **Allocate Sales Order Quantity**
Enter 1: to reallocate all quantity, 2: to allocate remaining quantity, or leave blank and the system does not allocate quantity. Specify whether the system allocates sales order detail information to all cartons in the shipment or only to those cartons to which no allocation has taken place.

2. **Reconcile Carton Detail**
Leave blank and the system does not update the Carton Detail Information table (F4620) with the information that is contained in the Shipment Detail table (F4942). Enter 1: and the system updates the Carton Detail Information table (F4620) with the information that is contained in the Shipment Detail table (F4942).

Specify whether the system reconciles the item quantity for a shipment in the Carton Detail Information table (F4620) with the item quantity for the matching shipment in the Shipment Detail table (F4942).

#### 9.4.10.2 Version
Specify the version for Carton Reorganization (P4620).

1. **Carton Organization (P4620)**
Specify the version of the Carton Reorganization program (P4620) that the system uses. If you leave this processing option blank, the system uses version ZJDE0001.

#### 9.4.10.3 Status
Specify the status for reconciled cartons.
1. **Reconciled Carton Status**
   Enter a UDC (46/CS) to specify the status for reconciled cartons. The cartons status is updated for all of the cartons on the shipment when all of them have been reconciled successfully. If cartons are reconciled, then a reconciled carton status is required.

   Status to which successfully reconciled cartons are updated.

9.4.11 **Reconcile Inbound Shipment Information**

   Access the Work With Shipment Cartons form.

   See “Confirming Shipments” in the *JD Edwards EnterpriseOne Applications Sales Order Management Implementation Guide*.

   See *Reorganizing Cartons and Items in a Shipment*. 
10 Working with Replenishment

This chapter contains the following topics:

- Section 10.1, "Understanding Replenishment"
- Section 10.2, "Working with Replenishment Requests"
- Section 10.3, "Working with Replenishment Suggestions"
- Section 10.4, "Working with Replenishment to Random Locations"

10.1 Understanding Replenishment

Replenishment is the process of refilling picking locations with items. You obtain these items from a replenishment location that you have set up to refill picking locations. You can tie specific replenishment zones to specific picking locations or picking zones.

You can create a replenishment request in response to picking that depletes the items in a location. You use replenishment requests to generate suggestions for locations from which to replenish items. The system tracks the items in each location. You can find locations containing the items you must replenish and then create suggestions to replenish from those locations.

You can use the locations that the system suggests for you and then confirm movement of the items from the chosen replenishment location to the picking location.

When you select to replenish to random picking locations, you group the locations to which you want to replenish items to maximize the efficiency of the replenishment process. When you replenish to fixed locations, you replenish to only one location at a time. When you replenish to random locations, you can replenish items in multiple locations when you run the Replenishment to Random Locations program (R461602).

If the branch/plant has license plate functionality activated, the system enables you to select the license plate record with the location. You can create putaway or replenishment requests for items and license plates.

10.2 Working with Replenishment Requests

This section provides an overview of replenishment requests and discusses how to:

- Create replenishment requests interactively.
- Set processing options for Manual Replenishments (P46100).
- Create replenishment requests by batch.
- Create replenishment requests automatically
- Set processing options for Location Selection Driver (R46171)
- Locate existing replenishment requests.

### 10.2.1 Understanding Replenishment Requests

You create replenishment requests to refill picking locations in which items are depleted. A replenishment request contains information about the item, such as:

- Branch/plant
- Item number
- Unit of measure
- Quantity
- License plate number

The system uses this information to create suggestions for replenishment, based on the replenishment instruction tables and other setup that you define.

To verify that you have created a replenishment request for an item that you just picked, you locate the request using unique criteria, such as an order number, a document type, or an item number.

You also can cancel a replenishment request and stop further processing. For example, if the customer cancels a sales order, you would cancel the pick request for the order. Because you did not pick those items, you may not want to replenish the picking location.

#### 10.2.1.1 Interactive Method

Use the Manual Replenishments program to create replenishment requests interactively.

#### 10.2.1.2 Batch Method

You create replenishment requests by batch under normal warehouse operating conditions. The system determines all depleted fixed picking locations and creates replenishment requests for them. You typically run the batch program during off-peak hours when more system resources are available.

Each fixed picking location has two letdown points. These letdown points represent the quantity level that determines whether the Fixed Location Replenishment program (R461601) creates a replenishment request:

- Normal replenishment (for example, 25 percent location capacity)
- Minimum replenishment (for example, 10 percent location capacity)

You can set the Enter the Letdown Point processing option on the Replenishment tab for the Fixed Location Replenishment program to use either the normal or minimum replenishment point when you create replenishment requests. Typically, you use the normal replenishment point for the batch replenishment process (which you usually run once each day). You use the minimum replenishment point for automatic replenishments, which can occur at the time you create pick suggestions.

You must also set the Method to Use for Replenishment Quantities processing option on the Replenishment tab for the Fixed Location Replenishment program to determine the quantity that the system should replenish, as follows:

- Economic (a specific quantity that you determine).
Working with Replenishment Requests

The value that is stored in the Fixed Picking Location file (F46012).

- Maximum (the quantity required to completely refill the location).

  Calculated during the request creation based on some Putaway and Item Setup.

When you create replenishment requests by batch, the system creates suggestions immediately. This helps to prevent over-replenishment because you would move inventory quickly before a pick cancellation could eliminate the need for a location’s replenishment.

When you run the Fixed Location Replenishment program, the system can:

- Select the picking locations that are below the normal or minimum replenishment point
- Create replenishment requests
- Create replenishment suggestions
- Update each request status in the Warehouse Requests table (F4600)
- Assign tasks and trips
- Print movement tags and slips
- Print audit reports

You control which functions the system performs by setting processing options in the Fixed Location Replenishment program.

10.2.1.3 Automatic Method

Use the Location Selection Driver program to automatically replenish picking locations when picking depletes the stock to minimum replenishment levels. This process keeps picking locations sufficiently stocked.

With automatic replenishment, the system creates a replenishment request when it cannot fill a pick request from fixed picking locations. When you create picking location suggestions, the system can:

- Create replenishment requests for depleted picking locations
- Create replenishment location suggestions
- Assign tasks and trips
- Print movement tags and slips
- Print audit reports
- Confirm replenishment suggestions

You control which functions the system performs by setting processing options in each program that the subsystem controls.

10.2.1.4 Existing Replenishment Requests

To verify that you have created a replenishment request for an item that you just picked, you can locate the request using unique criteria, such as an order number, a document type, or an item number.

You also can use the Replenishment Requests program to cancel replenishment requests and stop further processing.
10.2.2 Prerequisites

Before you complete the tasks in this section to create replenishment requests automatically, verify that you have:

- Set up picking instructions for automatic replenishment.
- Set up location profiles for replenishment.
- Set up replenishment instructions for replenishment.
- Set up fixed picking locations for automatic replenishment.
- Set up fixed replenishment zones for replenishment.
- Set the Method to Use for Replenishment Quantities processing option on the Replenishment tab in the pick requests version of the Location Selection Driver program to create replenishment requests.

10.2.3 Forms Used to Work with Replenishment Requests

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Replenishments</td>
<td>W46100B</td>
<td>Replenishment Operations (G4613), Manual</td>
<td>Create replenishment requests interactively.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replenishments</td>
<td></td>
</tr>
<tr>
<td>Replenishment Requests</td>
<td>W4600A</td>
<td>Replenishment Operations (G4613), Replenishment</td>
<td>Locate existing replenishment requests.</td>
</tr>
<tr>
<td>Requests Inquiry</td>
<td></td>
<td>Requests</td>
<td></td>
</tr>
</tbody>
</table>

10.2.4 Setting Processing Options for Manual Replenishments (P46100)

Processing options enable you to specify the default processing for programs and reports.

10.2.4.1 Defaults

Specify which order type the system uses.

1. Order Type
   Enter a user-defined code (UDC) (00/DT) to specify the order type.

10.2.4.2 Process

Use these processing options to specify how the system processes requests.

1. Enter the Process Mode
   Leave blank or enter 1: to create the request only.
   Enter 2: to create the request and process it through the subsystem.

2. Version of Location Selection (R46171)
   Enter the subsystem version of Location Selection. If you leave this processing option blank, the system uses version XJDE0007.

3. Activate Movement Quantity
   Use this processing option only if you are working with non-serial/non-license plate movements for which the from location is defined. Values are:
Leave blank and the system does not enable movements for quantities that are greater than the quantity available.
Enter 1: to enable movements for quantities that are greater than the quantity available.

10.2.5 Creating Replenishment Requests Interactively
Access the Manual Replenishments form.

10.2.6 Creating Replenishment Requests by Batch
Select Replenishment Operations (G4613), Fixed Location Replenishment.

10.2.7 Creating Replenishment Requests Automatically
Select Replenishment Operations (G4613), Process Replenishment Requests.

See Also:
- Defining Movement Instructions.
- Defining Location Profile Information for a Single Location.
- Setting Up Fixed Locations and Zones.
- Creating Replenishment Suggestions by Batch.

10.2.8 Setting Processing Options for Location Selection Driver (R46171)
Processing options enable you to specify the default processing for programs and reports.

10.2.8.1 Task and Trip
Use these processing options to specify how the system processes task and trip information.

1. Immediate Task and Trip Assignment
Specify whether the system immediately assigns task and trips. Values are:
Leave blank and the system does not assign task and trips.
Enter 1: to assign immediate task and trip.

2. Task and Trip Creation (R46471) Version
Specify which version of the Task and Trip Creation program (R46471) the system uses. If you leave this processing option blank, the system uses version XJDE0001.

10.2.8.2 Audit
Specify whether the system generates the audit report.

1. Audit Report
Specify whether the system generates the audit report and, if so, whether to include glossary text in the report. Values are:
Leave blank and the system does not generate the audit report.
Enter 1: to generate the audit report.
Enter 2: to generate the audit report and include a glossary for any messages.
Enter 3: to generate the audit report and include a complete glossary in the report.

10.2.8.3 Confirmation
Use these processing options to specify how the system processes confirmations.

1. Confirm Suggestions
Specify whether the system automatically confirms suggestions. Values are:
Leave blank and the system does not automatically confirm suggestions.
Enter 1: to automatically confirm suggestions.

2. Version of the Batch Confirmation Program
Specify the version of the Batch Confirmations program (R4617) the system uses. If you leave this processing option blank, the system uses XJDE001.

10.2.8.4 Resuggestions
Specify how the system processes resuggestions.

1. Resuggest Requests
Specify how the system processes requests. Values are:
Leave blank to process only new, non-processed requests.
Enter 1: to resuggest movement requests.

10.2.8.5 Replenishment
Use these processing options to specify how the system processes automatic replenishments.

1. Method to Use for Automatic Replenishment Quantities
Enter the method that the system uses to determine replenishment quantities. Values are:
Leave blank or enter 2: to use the maximum replenishment method. The quantity to replenish is the quantity that fills the location.
Enter 1: to use the economic replenishment method. The quantity to replenish is retrieved from the fixed location.

2. Task and Trip Creation (R46471) Version for Replenishment
Specify the version of the Task and Trip Creation program (R46471) the system uses for replenishment. If you leave this processing option blank, the system uses XJDE0003.

10.2.8.6 Edits
Specify the allowed lot status group.

1. Allowed Lot Status Group
Enter the allowed lot status group to validate. During the warehouse selection location process, the system validates the non-blank lot status codes against the user-defined status code values. If the non-blank lot status codes exist in the Allowed Lot Status table (F41081), the system treats the user-defined lot status codes as blank, and the on-hold item continues through the location selection process.

10.2.9 Locating Existing Replenishment Requests
Access the Replenishment Requests Inquiry form.
Request Batch Number
Enter the batch number assigned to one set of putaway, picking, or replenishment requests. This number comes from next numbers for system 46.

Order Number
Enter a number that identifies a document. For example, the document can be a purchase order, invoice, or sales order.

