Infor XA – Materials Management Concepts Guide

To the reader

This book contains the information you need to understand and run the Materials Management (MM) application. The information in this book applies only to Infor ERP XA (XA).

Before you begin

Complete the following training if you do not have equivalent knowledge:

- System i education for the basic operation concepts of System i.
- Education about how to use a Windows application.

What this book contains

This book contains information you need to understand MM.

- Chapter 1, "Materials Management (MM)" introduces the application and provides an overview of MM's application objects.
- Chapter 2, "Receiving Purchased Inventory" introduces the Scheduled Receipts, Scheduled Receipt Locations, and Item Shortages objects. This chapter explains receiving options.
- Chapter 3, "Receiving Purchased Inventory - Shipment Notices" explains creating shipment notices and receiving inventory using shipment notices.
- Chapter 4, "Counting Inventory" introduces the Inventory Count Groups and Inventory Count Items objects. This chapter shows how to use these objects during physical and cycle inventory counts.
- Chapter 5, "Transferring Inventory" shows how to create in-transit warehouse locations and transfer items between warehouses or warehouse locations.
- Chapter 6, "Picking for Customer Orders" shows how to generate pick lists.
- Chapter 7, "Shipping for Customer Orders" explains how to generate and maintain shipments, including printing or sending the documents associated with the shipment
- Appendix A, "Summary of MM Transactions" summarizes the inventory transactions that you can use in MM.
- Appendix B, "Receiving Procedures with Shipment Notices" provides processing rules and examples of under-receiving and over-receiving, in MM, when shipment notices exist.

Other books

For a complete list of books in the Infor ERP XA library, see the bibliography included on the Infor ERP XA documentation CD.

Summary of changes

The following changes have been made to this application:

- **Integration with EPDM:** If EPDM is installed, the Materials Management application is now fully integrated with the EPDM functions and Item Revisions replaces Item Master. While this guide might contain references to Item Master files, the functions in this application now use Item Revisions for item information. For more information, see the *Enterprise Product Data Management Concepts Guide.*
- **Materials Management desktop:** The Materials tab has been divided into three tabs showing inventory, shipping, and receiving objects.
- **Scheduled Purchase Receipts:** This object is replaced with the Scheduled Receipts object.

- **Scheduled Receipts:** The Scheduled Receipts object supports all the functions that the Scheduled Purchase Receipts object provided, except the purchase order vendor accept (VA) transaction, and includes the following new functionality:

  - The Scheduled Receipts object is updated with shipping purchasing information when a Shipment Notice creates a shipment notice in the Shipment Notices object. The Shipment Notice arrival date and time updates the arrival date and time in the scheduled receipt. If the shipped quantity is less than the purchase order item/release ordered quantity, another scheduled receipt is created for the difference and the original scheduled quantity is updated to the shipped quantity from the Shipment Notice.
  - You can generate scheduled receipts for items you are transferring between warehouses using the transfer item (TW) transaction and use these scheduled receipts to receive the transfer item into the receiving warehouse later.
  - The Scheduled Receipts object is updated when receiving information is entered into the Shipment Notices, Shipment Containers, or Shipment Container Items objects.
  - When a scheduled receipt is associated with a shipment notice, it is not deleted when the purchase order is purged. It is deleted when the shipment notice is deleted and the purchase order is purged.
- **Purchase order vendor accept (VA) transaction:** The purchase order vendor accept (VA) transaction, now called the accept promised date (VA) transaction, is no longer available in the MM application. You can create accept promised date (VA) transactions using the Purchase Orders, Purchase Order Items, and Purchase Order Item Releases objects in Procurement Management (PM).
- **Scheduled Receipt Locations:** The Scheduled Receipt Locations object provides the ability to set, before entering a receiving transaction, an alternate location for an item to be received. The scheduled receipt location can be either to inspection or to stock.
- **Item Shortages:** This object was available through the Scheduled Purchase Receipts object. Item Shortages is now available through the Scheduled Receipts object.
- **Shipment Notices:** The Shipment Notices object contains Shipment Notice information.

  - A shipment notice describes one shipment from one vendor (ship-from location), to one warehouse (ship-to location), arriving at one date and time. The shipment can include multiple items (purchase order items and/or purchase order item releases) from one or multiple purchase orders, and each item can be shipped in one or multiple containers or not in any container.
  - Shipment Notices also describe shipments for items you are transferring between warehouses.
  - A shipment notice is created automatically when a Shipment Notice is received from a vendor as an Advance Ship Notice (ASN) formatted as an XML document via System-Link. You can also create a shipment notice using the maintenance options in the Shipment Notices object or while generating a transfer item (TW) transaction.
  - A shipment notice includes shipment containers and shipment container items.
  - A Send Receiving Advice host job is available in the Shipment Notices object. You use this host job to send vendors the receiving status of a shipment.
- **Shipment Containers:** The Shipment Containers object provides information about the containers on the Shipment Notice. Shipment containers include shipment container items.
- **Shipment Container Items:** The Shipment Container Items object contains information about the items on the Shipment Notice.
- **Receiving options:** The following receiving options (for purchased and transferred items) are available in MM:

  - Receive (a scheduled receipt), Receive Purchase Order Complete, and Receive Shipment Notice Complete in the Scheduled Receipts object.
  - Receive Complete (a shipment notice) in the Shipment Notices object.
  - Receive Complete (a shipment container) in the Shipment Containers object.
  - Receive (a shipment container item) in the Shipment Container Items object.
- **Inventory Statuses:** This object allows you to classify items stored in a warehouse location, so that the items are held from some activities, by setting attributes to specify the activity from which the items are to be held.
  XA pre-defines two inventory statuses, IN-TRANSIT and PLAN HOLD, and one attribute, Planning hold. You can also use user fields, in Inventory Statuses, to classify items in a warehouse location for your own purposes.

- **Inventory Transaction History:** Using this object you can copy and reverse some transactions and generate the following transactions:

  - Issue item (IS)
  - Receive item (RC)
  - Issue sales item (SA)
  - Transfer item (TW).

  When transferring items between warehouses or in a warehouse, you can choose to use scheduled receipts and shipment notices to receive the item at the receiving warehouse.
- **In-transit locations:** The new In-transit type warehouse location is used exclusively for items transferred but not yet received. The Inventory status of an item location is set from the Inventory status of the associated warehouse location. Items in these locations are restricted from all activities except receipt, using the scheduled receipt or shipment notice, into the receiving warehouse specified during the transfer item (TW) transaction.
- **Inventory Transaction Register:** You can print this register in Inventory Transaction History.
- **Pick Lists:** This object contains information about pick lists. Using this object, you can generate pick lists and shipments, and print pick and packing lists.
- **Pick List Items:** This object shows the items on a pick list.
- **Pick List Ship-tos:** This object shows the ship-to addresses for a pick list.
- **Pick List Orders:** This object shows the orders used on a pick list.
- **Pick Pack Ship Items:** This object, now available from Pick Lists and Shipments, contains information about all items picked, packed, and/or shipped, plus any containers packed and/or shipped. Using this object, you can generate shipments.
- **Shipments:** This object, now available on the Materials Management tab, contains information you can view about shipments for customer orders. Using this object, you can generate invoices and print or send shipping documents.
- **Order Shipments:** This object, now available on the Materials Management tab, contains information you can view about orders for a shipment. Using this object, you can generate invoices and print pro forma invoices.
- **Shipment Special Charges:** This object, available from Shipments and Order Shipments, contains information you can view about special charges for a shipment.
- **Shipped Items:** This object, available from Shipments and Order Shipments, contains information about the items for a shipment. Using this object, you can generate serial numbers.
- **Shipped Item Kit Components:** This object, available from Shipped Items, contains information about the kit items for a shipment.
- **Serial Numbers:** This object, available from Shipped Items, contains information about the serial numbers for shipped items.
- **Shipped Item Features and Options:** This object, available from Shipped Items, contains information about the features and options for shipped items.
- **Shipped Item Pick Lists:** This object, available from Shipped Items, contains the pick lists used to pick the shipped item.
- **Shipping Calendars:** This object, now available on the Materials Management tab, contains information used to determine shipping dates based on promise dates and shipping lead-time.
- **Packed Containers:** This object, now available on the Materials Management tab, contains information you can view about containers used to ship customer orders.
- **Freight Containers:** This object, now available on the Materials Management tab, contains information you can view about freight containers used to ship customer orders.
- **Carriers:** This object now available on the Materials Management tab, contains information about carriers used to ship items to customers and from vendors.
- **Inventory Count Groups:** The option, Generate Tag Numbers, on the Maintain menu of Inventory Count Groups is replaced with a Generate Tag Numbers host job in the Inventory Count Groups object. You create inventory count groups in the Warehouses, Warehouse Locations, Item Warehouses, and Item Locations objects.
- **Inventory Count Items:** The option, Generate Tag Numbers, on the Maintain menu of Inventory Count Items is replaced with a Generate Tag Numbers host job in the Inventory Count Items object.
- **Warehouses:** The options, Cycle Count and Physical Inventory, on the Maintain menu of Warehouses are replaced with a Cycle Count and Physical Inventory host job in the Warehouses object.

- **Warehouse Locations, Item Warehouses, and Item Locations:** The option, Cycle Count, on the Maintain menu of these three objects are replaced with the Cycle Count host job in these objects.
- **Container Types:** You can now perform maintenance on Container Types.
- **Transaction Reasons:** Adding a transaction reason code to the Transactions Reasons object prevents you from entering codes, not defined in the object, into the Reason attribute of the receive options.

Contents

Chapter 1. Materials Management (MM)

Inventory items are items you use to produce goods, sell to customers, or assist you in your business activities. The management of inventory is the physical process of receiving, storing, moving, and shipping items to meet the needs of your company. At every stage of this process, you need to maintain accurate and complete records of what is happening to your inventory. Inventory records are an important part of reducing inventory costs, efficiently allocating inventory, providing audit controls, and improving decision-making. The objectives of Materials Management (MM) are to improve inventory management by assisting you to create and maintain an accurate description of your physical inventory.

In MM, you view information that describes warehouses where you locate inventory, locations where you store inventory, and items in your inventory. For example, in a controlled warehouse

you can identify items with batch/lot numbers and a quality control status to track and control the shelf life of items. You can also view a list of allocations for components of manufacturing orders and line items for customer orders that XA users have assigned to a particular location for picking purposes.

To ensure the accuracy of the information you are viewing, you can launch audits to validate the on-hand quantity by location, the allocated quantity, and the on-order quantity for one or more warehouses or item warehouses.

MM provides you with tools for defining and counting your inventory in either a total inventory count or smaller defined groups. You can generate counting documents and tag numbers, to assist with the count, and initiate up to three counts to ensure the counting process is accurate. You can compare count information to information in MM and update XA by posting the count adjustments.

MM assists you to track purchased items and to process receiving transactions. You can view scheduled receipts for items you have not received. If you use Shipment Notices, shipping information updates information in Scheduled Receipts, which provides you with the most up-to-date information available for when you will receive purchased inventory and the quantities you will receive. You can receive shipments, shipment containers, or purchase orders completely. If you need to adjust the purchased items, you can receive individual scheduled receipts and shipment container items.

You can also track items you transfer between your company's warehouses using scheduled receipts and shipment notices. You can account for the on-hand balance of items during the transfer, using in-transit warehouse locations.

MM assists you pick inventory to be packed and shipped to the customer. You can generate pick lists and use them to authorize people picking inventory in the warehouse. For example, they can use pick lists as a statement of what inventory was picked, to confirm the shipment, and even as a turnaround document to report actual picks for inventory control. In MM, you can consolidate multiple customers, orders and ship-tos on one shipment.

You can generate shipments and shipping documents such as packing lists, bills of lading, Advanced Ship Notices (ASNs), and invoices for customer orders.

Besides describing inventory, MM provides you with a list of items from which you can perform actions in other installed applications. For example, you can select an item and directly create a purchase order for a quantity of that item.

MM interfaces with other XA applications. Each interface provides additional function to either MM or the interfacing application.

- MM requires Inventory Management (IM) and Cross Application Support (CAS) applications to be installed and interfacing.
- The Scheduled Receipts object requires the Procurement Management (PM) application to be installed and interfacing because the Purchase Orders object in PM contains information about items available for receipt.

Materials Management objects

You can view information contained in the following MM objects:

- Inventory tab

    - Warehouses
    - Warehouse Locations
    - Items
    - Item Warehouses
    - Item Locations
    - Discrete Allocations
    - Inventory Transaction History
    - Inventory Count Groups
    - Inventory Count Items
    - Inventory Statuses
    - Transaction Reasons.
- Shipping tab

    - Pick Lists
    - Pick Orders
    - Pick List Items
    - Pick List Ship-tos
    - Pick Pack Ship Items
    - Shipments
    - Order Shipments
    - Shipment Special Charges
    - Shipped Items
    - Shipped Item Kit Components
    - Serial Numbers
    - Shipped Item Features and Options
    - Shipped Item Pick Lists
    - Shipping Calendars
    - Packed Containers
    - Freight Containers
    - Item Locations
    - Discrete Allocations
    - Carriers
    - Container Types.
- Receiving tab

    - Scheduled Receipts
    - Item Shortages
    - Scheduled Receipt Locations
    - Shipment Notices
    - Shipment Containers
    - Shipment Container Items
    - Item Warehouses
    - Item Locations
    - Warehouses
    - Warehouse Locations
    - Carriers
    - Container Types.