10.3 Working with Replenishment Suggestions
This section provides an overview of replenishment suggestions, lists prerequisites, and discusses how to:
- Create replenishment suggestions by batch.
- Create replenishment suggestions interactively.
- Create alternate replenishment suggestions.
- Create tasks and trips.
- Create the summary document.
- Create move tags.
- Confirm replenishment suggestions interactively.
- Confirm replenishment suggestions by batch.
- Override replenishment suggestions.

10.3.1 Understanding Replenishment Suggestions
After you create replenishment requests, you create replenishment suggestions to move items from replenishment locations and refill depleted picking locations. You can create replenishment suggestions by batch or interactively. Also, you can create alternate replenishment suggestions by using the Location Selection Driver program's resuggestions version with the correct processing options selected to replace existing suggestions with which you do not agree.

10.3.1.1 Batch Method
You create replenishment suggestions by batch to process replenishment requests on a regular basis. You typically run batch programs during off-peak hours when more system resources are available.

When you run the Location Selection Driver program's version for processing replenishment requests, the system can:
- Select all outstanding replenishment requests
- Update each request's status in the F4600
- Create replenishment location movement suggestions
- Assign tasks and trips
- Print audit reports
- Confirm replenishment suggestions
- Replenish inventory using either the economic or maximum quantity method

You control which functions that the system performs by setting processing options in the Location Selection Driver program.
10.3.1.2 Interactive Method
You can create suggestions interactively to select locations for replenishment. You can either enable the system to suggest a location or manually specify replenishment information such as the quantity, the unit of measure, and the location.

If you want the system to suggest locations automatically when you access the Manual Replenishment Location Planner form, you must set the Auto Location Selections processing option on the Manual Planner tab for the Replenishment Request Inquiry program (P4600).

10.3.1.3 Alternate Replenishment Suggestions
You can create replenishment suggestions with the Location Selection Driver program’s version for resuggestions, which you use to replace existing suggestions with which you do not agree. You access this version through the processing options for the Location Selection Driver program.

Creating alternate suggestions replaces any previous location suggestions. With alternate suggestions, you can access new inventory locations that you might have added since you created the first suggestions or locations with new available inventory.

**Important:** To create alternate replenishment suggestions, you must cancel the original replenishment suggestions manually. The Location Selection Driver program does not cancel existing suggestions.

If you have not changed inventory locations or levels in the warehouse, and you want to create suggestions for locations that are different from previously suggested locations, you must change values you entered when you set up the system. For example, you could change the replenishment instructions table to select a new replenishment zone or to use a different tiebreaker rule to select locations. If you do not change the replenishment instructions or values in other programs when you set up the system, such as process selection or fixed replenishment zones, the system suggests the same locations as in the previous suggestions.

10.3.1.4 Tasks and Trips
After you have created suggestions for putaway, picking, or replenishment, you can create task/trip assignments (if you have not done so when creating suggestions), and create customized move documents to help warehouse personnel efficiently move inventory through the warehouse.

The system can assign task and trip numbers to suggestions when you create and process suggestions. A task is a group of suggestions, and a trip is each suggestion in the task.

If the system did not assign task and trip numbers to suggestions when you created and processed suggestions, you can run a batch process for task and trip number assignment.

When you run the Task and Trip Creation program (R46471), it is important to set the data sequencing so that you can verify the information that the system uses to assign task and trip numbers.

When you run the Task and Trip Creation program, you can specify this type of information using the processing options:
- Maximum quantity information, such as the maximum number of tasks and trips (by leaving the default value of blank or zero, you can specify an unlimited number of tasks and trips) on the Task Control tab.

- Whether you want the system to print the supporting documents when you run the Move Slips program (R46472) with the task and trip assignments on the Print tab.

- Whether you want the system to recommend cartons during picking on the Process tab.

- Whether the system generates the Carton Detail Information table (F4620), which contains detailed information about the contents of each carton during picking on the Process tab.

- Which version of the Carton Reorganization program (P4620) the system uses if selecting to generate Carton Detail Information during picking on the Process tab.

After you run the Task and Trip Creation program, you can print supporting documents to review task and trip assignments.

### 10.3.1.5 Summary Document

Use the Move Slips program to print a summary document that contains information for all the suggestions that you created. The summary document is also referred to as a move document or move slip. This report page breaks by the task number. The summary document includes information such as:

- Trip number
- To and From locations
- Item number and description
- Quantity information
- Unit of measure information

After you create and review the summary document, you can print move tags, which enable warehouse personnel to plan the movement of inventory throughout the warehouse.

### 10.3.1.6 Move Tags

When you run the Move Tags program (R46473), the system creates move tags for the suggested location during putaway, picking, and replenishment. A move tag contains information such as:

- The item that warehouse personnel are moving
- The item unit of measure
- To and From locations

You can print tags for each trip or for each unit of measure moved on the trip, depending on the definition you set for the item on Item Unit of Measure Definition Revisions. You can scan the move tags to facilitate movements, storage, confirmation, and other downstream material handling and counting operations.

Examples of other JD Edwards EnterpriseOne Warehouse Management programs from which you can automatically print move tags (by setting processing options or by choosing row exits or form exits) are:

- Batch Putaway Reservations (R461301)
Working with Replenishment Suggestions

- Location Selection Driver
- Move Slips
- Warehouse Movement Confirmations (P4617)

10.3.1.7 Replenishment Suggestion Confirmation
If you agree with the system’s suggestions for replenishment locations, you confirm them interactively or by batch using Warehouse Movement Confirmations. If you do not agree, you can override the suggestions and specify another location, or you can cancel the existing suggestions and stop further processing.

When you confirm suggestions for replenishment, you:
- Reduce on-hand inventory in the replenishment location.
- Relieve the commitment or outbound quantity of inventory in the replenishment location.
- Increase on-hand inventory in the picking or replenishment location.
- Relieve the commitment of inbound inventory in the picking or replenishment location.

Replenishment confirmation ensures that the system’s records match actual inventory movements by updating these tables:
- Item Location File (F41021)
- Location Detail Information (F4602)

**Note:** For Branch Plants that do not have the License Plate process activated.

- Item Ledger File (F4111)
- F4600
- Warehouse Suggestions (F4611)
- F4601

**Note:** For Branch Plants that have the License Plate process activated, the system updates the License Plate Master F46L10, the License Plate Item Detail F46L11, the License Plate Commitment F46L12, the Location Capacity F46L30 and the License Plate History F46L99 tables.

10.3.1.8 Interactive Confirmation
If you agree with the system’s suggestions for replenishment locations, you confirm them interactively using the Warehouse Movement Confirmations program.

10.3.1.9 Batch Confirmation
You can confirm replenishment suggestions by batch when you run the Batch Confirmations program. The system automatically confirms suggestions if there are no errors during the confirmation process and prints all of the suggestions that were not confirmed. If you set the Print Glossary Text for Error Messages processing option on
the Process Tab, the system prints the corresponding description of the error on the report after it processes all suggestions.

**Note:** Before you confirm replenishment suggestions by batch, you should review and override suggestions as necessary because after you run the Batch Confirmations program, you cannot reverse the confirmations.

10.3.1.10 Overrides
You can override replenishment suggestions and specify another location, or you can split a suggestion into two locations.

10.3.2 Prerequisites
Before you complete the tasks in this section:
- Verify that you have set up order groups and process groups for stock items.
- Verify that you have set up replenishment instruction tables to designate specific locations based on the items’ order and process groups.
- Verify that the system has created suggestions.
- Verify that you have set up Fixed Locations, Random Rules, and so forth.

10.3.3 Forms Used to Work with Replenishment Suggestions

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Replenishment Location</td>
<td>W4600B</td>
<td>Replenishment Operations (G4613), Replenishment Requests</td>
<td>Create replenishment suggestions interactively.</td>
</tr>
<tr>
<td>Planner</td>
<td></td>
<td>Select a record and select Manual Planner from the Row menu, on Replenishment Requests Inquiry. To manually create a suggestion, select a row, and enter values in the appropriate fields.</td>
<td>To enable the system to create a suggestion, select a row and click Select and then click OK. If you have set the processing option on the Manual Planner tab to automatically suggest locations, you do not select the row to create suggestions.</td>
</tr>
<tr>
<td>Process Transactions</td>
<td>W4617A</td>
<td>Replenishment Operations (G4613), Confirm Replenishment</td>
<td>Confirm replenishment suggestions interactively.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select a record and then select Confirm from the Row menu. Click Process on Work With Warehouse Confirmations.</td>
<td></td>
</tr>
<tr>
<td>Form Name</td>
<td>Form ID</td>
<td>Navigation</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Override Suggestion</td>
<td>W4617C</td>
<td>Select a record and then select Override from the Row menu on Work With Warehouse Confirmations.</td>
<td>Override replenishment suggestions.</td>
</tr>
</tbody>
</table>

10.3.4 Creating Replenishment Suggestions by Batch
Select Replenishment Operations (G4613), Process Replenishment Requests.

10.3.5 Creating Replenishment Suggestions Interactively
Access the Manual Replenishment Location Planner form.

- **Quantity**
Enter the number of units affected by this transaction.

- **UM**
Enter a UDC (00/UM) that indicates the quantity in which to express an inventory item, for example, CA (case) or BX (box).

- **Location**
Enter the area in the warehouse where you receive inventory. The format of the location is user-defined and you enter the location format for each branch/plant.

10.3.6 Creating Alternate Replenishment Suggestions
Select Replenishment Operations (G4613), Process Replenishment Requests.

10.3.7 Creating Tasks and Trips
Select Warehouse Move Documents (G4621), Create Tasks and Trip.

10.3.8 Creating the Summary Document
Select Warehouse Move Documents (G4621), Summary Document.

10.3.9 Creating Move Tags
Select Warehouse Move Documents (G4621), Move Tags.

10.3.10 Confirming Replenishment Suggestions Interactively
Access the Process Transactions form.

10.3.11 Confirming Replenishment Suggestions by Batch
Select Replenishment Operations (G4613), Batch Replenishment Confirmations.

10.3.12 Overriding Replenishment Suggestions
Access the Override Suggestion form.
10.4 Working with Replenishment to Random Locations

This section provides an overview of replenishment to random locations, lists prerequisites, and discusses how to:

- Define replenishment groups.
- Set processing options for Replenishment Groups (P46014).
- Define detailed replenishment information.
- Set processing options for Replenishment by Random Rules (P46015).
- Run the Random Location Replenishment program.

10.4.1 Understanding Replenishment to Random Locations

Replenishment to random locations enables you to maximize the efficiency of the replenishment process by grouping locations for picking and enables you to replenish items over a set of locations. When you replenish to fixed locations, you replenish to only one fixed picking location at a time. When you replenish to random rule locations, you can replenish items in many random rule locations at the same time.

For example, the constant demand for an item can require you to store a certain item quantity near the shipping dock for picking always. The warehouse has many random rule storage locations that are close to the shipping dock. By setting up replenishment to random locations, you enable the system to suggest replenishment to the random rule locations that are closest to the shipping dock.

10.4.1.1 Replenishment Groups

Replenishment is the process of refilling picking locations with items. To define the random rule picking locations to replenish, you use random rules, which are sets of criteria that the system uses to identify locations for the random distribution of items in the warehouse. The system matches locations to random rules if the locations meet the criteria that you have defined for each random rule.

If you want to replenish to numerous random rule locations simultaneously, you assign the random rule to a replenishment group. A replenishment group is a user-defined code (46/RG) that contains one or more random rules for replenishment. By specifying multiple random rules for a replenishment group, you enable the system to identify many different random locations to which it replenishes inventory when you run the Replenishment to Random Locations program.

For each random rule that you specify, you also can specify the sequence in which the system replenishes locations that meet the criteria of each random rule, and whether the rule is active. When you specify a sequence, the system processes each random rule in the order that you specified. When you specify whether a rule is active, the system either processes the rule or skips the rule if it is inactive.

You can specify a zone and zone type to further limit the random rule picking locations that the system identifies for replenishment.

You also can specify effective and expiration dates for a replenishment group.

After you have defined the replenishment group, you define detailed replenishment information.