Each object represents a different type of materials information, such as locations in warehouses where you store materials, or items scheduled for receipt from purchase orders. Objects like Warehouses, Warehouse Locations, and Items, represent static information that you establish once and use to process information that is more dynamic. Objects like Inventory Count Groups,

Pick Lists, and Scheduled Receipts represent dynamic information that enters the system, is processed, and is sometimes closed out.
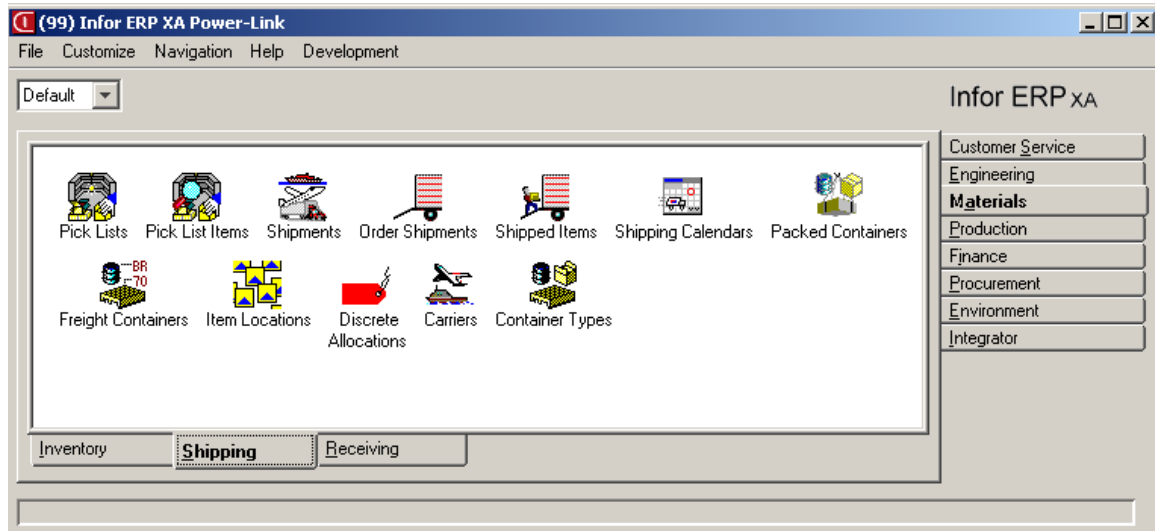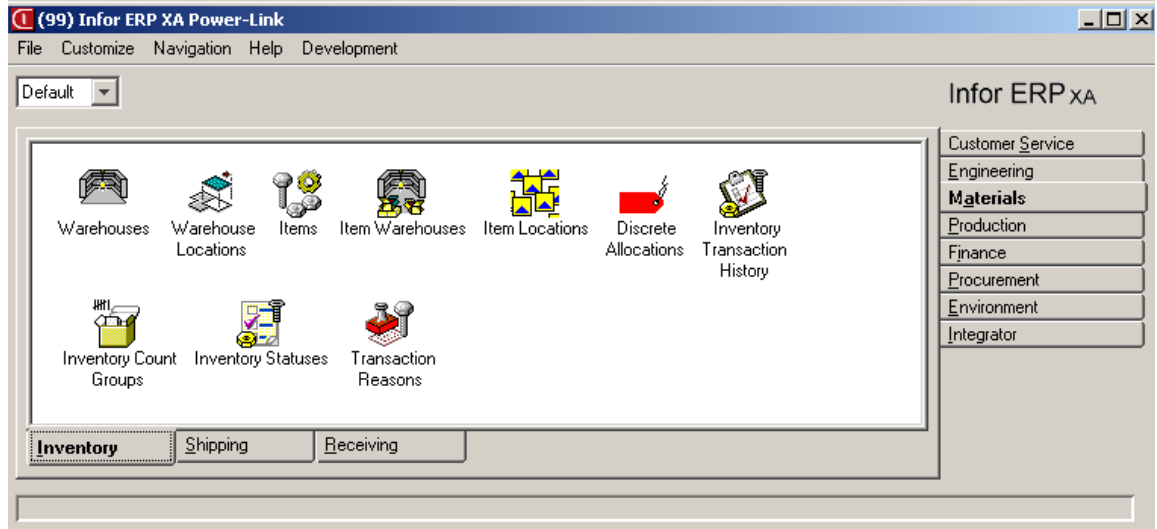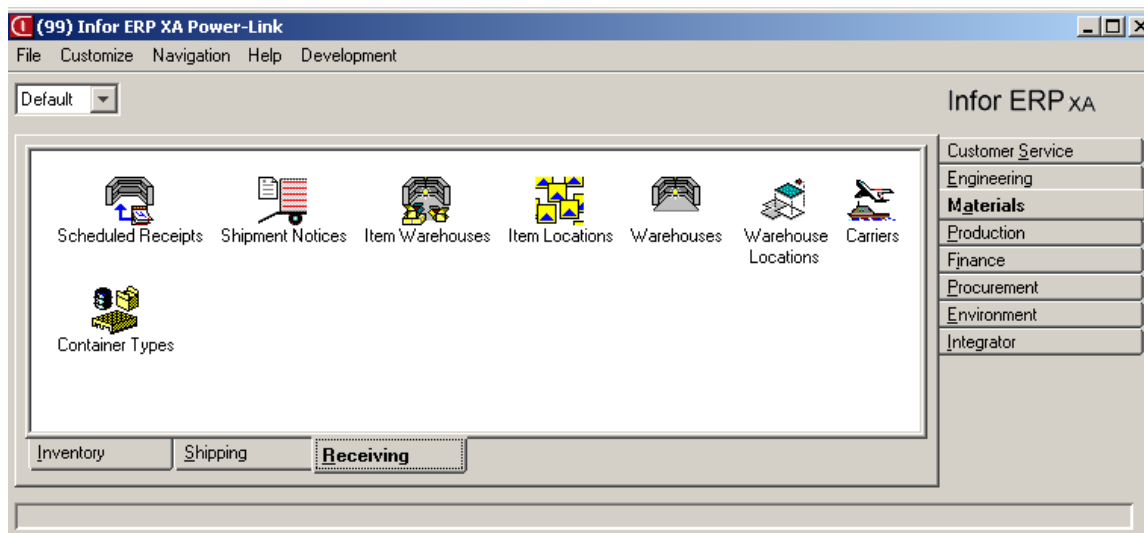
Some objects have hierarchical relationships to other objects. These relationships generally occur when header information in one object is related to detailed information in other objects. For example, a shipment notice is related to any shipment containers and shipment container items that are part of the shipment. Objects that are lower-level to other objects in the hierarchy might not appear on the XA desktop but you can access these lower-level objects through their higher-level objects. Display menu options or card files provide easy access to lower-level objects. For example, the Inventory Count Items object is a lower-level object to the Inventory Count Groups object. You can select Inventory Count Items on the Display menu of Inventory Count Groups to see a list of items for a selected inventory count group.

Display menu options also provide easy access to other objects, which have related information. These objects are available on the XA desktop and from the object you select. When you select the related object from the object you are interested in viewing, the information in the list window relates only to the object you want to view. For example, you are interested in viewing all the scheduled receipts associated with a warehouse in your company. You can view scheduled receipt information for all warehouses in the Scheduled Receipts object but this object gives you too much information. Instead, using the Warehouses object, select the warehouse and use the Warehouse Scheduled Receipts option to view all scheduled receipts for only that warehouse. Some objects such as Shipment Container Items, you can only view from another object.

Many objects that you view on the Materials tab are available from other applications. For example, you find the Items object on the desktop of many applications, including MM, so that you do not need to navigate to another application to view commonly used information.

In MM, the objects that have lower-level objects are:
- Inventory Count Groups
- Pick Lists
- Pick Orders
- Pick List Items
- Shipments
- Order Shipments
- Shipped Items
- Scheduled Receipts
- Shipment Notices
- Shipment Container Items.

The figure below demonstrates the relationship among the inventory MM objects and their lower-level objects.

Inventory
Count
Groups

Inventory
Count
Items
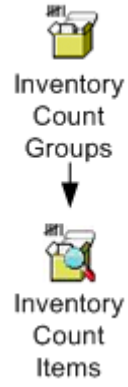
The figure below demonstrates the relationship among the shipping MM objects and their lower-level objects.
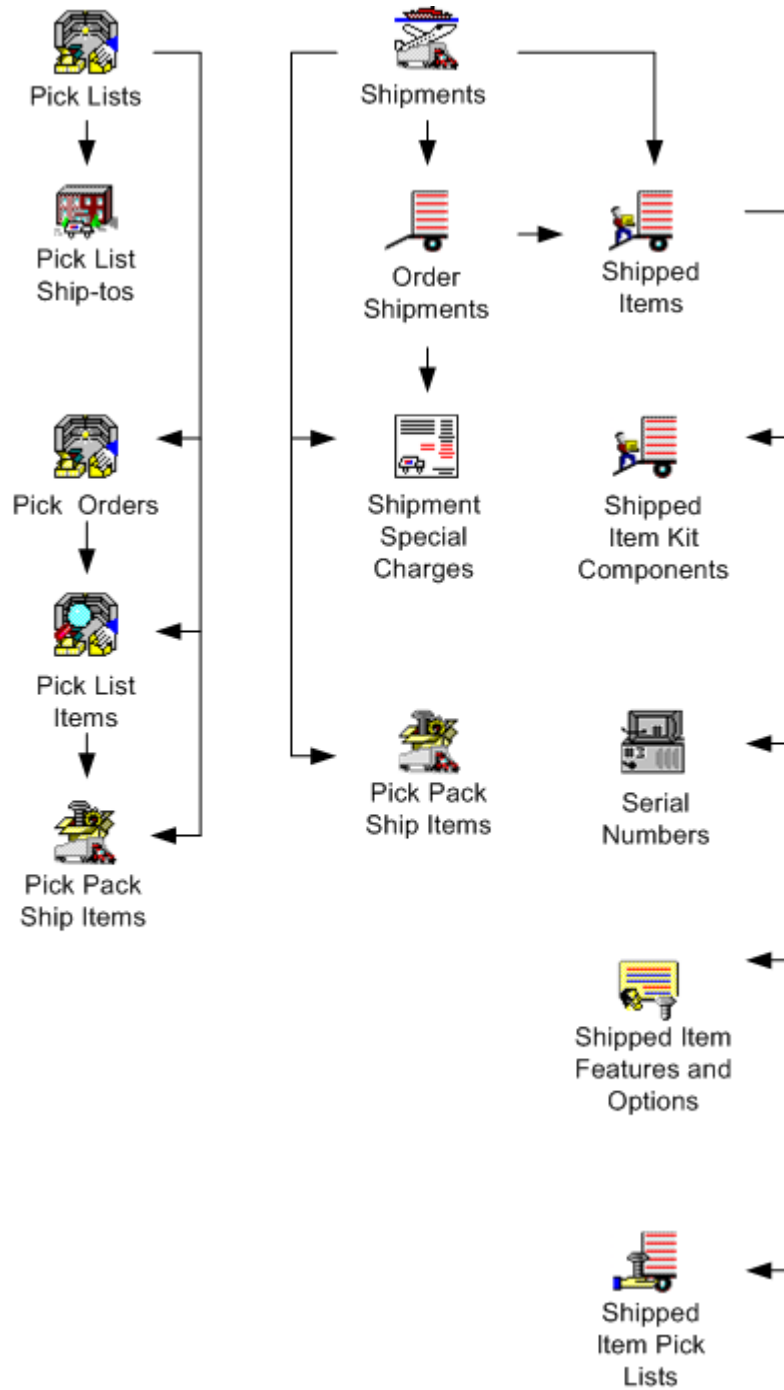
The figure below demonstrates the relationship among the receiving MM objects and their lower-level objects.
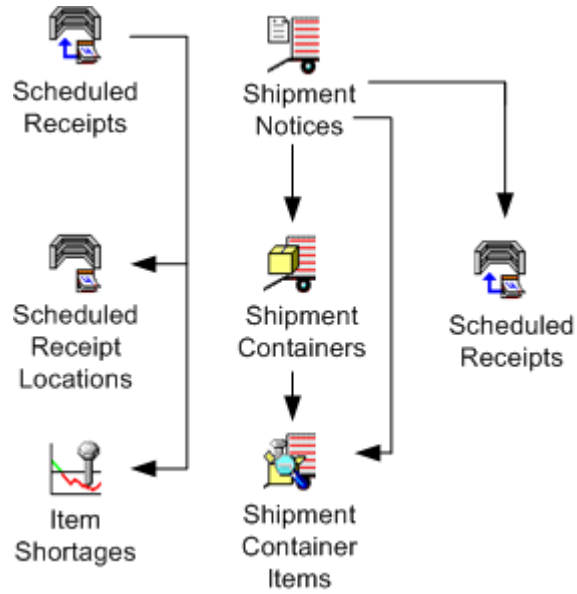
Warehouses

The Warehouses object contains information about warehouses in your system. Warehouses are facilities you use to receive and store inventory. In the Warehouses object, you can record details about warehouses or you can record details about part of a warehouse that you consider a separate warehouse. For example, when you want to control a subsection of inventory differently from the rest of the inventory in the physical warehouse, you define part of a physical warehouse as another warehouse, in MM, and use locations in the defined warehouse for the separate inventory.

In-transit warehouses are warehouses, containing warehouse locations that you use to transfer inventory from one warehouse to another. In-transit locations show the transferred items are no longer in the sending warehouse and not yet received at the receiving warehouse. To account for the item, you specify an in-transit warehouse location where the item resides, for your records, until it is actually received at the receiving warehouse.

The Warehouses list window displays the warehouses defined for your company and includes the following information:

- Warehouse
- Description
- Warehouse type (Controlled and Uncontrolled)
- Site (if Enterprise Product Data Management (EPDM) is installed)
- Planning warehouse
- Selling warehouse
- Primary planning warehouse.