10.4.1.2 Detailed Replenishment Information

After you have defined replenishment groups, you define detailed replenishment information for each random rule. You can define detailed replenishment information
Working with Replenishment to Random Locations

for either an individual item or warehouse process groups. When you define detailed
replenishment information for warehouse process groups, you define information that
applies to all items within warehouse process groups rather than to just a single item.
However, within the warehouse process groups, you might want to replenish some
items differently than others. In this case, you define detailed replenishment
information for individual items within the warehouse process groups. When you run
the Replenishment to Random Locations program, the system always overrides the
detailed replenishment information for the warehouse process groups with the
detailed replenishment information that you specify for individual items.

For each random rule, you can specify this information:

■ Warehouse process groups
■ Order group
■ Item information
■ Unit of measure
■ Minimum and normal replenishment points
■ Item quantity calculation method
■ Zone
■ Move by unit of measure

The system uses an item’s warehouse process groups and order group that you specify
to determine which putaway and replenishment movement instruction table to use to
determine the To and From locations for replenishment, respectively.

By specifying the unit of measure and minimum and normal replenishment points,
you indicate the minimum quantity of inventory that the random locations must
contain to satisfy picking requirements and when replenishment must occur to ensure
a sufficient quantity on hand.

To calculate the replenishment quantity, the system uses the item quantity calculation
method that you specify. To determine the on-hand quantity in a set of random picking
locations, you can instruct the system to count using three different methods:

■ Count only the F4602 records that have the Replenishment Information UOM as
  the highest/largest (Level 1) UOM.
■ Count quantities across all levels in an item’s unit of measure structure
■ Count quantities in the primary unit of measure rounded to the UOM of the
  Replenishment Information.

You can specify a zone and zone type to further limit the random rule picking
locations that the system identifies for replenishment. If you specified zone and zone
type for a replenishment group and select to specify zone and zone type for the
individual random rules, the zone information in both applications (P46014 and
P46015) must match. Otherwise, the system cannot successfully replenish to locations
within the zones.

10.4.1.3 Random Location Replenishment Program

After you have defined replenishment groups and detailed replenishment information
for the random rules within each replenishment group, you can run the
Replenishment to Random Locations program. The system automatically creates
replenishment requests and replenishment suggestions by using the information that
you specified.
To expedite processing, you should run the Replenishment to Random Locations program during off-peak hours when more system resources are available.

**Note:** During data selection, you can specify one or more of the replenishment groups that you defined in the Replenishment Groups program. Processing options enable you to enter other information, such as:

- Order group for the From location.
- Replenishment points.
- Maximum or economic quantity method for replenishment.
- Overfill.
- Reservations.
- Reservation days.
- Commitments.
- Audit report.
- Task and trip.

### 10.4.2 Prerequisites

Before you complete the tasks in this section, ensure you correctly set up information such as items, locations, warehouse process groups, license plate information, and order groups before you set up replenishment to random locations. This is critical to the accuracy and predictability of the results you obtain when running the Replenishment to Random Locations program. This information help you review and verify the setup of the warehouse, and troubleshoot problems if the results vary from the results you expect.

- Verify that the items that pertain to the putaway, picking, and replenishment processes are set up in the JD Edwards EnterpriseOne Inventory Management system. Review item information, such as the branch/plant to which the item is assigned, specific item locations within the branch/plant, the item unit of measure and associated conversions, and item quantities.
  
  See Setting Up License Plate Processing.

  See "Entering Item Master Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

  See "Entering Branch, Plant Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

  See "Locating Quantity Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

- Verify that the locations that pertain to the putaway, picking, and replenishment processes are set up in the JD Edwards EnterpriseOne Inventory Management system. Review location information such as primary and secondary locations, and whether location control has been activated.

  See "Searching for Item Information" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

- Verify that you have set up random locations, which consists of defining location characteristics and setting up random rules. If you have defined location
characteristics and set up random rules, you should also verify that you have created the random location table.

See **Setting Up Random Requirements**.

- Verify that you have defined location profile information to enable putaway and replenishment for To and From locations, respectively.

  See **Defining Location Profile Information for a Single Location**.

- Verify that the size of the random locations can accommodate the item quantity that you plan to replenish to the locations.

  See **Defining Location Dimensions**.

  See **Defining Location Capacity**.

- Verify that you have defined the item warehouse process groups. The system uses an item's warehouse process groups in combination with the order group to identify the putaway and replenishment instruction tables. Putaway and replenishment instruction tables determine the To and From locations for putaway and replenishment, respectively.

  See "Entering Classification Codes for Branch, Plants" in the *JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide*.

- Verify that you have set up order groups and specified order types IQ (Inventory Quantity) and OP (Purchase Order) for order types with which you are working.

  See **Setting Up Order Groups**.

- Verify that you have correctly defined putaway movement instructions and replenishment movement instructions. The system uses putaway and replenishment instruction tables to determine the To and From locations for random location replenishment.

  See **Defining Movement Instructions**.

### 10.4.3 Forms Used to Work with Replenishment to Random Locations

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
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</thead>
<tbody>
<tr>
<td>Replenishment Groups</td>
<td>W46014B</td>
<td>Warehousing Movement Rules (G46311), Replenishment Groups</td>
<td>Define replenishment groups.</td>
</tr>
<tr>
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<td></td>
<td>Click Add on Work With Replenishment Groups.</td>
<td></td>
</tr>
<tr>
<td>Replenishment Information</td>
<td>W46015B</td>
<td>Warehousing Movement Rules (G46311), Replenishment by Random Rules</td>
<td>Define detailed replenishment</td>
</tr>
<tr>
<td>by Random Rules</td>
<td></td>
<td>Click Add on Work With Replenishment Information by Random Rules.</td>
<td>information.</td>
</tr>
</tbody>
</table>
10.4.4 Setting Processing Options for Replenishment Groups (P46014)

Processing options enable you to specify the default processing for programs and reports.

10.4.4.1 Default

These processing options enable you to specify the default information that the system displays, such as effective dates.

1. Active

Specify whether the system processes the information that is contained in a row in the detail area when you run the Replenishment to Random Locations program (R461602).

Enter Y and the system processes the information. Enter N and the system does not process the information.

2. Date - Effective From

Specify the date from which the replenishment information is effective.

3. Date - Effective Through

Specify the date up to which the replenishment information is effective.

10.4.5 Defining Replenishment Groups

Access the Replenishment Groups form.

Replenishment Group

Enter a UDC (46/RG) that the system uses to identify a replenishment group, which consists of random rules that you specify in the Replenishment Groups program (P46014). The system uses the random rules that you specify to identify random rule picking locations for replenishment.

Sequence

Enter a number that specifies the sequence of information.

Random Rule

Enter a UDC (46/SR) that identifies a random requirements table. If you use Random, Empty or Existing locations for the movement method, you can enter a random rule code to consider only locations whose characteristics match the random rule. You can leave Random Rule blank to have the system consider all locations for each movement method.

Zone

Enter a UDC (46/ZN) that identifies an area within a warehouse.

Zone Type

Enter a code to specify what type of zone is being used for this replenishment random rule. This is related to the Zone field.

Enter 1: for Putaway Zone.
Enter 2: for Picking Zone.
Enter 3: for Replenishment Zone.

Active (Y/N)

Enter Y: to indicate a row in the detail area is active and the system processes the information in the row when you run Replenishment to Random Locations (R461602).
Enter N: and the system does not process the information in the row.

**Effective Date From**
Enter the date from which the replenishment information is effective.

**Effective Date Through**
Enter the date through which the replenishment information is effective.

**See Also:**
- Setting Up Random Requirements.

### 10.4.6 Setting Processing Options for Replenishment by Random Rules (P46015)

Processing options enable you to specify the default processing for programs and reports.

#### 10.4.6.1 Default

These processing options enable you to specify the default information that the system displays, such as effective dates.

1. **Active**
   Specify whether the system displays active or inactive rows in the detail area. An active row contains a group of random picking locations to which you want to replenish. An inactive row contains a group of random picking locations to which you do not want to replenish.

   Leave blank and the system displays all rows in the detail area.
   Enter 1: to display only the active rows in the detail area.
   Enter 2: to display only the inactive rows in the detail area.

2. **Date - Effective From**
   Specify the date from which replenishment is effective.

3. **Date - Effective Through**
   Specify the date up to which the replenishment information is effective.

4. **Item Quantity Calculation Method**
   Specify the method that the system uses to calculate the item quantity that is on hand.

   Enter 1: to calculate an item’s existing quantity by using the level 1 unit of measure.
   Enter 2: to calculate an item’s existing quantity by using the primary unit of measure.
   Enter 3: to calculate an item’s existing quantity by using the level 1-5 unit of measure.

5. **Order Group**
   Enter a UDC (46/DT) that identifies the type of group, such as rush orders or special orders. The system uses the code that you specify with the warehouse process group for the item to determine which movement instruction table to use when selecting the From locations for replenishment.

### 10.4.7 Defining Detailed Replenishment Information

Access the Replenishment Information by Random Rules form.
10.4.8 Running the Random Location Replenishment Program

Select Replenishment Operations (G4613), Random Location Replenishment.
This chapter contains the following topics:

- Section 11.1, "Understanding Advanced Features"
- Section 11.2, "Understanding Dimension and Weight Calculations"
- Section 11.3, "Setting Up Advanced Features"
- Section 11.4, "Using Advanced Features"
- Section 11.5, "Working with the Location Driver Program"

11.1 Understanding Advanced Features

The features described in Advanced Topics and Inquiries are not required to operate the warehouse. However, they provide enhanced flexibility in inventory movement and record keeping. With these features, you can:

- Generate detailed movement records by confirming movement out of one location and into another in two separate steps or two-phase processing.
- Segregate tax-paid inventory in special locations according to tax codes that you assign.
- Control locations by restricting the mixing of different dated products in the inventory in the location using freeze rules.
- Reduce the number of picking trips by combining (or rolling up) small units of measure into larger units during picking.
- Protect the inventory by packing items in suitable storage containers during putaway.
- Reduce warehouse traffic congestion and the effects of pick and putaway equipment failure by setting the maximum quantity for an item in a zone.
- Change the effect of movement instructions by changing an item's warehouse process groups.
- Correct errors in system records by updating the Warehouse Suggestions (F4611), Item Location File (F41021), and Location Detail Information (F4602) tables with identical information.
- Reorganize cartons within a shipment and items within cartons before shipment.
- Merge location detail records to minimize system and user resources when processing these records.
- Generate reports of location detail information.
Generate reports of discrepancies between the F41021 and F4602 tables.

Review the amount of space that is not available and the amount of space that is usable per location with the Location Utilization program (P46220) and the Location Detail Inquiry program (P46321).

Purge closed requests, suggestions, tasks, and reservations.

Create sales and purchase orders using multiple shipping and multiple receiving locations preferences.

11.2 Understanding Dimension and Weight Calculations

The JD Edwards EnterpriseOne Warehouse Management system calculates each item’s volume and weight to select a location during putaway. The system bases all volume and weight calculations on the Level 1 (largest) unit of measure and stores the resulting values in the Item Unit of Measure Definition table (F46011).

11.2.1 Weight for a Complete Level 1 Unit of Measure

The system performs this calculation for items with storage containers:

Total Weight = (Gross Weight + Carton weight) x Quantity

The system performs this calculation for items without storage containers:

Total Weight = Gross Weight x Quantity

11.2.2 Volume for a Complete Level 1 Unit of Measure

The system performs this calculation for items with open storage containers:

Total Volume = Width x Depth x Height of the greater of container’s and item’s depth x the container height + item height.

The system performs this calculation for items with closed storage containers:

Total Volume = Width x Depth x Height of the container

The system performs this calculation for items without storage containers:

Total Volume = Gross Volume x Quantity

11.2.3 Weight for a Partial Level 1 Unit of Measure

The system performs these weight calculations for a partial level 1 unit of measure:

Percentage Filled = Number of primary units of measure represent P divided by the number of primary units of measure required to complete a Level 1 unit of measure

Total Weight = Weight of a Level 1 unit of measure x Percentage Filled

11.2.4 Volume for a Partial Level 1 Unit of Measure

The system performs these volume calculations for a partial level 1 unit of measure:

Percentage Filled = Number of Level 2 units of measure represent P divided by the number of Level 2 units of measure required to complete a Level 1 unit of measure

Total Volume = Volume of a Level 1 unit of measure x Percentage Filled
11.3 Setting Up Advanced Features

This section provides an overview of setting up advanced features, lists a prerequisite, and discusses how to:

- Set up two-phase movement confirmation.
- Assign tax codes.
- Set up freeze rules.
- Set up roll-up.
- Set up repack.
- Define maximum quantity by zone.

11.3.1 Understanding Advanced Feature Setup

This section discusses advanced features of the JD Edwards EnterpriseOne Warehouse Management system.

11.3.1.1 Two-Phase Movement Confirmation

You use one-phase movement, normally the default, to move inventory as one step, confirming after you move the items out of the From location and into the To location. You use two-phase movements to move inventory as two steps and performing confirmation:

- When you move the items out of the From location and into a logical or physical staging location.
- When you move the items out of the logical or physical staging location and into the To location as a final destination.

You might want to use two-phase movements if the warehouse contains narrow storage aisles and is equipped with automated tri-directional forklifts. First, warehouse personnel move the inventory from the receiving dock to the end of the storage aisle. Second, the warehouse personnel move the inventory onto shelves using the forklift.

You can use two-phase movements to generate reports for audit purposes that display the movement of items during each phase.

You can use either a physical (real) staging location or logical staging location that exists only in the system's database. You use a logical staging location to generate separate transactions for movement out of the From location and into the To location without actually using a physical staging location.

You must set up two-phase movements for each item or item dimension group and for each From location or To location for Putaway.

11.3.1.2 Tax Codes

Assign a tax code to a location to allow only items with the same tax code to be stored in that location. For example, if you have an item on which you have paid tax, you can assign the same tax code to the item and to specific locations so that the system uses only those locations for putaway. You can use tax codes for import or export items.
11.3.1.3 Freeze Rules
A freeze rule determines how the system refills a pick location after picking. You can use a freeze rule to control the locations, for example, for cleaning or restricting mixing of different dated product.

You must set up the freeze rule for each location for which you want to restrict putaway after picking and during picking suggestions.

11.3.1.4 Roll-up
You can convert large units of measure into smaller units of measure during putaway.

You set up the unit of measure definition for an item or item group to use roll-up and the system converts (rolls up) only one unit of measure in the item structure. You also must set up the pick instructions to perform roll up.

11.3.1.5 Repack
You use repack to specify whether you want to pack items in new containers before you send them to storage. For example, if the inventory items arrive in containers that are not suitable for storage, you would repack the items during putaway.

11.3.1.6 Maximum Quantity by Zone
You can define a maximum quantity of items to store in a zone to prevent the zone from being dominated by one particular item. For example, if you were concerned about the risk of fire for a certain item, you would specify a maximum quantity of the item to minimize losses because of fire. Alternatively, to minimize warehouse traffic for a zone that stores a popular item, you would limit the quantity of the popular item that you store in the zone.

11.3.2 Prerequisite
Before you complete the tasks in this section, verify that you have set up staging locations in the Location Profile program (P46020).

11.3.3 Forms Used to Set Up Advanced Features

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Profile Revisions</td>
<td>W460101A</td>
<td>Warehouse System Setup (G4641), Item Profile Revisions</td>
<td>Set up two-phase movement confirmation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Item Profiles.</td>
<td>Assign tax codes.</td>
</tr>
<tr>
<td>Enter Location Profile</td>
<td>W46020C</td>
<td>Warehouse System Setup (G4641), Location Profile</td>
<td>Set up freeze rules.</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>Select a record and then select Enter Location Inf from the Form menu on Work with Location Profiles.</td>
<td></td>
</tr>
</tbody>
</table>
11.3.4 Setting Up Two-Phase Movements

Access the Item Profile Revisions form.

**Overflow Location**
Enter a code to identify the location that the system uses when an item cannot fit into the attempted putaway locations. You can monitor movement suggestions for the overflow location by accessing the audit report (P46175) or by inquiring on the location detail (F4602).

**Variance Location**
Enter a code to identify the location that the system uses when you confirm a smaller quantity than the suggested quantity during any movement confirmation. You do this through Override Suggestion during any movement confirmation, where you enter a quantity that is smaller than the suggested quantity, and confirm with a variance to the suggested quantity. The system places the variance (remaining) quantity in the variance location.

**Holding Location**
Enter a code to identify the location that the system uses when you confirm a larger quantity than the suggested pick quantity during pick confirmation. You do this through Override Suggestion during pick confirmation, where you enter a quantity that is greater than the suggested quantity, and confirm with an overpick to the suggested quantity. The system places the overpick (extra) quantity in the holding location.

**Base Putaway Location**
Enter a code to identify the base putaway location that the system uses to calculate proximity when you specify base putaway proximity as the tiebreaker in a putaway instruction. If you use a tiebreaker that sequences locations according to base putaway proximity, the system ranks the locations based on their distance from this base putaway location. The system calculates distance based on the coordinates (longitude, latitude, and height) you defined in the location profile (P46020).

**Base Picking Location**
Enter a code to identify the base picking location that the system uses to calculate proximity when you specify base picking proximity as the tiebreaker in a picking (or putaway) instruction. If you use a tiebreaker that sequences locations according to base picking proximity, the system ranks the locations based on their distance from this base picking location. The system calculates distance based on the coordinates.
(longitude, latitude, and height) you defined in the location profile (P46020).

### 1 or 2 Phase Putaway

Enter a user-defined code (UDC) (H46/PT) to indicate you use 1- or 2-phase movements during putaway.

- **1-phase movements** mean the process is confirmed as one step after goods have moved from the starting location to the destination location.

- **2-phase movements** mean the process is confirmed in two steps: the first when the goods have moved from the starting location to the staging location, and the second when the goods have moved from the staging location to the destination location.

If you use 2-phase movements, you can specify whether the movements are logical or physical.

- **Logical 2-phase movements** generate one document and do not indicate physical movement to the staging location.

- **Physical 2-phase movements** generate two documents: the first indicates movement from the starting location to the staging location, and the second indicates movement from the staging location to the destination location in the Location Profile.

Values are:

- Enter **I**: to use 1-phase movements.
- Enter **L**: to use logical 2-phase movements.
- Enter **P**: to use physical 2-phase movements.

### 11.3.5 Assigning Tax Codes

Access the Item Profile Revisions form.

**Default Tax Code**

Enter a UDC (46/LT) to indicate the item is tax-paid inventory (in-bond or duty paid). If an item has an assigned tax code, the system puts the item away only in locations with the same tax code.

You assign tax codes to items through Item Profile (P46010) and in the Location Profile.

### 11.3.6 Setting Up Freeze Rules

Access the Enter Location Profile Information form.

**Freeze Rule**

Enter a UDC (H46/FR) to indicate what putaway restrictions you want to place on a location during the pick process. Values are:

- **Blank**: The system does not perform any automatic restrictions.
- **1**: Freeze when empty. Do not put away to this location after you pick the location empty.

**Note:** Restriction is placed on location at Pick Confirmation time if location becomes empty.
Enter 2: to freeze when picked (auto reset). Do not put away to this location after picking. When you pick the location empty, the system automatically resets the putaway flag to allow putaway to this location.

**Note:** Restriction is placed on location at Pick Suggestion time when the system creates the first Pick Suggestion to pick from the location. Reset occurs on the location at Pick Confirmation time if the location becomes empty.

Enter 3: to freeze when picked (manual reset). Do not put away to this location after picking. When you pick the location empty, you must manually reset the putaway flag to allow putaway to this location.

**Note:** Restriction is placed on location at Pick Suggestion time when the system creates the first Pick Suggestion to pick from the location.

### 11.3.7 Setting Up Roll-up
Access the U/M Definition by Item Revisions form.

**Roll-up**
Select to indicate you allow roll-up during picking.

### 11.3.8 Setting Up Repack
Access the U/M Definition by Item Revisions form.

**Repack**
Select to indicate the specified item in this unit of measure should be repacked before putaway.

You must also specify a packing method by entering a code in the Default Pack Code field.

### 11.3.9 Defining Maximum Quantity by Zone
Access the Maximum Putaway Quantity by Zone - Revisions form.

### 11.4 Using Advanced Features
This section provides an overview of using advanced features and discusses how to:

- Work with item dimension and warehouse process groups.
- Repost open location suggestions.
- Manage location detail information.
- Compare inventory and warehouse item balance.
- Create location detail information from existing inventory data.
- Review location utilization and detail information.
- Purge closed requests, suggestions, tasks, and reservations.
- Create sales or purchase orders using multiple shipping and multiple receiving locations preferences.
11.4.1 Understanding Advanced Feature Use

This section discusses important information when using advanced features.

11.4.1.1 Item Dimension and Warehouse Process Groups
You can quickly review or change an item’s dimension group or warehouse process group by using the Warehouse Speed Group Maintenance program (P4690). By changing the process groups for an item, you can change which movement instruction table that you use, which can change the putaway, picking, or replenishment location that you use during inventory movements.

You can use the Warehouse Speed Group Maintenance program in interactive or batch mode. If you run a batch version of the Warehouse Speed Group Maintenance program, ensure that the batch job has completely finished processing before you run the Location Selection Driver program (R46171). If you run the Location Selection Driver program before the batch job is finished processing, the results of the process selection might be inaccurate. To determine whether the batch job is finished, review the process groups on the Speed Group Maintenance form or in the Category Codes of the Item Branch application and verify whether the process groups have changed. If they have not changed, the batch job has not finished processing.

**Note:** If you are changing large quantities of process groups for an item, ensure that you allow adequate processing time.

11.4.1.2 Repost Open Suggestions
An open suggestion selects a location for an item based on the total quantity, volume, or weight of the item. The system creates open suggestions for items for which you have posted putaway, picking, or replenishment suggestions but for which you have not confirmed the movement. You repost open location suggestions if the location suggestion information in the Item Location, Location Detail Information, and Warehouse Suggestions tables do not match.

When you run the Repost Open Suggestions program (R46995), the system:

- Examines the suggestions in the F4611.
- Updates the suggestion commitment information in the F41021.
- Updates the inbound quantity, outbound quantity, reserved cubes, and reserved weight in the F4602.

**Note:** It also updates Hard Commitment Quantity depending on the type of Movement Suggestion that is being reposted.

11.4.1.3 Location Detail Information
You can review and change information in the F4602 using the Location Detail Maintenance program (P4602). You might run this program after a system failure when you must reconstruct information about locations.
11.4.1.4 Inventory and Warehouse Item Balance Comparison

When you perform a cycle or tag count of items in selected locations in the inventory, the system records the variance between the expected on-hand quantity and the quantity determined from a physical count of the inventory. The system uses this information to update the F41021 and F4602 records. If you record a negative variance (missing inventory), the system subtracts this variance from existing records and can make both sets of records negative. In the cycle or tag process, the system can also create discrepancies between these records.

The Warehouse Location Integrity program (R46990) generates a report that compares the warehouse and inventory records for all locations and items, and displays imbalances between the records. You can set processing options to specify the type of imbalance that the system displays.

11.4.1.5 Build Location Detail Information Program (R46820)

The system administrator or other qualified personnel should run this batch program only during initial system setup. Using this program on a regular basis can be detrimental to the way that you have set up warehouse information, such as unit of measure structure and location utilization.

Use the Build Location Detail Information program to create the F4602 with information from existing records in the F41021. Typically, you run this program when you use the JD Edwards EnterpriseOne Inventory Management system and want to begin using the JD Edwards EnterpriseOne Warehouse Management system.

If the Build Location Detail Information program has been run during initial system setup and you find a discrepancy between the JD Edwards EnterpriseOne Inventory Management records and JD Edwards EnterpriseOne Warehouse Management records, run the Warehouse Location Integrity program to identify the cause of the discrepancy before running the Build Location Detail Information program. The system administrator or other qualified personnel must run this program again. However, you should thoroughly investigate the cause of the discrepancies before using the Build Location Detail Information program to reconcile records.

When you run the Build Location Detail Information program, the system either rebuilds or adds location detail information based on the quantity values in the Item Location File table. You may apply the item’s default structure using a processing option.