The Default card file for the Warehouses object contains three cards:
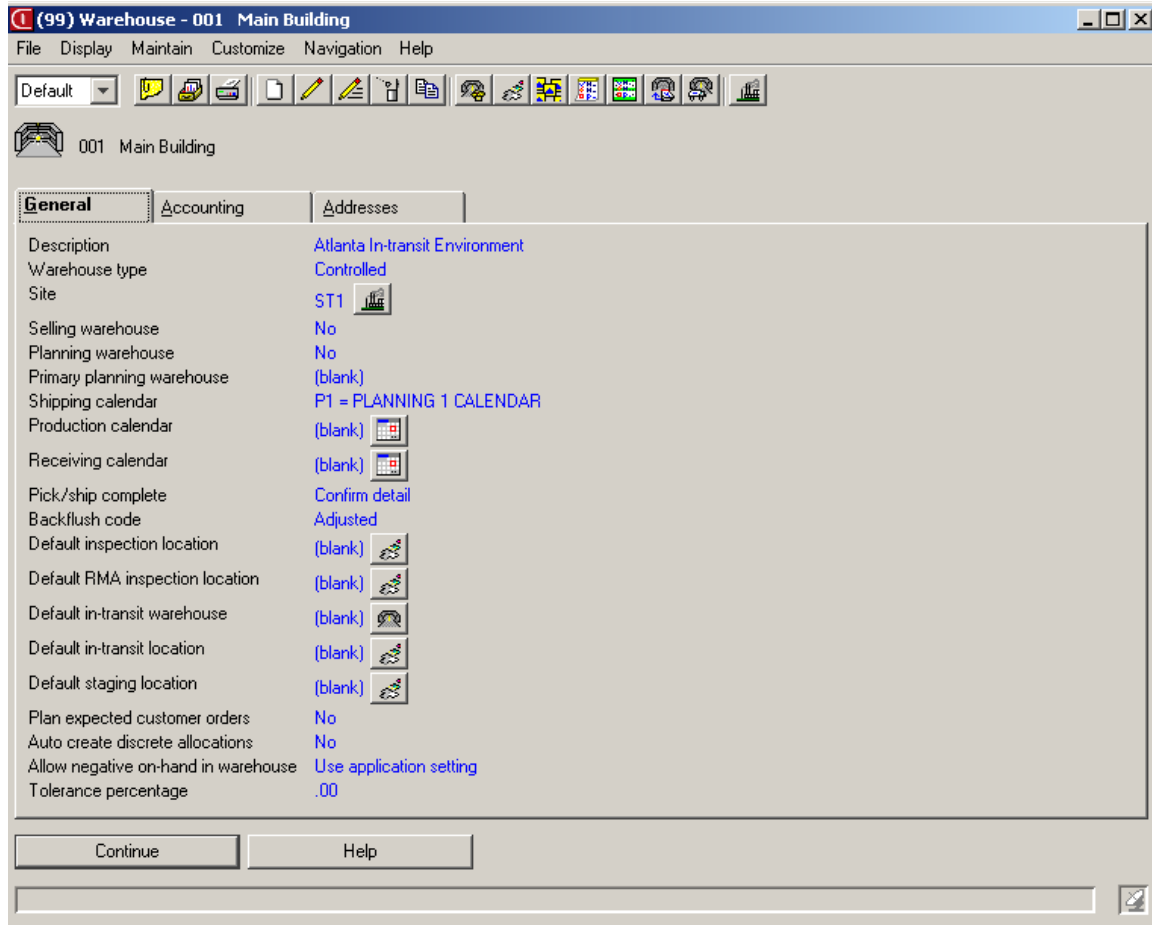
Card	Displays this information
General	Warehouse information as defined in the Warehouse Master file. You view the General card to determine whether warehouses are planning or non-planning, selling or non-selling, and controlled or uncontrolled.
Accounting	Tax information that applies to the selected warehouse.
Addresses	Addresses defined for the selected warehouse.

On the File menu, Host Print ... option on the Warehouses list window or card file, you can generate the following reports:

Host Print	Use this report to
M.O. Transaction Register	Show all material and labor transactions, and any closeout transactions that XA performs during completing and closing orders. Transactions processed through IM, XA logs in the OBPM Order Close transaction file. Production Control and Costing (PC&C) transactions, such as labor complete and operations, XA writes to the OBPM Order Close transaction file.
Order Shortages	Show the materials not available to meet current release demands at order release.

On the File menu, Host Jobs ... option on the Warehouses list window or card file, you can generate the following host jobs:

Host Jobs	Use this host job to
Audit Allocation Quantities	Validate the allocation quantities or pick requirements between the Item Balance file and the Manufacturing Order Detail file. The Audit Allocation Quantities host job updates the Item Balance file to correct discrepancies found between these two files and prints any differences found.
	If Customer Order Management (COM) is installed and interfacing, this option accumulates the customer order allocation quantities in the Item Balance file. XA lists any item/warehouses that are out of balance and updates the Item Balance record to agree with the Customer Order Detail records for the items.
	Schedule this option for a time when the Item Balance, Customer Order Detail, Manufacturing Order Detail, Customer Order Master, Manufacturing Order Master, and Order Release Data Entry files are not used by another task.
Audit Location Quantities	Print the Location Quantity/Item Balance report. This report compares the item quantities in the Item Balance file with the on-hand quantities in the Location Quantity file to identify any discrepancies. XA does not include rejected items and items waiting for inspection in the totals.
Audit On-order Quantities	Validate quantities on-order among the Item Balance file, Purchase Order Item Detail, and Manufacturing Order Master files. XA updates the Item Balance file to correct discrepancies among these three files and prints any differences found.
	Schedule this option for a time when the Item Balance, Purchase Order Item Detail, and Manufacturing Order Master files are not used by another task.
Cycle Count	Create sample groups of items and compare their inventory on-hand balances with the quantity found in inventory. Use the Cycle Count host job if you need to define the items you count into small groups. The Cycle Count host job has more flexibility for defining the items in your inventory count groups than the Physical Inventory host job.
Generate Reorder Recommendations	Create or refresh reorder recommendations. XA generates reorder recommendations for all order point items in a warehouse or a subset of warehouses.

Host Jobs	Use this host job to
	The Generate Reorder Recommendations host job allows you to select whether to create automatically replenishment orders during generation.
Physical Inventory	Count all items in all locations in the warehouse. XA creates a physical inventory for warehouses because a total physical inventory is for all items, in all locations, in the warehouse. You can select a single warehouse or multiple warehouses. If you wish to specify multiple warehouses, you can supply a subset.

Warehouse Locations

The Warehouse Locations object contains information associated with locations in warehouses. In controlled warehouses, the Warehouse Locations object shows the qualities of inventory in each location defined in each warehouse.

In-transit warehouse locations are locations used to transfer inventory from one warehouse location to another to show the transferred items are no longer in the sending warehouse location and not yet received at the receiving warehouse location. To account for the item, you specify an in-transit warehouse location where the item resides, for your records, until it is actually received at the receiving warehouse location.

The Warehouse Locations list window displays the locations in your warehouses and includes following information:

Location	Whs	Description	Type	Empty	Multiple items	Multiple lots
A1211	001	Main Building	Production Line	No	Yes	Yes
A1212	001	Main Building	Production Line	No	No	Yes
A1213	001	Main Building	Stocking-main	No	No	No
A1214	001	Main Building	Stocking-main	No	No	No
A1311	001	Main Building	Stocking-main	No	No	No
A1312	001	Main Building	Stocking-main	Yes	No	No

- Warehouse
- Location
- Description
- Location type description (Default types are bulk stores, stocking-main, quality control, stocking-sub, and In-transit.)
- Empty location
- Multiple items
- Multiple lots.

The Default card file for the Warehouse Locations object contains one card called Location Compound (the tab label is Location). This card displays location information such as general information about the location, location comments, and a list of location items.

On the File menu, Host Print ... option on the Warehouse Locations list window or card file, you can generate the following report:

Host Print	Use this report to
Staging Location Return to Stock	Identify items in controlled warehouses that XA users picked to a staging location but did not ship. You can print this report for a sizing of the work you want to process the next day or after a shipment is complete for a list of items that you want to return to inventory.

On the File menu, Host Jobs ... option on the Warehouse Locations list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Cycle Count	Create sample groups of items and compare their inventory on-hand balances with the quantity found in inventory. Use the Cycle Count host job if you need to define the items you count into small groups. The Cycle Count host job has more flexibility for defining the items in your inventory count groups than the Physical Inventory host job.

Items

Items are components, materials, purchased parts, finished goods, and any other types of objects your company uses, manufactures, stocks, or sells to customers. You use the Items object to view, create, and maintain item records. If EPDM is installed, use the Item Revisions object to create and maintain item information.

The Items list window displays a list of items and includes the following information:

Item	Description	Class	I/T	Drawing number	Stk UM	Val	Location	Dept
W1325	Component Item J Series		F		EA			
W1326	Component Item J Series		4		EA			
W1327	Component Item K Series		3		EA			
W1328	Phantom Item J Series		0		EA		A1211	
W1329	End Item J Series		1		EA			
W1330	End Item K Series		F		EA			

- Item
- Description
- Item class
- Item type. Default types are:

    - 0 Phantom
    - 1 Assembly or subassembly
    - 2 Fabricated item
    - 3 Raw material
    - 4 Purchased item
    - 9 User option
    - F Feature
    - K Kit
- Drawing number (Engineering)
- Stocking UM
- Value class
- Default stock location
- Department.

The Default card file for the Items object contains fifteen cards:
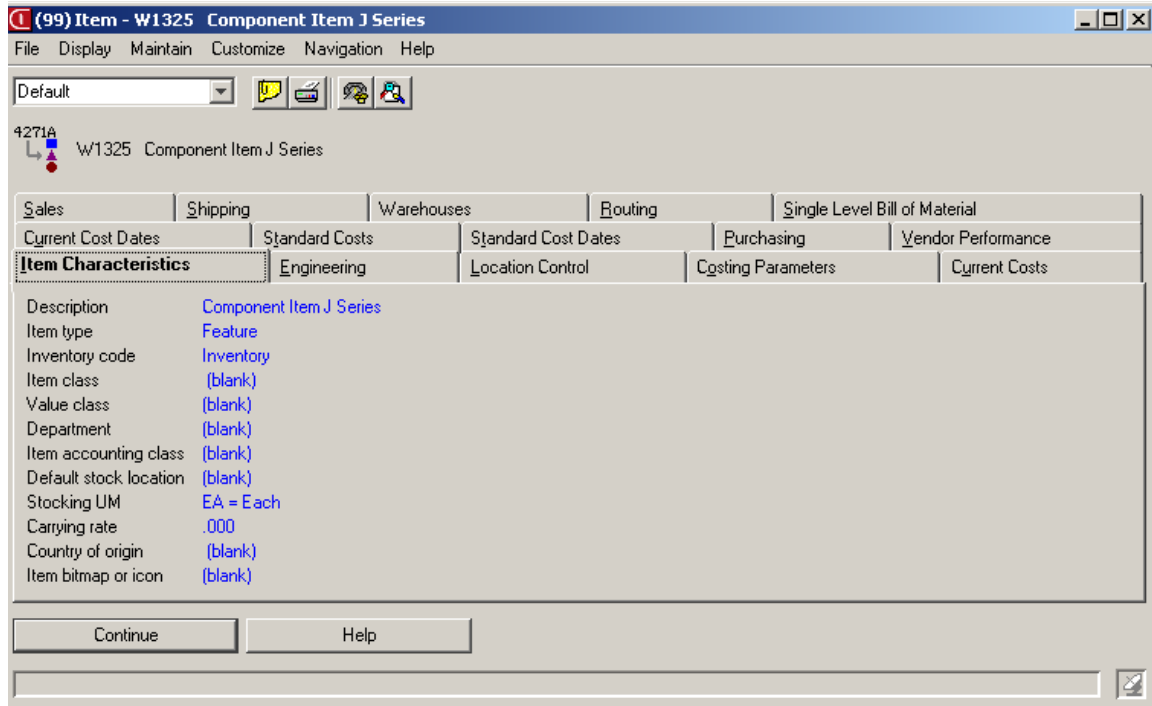
Card	Displays this information
Item Characteristics	Categories to which the item belongs.
Engineering	How your company assembles the item or uses the item in the assembly of another item.
Location Control	Where and how your company stores the item.
Costing Parameters	Different amounts the item adds to the total cost of the product.
Current Costs	Latest expected costs for the item.
Current Cost Dates	Dates when the current this-level costs were last maintained.
Standard Costs	Constant costs for the year.
Standard Cost Dates	Dates at which the standard this-level costs were last maintained.
Purchasing	Purchasing details for buying the item. The information on this card is relevant for items you buy from an outside vendor instead of items you manufacture.
Vendor Performance	Vendor's effectiveness for supplying a purchased item.
Sales Compound (the tab label is Sales)	Figures used to track the sales performance of the item.
Shipping	Packing and delivery information. You can use shipping information for both items you send to a customer and the items you receive from a vendor.
Warehouses	Warehouses where you stock the item.

Card	Displays this information
Routing	Routing operations for the item when PDM Plus is installed.
Single Level Bill of Material	Components at the highest-level for the selected item when PDM Plus is installed.

On the Maintain menu on the Items list window or card file, you can perform the following options when PDM Plus is installed:

Option	Use this option to
Delete Bill of Material	Delete all the product structure records for the component items associated with the bill of material for the item.
Copy Bill of Material	Copy all the product structure records for the component items on the bill of material, for the source item, to a new bill of material for the target item.
Delete Routing	Remove all the relationships between the item and the production facilities and operations used in the manufacture of the item.
Copy Routing	Copy all the relationships between production facilities and operations used in the manufacturing of the item to a new routing for the target item.

Item Warehouses

You use the Item Warehouses object to view and maintain items you stock in warehouses. The Item Warehouses object contains one record for each item number assigned to a warehouse. Each record includes data for managing inventory, such as quantity on-hand, quantity on-order, past use, and lead time.

The Item Warehouses list window displays a list of items and includes the following information:

- Item
- Warehouse
- Planner
- Primary vendor
- Quantity on-hand
- Stocking UM
- Total quantity on-order
- Total quantity allocated
- Total quantity available.

The Default card file for the Item Warehouses object contains fourteen cards:
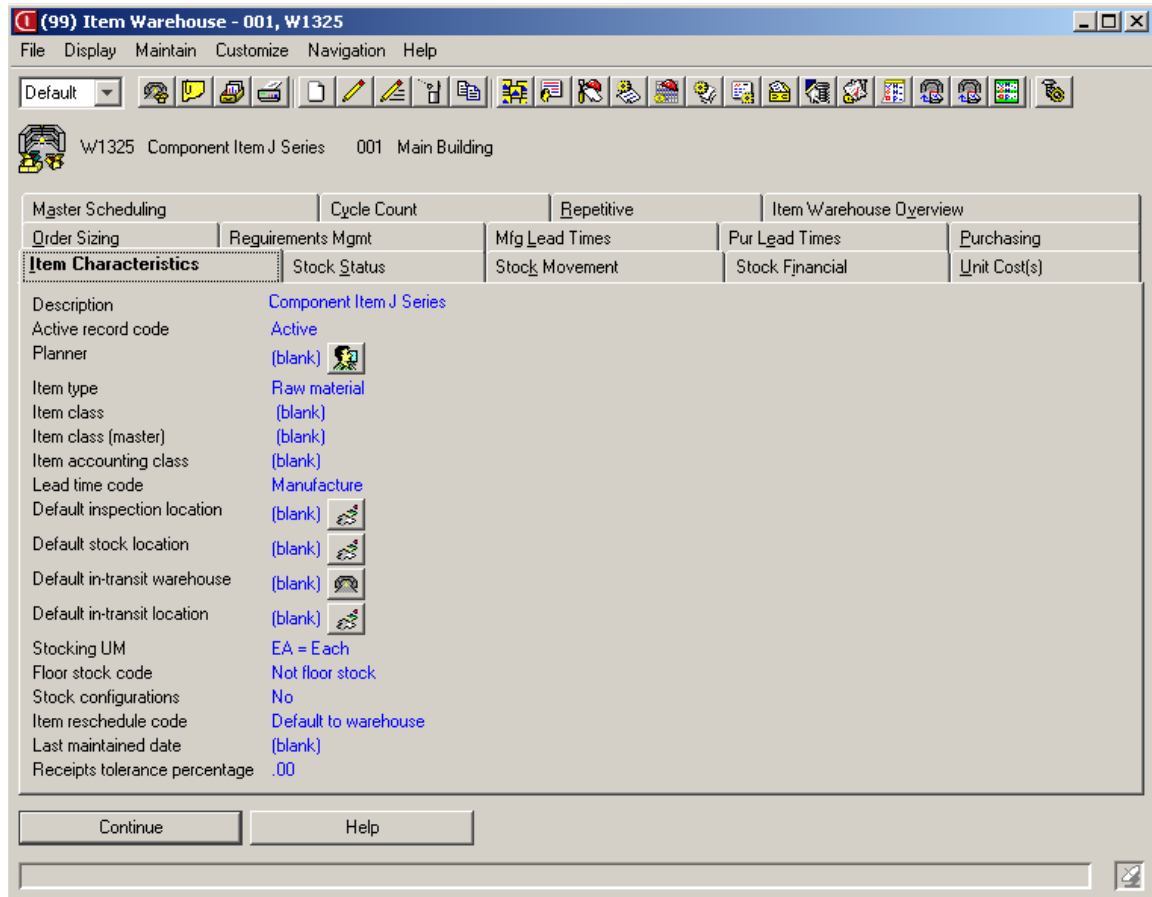
Card	Displays this information
Item Characteristics	Categories to which the item belongs.
Stock Status	Item quantities.
Stock Movement	How the stock quantity of the item has changed. It provides information for this period and for the year-to-date.
Stock Financial	Costs and sales information associated with the item. It shows information for this period and for the year-to-date.
Unit Cost(s)	Costs your company has defined for the item.
Order Sizing	Usual size of orders. This information helps you replenish the item.
Requirements Mgmt	Requirements planning for the item warehouse.
Mfg Lead Times	Lead times associated with manufacturing the item.
Pur Lead Times	Lead times associated with purchasing the item.
Purchasing	Purchasing information related to buying the item and includes the vendor associated with the purchase.
Master Scheduling	Scheduling information used by the Master Production Schedule Planning application for planning replenishments for the item.

Card	Displays this information
Cycle Count	Cycle count information for the item.
Repetitive	Repetitive information used by the Repetitive Production Management application for items manufactured on production lines.
Item Warehouse Overview	Item locations and discrete allocations for the Item/Warehouse in an indented outline.

On the Maintain menu on the Item Warehouses list window or card file, you can perform the following options:

Option	Use this option to
Create Manufacturing Order	Create manufacturing orders using item and warehouse information using selected item warehouse records.
Create Purchase Order	Create purchase orders using item and warehouse information using selected item warehouse records.
Create Requisition	Create requisitions using item and warehouse information using selected item warehouse records.
Check Component Availability	Search for available components related to the selected order.
Suspend	Prevent XA users from using the item warehouse.
Activate	Allow XA users to use the item warehouse.

On the File menu, Host Jobs ... option on the Item Warehouses list window or card file, you can generate the following host jobs:

Host Jobs	Use this host job to
Audit Allocation Quantities	Validate the allocation quantities or pick requirements between the Item Balance file and the Manufacturing Order Detail file. The Audit Allocation Quantities updates the Item Balance file to correct discrepancies found between these two files and prints any differences found.
	If COM is installed and interfacing, this option accumulates the customer order allocation quantities in the Item Balance file. XA lists any item/warehouses that are out of balance and updates the Item Balance record to agree with the Customer Order Detail records for the items.
	Schedule this option for a time when the Item Balance, Customer Order Detail, Manufacturing Order Detail, Customer Order Master, Manufacturing Order Master, and Order Release Data Entry files are not used by another task.
Audit Location Quantities	Print the Location Quantity/Item Balance report. This report compares the item quantities in the Item Balance file with the on-hand quantities in the Location Quantity file to identify any discrepancies. XA does not include rejected items and items waiting for inspection in the totals.
Audit On-order Quantities	Validate quantities on-order among the Item Balance file, Purchase Order Item Detail, and Manufacturing Order Master files. XA updates the Item Balance file to correct discrepancies among these three files and prints any differences found.

Host Jobs	Use this host job to
	Schedule this option for a time when the Item Balance, Purchase Order Item Detail, and Manufacturing Order Master files are not used by another task.
Cycle Count	Create sample groups of items and compare their inventory on-hand balances with the quantity found in inventory. Use the Cycle Count host job if you need to define the items you count into small groups. The Cycle Count host job has more flexibility for defining the items in your inventory count groups than the Physical Inventory host job.

Item Locations

You use the Item Locations object in controlled warehouses to store information about the locations for selected items. It shows all the locations in all the warehouses where quantities of the item are in inventory.

The Item Locations list window displays a list of items and includes the following information:

- Item
- Warehouse
- Location
- Batch/lot
- FIFO date
- QC status
- Quantity on-hand
- Stocking UM
- Quantity allocated
- Quantity available
- QC due date
- Goods received note.

The Default card file for Item Locations contains one card called Location. This card displays Batch/lot and FIFO data options, selected during application tailoring.
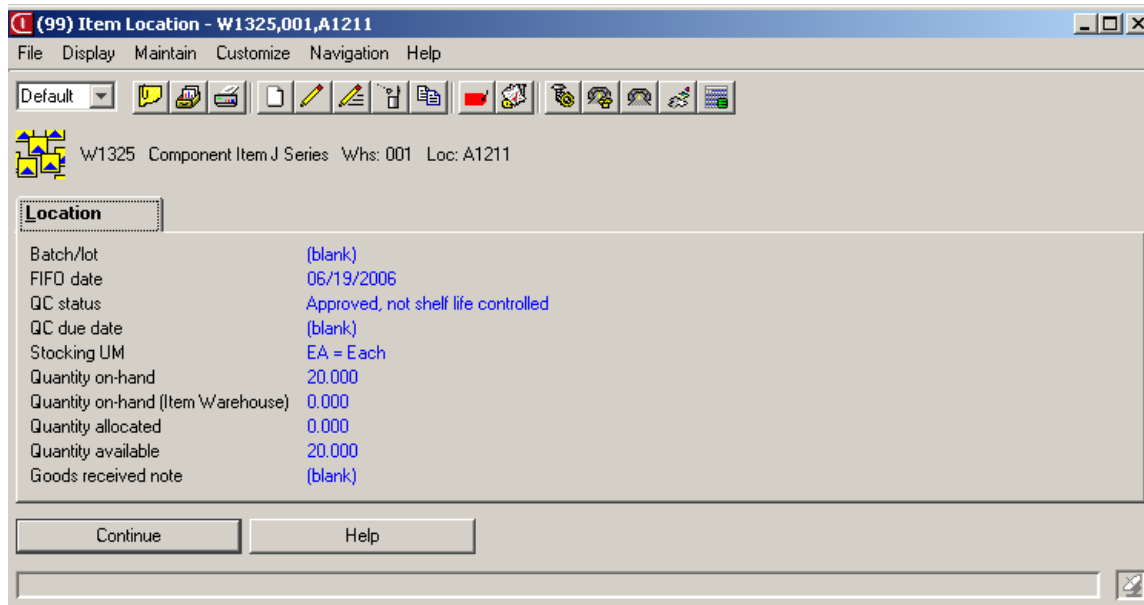
On the File menu, Host Jobs ... option on the Item Locations list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Cycle Count	Create sample groups of items and compare their inventory on-hand balances with the quantity found in inventory. Use the Cycle Count host job if you need to define the items you count into small groups. The Cycle Count host job has more flexibility for defining the items in your inventory count groups than the Physical Inventory host job.

Discrete Allocations

The Discrete Allocations object contains information about all locations in controlled warehouses, where XA users have allocated a particular quantity of an item to a particular order. You can allocate an item if the Discrete allocations attribute in the Items or Item Revisions object has a value of Yes.

The Discrete Allocations list window displays a list of items and includes the following general information:

- Item
- Warehouse
- Location
- Batch/lot
- FIFO date
- Order (formatted)
- Allocated quantity
- Stocking UM
- Required quantity
- Quantity on-hand
- Quantity available.

The Default card file for the Discrete Allocations object contains one card called Allocation. This card displays information about the item, the warehouse, the location for the item, and the order to which an XA user has allocated the item.
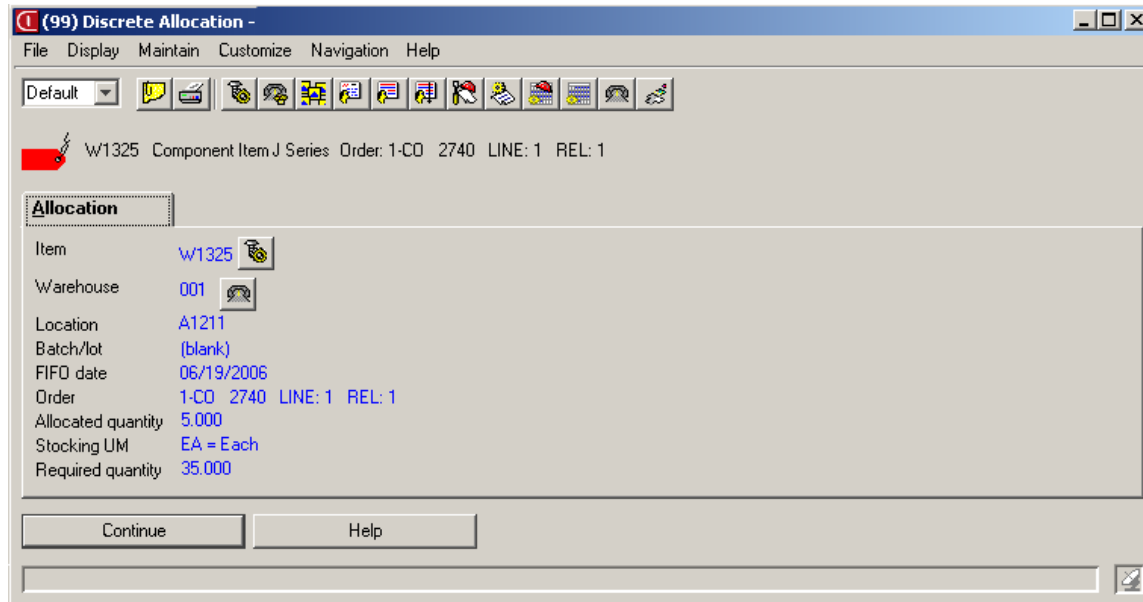
Inventory Transaction History

The Inventory Transaction History object contains information about all the inventory transactions entered in XA. You can use this object to view transactions XA has generated and generate new transactions.

You can reverse, copy, and enter negative quantities for some MM inventory transactions. You reverse a transaction when it is created in error, copy a transaction when you want to create a similar transaction of the same type quickly, and enter a transaction with a negative quantity when you want to undo an issue or receipt. For example, when a sales item is returned from the customer, you can enter an issue sales item (SA) transaction with a negative quantity.

Information about inventory transactions is contained in the Inventory Transaction History list window until you purge it.

Depending on the applications you install, the Inventory Transaction History object information includes the following type of transactions for each item/warehouse, batch/lot, or order/scheduled number:

- Issue
- Receipt
- Cost
- Scrap
- Quality control
- Maintenance
- Purchasing
- Miscellaneous.

The Inventory Transaction History list window displays a list of inventory transactions that XA has processed and includes the following information:

- Item
- Warehouse
- Posted date
- Transaction code
- Order (formatted)
- Transaction quantity
- Unit of measure
- New quantity on-hand

- New quantity on-order
- New quantity allocated.

The Default card file for the Inventory Transaction History object contains nine cards:

Card	Displays this information
General	Inventory transaction record information, such as the date posted, the transaction code, and the quantity.
Item	Item information for the item associated with the selected inventory transaction record.
Before and After	Changes made to the item compared to before the transaction was processed.
Overview	The selected inventory transaction and its associated transactions in an indented outline. The outline includes parent, child, reversed, and reversing transactions in the sequence XA processed the transactions. The selected transaction might not be first transaction in the overview.
Mfg Order	Transaction information for the transaction generating the manufacturing order for the item associated with the selected inventory transaction record. The Mfg Order card displays information related to the order, and a repeat of the information shown on the General card, for quick reference.

Card	Displays this information
Schedule	Transaction information for the transaction generating the schedule for the item associated with the selected inventory transaction record. The Schedule card displays information related to the schedule, and a repeat of the information shown on the General card, for quick reference.
Purchase Order	Transaction information for the transaction generating the purchase order for the item associated with the selected inventory transaction record. The Purchase Order card displays information related to the order, and a repeat of the information shown on the General card, for quick reference.
Customer Order	Transaction information for the transaction generating the customer order for the item associated with the selected inventory transaction record. The Customer Order card displays information related to the order, and a repeat of the information shown on the General card, for quick reference.
Costs	Costs for the item associated with the selected inventory transaction record.

On the Maintain menu on the Inventory Transaction History list window or card file, you can perform the following options:

Option	Use this option to
Copy	Copy a transaction as a quick way to generate a new transaction of the same transaction type as the selected transaction.
Reverse	Reverse a transaction by generating a new transaction that reverses the effect of the selected transaction and creates a link between the two transactions. The first transaction can be reversed only once. The reversing transaction can be reversed, as needed. Some transactions can only be reversed under certain conditions. Information about reversing transactions is provided for each MM inventory transaction in Appendix A, "Inventory transactions."
Issue Item (IS)	Report the issue of an item not associated with a production or sales order. Examples are cutting oil, lubricants, or uncontrolled floor stock items. In IM, this transaction is called a miscellaneous issue (IS).
Receive Item (RC)	Report the receipt of an item not associated with a purchase or production order. In IM, this transaction is called a miscellaneous receipt (RC). MM uses this transaction when receiving a scheduled receipt for a transfer (or shipment container item linked to the scheduled receipt) when the quantity you are receiving does not match the quantity sent. The receive item (RC) transaction accounts for the quantity difference.