11.4.1.6 Location Utilization and Detail Information

The Location Utilization program enables you to review the amount of space that is not available and the amount of space that is usable for locations in the warehouse. The system displays the space by cubic inches and, for each location, displays the utilization percentage.

You also can access detailed information about the contents of a location by using the Location Detail Inquiry program.
11.4.1.7 Purge Movement Information

The system stores the data in tables each time you create requests, suggestions, tasks, and reservations. This data can consume storage space and increase processing time for all transactions that exchange information with the tables. You use the WMS Purge Movement Information program (R4600P) to purge information that you no longer need from these tables:

- Warehouse Requests (F4600)
- F4611
- Warehouse Requests Tag File (F4600T)
- Warehouse Suggestions Tag File (F4611T)
- Warehouse Task Header (F4601)
- Putaway Reservations (F46130)
- Bulk Pick Requests (F46200)

The WMS Purge Movement Information program searches all of the information in the table that you specify and purges only the information for which processing has been completed. A request and its suggestions must meet all of this criteria before the system purges data:

- Requests must be closed or canceled.
- Associated suggestions must be confirmed or canceled.
- Associated tasks must be completed or canceled.
- Associated reservations must be confirmed or canceled.

For tasks that several work orders share, such as work order completions putaway requests, you specify the work order status at which you can purge the task. A task must meet this criteria before the system can purge the data:

- All requests and suggestions that are associated with the task are closed, complete, or canceled.
- The work order header that is associated with the task meets the status requirement that you specify.

When you run the WMS Purge Movement Information program, you can select the requests you want to purge. Using the processing options, you can run the program in proof or final mode. When you run the program in proof mode, the system generates a report that enables you to review the information that the system purges.

When you run the program in final mode, the system permanently removes the information from the tables that you specified. You can also select to have the system move the information to special purge tables. To move the information, you set a processing option to store the information in these tables:

- F4600PU (Warehouse Requests - Purged).
- F4611PU (Warehouse Suggestions - Purged).
- F4600TPU (Warehouse Requests Tag File - Purged).
- F4611TPU (Warehouse Suggestions Tag File - Purged).
- F4601PU (Warehouse Task Header - Purged).
- F46130PU (Putaway Reservations - Purged).
- F46200PU (Bulk Pick Requests - Purged).
After you run the program in final mode, the system generates a report that lists all requests, suggestions, tasks, and reservations that were not purged and the reason that the system did not purge them. The report also lists the total number of requests, suggestions, tasks, and reservations that were and were not purged.

11.4.1.8 Multiple Shipping and Multiple Receiving Locations Preferences
You use these preferences to accommodate warehouses with multiple shipping or receiving docks and specified dock numbers for shipping and receiving goods. You must enter the preference name in the Preference Profile (R40400) processing option on the Versions Tab for the sales order and purchase order entry programs. The system uses these preferences based on criteria you enter during sales order or purchase order entry. The preference can be set up for the carrier, mode of transportation, shipment weight, and supplier.

See "Understanding Advanced Pricing Hierarchies" in the *JD Edwards EnterpriseOne Applications Advanced Pricing Implementation Guide.*

11.4.2 Forms Used to Use Advanced Features

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Groups</td>
<td>W4690C</td>
<td>Warehouse System Setup (G4641), Speed Group Maintenance</td>
<td>Work with item dimension and warehouse process groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select Copy Process Groups from the Form menu on Work With Speed Group Maintenance.</td>
<td></td>
</tr>
<tr>
<td>Location Detail Maintenance</td>
<td>W4602C</td>
<td>Advanced &amp; Technical Ops (G4631), Location Detail Maintenance</td>
<td>Manage location detail information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on Work With Location Detail Maintenance.</td>
<td></td>
</tr>
<tr>
<td>Work with Location Utilization</td>
<td>W46220C</td>
<td>Outbound Warehousing Operations (G4612), Location Utilization</td>
<td>Review location utilization.</td>
</tr>
<tr>
<td>Work with Location Details</td>
<td>W46321A</td>
<td>Select Detail from the Row menu on Work With Location Utilization.</td>
<td>Review location utilization and detail information.</td>
</tr>
<tr>
<td>Work With Sales Order Headers or Work With Order Headers</td>
<td>W4210H or W4310I</td>
<td>Sales Order Processing (G4211), Enter Orders Header Purchase Order Processing (G43A11), Enter Purchase Orders</td>
<td>Create sales and purchase orders using multiple shipping and multiple receiving locations preferences.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Add on the appropriate Order Entry form.</td>
<td></td>
</tr>
</tbody>
</table>

11.4.3 Working with Item Dimension and Warehouse Process Groups
Access the Update Groups form.
11.4.4 Reposting Open Location Suggestions
Select Advanced & Technical Ops (G4631), Repost Open Suggestions.

11.4.5 Managing Location Detail Information
Access the Location Detail Maintenance form.

11.4.6 Comparing Inventory and Warehouse Item Balance
Select Warehousing Inquiries & Reports (G4614), Warehouse Location Integrity.

See Also:
- "Processing Cycle Counts" in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.
- "Processing Tag Counts" in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

11.4.7 Creating Location Detail Information from Existing Inventory Data
Select Advanced & Technical Ops (G4631), Build Location Detail Information.

See Also:
- "Processing Cycle Counts" in the JD Edwards EnterpriseOne Applications Inventory Management Implementation Guide.

11.4.8 Reviewing Location Utilization and Detail Information
Access the Work With Location Utilization and Work With Location Details forms.

**Usable**
Displays the actual cubic volume that you can use for storage in a location. You define usable location space through Location Dimensions (P46022), and assign it to individual locations using Location Profile Detail (P460201). The unit of measure is defined in Branch/Plant Constants - Page 2 (P41001).

**Usable Available**
Displays the cubic space (volume) used in a location. The system uses item dimensions and storage container dimensions to determine used cubic space if the level 1 unit of measure for the item in this location detail has a container.

**Utilized Percentage**
Displays results in a calculation.

**Used Cubes**
Displays the cubic space (volume) used in a location. The system uses item dimensions and storage container dimensions to determine used cubic space if the level 1 unit of measure for the item in this location detail has a container.

**Reserved Cubes**
Displays the cubic space (volume) that has been reserved for items. You use the Reservations program (P46130) to create reservations. The system suggests reserved locations when you create suggestions. The amount comes from the item/unit of measure profile and the cubic dimensions of the storage container if the level 1 unit of measure in the location detail has a container.
Available Cubes
Displays the cubic space (volume) used in a location. The system uses item dimensions and storage container dimensions to determine used cubic space if the level 1 unit of measure for the item in this location detail has a container.

Used Weight
Displays the weight of goods currently in a location. The system calculates this amount from the weight from the item/unit of measure profile and the weight of the container if the level 1 unit of measure for this location detail has a storage container.

Reserved Weight
Displays the weight that has been reserved for items in this location. The system creates reserved weight when you use the Reservations program (P46130) to reserve space in the warehouse for items you expect to receive. The amount comes from the item/unit of measure profile and the weight for the storage container if the level 1 unit of measure in the location detail has a container.

Available Weight
Displays the weight of goods currently in a location. The system calculates this amount from the weight from the item/unit of measure profile and the weight of the container if the level 1 unit of measure for this location detail has a storage container.

11.4.9 Purging Closed Requests, Suggestions, Tasks, and Reservations
Select Advanced & Technical Ops (G4631), Purge Movement Information.

11.4.10 Creating Sales or Purchase Orders Using Multiple Shipping and Multiple Receiving Locations Preferences
Access the Work With Sales Order Headers or Work With Order Headers form.

11.5 Working with the Location Driver Program
This section provides an overview of the Location Driver Program, and discusses how to:

- Run the Process Putaway Requests program.
- Run the Process Pick Requests program.
- Run the Process Replenishment Requests program.

11.5.1 Understanding the Location Driver Program
This information describes the function of the Location Selection Driver program, which exists in seven predefined versions in the JD Edwards EnterpriseOne Warehouse Management system:

- Process Putaway Requests
- Resuggest Putaway Requests
- Process Pick Requests
- Resuggest Pick Requests
- Process Replenishment Requests
- Resuggest Replenishment Requests
Process Requests - Subsystem

When you are working with the Process Putaway Requests, Process Pick Requests, and Process Replenishment Requests versions of the Location Selection Driver program, you can run the Location Selection Audit report. Before you submit the appropriate version, the system displays processing options. The Audit tab contains a processing option that enables you to run the Location Selection Audit report, which contains information about the locations that the system suggests for putaway, pick, or replenishment.

11.5.1.1 Process Putaway Requests Program

You run the Location Selection Driver program to process all movement requests at a particular status and create location suggestions. The same program processes putaway, picking, and replenishment requests. If you create a version of the Location Selection Driver, you can define the type of request to process in the data selection in the program.

Use the versions list to review the predefined versions of the Location Selection Driver program, such as Process Putaway Requests and Resuggest Putaway Requests.

When you run the Process Putaway Requests version, the program performs these functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locates outstanding putaway requests</td>
<td>The system searches for outstanding requests (requests for which you have not yet created suggestions) in the F4600. The system selects the requests that have a warehouse code of 1 (putaway). The Data Selection function of the program controls this process.</td>
</tr>
<tr>
<td>Creates error messages</td>
<td>The system creates an error message, which it displays during putaway confirmation, in these instances:</td>
</tr>
<tr>
<td></td>
<td>- The Audit Report displays errors.</td>
</tr>
<tr>
<td></td>
<td>- The putaway request’s status is not 200 (Request Created) or 220 (Suggestion Created).</td>
</tr>
<tr>
<td></td>
<td>- Putaway suggestions exist, and you have not set the program’s processing options to create alternate suggestions.</td>
</tr>
<tr>
<td></td>
<td>- You tried to create alternate putaway suggestions after you confirmed the original suggestions.</td>
</tr>
<tr>
<td></td>
<td>- The warehouse (branch/plant) is not a valid warehouse in the address book.</td>
</tr>
<tr>
<td></td>
<td>- The system cannot convert the transaction’s unit of measure into the item’s primary unit of measure.</td>
</tr>
<tr>
<td></td>
<td>- The item’s primary branch/plant record does not exist.</td>
</tr>
<tr>
<td></td>
<td>- The item’s warehouse process groups and order group do not reference a valid putaway instruction table.</td>
</tr>
</tbody>
</table>
Selects an instruction table

During process selection, the system selects a putaway instruction table for an item by comparing the item's warehouse process groups and order group to the groups specified in the process selection table. The system uses these priorities:

- Match all three warehouse process groups and the order group.
- Match all three warehouse process groups.
- Match the order group.

After the system locates the most accurate match, it uses the putaway instruction table that you specified for that combination of groups. The putaway instruction table must include a unit of measure that also exists in the item's unit of measure structure, or the system cannot create putaway suggestions.

Selects location types

After the system selects a putaway instruction table, the method code attached to the table determines which location type the system suggests. You can set the method code to select:

- Fixed locations.
- Random locations.
- Existing locations, which contain the same item that you are moving.
- Empty locations.

If you specified a zone in the putaway instructions, the system searches for locations only within that putaway zone.

Selects locations using location requirements

From the eligible locations, the system selects the locations that:

- You can use for putaway.
- Have the same tax code as the item (optional).
- Are not the location from which you are moving the item (usually the receiving dock).