Option	Use this option to
Issue Sales Item (SA)	Issue an item to a customer sales order. In IM, this transaction is called a sales shipment (SA).
Transfer Item (TW)	Transfer or move items from one warehouse or location to another. In IM, this transaction is called an Interwarehouse transfer (TW). If you know both (the sending and receiving) warehouse locations, the transfer item (TW) transaction does the transfer in one step. You can also use this transaction when you want to issue an item to another warehouse or warehouse location but do not yet want to receive the item at its new warehouse or location. For example, if the transfer of the item between warehouses will take several days, you might not want the item to show as received in the receiving warehouse until it physically arrives. In this situation, you can use the transfer item (TW) to move the item to an in-transit warehouse location so that you can track where the item is between its issue and receipt. You can also create a scheduled receipt, as part of the transfer item (TW) transaction, which you can use to receive the transferred items in the receiving warehouse.

On the File menu, Host Print ... option on the Inventory Transaction History list window or card file, you can generate the following report:

Host Print	Use this report to
Inventory Transaction Register	Print a list of inventory transactions that XA has generated. You can print subsets of transactions including value transactions to view transactions that affected inventory value or transactions associated with a transfer.

Inventory Count Groups

An inventory count group is the collection of items in warehouses or warehouse locations that you count together.

The Inventory Count Groups list window displays a list of groups of inventory you want to count and includes the following information:

- Count group
- Count group description
- Count type (Physical Inventory or Cycle Count)
- Current group count
- Post date.

Double-clicking a row in the Inventory Count Groups list window displays the Inventory Count Items list window. To display the card file of a selected inventory count group, choose the Inventory Count Group details option on the Display menu of Inventory Count Groups.

The Default card file for Inventory Count Groups object contains one card called General. This card displays information about the count including count type, post date, and the current group count.

On the Maintain menu on the Inventory Count Groups list window or card file, you can perform the following options:

Option	Use this option to
Activate Next Count	Initiate another count, which you use to ensure the counts are accurate before making any inventory adjustments. You activate the first count when you create the inventory count group or you can wait until later. If you wait to activate the count, you can review the inventory count items and add or delete inventory count items to the inventory count group. After you activate the count, you can no longer delete an inventory count item. You can enter up to three counts for each inventory count item. If you are satisfied with the results and all items are within tolerance, you post the inventory adjustments. If you have inventory count items that are out of tolerance, you decide whether you need to do another count.
Post Count Adjustments	Update the inventory balances based on the results of the count. You post inventory count groups only one-time.
Sequential Count Entry	Enter each inventory count item in sequence from the Inventory Count Entry List report. The sequential count entry method assumes you sorted your Inventory Count Entry List and inventory count items in the same order. XA provides three sorts for sequencing inventory count items on the Inventory Count Entry List report: (default), By tag, or By warehouse/item/location. The default sort arranges inventory count items by warehouse, warehouse location, and item number.
Random Count Entry	Enter each inventory count item when your counters return to you the inventory tags out of order. Using random count entry, you can enter details for inventory count items in an order other than the count entry list. Instead, you choose to locate each inventory count item by item, tag number, or bar code. If you enter by item, you need to enter the warehouse and item number. If the item is in a controlled warehouse, you also need to enter the location, batch/lot, and FIFO as appropriate.

On the File menu, Host Jobs ... option on the Inventory Count Groups list window or card file, you can generate the following host jobs:

Host Jobs	Use this host job to
Generate Tag Numbers	Create tag numbers after you created the count group, XA generates the tag numbers using the starting tag number you define.
Import Counts	Load count information into XA. You use this option when you capture and prepare count information out of XA and write the counting data to a disk file that resides in System i, but out of XA.

To create an inventory count group, you use the Host Jobs functions in Warehouses, Warehouse Locations, Item Warehouses, or Item Locations. The object you choose depends on the items or locations you want to count. For example, if you want to count the items in a warehouse location, you use the Warehouse Locations object or if you want to count all items in several warehouses, you use the Warehouses object.

Inventory Count Items

Inventory Count Items are items that are grouped to be counted in physical inventory or cycle counts. Each inventory count item has a different combination of warehouse and item, and for a controlled warehouse, location, batch/lot, and FIFO date.

The Inventory Count Items object is a lower-level object of Inventory Count Groups. You view the Inventory Count Items list window by double-clicking a row of the Inventory Count Groups list window or by selecting Inventory Count Items on the Display menu on the Inventory Count Groups list window or Default card file.

The Inventory Count Items list window displays a list of items that XA users have grouped for counting and includes the following information:

- Warehouse
- Warehouse location
- Item number
- Batch/lot number
- FIFO date
- Tag number
- Assigned to
- Count quantity
- Count by user
- Count date.

The Default card file for the Inventory Count Items object contains four cards:
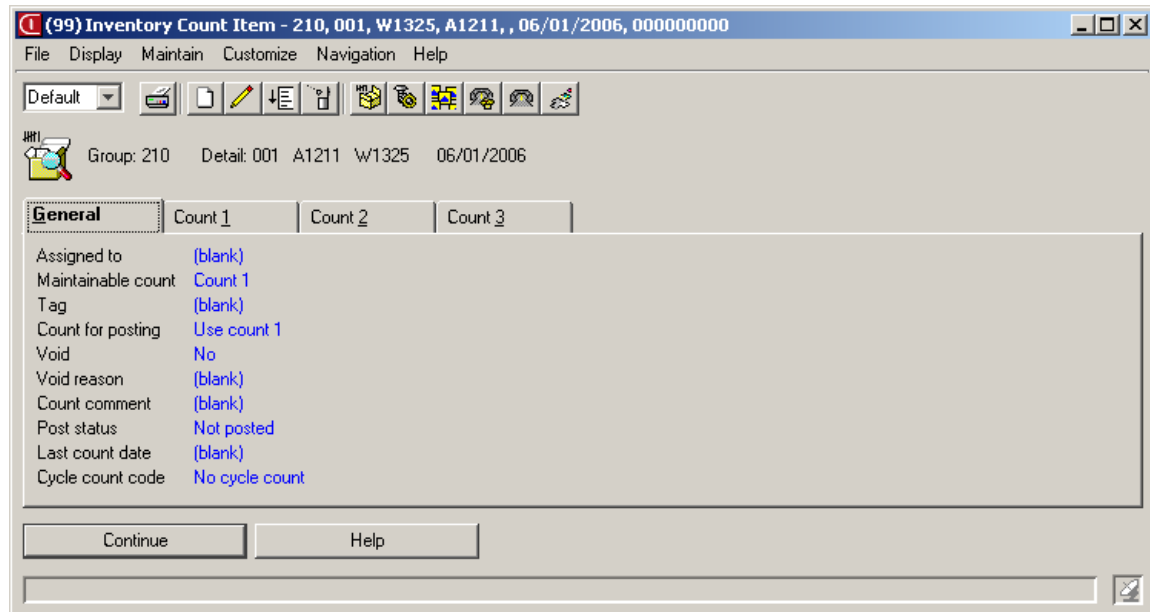
Card	Displays this information
General	General count information for the inventory count item.
Count 1	First count information, including information about quantities, variances, and information about the count itself.
Count 2	Second count information, including information about quantities, variances, and information about the count itself.
Count 3	Third count information, including information about quantities, variances, and information about the count itself.

On the Maintain menu on the Inventory Count Items list window or card file, you can perform the following options:

Option	Use this option to
Activate Next Count	Initiate another count, which you use to ensure the counts are accurate before making any inventory adjustments. You activate the first count when you create inventory count groups or you can wait until later. If you wait to activate the count, you can review the inventory count items and add or delete inventory count items to the inventory count group. After you activate the count, you can no longer delete an inventory count item. You can enter up to three counts for each inventory count item. If you are satisfied with the results and all items are within tolerance, you post the inventory adjustments. If you have inventory count items that are out of tolerance, you decide whether you need to do another count.
Sequential Count Entry	Enter each inventory count item in sequence from the Inventory Count Entry List report. The sequential count entry method assumes you sorted your Inventory Count Entry List and inventory count items in the same order. XA provides three sorts for sequencing inventory count items on the Inventory Count Entry List report: (default), By tag, or By warehouse/item/location. The default sort arranges inventory count items by warehouse, warehouse location, and item number.
Random Count Entry	Enter each inventory count item when your counters return to you the inventory tags out of order. Using random count entry, you can enter details for inventory count items in an order other than the count entry list. Instead, you choose to locate each inventory count item by item, tag number, or bar code. If you enter by item, you need to enter the warehouse and item number. If the item is in a controlled warehouse, you also need to enter the location, batch/lot, and FIFO as appropriate.

On the File menu, Host Print ... option on the Inventory Count Items list window or card file, you can generate the following reports:

Host Print	Use this report to
Inventory Count Entry List	Be a turnaround document for your counters as they count the inventory. The list contains all the item numbers you need to count.
Inventory Tags	Be a turnaround document for your counters as they count the inventory. You print one inventory tag for each item per location. The tag identifies the item, its characteristics, and the location where your company stocks the item. The counter writes the count on the tag and returns the tag, which an XA user enters in the system. You use the one tag for one item or location method primarily for physical inventory counts.
Items Counted / Uncounted	Check you entered all the counts in the inventory count group. You can print the Items Counted/Uncounted report any time during the count entry process.
Variance Report	Print the Variance Report after you enter the count. You can verify that you entered the counts correctly and the recommended adjustments are acceptable. For each count you activated for the item, the report shows the count quantity, the compare quantity (cutoff or entry on-hand), the variance, and whether the count is accurate.

On the File menu, Host Jobs ... option on the Inventory Count Items list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Generate Tag Numbers	Create tag numbers after you created the count group. XA generates the tag numbers using the starting tag number you define. The Generate Tags host job in Inventory Count Items allows you to subset and sort the inventory count items before generating the tags. You can also change the starting tag number for each subset, leaving gaps in the numbers. Leaving gaps in the numbers is useful if you are assigning tags by the person assigned to the count.

Inventory Statuses

The Inventory Statuses object allows you to classify items stored in a warehouse location, so that those items are held from some activities, by setting attributes to specify the activity from which the items are to be held.

The Inventory Statuses list window displays a list of statuses for inventory and includes the following information:

- Inventory status
- Description
- Planning hold.

The Default card file for the Inventory Statuses object contains one card called General. This card displays information about the inventory status.

Transaction Reasons

The Transaction Reasons object helps you define reason codes for inventory transaction types. If your company defines one or more reason codes for a transaction type, you can select only the defined reason codes for that inventory transaction. If your company has not defined any reason codes, you can enter a code of your own.

The Transaction Reasons list window displays a list of reason codes for transactions and includes the following information:

- Transaction type
- Reason code
- Reason description.

The Default card file for the Transaction Reasons object contains one card called General. This card displays information about the transaction reason.

Pick Lists

You use the Pick Lists object to display online all the information that is printed on a pick list. None of the attributes in the Pick Lists object are maintainable. Employees in the warehouse use the pick list as an authorization to pick materials and employees working in shipping or packaging use the pick list as a statement of what was picked. The pick list might also be used to confirm shipments.

The Pick Lists list window displays a list of pick lists and includes the following information:

Co	Pick list	Pick date	Pick list type	Pick list status	Whs
1	239	02/20/2008	0 = Regular pick list	0 = Unpicked	MPA
1	238	02/20/2008	0 = Regular pick list	0 = Unpicked	MPA
1	237	05/17/2007	0 = Regular pick list	2 = Picked	LW1
1	236	02/06/2007	0 = Regular pick list	0 = Unpicked	ATL
1	235	02/06/2007	0 = Regular pick list	2 = Picked	CR
1	234	02/06/2007	0 = Regular pick list	2 = Picked	ATL

- Company
- Pick list
- Pick date
- Pick list type
- Pick list status
- Warehouse.

The Default card file for the Pick Lists object contains five cards:

Card	Displays this information
General (with Items) (the tab label is General)	Pick list information and includes and a list of the items on the pick list.
	The General (with Items) card includes a Warehouse Location Sequence tab that is a list of pick list items in warehouse location sequence.
	The General (with Items) card includes an Order Entry Sequence tab that is a list of pick list items in warehouse location sequence.
	The General (with Items) card includes an Order Location Sequence tab that is a list of pick list items in order location sequence.
Ship-tos	Additional addresses to which the order can be shipped.
Pick List Orders	Orders for which the pick list was generated.
Packing	Pick pack ship items on the pick list.
Overview	Pick list, pick list ship-tos, pick orders, pick list items, discrete allocations, item locations, and line item feature and options in an indented outline.

On the Maintain menu on the Pick Lists list window or card file, you can perform the following options:

Option	Use this option to
Generate Pick List	Create a list of items you need to pick for an order. When you generate the pick list, you can also print the pick list and packing list.
Generate Shipment	Create a shipment using a single pick list. When you generate the shipment, you can also print the packing list, bill of lading and pro forma invoice. If you selected the Ready to invoice attribute, the invoice can also be printed when XA generates the shipment.

On the File menu, Host Print ... option on the Pick Lists list window or card file, you can generate the following reports:

Host Print	Use this report to
Packing List	Create a packing list after the pick list is generated. This host report is optional.
Pick List	Create a printout of the pick list after the pick list is generated. This host report is optional. Pick lists can only be reprinted if the Pick list status is 0 - Unpicked and the pick list is not a kit component pick list.

On the File menu, Host Jobs ... option on the Pick Lists list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Generate Shipment	Create a shipment using a single pick list or multiple pick lists. When you generate the shipment, you can also print the packing list, bill of lading and pro forma invoice. If you selected the Ready to invoice attribute, the invoice can also be printed when XA generates the shipment.

Pick Orders

Pick Orders object shows the customer orders that are on the pick list.

The Pick Orders object is a lower-level object of Pick Lists. For the selected pick list, you can view the Pick List Orders list window by selecting the Pick List Orders option on the Display menu on the Pick Lists list window or Default card file. You can also view pick orders on the Orders card in the Pick List Default card file.

The Pick List Orders list window displays a list of orders on the pick list and includes the following information:

- Order number (formatted)
- Customer name
- Partial ship
- Accept substitute
- Carrier.

The Default card file for the Pick Orders object contains one card called General and Comments (the tab label is General). This card displays information about the orders for which the pick list was generated and order comments specified for the pick list.

Pick List Items

You use the Pick List Items object to display online all the information that is printed on a pick list. Only the Stage location attribute in Pick List Items is maintainable.

The Pick List Items object is a lower-level object of Pick Lists. You find the Pick List Items list window by selecting the Pick List Items icon on the MM desktop, or by selecting the option, Pick List Items, on the Display menu of the Pick Lists list window or card file.

The Pick List Items list window displays a list of items on a pick list and includes the following information:

- Company
- Pick list
- Warehouse
- Pick status
- Presentation item
- Presentation item description
- Stocking unit of measure
- Pick quantity
- Picked quantity
- Pick note
- Warehouse stock location
- Warehouse stage location.

The Default card file for the Pick List Items object contains seven cards:

Card	Displays this information
General	Item information for the item on the pick list such as location and item details.
Ship-to	Address information for the address to which the pick list item is shipped.
	The Ship-to card includes an Address tab that provides address and contact information.
	The Ship-to card includes a Logistics tab that provides shipping instructions and information.
Allocations	Discrete allocations associated with the item on the pick list.
	The Allocation card includes a Discrete Allocations tab that provides the list of discrete allocations.
	The Allocation card includes an Available Inventory tab that provides the list of item locations that are available for picking.
Features and Options	Line item features and options that match the s-number printed on the pick list.
Kit Pick List	General information about the kit pick list and a list of component pick list items.
Packing	Pick pack ship items associated with the item on the pick list.
Comments	Comments for the pick list item.

Pick List Ship-tos

Pick List Ship-tos object shows the destination addresses for customers for which the pick list was generated. Customers often want items shipped to different addresses. The customer ship-to addresses are used to override the default shipping address for an entire customer order or for individual line items on the order. By having multiple ship-tos for a customer, you can send the bill for an order to one address, but send items on the pick list to one or more addresses.

The Pick List Ship-tos object is a lower-level object of Pick Lists. For the selected pick list, you can view the Pick List Ship-tos list window by selecting the Pick List Ship-tos option on the Display menu on the Pick Lists list window or Default card file. You can also view pick list ship-tos on the Ship-tos card in the Pick List Default card file.

The Pick List Ship-tos list window displays a list of additional customer addresses to which items on the pick list can be shipped and includes the following information:
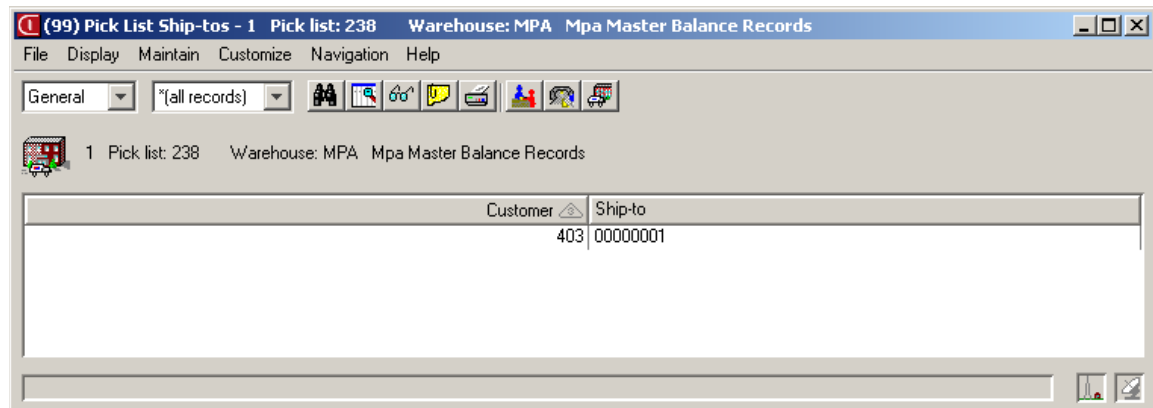
- Company
- Pick list
- Customer
- Ship-to.

The Default card file for the Pick List Ship-tos object contains one card called General (tabbed) (the tab label is General). This card displays information about the shipping address and shipping information for the items on the pick list. The General (tabbed) card includes an Address tab that provides address and contact information and a Logistics tab that provides shipping instructions and information.
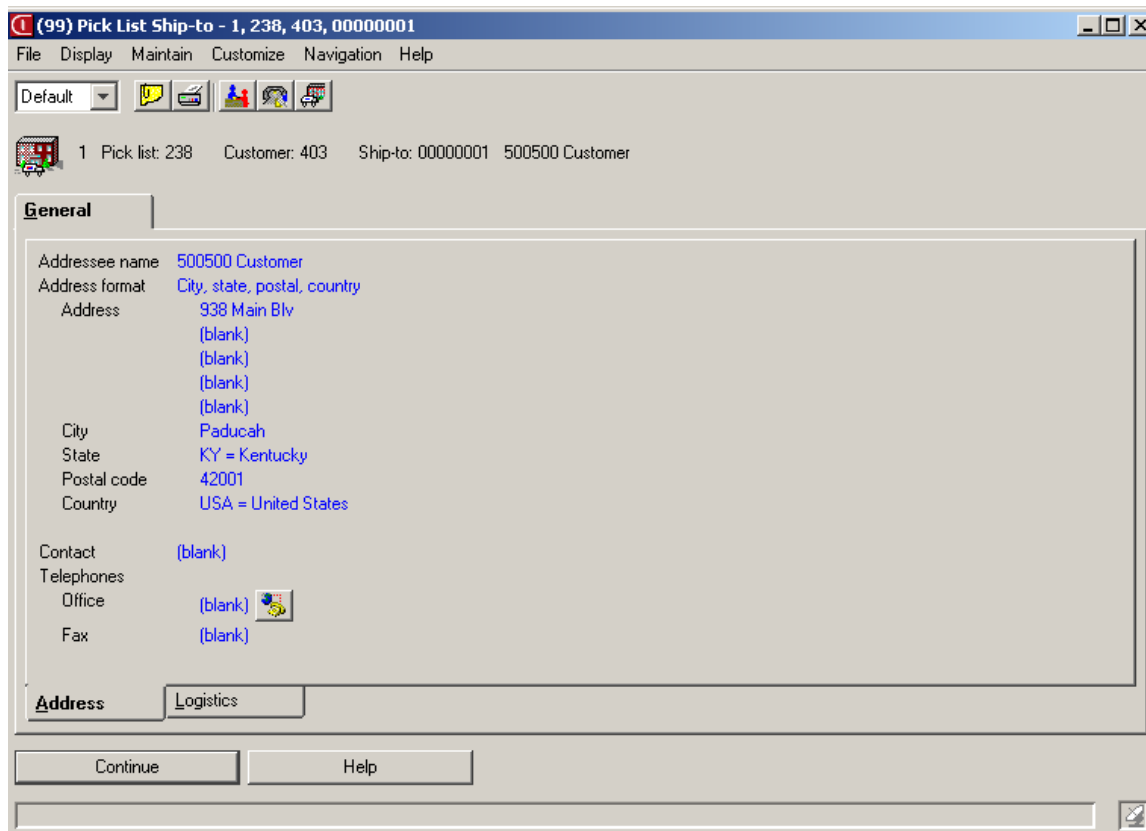
Pick Pack Ship Items

The Pick Pack Ship Items object contains information about all items picked, packed, and/or shipped, plus any containers packed and/or shipped.

The Pick Pack Ship Items object is a lower-level object of Pick Lists and Shipments. For the selected pick list or shipment, you can view the Pick Pack Ship Items list window by selecting the Pick Pack Ship Items option on the Display menu on these objects. You can also view pick pack ship items on the Packing card in the Pick List Default card file.

The Pick Pack Ship Items list window displays items that are picked, packed, and/or shipped and includes the following information:

- Company
- Warehouse
- Item (derived)
- Description (derived)
- Kit release sequence
- Pack/ship quantity in stocking unit of measure
- Stocking unit of measure
- Order number (formatted)
- Shipment
- Container ID
- Pick list.

The Default card file for the Pick Pack Ship Items object contains five cards:
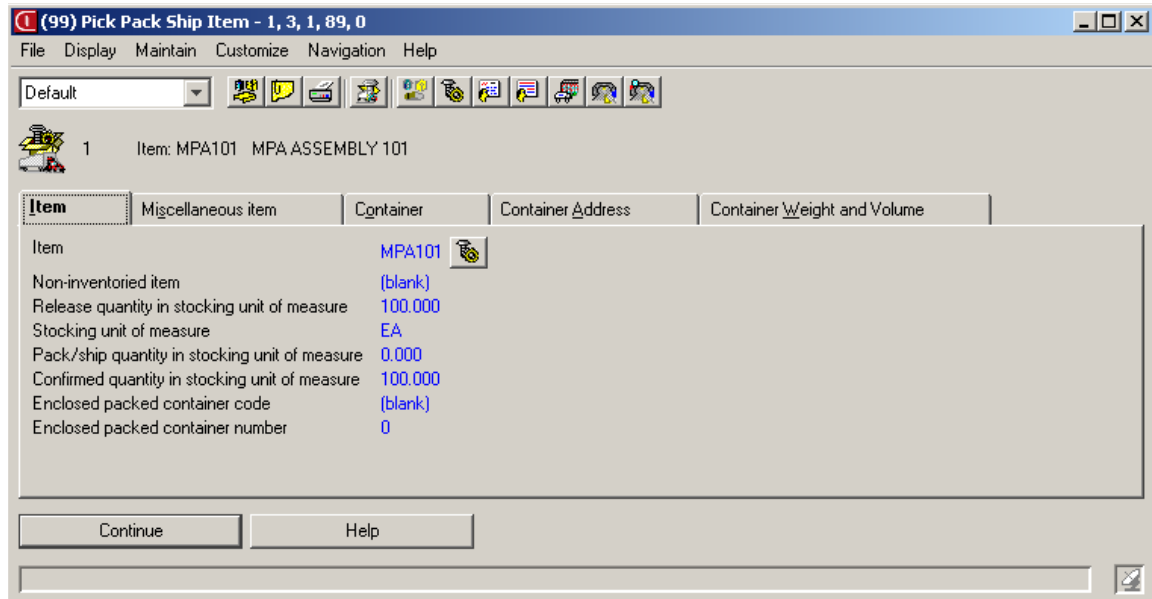
Card	Displays this information
Item	Item information for the pick pack ship item.
Miscellaneous item	Miscellaneous information for the pick pack ship item.
Container	Container information for the pick pack ship item.
Container Address	Address information for the address to which the pick pack ship item was sent.
Container Weight and Volume	Weight and volume information for the pick pack ship item.

On the Maintain menu on the Pick Pack Ship Items list window or card file, you can perform the following option:

Option	Use this option to
Generate Shipment	Create a shipment using a single container or multiple containers. When you generate the shipment, you can also print the packing list, bill of lading and pro forma invoice. If you selected the Ready to invoice attribute, the invoice can also be printed when XA generates the shipment.

On the File menu, Host Jobs ... option on the Pick Pack Ship Items list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Generate Shipment	Create a shipment using a single container. When you generate the shipment, you can also print the packing list, bill of lading and pro forma invoice. If you selected the Ready to invoice attribute, the invoice can also be printed when XA generates the shipment.

Shipments

Shipping is the process of sending goods to customers. One shipment can contain individual items, as well as packed containers. A consolidated shipment can contain multiple orders and ship-to IDs for multiple customers.

The Shipments list window displays a list of shipments to customers and includes the following information:

- Company
- Shipment
- Shipment date
- Name
- Shipment status
- Shipping instructions.

The Default card file for the Shipments object contains five cards:
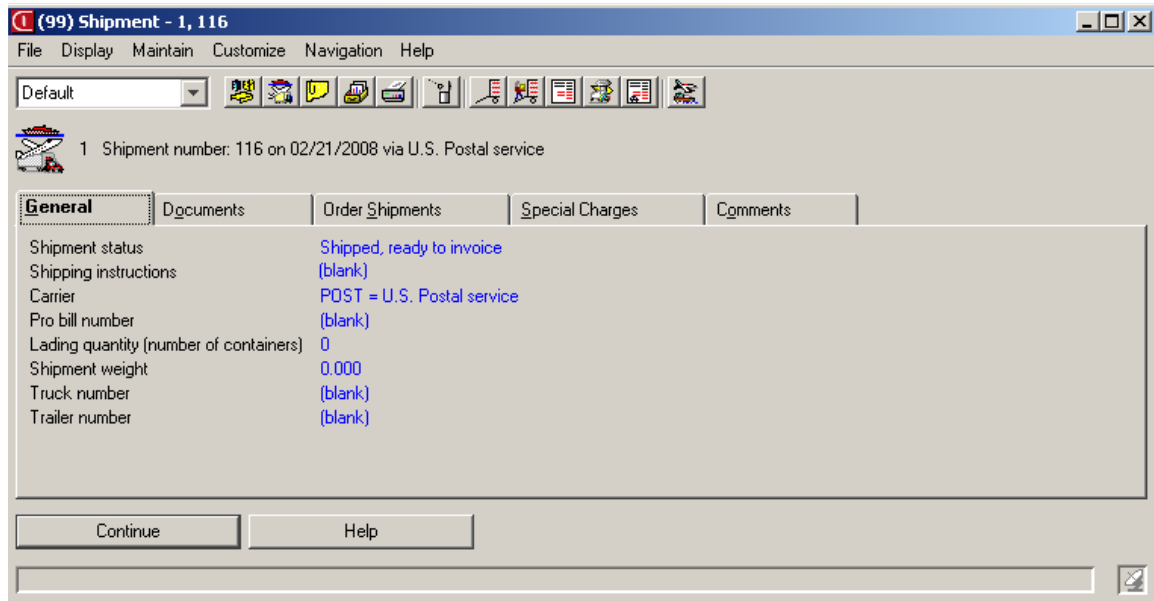
Card	Displays this information
General	Shipment information including the shipment status, shipping instructions, number of containers, and weight of the shipment.
Documents	Document information for documents that describe the shipment.
Order Shipments	Individual order shipments that are consolidated into one shipment. Each order shipment represents a group of items shipped at the same time from the same warehouse to the same customer ship-to address on the same customer order.
Special Charges	Special charges that apply to the selected shipment.
Comments	Comments about the shipment.