Selects locations using putaway instructions

The system ranks the remaining eligible locations according to the tiebreaker that you specified in the putaway instruction table. If you use this criteria, the system selects the locations which:

- Avoid exceeding the maximum putaway quantity for the location.
- Meet the minimum utilization percentage.
- Convert large units of measure into smaller units of measure, if necessary.
- Complete partial units of measure, such as half-filled pallets.
<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects locations using the item profile</td>
<td>If you use this criteria, the system selects locations where the item's profile enables you to:</td>
</tr>
<tr>
<td></td>
<td>■ Mix different items in a location.</td>
</tr>
<tr>
<td></td>
<td>■ Mix items with different dates or lot numbers in a location.</td>
</tr>
<tr>
<td></td>
<td>■ Split an order line into multiple location suggestions.</td>
</tr>
<tr>
<td></td>
<td>■ Move the items to a default location that you specify, if there is not enough space in the eligible locations.</td>
</tr>
<tr>
<td>Selects locations using the item unit of</td>
<td>If you use this criteria, the system selects locations based on whether the item’s unit of measure definition enables you to:</td>
</tr>
<tr>
<td>measure profile</td>
<td>■ Convert large units of measure to smaller units of measure.</td>
</tr>
<tr>
<td></td>
<td>■ Put the item in the location, according to the capacity method that you specified for the item.</td>
</tr>
<tr>
<td></td>
<td>You can use one of three capacity methods to decide if the item fits:</td>
</tr>
<tr>
<td></td>
<td>■ Volume Method — Divide the usable cubic capacity of the locations by the dimensions of the item to store in the location. The result must be less than or equal to 1.</td>
</tr>
<tr>
<td></td>
<td>■ Layering Method — Compare the item’s dimensions to the location’s usable dimensions. You must also have specified whether you allow the system to rotate the item and defined the stacking limit for the item unit of measure.</td>
</tr>
<tr>
<td></td>
<td>■ Quantity Method — Verify that the quantity of the item to store equals or less than the quantity that you defined for the location in Location Capacity Definition (P46024).</td>
</tr>
</tbody>
</table>
You run the Location Selection Driver program to process all movement requests at a particular status and create location suggestions. The same program processes putaway, picking, and replenishment requests. If you create a version of the Location Selection Driver, you can define the type of request to process on Data Selection in the program’s processing options.

Use the versions list to review the predefined versions of the Location Selection Driver program, such as Process Pick Requests and Resuggest Pick Requests.

When you run the Process Pick Requests version, the program performs these functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| Selects locations using the location profile | If you use this criteria, the system selects locations based on whether the location profile detail enables you to:  
- Use the location for putaway.  
- Include the location in the putaway zone, if you specified one in the movement instructions.  
- Use the location for staging (unlimited capacity).  
- Mix different containers in the location.  
- Mix items with different dates or lot numbers in the location.  
- Store the item without exceeding the location’s maximum number of items.  
- Store the item based on the item’s tax code.  
- Store the item based on whether you allow the item's container to exist in the location.  
- Store the item if it exceeds the location’s minimum putaway percentage.  
- Use the location's putaway sequence number as a tiebreaker to rank locations that are otherwise equally suitable.  
- Use the location’s proximity (latitude, longitude, and height) to the receiving location as a tiebreaker to rank locations that are otherwise equally suitable. |

11.5.1.2 Process Pick Requests Program

You run the Location Selection Driver program to process all movement requests at a particular status and create location suggestions. The same program processes putaway, picking, and replenishment requests. If you create a version of the Location Selection Driver, you can define the type of request to process on Data Selection in the program’s processing options.

Use the versions list to review the predefined versions of the Location Selection Driver program, such as Process Pick Requests and Resuggest Pick Requests.

When you run the Process Pick Requests version, the program performs these functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locates outstanding pick requests</td>
<td>The system searches for outstanding requests (requests for which you have not yet created suggestions) in the Warehouse Requests table. The system selects the requests that have a warehouse code of 2 (picking). The Data Selection function of the program controls this process.</td>
</tr>
</tbody>
</table>
## Creates error messages

The system creates an error message, which it displays during pick confirmation, in these instances:

- Errors on the audit report.
- The pick request's status is not 200 (Request Created) or 220 (Suggestion Created).
- Pick suggestions exist, and you have not set the program's processing options to create alternate suggestions.
- You tried to create alternate pick suggestions after you confirmed the original suggestions.
- The warehouse (branch/plant) is not a valid warehouse in the branch/plant constants.
- The system cannot convert the transaction's unit of measure into the item's primary unit of measure.
- The item's primary branch/plant record does not exist.
- The item's warehouse process groups and order group do not reference a valid picking instruction table.

## Selects an instruction table

During process selection, the system selects a picking instruction table for an item by comparing the item's warehouse process groups and order group to the groups specified in the process selection table. The system uses these priorities:

- Match all three warehouse process groups and the order group.
- Match all three warehouse process groups.
- Match the order group.

After the system locates the most accurate match, it uses the picking instruction table that you specified for that combination of groups. The picking instruction table must include a unit of measure that also exists in the item's unit of measure structure, or the system cannot create picking suggestions.

## Selects location types

After the system selects a picking instruction table, the method code attached to the table determines which location type that the system suggests:

- Fixed locations
- Random locations

If you specified a zone in the picking instructions, the system searches for locations only within that pick zone.
Selects locations using location requirements

- From the remaining eligible locations, the system selects the locations that:
  - You can use for picking.
  - Are not the location to which you are moving the item (usually the shipping dock).

Selects locations using pick instructions

- The system ranks the eligible locations according to the tiebreaker that you specified in the picking instruction table.
  
  If you use this criteria, the system selects the locations for which you can:
  - Meet or exceed the minimum pick percentage for the location.
  - Avoid exceeding the maximum pick quantity for the location.
  - Combine smaller units of measure into larger units of measure, if necessary roll up.
  - Require automatic replenishment after you deplete the items in the location (for fixed picking locations only).
  - Use the First In First Out (FIFO) picking method based on the commitment method you specify on Branch/Plant Constants.

  You can set the picking method to:
  - Avoid using FIFO. Instead, rank locations according to the tiebreaker.
  - Rank locations from the lowest lot number to the highest lot number.
  - Rank locations from the earliest expiration date to the latest expiration date for the date that you stored the item.
  - Rank locations from the oldest date to the newest date that you received the item.

Selects locations using the location profile

- If you use this criteria, the system selects locations based on whether the location profile detail enables you to:
  - Use the location for picking.
  - Include the location in the pick zone, if you specified one in the movement instructions.
  - Use the location's picking sequence number as a tiebreaker to rank locations that are otherwise equally suitable.
  - Use the location's proximity (latitude, longitude, and height) to the shipping location as a tiebreaker to rank locations that are otherwise equally suitable.
Working with the Location Driver Program

You run the Location Selection Driver program to process all movement requests at a particular status and create location suggestions. The same program processes putaway, picking, and replenishment requests. If you create a version of the Location Selection Driver, you can define the type of request to process on Data Selection in the program's processing options.

Use the versions list to review the predefined versions of the Location Selection Driver program, such as Replenishment Requests and Resuggest Replenishment Requests.

When you run the Process Replenishment Requests version, the program performs these functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picks from locations according to item availability</td>
<td>From the eligible locations, the system picks items according to this priority:</td>
</tr>
<tr>
<td></td>
<td>■ Pick from locations with available quantity, ignoring inbound quantities (incoming purchase orders).</td>
</tr>
<tr>
<td></td>
<td>■ Pick from locations using any available inbound quantities.</td>
</tr>
<tr>
<td></td>
<td>■ Pick from locations that you replenished because of automatic replenishment.</td>
</tr>
<tr>
<td></td>
<td>The system displays an error message if it cannot satisfy the pick request using available, incoming, or replenished quantities. If the customer does not allow the partial shipment of an order, the system automatically deletes any pick suggestions for the order, and you do not fill the order.</td>
</tr>
</tbody>
</table>

### 11.5.1.3 Process Replenishment Requests Program

You run the Location Selection Driver program to process all movement requests at a particular status and create location suggestions. The same program processes putaway, picking, and replenishment requests. If you create a version of the Location Selection Driver, you can define the type of request to process on Data Selection in the program's processing options.

Use the versions list to review the predefined versions of the Location Selection Driver program, such as Replenishment Requests and Resuggest Replenishment Requests.

When you run the Process Replenishment Requests version, the program performs these functions:

<table>
<thead>
<tr>
<th>Function</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locates outstanding replenishment requests</td>
<td>The system searches for outstanding requests (requests for which you have not yet created suggestions) in the F4600. The system selects the requests that have a warehouse code of 3 (replenishment). The Data Selection function of the program controls this process.</td>
</tr>
<tr>
<td>Function</td>
<td>Purpose</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Creates error messages</td>
<td>The system creates an error message, which it displays during replenishment confirmation, in these instances:</td>
</tr>
<tr>
<td></td>
<td>■ Audit report.</td>
</tr>
<tr>
<td></td>
<td>■ The replenishment request's status is not 200 (Request Created) or 220 (Suggestion Created).</td>
</tr>
<tr>
<td></td>
<td>■ The replenishment suggestions exist, and you did not delete the existing suggestions to create alternate suggestions.</td>
</tr>
<tr>
<td></td>
<td>■ The original suggestions are confirmed and you attempt to create alternate replenishment suggestions.</td>
</tr>
<tr>
<td></td>
<td>■ The warehouse (branch/plant) is not a valid warehouse in the branch/plant constants.</td>
</tr>
<tr>
<td></td>
<td>■ The system cannot convert the transaction's unit of measure into the item's primary unit of measure.</td>
</tr>
<tr>
<td></td>
<td>■ The item's primary branch/plant record does not exist.</td>
</tr>
<tr>
<td></td>
<td>■ The item's warehouse process groups and order group do not reference a valid replenishment instruction table.</td>
</tr>
<tr>
<td>Selects an instruction table</td>
<td>During process selection, the system selects a replenishment instruction table for an item by comparing the item’s warehouse process groups and order group to the groups specified in the process selection table. The system uses these priorities:</td>
</tr>
<tr>
<td></td>
<td>■ Match all three warehouse process groups and the order group.</td>
</tr>
<tr>
<td></td>
<td>■ Match all three warehouse process groups.</td>
</tr>
<tr>
<td></td>
<td>■ Match the order group.</td>
</tr>
<tr>
<td></td>
<td>After the system locates the most accurate match, it uses the replenishment instruction table that you specified for that combination of groups. The replenishment instruction table must include a unit of measure that also exists in the item’s unit of measure structure, or the system cannot create replenishment suggestions.</td>
</tr>
<tr>
<td>Selects location types</td>
<td>After the system selects a replenishment instruction table, the method code attached to the table determines which location type the system suggests. You can set the method code to select:</td>
</tr>
<tr>
<td></td>
<td>■ Fixed locations</td>
</tr>
<tr>
<td></td>
<td>■ Random locations</td>
</tr>
</tbody>
</table>
Selects locations using location requirements

From the eligible locations, the system selects the locations that:

- You can use for replenishment.
- Are not the location to which you are moving the item (usually a pick location).

Selects locations using replenishment instructions

The system ranks the remaining eligible locations according to the tiebreaker that you specified in the replenishment instruction table.

If you use this criteria, the system selects the locations for which you can:

- Meet the minimum utilization percentage.
- Avoid exceeding the maximum replenishment quantity.
- Combine smaller units of measure into larger units of measure, if necessary.
- Use the First In First Out (FIFO) picking method based on the commitment method that you specify on Branch/Plant Constants.

You can set the picking method to:

- Avoid using FIFO. Instead, rank locations according to the tiebreaker.
- Rank locations from the lowest lot number to the highest lot number.
- Rank locations from the earliest expiration date to the latest expiration date for the date when you stored the item.
- Rank locations from the oldest date to the most recent date when you received the item.

Selects locations using the location profile

If you use this criteria, the system selects locations based on whether the location profile detail enables you to:

- Use the location for replenishment.
- Include the location in the replenishment zone, if you specified one in the replenishment instructions.
- Use the location’s replenishment sequence number as a tiebreaker to rank locations that are otherwise equally suitable.
- Use the location’s proximity (latitude, longitude, and height) to the To location as a tiebreaker to rank locations that are otherwise equally suitable.

Replenishes from locations according to item availability

From the eligible locations, you replenish items according to this priority:

- Replenish from locations with available quantity, ignoring inbound quantities (incoming purchase orders)
- Replenish from locations with inbound quantities.
11.5.1.4 Request and Suggestion Statuses
The system uses status codes to track movement requests and suggestions. These status codes are hard coded in a UDC table (46/PS):

Request Statuses:
- 200 Request Created.
- 220 Request Suggested.
- 250 Request in Confirmation.
- 291 Request Canceled.
- 299 Request Closed.

Suggestion Statuses:
- 300 Location Suggested.
- 320 Suggestion Assigned to Tasks.
- 340 Suggestion Printed.
- 391 Suggestion Canceled.
- 399 Suggestion Confirmed.

11.5.1.5 Putaway Reservation Statuses
The system uses status codes to track putaway reservations. These status codes are hard coded in a UDC table (46/PS):

- 100 Reserved
- 191 Reservation Canceled
- 199 Reservation Closed

11.5.2 Running the Process Putaway Requests Program
Select Inbound Warehousing Operations (G4611), Process Putaway Requests.

11.5.3 Running the Process Pick Requests Program
Select Outbound Warehousing Operations (G4612), Process Pick Requests.

11.5.4 Running the Process Replenishment Requests Program
Select Replenishment Operations (G4613), Process Replenishment Requests.
This chapter contains the following topics:

- Section 12.1, "Understanding the Warehouse Availability Inquiry Program (P46230)"
- Section 12.2, "Prerequisites"
- Section 12.3, "Working With Warehouse Availability Inquiry"

12.1 Understanding the Warehouse Availability Inquiry Program (P46230)

The Warehouse Availability Inquiry program (P46230) combines inventory detail, warehouse detail, and license plate detail information into a single application. The Warehouse Availability Inquiry program enables you to filter criteria by branch/plant, item, location, lot, and license plate. Based on the established filter criteria, the system can display:

- Items and all locations storing those items.
- Locations and all items in those locations.
- Parent license plate and all associated child license plates.

The Warehouse Availability Inquiry program enables you to view inventory balance information and warehouse detail information for a non-license plate warehouse. For a license plate warehouse, the Warehouse Availability Inquiry program enables you to view inventory balance information and license plate detail information. The program uses information from five transaction tables:

- Item Location File (F41021).
- Lot Master Information (F4108).
- Location Detail Information (F4602).
- License Plate Master (F46L10).
- License Plate Item Detail (F46L11).
- License Plate Commitments (F46L12).

Note: Warehouse Availability Inquiry does not have open search capability. You must enter a combination of branch/plant and either lot/location, item or license plate. If you do not enter the required data, the system displays an error.
The Warehouse Availability Inquiry program is designed to render properly on any supported Enterprise One Web Client and the JD Edwards iPad Container. The program is designed with collapsible subforms to provide you with maximum information you might want to see on a tablet. The design is configured based on the space available when using the JDE iPad Container. See *JD Edwards EnterpriseOne Web Client for iPad Quick Start Guide*

### 12.1.1 Mobile Enterprise Applications for Reviewing Warehouse Availability

The following mobile applications are available, and can be used to review warehouse availability information on a mobile device:

- **Warehouse Availability Tablet Application**

  This application requires system administrator configuration before it is available to individual users. Contact your system administrator to determine whether this application is available for use.

  Additionally, see the following topic in the JD Edwards EnterpriseOne Applications Mobile Enterprise Applications Implementation Guide:

  - Mobile Applications: Warehouse Availability

### 12.2 Prerequisites

Before you complete the tasks in this chapter:

- Set up branch/plant for warehouse processing.
  
  See Chapter 2, "Setting Up Warehouse Management"

- (Optional) Set up license plate processing.
  
  See Section 2.19, "Setting Up License Plate Processing"

### 12.3 Working With Warehouse Availability Inquiry

This section discusses how to:

- Inquire on inventory for a non-license plate warehouse.

- Inquire on inventory for a license plate warehouse.

### 12.3.1 Inquiring on Inventory Information for a Non-License Plate Warehouse

To inquire on inventory information for a non-license plate warehouse:

1. Access the Warehouse Availability Inquiry form.

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse Availability Inquiry</td>
<td>W46230B</td>
<td>Warehousing Inquiries and Reports (G4614). Select Warehouse Availability Inquiry (P46230).</td>
</tr>
</tbody>
</table>

When you initially access the Warehouse Availability Inquiry program, the system displays the Search By subform and the Item Balance subform. The system enables the License Plate tab by default. When you enter a non-license plate warehouse in the Branch/Plant field, the system disables the License Plate tab.
The system displays information in the Item Balance subform when you enter a warehouse branch/plant and data in any one of the following field combinations on the Item/Location/Lot tab:

- Item only.
- Item and location.
- Item and lot/serial.
- Item, location, and lot/serial.
- Location only.
- Location and lot/serial.
- Lot/serial only.

2. On the Search By subform, Item/Location/Lot tab, complete these fields:

   **Item Number**
   A number assigned to an item. The number can be in short, long, or third item number format.

   **Location**
   The area in the warehouse where you receive, store, or ship inventory. The format of the location is user defined and you enter the location format for each branch/plant.

   **Lot/Serial**
   Enter an alphanumeric code that identifies a lot or a serial number. A lot is a grouping of the same item with specific characteristics.

   **Branch Plant**
   Enter an alphanumeric code that identifies a separate entity within a business for which you want to track items and costs. This entity might be a warehouse location, job, project, work center, or branch/plant.

   This is a required field. You must enter a branch/plant that is warehouse enabled. When you enter a non-license plate warehouse, the system disables the License Plate tab on the Search By subform.

   **Omit Zero Quantities**
   Select this check box to hide inventory balance information with zero quantities. If you do not select this check box, the system displays inventory balance information with zero on-hand quantities.

3. Click the Find button.

   The system displays data in the Item Balance subform.

4. On the Item Balance subform, click the link to a location record.

   When you click the link to a location, the system collapses the Item Balance subform and displays the Warehouse Location Detail subform.

   The Warehouse Location Detail subform displays information that is stored in the Location Detail Information table (F4602) such as unit of measures levels, unit of measure structures, and quantities.

### 12.3.2 Inquiring on Inventory Information for a License Plate Warehouse

To inquire on inventory information for a license plate branch/plant:
1. Access the Warehouse Availability Inquiry form.

<table>
<thead>
<tr>
<th>Form Name</th>
<th>Form ID</th>
<th>Navigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehouse Availability Inquiry</td>
<td>W46230B</td>
<td>Warehousing Inquiries and Reports (G4614). Select Warehouse Availability Inquiry (P46230).</td>
</tr>
</tbody>
</table>

When you initially access the Warehouse Availability Inquiry program, the system displays the Search By subform and the Item Balance subform. The system enables the License Plate tab by default.

2. Enter data in any one of the following field combinations:
   - Item only.
   - Item and location.
   - Item and lot/serial.
   - Item, location, and lot/serial.
   - Location only.
   - Location and lot/serial.
   - Lot/serial only.

3. Click the Find button.
   The system displays information in the Item Balance subform.

4. On the Item Balance subform, click the link to a location record.
   The system displays the License Plate Structure subform and the License Plate Items subform.
   The system displays the license plate number and parent license plate in a parent-child tree in the leftmost column. You can expand and collapse the tree nodes to display license plate detail. You can use the Expand All button to open all of the license plate hierarchy trees.

5. On the License Plate Structure subform, select a record.
   When you select a license plate record, the system displays data in the License Plate Items subform.
   The License Plate Items subform displays the license plate and any item, lot, and quantity assigned directly to the license plate. The License Plate Items subform also displays any subsequent child license plate with an item directly assigned to the license plate. However, it does not display any license plate that does not have item and quantity directly associated to the license plate.
This appendix contains the following topics:

- Section A.1, "Warehouse Management Tables"

### A.1 Warehouse Management Tables

This section lists the major tables used in Warehouse Management.

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inventory Constants (F41001)</strong></td>
<td>Contains information for day-to-day transactions, including:</td>
</tr>
<tr>
<td></td>
<td>■ Location number definition</td>
</tr>
<tr>
<td></td>
<td>■ Warehouse control data</td>
</tr>
<tr>
<td></td>
<td>■ Default units of measure</td>
</tr>
<tr>
<td></td>
<td>■ Inclusion rule, which determines the document types and status codes to process through the system</td>
</tr>
<tr>
<td><strong>Location Master (F4100)</strong></td>
<td>Contains basic information about each warehouse location, such as zones and level of detail</td>
</tr>
<tr>
<td><strong>Location Dimensions (F46022)</strong></td>
<td>Contains the dimensions and maximum weight capacity of location dimension groups</td>
</tr>
<tr>
<td><strong>Item Master (F4101)</strong></td>
<td>Contains basic information about each item, including:</td>
</tr>
<tr>
<td></td>
<td>■ Item number</td>
</tr>
<tr>
<td></td>
<td>■ Description</td>
</tr>
<tr>
<td></td>
<td>■ Search keys</td>
</tr>
<tr>
<td></td>
<td>■ Category codes</td>
</tr>
<tr>
<td></td>
<td>■ Default units of measure</td>
</tr>
<tr>
<td></td>
<td>■ Advanced Warehouse Management process groups</td>
</tr>
<tr>
<td></td>
<td>■ Item dimension group</td>
</tr>
<tr>
<td><strong>Item Units of Measure Conversion Factors (F41002)</strong></td>
<td>Contains the unit of measure conversion equations that are unique to the warehouse item and its default unit of measure information</td>
</tr>
<tr>
<td><strong>Location Characteristics (F46021)</strong></td>
<td>Contains a list of characteristics that you use in random movement instructions</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Location Capacity (F46024)</td>
<td>Contains the quantity of an item (or an item group) that fits into each location by item unit of measure</td>
</tr>
<tr>
<td>Allowed Containers by Location (F46026)</td>
<td>Contains a list of the containers that you allow in each location</td>
</tr>
<tr>
<td>Unit Of Measure Standard Conversion (F41003)</td>
<td>Contains the unit of measure conversion equations that are common to all warehouse items</td>
</tr>
<tr>
<td>Item Branch File (F4102)</td>
<td>Contains default item information, including each item's process and dimension groups, and other parameters that are common to every unit of that item in the warehouse</td>
</tr>
<tr>
<td>Item Location File (F41021)</td>
<td>Contains each item's quantity information, general ledger class, and lot status in each location</td>
</tr>
<tr>
<td>Item Profile (F46010)</td>
<td>Contains a profile of every item in the warehouse</td>
</tr>
<tr>
<td>Item Unit Of Measure Definition (F46011)</td>
<td>Defines every unit of measure for each item in the warehouse</td>
</tr>
<tr>
<td>Warehouse Requests (F4600)</td>
<td>Contains putaway, pick, and replenishment requests for inventory movement</td>
</tr>
<tr>
<td>Warehouse Task Header (F4601)</td>
<td>Contains inventory movement tasks and the corresponding trips that warehouse employees make to fulfill the tasks</td>
</tr>
<tr>
<td>Putaway Reservations (F46130)</td>
<td>Contains locations that you reserved for storage of a particular item</td>
</tr>
<tr>
<td>Warehouse Suggestions (F4611)</td>
<td>Contains putaway, pick, and replenishment suggestions for inventory movement</td>
</tr>
<tr>
<td>Location Detail Information (F4602)</td>
<td>Contains the items, quantities, and units of measure that exist in each location</td>
</tr>
<tr>
<td>Item Ledger File (F4111)</td>
<td>Contains a history of all inventory movements</td>
</tr>
<tr>
<td>Demand/Supply Inclusion Rules (F34004)</td>
<td>Contains the order types (sales, procurement, and so on) and the order statuses at which the system creates a request</td>
</tr>
<tr>
<td>Process Selection Rules (F46093)</td>
<td>Contains information about an item's process groups and order groups, and the movement instructions for putaway, picking, and replenishment that you match to each set of groups</td>
</tr>
<tr>
<td>Movement Instructions (F46095)</td>
<td>Contains information, such as zones and tiebreakers, about how the system selects locations for putaway, picking, or replenishment</td>
</tr>
<tr>
<td>Order Groups (F46092)</td>
<td>Contains order types that you assign to a group to use in the Process Selection Rules table</td>
</tr>
<tr>
<td>Unit Of Measure Groups (F46096)</td>
<td>Contains units of measure that you assign to a group to use in the Movement Instructions table</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Fixed Locations (F46012)</td>
<td>Contains locations that you use only for putaway, only for picking, or only for replenishment by item</td>
</tr>
<tr>
<td>Random Locations (F46821)</td>
<td>Contains a list of valid random locations that match the characteristics that you defined in a random rule</td>
</tr>
<tr>
<td>Random Tables (F46822)</td>
<td>Contains characteristics that you match to location characteristics to create a table of valid random locations</td>
</tr>
<tr>
<td>Container and Carton Codes (F46091)</td>
<td>Contains a list of storage containers and shipping cartons, and their dimensions and weights</td>
</tr>
<tr>
<td>Carton Recommendation Rules (F46013)</td>
<td>Contains information about the quantity of each item that fits in each carton so that the system can recommend cartons for shipping</td>
</tr>
<tr>
<td>Maximum Putaway Quantity by Zone (F46025)</td>
<td>Contains the maximum quantity of each item by unit of measure that you allow in each zone</td>
</tr>
<tr>
<td>Fixed Replenishment Zones (F46051)</td>
<td>Contains a list of zones from which you allow the system to replenish fixed picking locations</td>
</tr>
<tr>
<td>Default Locations/Printers (F40095)</td>
<td>Contains the default warehouse code (branch/plant) and the default printer output queue for transactions that you process through the subsystem</td>
</tr>
<tr>
<td>Distribution/Manufacturing Constants (F4009)</td>
<td>Contains information that specifies whether the item unit of measure conversions are unique for each item or applicable to each item in the warehouse</td>
</tr>
<tr>
<td>Available Space Tiebreaker (F46027)</td>
<td>Contains information about constants that the system uses during putaway location selection</td>
</tr>
</tbody>
</table>
This appendix contains the following topics:

- Section B.1, "License Plate FIFO Processing Scenarios"
- Section B.2, "Picking Logic Scenario 2"

The JD Edwards EnterpriseOne Warehouse Management system enables you to define a warehouse that processes license plates. You can use the Process Selection (P46093) program to enable a license plate warehouse to process transactions only in the primary unit of measure. During processing, the system does not look at the license plate unit of measure equal to the instruction unit of measure, but rather considers all license plates regardless of the unit of measure and performs breakdown of multilevel license plates.

**B.1 License Plate FIFO Processing Scenarios**

This section discusses four picking logic scenarios for license plate FIFO processing.

**B.1.1 Picking Logic Scenario 1**

This scenario is based upon the following description:

1. Sales order entered for 100 EA of a given item.
2. Lot commitment = Expiration Date.
3. Item UOM setup:
   - 1 PL = 2 CA
   - 1 CA = 25 EA
4. Picking instruction set for EA and descending quantity sort.

<table>
<thead>
<tr>
<th>Location</th>
<th>Availability</th>
<th>License Plate</th>
<th>LP UOM</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A1 LOT1</td>
<td>30 EA</td>
<td>LPN1</td>
<td>PL</td>
<td>Feb 5, 2008</td>
</tr>
<tr>
<td>1A2 LOT2</td>
<td>40 EA</td>
<td>LPN2</td>
<td>PL</td>
<td>Feb 6, 2008</td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>20 EA</td>
<td>LPN3</td>
<td>CA</td>
<td>Feb 4, 2008</td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>10 EA</td>
<td>LPN4</td>
<td>PL</td>
<td>Feb 4, 2008</td>
</tr>
</tbody>
</table>
B.1.1.1 Suggestions for a License Plate Warehouse
The suggestions for picking logic scenario 1 are:

1. LPN3 suggested for 20 EA.
2. LPN4 suggested for 10 EA.
3. LPN1 suggested for 30 EA.
4. LPN2 suggested for 40 EA.

Based upon the criteria of this scenario, the system picks license plates regardless of the license plate unit of measure.

B.2 Picking Logic Scenario 2
This scenario is based upon the following description:

1. Sales order entered for 73 EA of a given item.
2. Lot commitment = Expiration Date.
3. Item UOM setup:
   - 1 PL = 2 CA
   - 1 CA = 25 EA
4. Picking instruction set for EA and ascending quantity pick of license plate number.

<table>
<thead>
<tr>
<th>Location</th>
<th>Availability</th>
<th>License Plate</th>
<th>LP UOM</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A1 LOT1</td>
<td>30 EA</td>
<td>LPN1</td>
<td>PL</td>
<td>Feb 5, 2008</td>
</tr>
<tr>
<td>1A2 LOT2</td>
<td>40 EA</td>
<td>LPN2</td>
<td>PL</td>
<td>Feb 6, 2008</td>
</tr>
<tr>
<td>1A2 LOT2</td>
<td>15 EA (5 EA in Child)</td>
<td>LPN5 (CHILD)</td>
<td>CA</td>
<td>Feb 6, 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPN7 (CHILD)</td>
<td>PL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPN8 (CHILD)</td>
<td>PL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPN6 (PARENT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>20 EA</td>
<td>LPN3</td>
<td>CA</td>
<td>Feb 4, 2008</td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>10 EA</td>
<td>LPN4</td>
<td>PL</td>
<td>Feb 4, 2008</td>
</tr>
</tbody>
</table>

B.2.1 Suggestions for a License Plate Warehouse
The suggestions for picking logic scenario 2 are:

1. LPN4 suggested for 10 EA.
2. LPN3 suggested for 20 EA.
3. LPN1 suggested for 30 EA.
4. Full movement of LPN5 from parent LPN6 suggested for 5 EA.
5. Full movement of LPN7 from parent LPN6 suggested for 5 EA.
6. Full movement of LPN8 from parent LPN6 suggested for 3 EA

Based upon the criteria of this scenario, the system picks license plate numbers regardless of the license plate unit of measure and performs breakdown on a multilevel license plate.
B.2.2 Picking Logic Scenario 3

This scenario is based upon the following description:

1. Sales order entered for 110 EA of a given item.
2. Lot commitment = Expiration Date.
3. Item UOM setup:
   - 1 PL = 2 CA
   - 1 CA = 25 EA
4. Picking instruction set for EA and license plate number sorting.

<table>
<thead>
<tr>
<th>Location</th>
<th>Availability</th>
<th>License Plate</th>
<th>LP UOM</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A1 LOT1</td>
<td>30 EA</td>
<td>LPN1</td>
<td>PL</td>
<td>Feb 5, 2008</td>
</tr>
<tr>
<td>1A2 LOT2</td>
<td>40 EA</td>
<td>LPN2</td>
<td>PL</td>
<td>Feb 6, 2008</td>
</tr>
<tr>
<td>1A2 LOT2</td>
<td>10 EA (CHILD)</td>
<td>LPN5 (CHILD)</td>
<td>CA</td>
<td>Feb 6, 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPN6 (PARENT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>20 EA</td>
<td>LPN3</td>
<td>CA</td>
<td>Feb 4, 2008</td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>10 EA</td>
<td>LPN4</td>
<td>PL</td>
<td>Feb 4, 2008</td>
</tr>
</tbody>
</table>

B.2.2.1 Suggestions for a License Plate Warehouse

The suggestions for picking logic scenario 3 are:

1. LPN3 suggested for 20 EA.
2. LPN4 suggested for 10 EA.
3. LPN1 suggested for 30 EA.
4. LPN2 suggested for 40 EA.
5. Full movement of parent LPN6 suggested for 10 EA.

Based upon the criteria of this scenario, the system picks license plate numbers regardless of the license plate unit of measure.

B.2.3 Picking Logic Scenario 4

This scenario is based upon the following description:

1. Sales order entered for 100 EA of a given item.
2. Lot commitment = Expiration Date.
3. Branch Plant is set up as a license plate warehouse but the system has not built license plates. All item availability is in the item's primary unit of measure.
4. Item UOM setup:
   - 1 PL = 2 CA
   - 1 CA = 25 EA
5. Picking instruction set for EA.

<table>
<thead>
<tr>
<th>Location</th>
<th>Availability</th>
<th>License Plate</th>
<th>LP UOM</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A1 LOT1</td>
<td>30 EA</td>
<td></td>
<td></td>
<td>Feb 5, 2008</td>
</tr>
</tbody>
</table>


### Picking Logic Scenario 2

<table>
<thead>
<tr>
<th>Location</th>
<th>Availability</th>
<th>License Plate</th>
<th>LP UOM</th>
<th>Expiration Date</th>
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</thead>
<tbody>
<tr>
<td>1A2 LOT2</td>
<td>40 EA</td>
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<td></td>
<td>Feb 6, 2008</td>
</tr>
<tr>
<td>1A2 LOT3</td>
<td>30 EA</td>
<td></td>
<td></td>
<td>Feb 4, 2008</td>
</tr>
</tbody>
</table>

**B.2.3.1 Suggestions for a License Plate Warehouse**

The suggestions for picking logic scenario 4 are:

1. LOT3 suggested for 30 EA.
2. LOT1 suggested for 30 EA.
3. LPN2 suggested for 40 EA.
FIFO
FIFO
Enter a value to indicate whether the system considers an item’s receipt date when it searches for pick locations. Values are:

Y: Yes, use the oldest receipt date (First In First Out method) when searching for pick locations

N: No, do not use the oldest receipt date when searching for pick locations

When you set this field to Y (yes), this setting overrides the tiebreaker rule.

Min Pick (minimum pick)
Enter a value to indicate whether the system suggests a location if picking does not deplete that location to at least the minimum percentage capacity defined through Location Profile Detail (P460201). Values are:

Y: Yes, use the minimum utilization percentage when searching for pick locations.

N: No, do not use the minimum utilization percentage when searching for pick locations.

Order Group
Enter a UDC (46/DT) that identifies a group of order types to process as one for putaway, picking, and replenishment transactions.

You set up order group codes on User-defined Codes, then add order types to the code on Order Groups (P46092). You specify an order group on Picking Instructions (P46095) to limit the order types that trigger replenishment after picking.

Picking Process Mode
Enter a UDC (46/PC) that identifies a picking processing method. Valid are:

P: Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips. The system minimizes the number of replenishment trips by replenishing from the fewest locations possible.

S: Space maximization mode. The system maximizes space use by trying to top off partially filled locations to minimize inventory fragmentation.

Picking Table
Enter a UDC (46/IT) that identifies a picking table. The picking table defines how the system selects locations for picking. You create picking tables using Picking Instructions (P46095).
**Proc Mode (process mode)**

Enter a UDC (46/PC) that determines the putaway processing method. Values are:

**P:** Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips.

**S:** Space maximization mode. The system maximizes the use of space by trying to top off partially filled locations. This mode also minimizes inventory fragmentation.

**Putaway Process Mode**

Enter a UDC (46/PC) that determines the putaway processing method. Values are:

**P:** Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips.

**S:** Space maximization mode. The system maximizes the use of space by trying to top off partially filled locations. This mode also minimizes inventory fragmentation.

**Putaway Table**

Enter a UDC (46/IT) that identifies a putaway table. The putaway table defines how the system selects locations for putaway. You create putaway tables using Putaway Instructions (P46095).

**Replenishment Process Mode**

Enter a UDC (46/PC) that identifies a replenishment processing method. Valid are:

**P:** Productivity mode. The system suggests the fewest locations possible to minimize the number of putaway and picking trips. The system minimizes the number of replenishment trips by replenishing from the fewest locations possible.

**S:** Space maximization mode. The system maximizes space use by attempting to top off partially filled locations to minimize inventory fragmentation.

**Replenishment Table**

Enter a UDC (46/IT) that identifies a replenishment table. The replenishment table defines how the system selects locations for replenishment. You create replenishment tables using Replenishment Instructions (P46095).

**RU (roll-up)**

Enter a value to indicate whether you allow roll-up during picking. Values are:

**Y:** Allow roll-up.

**N:** Do not allow roll-up.

**Warehouse Process Group 1**

Enter a user-defined code (UDC) (41/02) that identifies a group of items for movement purposes. A process group determines what movement instructions the system uses for putaway, picking, and replenishment.

**Warehouse Process Group 2**

Enter a UDC (41/02) that identifies a group of items for movement purposes. A process group determines what movement instructions the system uses for putaway, picking, and replenishment.

**Warehouse Process Group 3**

Enter a UDC (41/02) that identifies a group of items for movement purposes. A process group determines what movement instructions the system uses for putaway,
picking, and replenishment.