On the Maintain menu on the Shipments list window or card file, you can perform the following options:

Option	Use this option to
Generate Invoice	Invoice the shipment. The Shipment status must be 20 - Ready to invoice or 30 - Special charge only. If your company requires pre-numbered forms, use the Generate Invoice host job to print the invoices.
Send ASN	Send an ASN to the customer providing information about the shipment the customer is expecting. To use this option Electronic Commerce (EC) must be installed and you must be authorized to send ASNs.
Disable Invoice	Prevent the shipment from being invoiced. This option sets the Shipment status to 00 - Incomplete.
Enable Invoice	Allow the shipment to be invoiced when you generate an invoice for the shipment. This option sets the Shipment status to 20 - Ready to invoice.

On the File menu, Host Print ... option on the Shipments list window or card file, you can generate the following reports:

Host Print	Use this report to
Bill of Lading	Print a bill of lading document after the shipment has been generated.
Packing List	Create a packing list after the shipment has been generated. This host report is optional.
Pro Forma Invoice	Print a pro forma invoice for the order shipments on the shipment.

On the File menu, Host Jobs ... option on the Shipments list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Generate Invoice	Invoice the shipment. The Shipment status must be 20 - Ready to invoice or 30 - Special charge only. Use this host job when your company requires that you print pre-numbered invoice forms.

Order Shipments

Each order shipment represents a group of items shipped at the same time from the same warehouse on the same customer order. A collection of order shipments creates a consolidated shipment. For shipments that are not consolidated, the order shipment contains the same information as the shipment. You use the Order Shipments object to view a list of the shipments created to fulfill the customer order, the date of the shipments, and the addressees to whom the shipments were sent.

The Order Shipments object is a lower-level object of Shipments. You find the Order Shipments list window by selecting the Order Shipments icon on the MM desktop, or by selecting the option, Order Shipments, on the Display menu of the Shipments list window or card file. You can also view the Order Shipments list window from the Order Shipments card in the Shipment Default card file.

The Order Shipments list window displays a list of orders and includes the following information:

- Company
- Order number (formatted)
- Shipment
- Shipment date
- Ship-to name
- Warehouse
- Shipping instructions.

The Default card file for the Order Shipments object contains five cards:
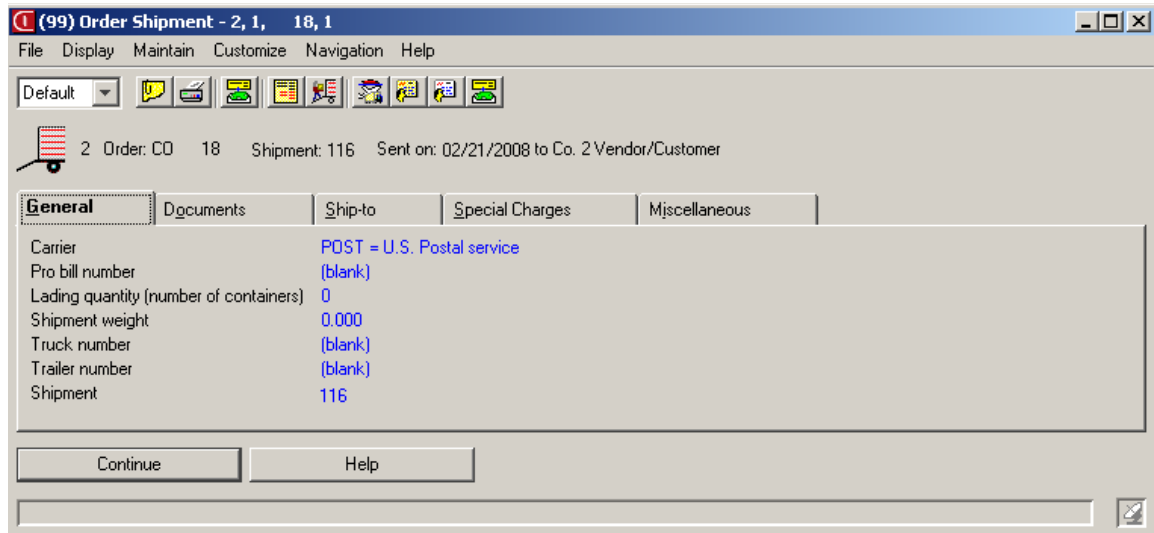
Card	Displays this information
General	Order shipment information including shipment number, number of containers, and carrier ID.
Documents	Document information for the documents that describe the order shipment.
Ship-to	Ship-to address information for the order shipment.
Shipment Special Charges (the tab label is Special Charges)	Special charges associated with the order shipment.
Miscellaneous	Useful information for the order shipment.

On the Maintain menu on the Order Shipments list window or card file, you can perform the following option:

Option	Use this option to
Generate Invoice	Invoice the shipment. The Shipment status must be 20 - Ready to invoice or 30 - Special charge only. If your company requires pre-numbered forms, use the Generate Invoice host job to print the invoices.

On the File menu, Host Print ... option on the Order Shipments list window or card file, you can generate the following report:

Host Print	Use this report to
Pro Forma Invoice	Print a pro forma invoice for an order shipment.

On the File menu, Host Jobs ... option on the Order Shipments list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Generate Invoice	Invoice the order shipment. The Shipment status must be 20 - Ready to invoice or 30 - Special charge only. Use this host job when your company requires that you print pre-numbered invoice forms.

Shipment Special Charges

The Shipment Special Charges object contains information about the special charges associated with a shipment, such as the type of charge and its description, amount, cost, and terms discount.

The Shipment Special Charges object is a lower-level object of Shipments and Order Shipments. For the selected shipment, you can view the Shipment Special Charges list window by selecting the Shipment Special Charges option on the Display menu on the Shipments or Order Shipments list window or Default card file. You can also view shipment special charges on the Special Charges card in these objects.

The Shipment Special Charges list window displays a list of special charges associated with the shipment and includes the following information:

Reference	Type	Description	Amount	Cost	Prorate	Terms discount	Tax indicator	Tax class	Tax transaction type
	1	Freight charge	100.00	0.00	Equal division	No			

- Company
- Shipment
- Reference
- Type
- Description
- Amount
- Cost
- Prorate
- Terms discount
- Tax indicator
- Tax class
- Tax transaction type.

The Default card file for the Shipment Special Charges object contains two cards:
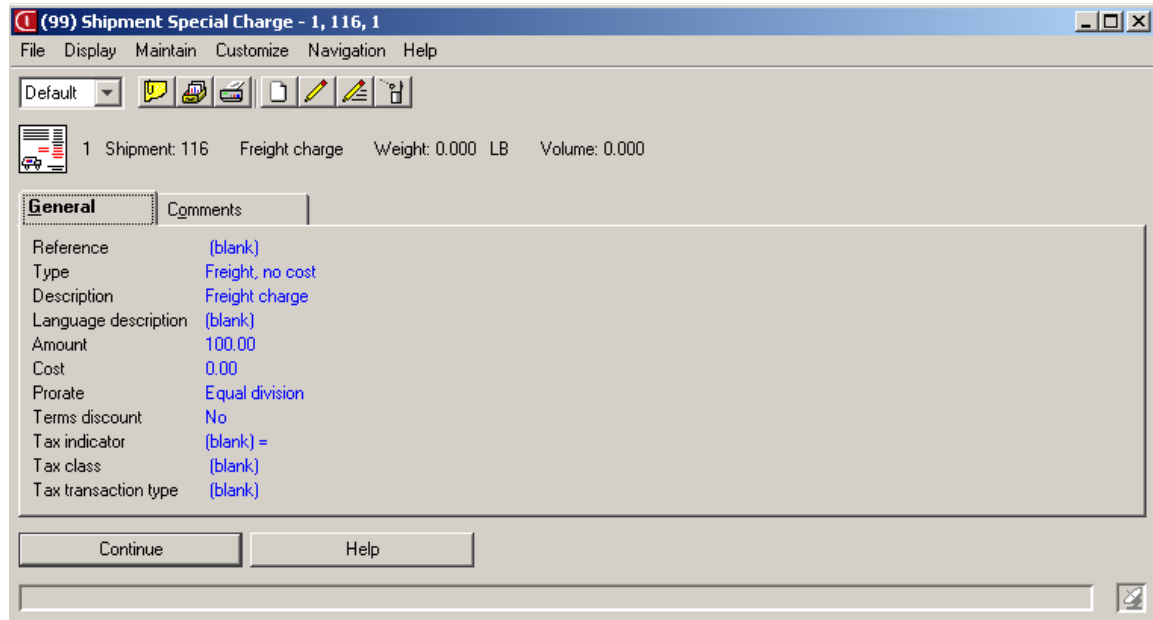
Card	Displays this information
General	Special charge information such as type, amount, and cost.
Comments	Comments for the shipment special charge.

Shipped Items

The Shipped Items object contains detailed information about the items that have shipped.

The Shipped Items object is a lower-level object of Shipments and Order Shipments. You find the Shipped Items list window by selecting the Shipped Items icon on the MM desktop, or by selecting the option, Shipped Items, on the Display menu of the Shipments or Order Shipments list window or card file.

The Shipped Items list window displays a list of items that are shipped and includes the following information:

- Company
- Order number (formatted)
- Shipment
- Release sequence
- Shipped quantity in stocking unit of measure
- Stocking unit of measure
- Kit/component indicator
- Presentation item
- Presentation item description
- Promise date
- Extended weight
- Shipment date.

The Default card file for the Shipped Items object contains eight cards:
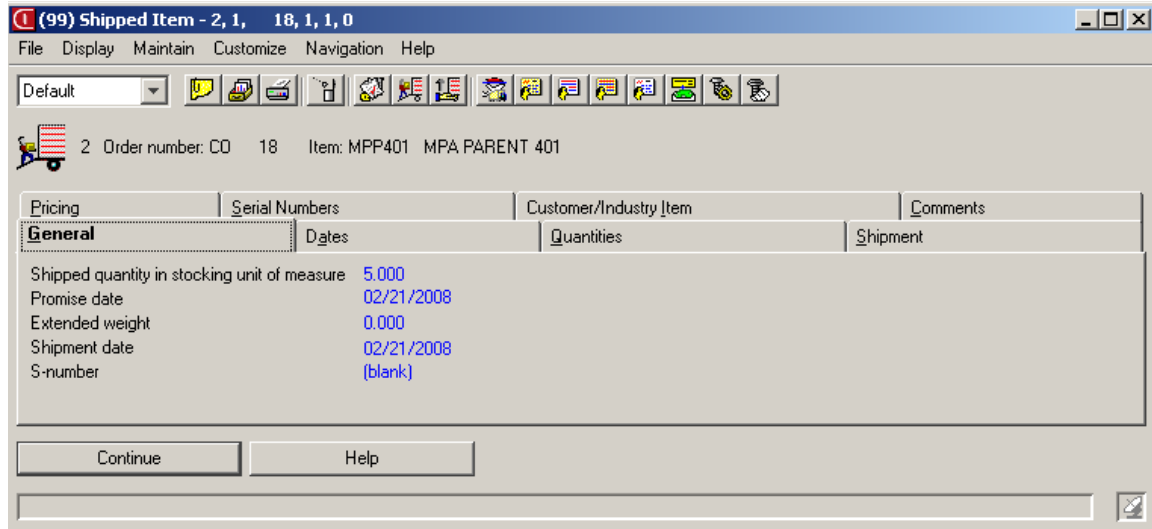
Card	Displays this information
General	Shipped item information such as promise and shipment date.
Dates	Date information for the dates associated with the shipped item.
Quantities	Quantity information for the quantities and units of measure for the shipped item.
Shipment	Shipment information for the shipment of which the item is part.
Pricing	Price, currency, tax, discounts, and promotion information for the shipped item.
Serial Numbers	Serial numbers assigned to a shipped item.
Customer/Industry Item	Customer and industry item information.
Comments	Comments such as instructions or additional descriptions, entered for the shipped item.

On the Maintain menu on the Shipped Items list window or card file, you can perform the following option:

Option	Use this option to
Generate Serial Numbers	Create a group of serial numbers for the shipped item. If there is a serial number already for the shipped item, the serial number is not generated again.

Shipped Item Kit Components

For a shipped item that is a kit, the Shipped Item Kit Components object shows the component items in the kit. These component items are the items that were shipped when the customer ordered the kit parent item.

The Shipped Item Kit Components object is a lower-level object of Shipped Items. For the selected shipped item, you can view the Shipped Item Kit Components list window by selecting the Shipped Item Kit Components option on the Display menu on the Shipped Items list window or Default card file.

The Shipped Item Kit Components list window displays a list of kit components and includes the following information:

- Company
- Order number (formatted)
- Shipment
- Release sequence
- Shipped quantity in stocking unit of measure
- Stocking unit of measure
- Presentation item
- Presentation item description
- Promise date
- Extended weight
- Shipment date.

The Default card file for the Shipped Item Kit Components object contains seven cards:

Card	Displays this information
General	Shipped item kit component information such as promise and shipment date.
Dates	Date information for the dates associated with the shipped item kit component.
Quantities	Quantity information for the quantities and units of measure for the shipped item kit component.
Shipment	Shipment information for the shipment of which the component is part.
Pricing	Price, currency, tax, discounts, and promotion information for the shipped item kit component.
Serial Numbers	Serial numbers assigned to a shipped item kit component.
Customer/Industry Item	Customer and industry item information.

Serial Numbers

The Serial Numbers object contains information about the serial number assigned to each unit of the component that was shipped.

The Serial Numbers object is a lower-level object of Shipped Items. You find the Serial Numbers list window by selecting the Serial Numbers icon on the CSM desktop, or by selecting the option, Serial Numbers, on the Display menu of the Shipped Items list window or card file. You can also view the Serial Numbers list window from the Serial Numbers card in the Shipped Item Default card file.

The Item Serial Numbers list window displays a list of serial numbers assigned to shipped items and includes the following information:

- Company
- Order number (formatted)
- Order shipment
- Item
- Serial number
- Warranty start date (derived)
- Shipment.

The Default card file for the Item Serial Numbers object contains one card called General. This card displays information about the order, item, serial number, and warranty start date.
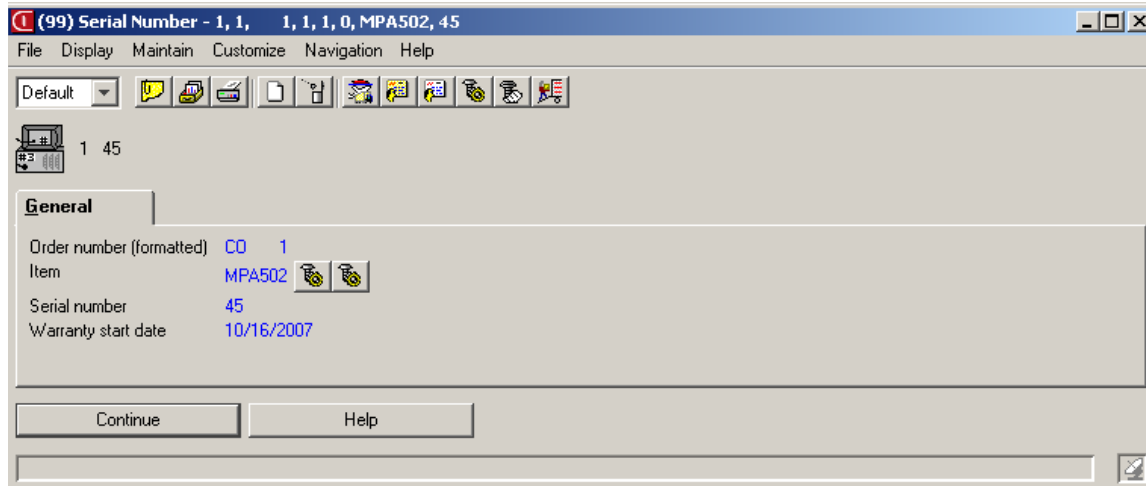
Shipped Item Features and Options

The Shipped Item Features and Options object shows a list of features and options selected for a shipped item, based on the s-number entered for the item on the customer order. The S-number indicates the configuration of features and options that apply to the item.

The Shipped Item Features and Options object is a lower-level object of Shipped Items. For the selected shipped item, you can view the Shipped Item Features and Options list window by selecting the Shipped Item Features and Options option on the Display menu on the Shipped Items list window or Default card file.

The Shipped Item Features and Options list window displays a list of features and options for the shipped item and includes the following information:

- Feature
- Option
- Option item
- Option item description
- Invoice language item description
- Phantom option
- User sequence.

The Default card file for the Shipped Item Features and Options object contains one card called General. This card displays information about the options for the shipped item.
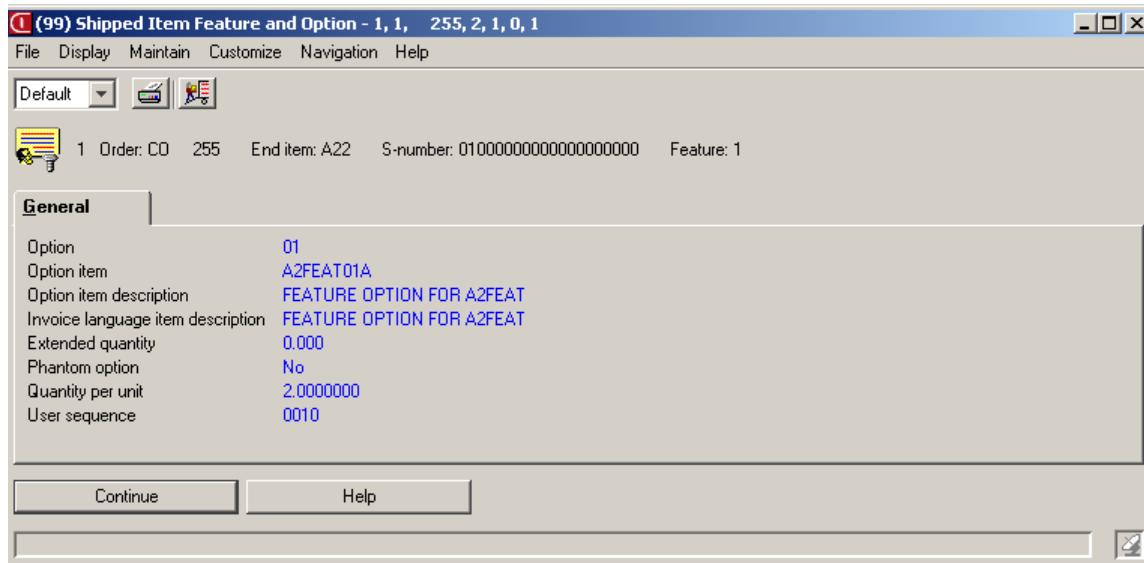
Shipped Item Pick Lists

The Shipped Item Pick Lists object shows the pick lists used to pick the shipped item. You use this object to connect the shipped item information to the pick list item information.

The Shipped Item Pick Lists object is a lower-level object of Shipped Items. For the selected shipped item, you can view the Shipped Item Pick Lists list window by selecting the Shipped Item Pick Lists option on the Display menu on the Shipped Items list window or Default card file.

The Shipped Items Pick Lists list window displays a list of pick lists for the shipped item and includes the following information:

- Pick list
- Order shipment
- Shipment
- Pick list type
- Presentation item
- Presentation item description
- Pick quantity
- Shipped quantity
- Pick note.

The Default card file for the Shipped Item Pick Lists object contains one card called General. This card displays information about the options for the shipped item.

Shipping Calendars

You use the Shipping Calendars object to determine shipping dates based on promise dates and shipping lead time. It defines the valid workdays in a shipping department. A calendar consists of a full year, called a calendar year, running from January through December.

Information in the Shipping Calendar object is viewed but not maintained.

The Shipping Calendar list window displays a list of shipping calendars and includes the following information:
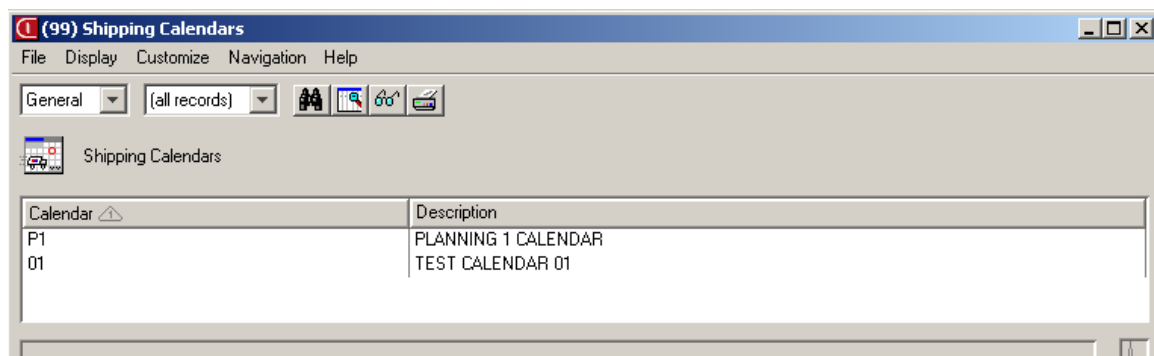
- Calendar ID
- Calendar description.

The Default card file for the Shipping Calendar object contains one card called General. This card displays information about the shipping calendar.
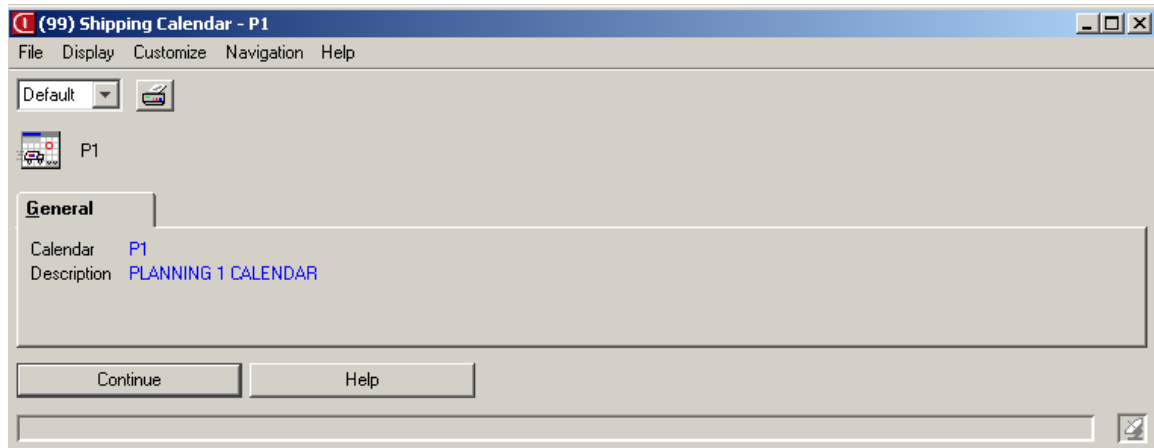
Packed Containers

A packed container is a container you use in shipments for customer orders. A packed container might reference a freight container. Packed containers can hold one or many items and/or one or many containers and can have items from any combination of orders. Containers can be packed in other containers.

The Packed Containers list window displays a list of containers in the freight container and includes the following information:

- Company
- Container type description
- Container ID
- Container content weight
- Weight unit of measure
- Shipment
- Packed by user
- Packed date
- Packing list
- Staging location.

The Default card file for the Packed Containers object contains five cards:
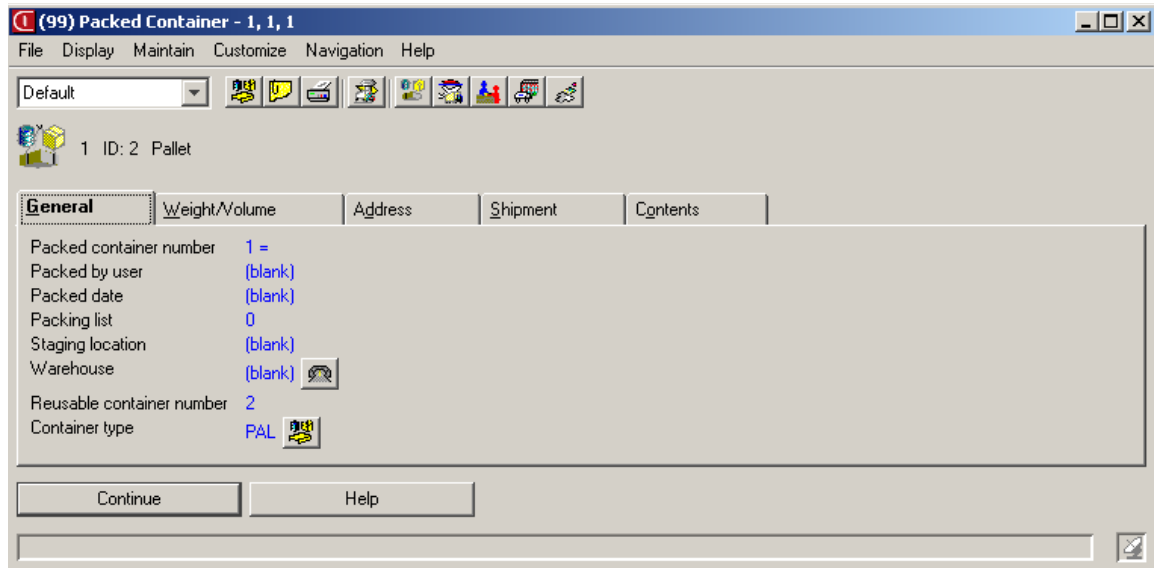
Card	Displays this information
General	Packed container information including who packed the container and the container type
Weight/Volume	Weight and volume information for the packed container.
Address	Address to which the container will be sent.
Shipment	Shipment number and shipping ID/license plate.
Contents	Pick pack ship items that are packed in the container.

Freight Containers

Freight Containers is a code file that describes containers that you need to track. They are usually more than simple cardboard boxes and might include standard 53' truck containers or standard 20' or 40' containers.

The Freight Containers list window displays a list of containers and includes the following information:

- Container type
- Container number
- Container ID.

The Default card file for the Freight Containers object contains one card called General. This card displays information about the container type, number, and ID.
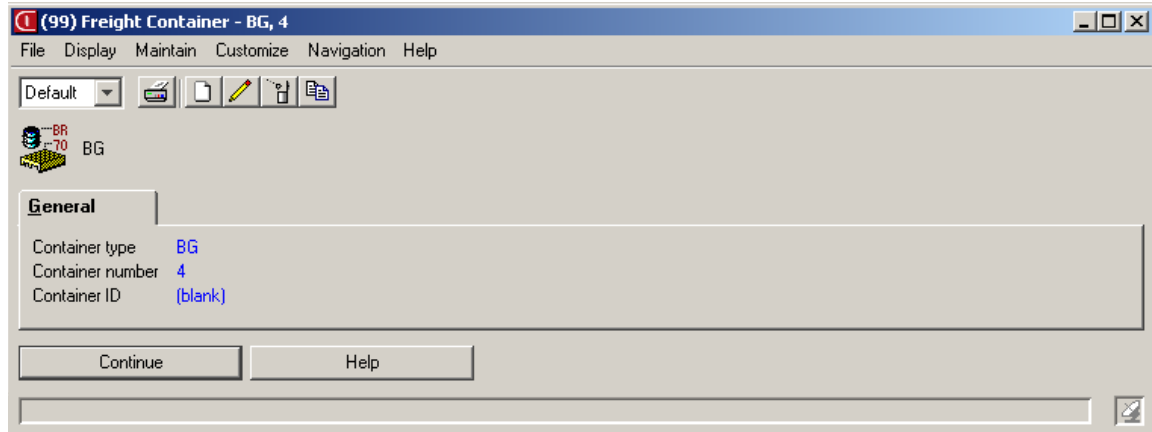
Carriers

The Carriers object contains information about carriers your vendor uses to transport shipments to you and carriers you use to send orders to your customers.

The Carriers list window displays a list of carriers and includes the following information:

- Carrier
- Name
- City
- State
- Standard carrier code
- Transport mode
- Telephone
- Fax.

The Default card file for the Carriers object contains two cards:
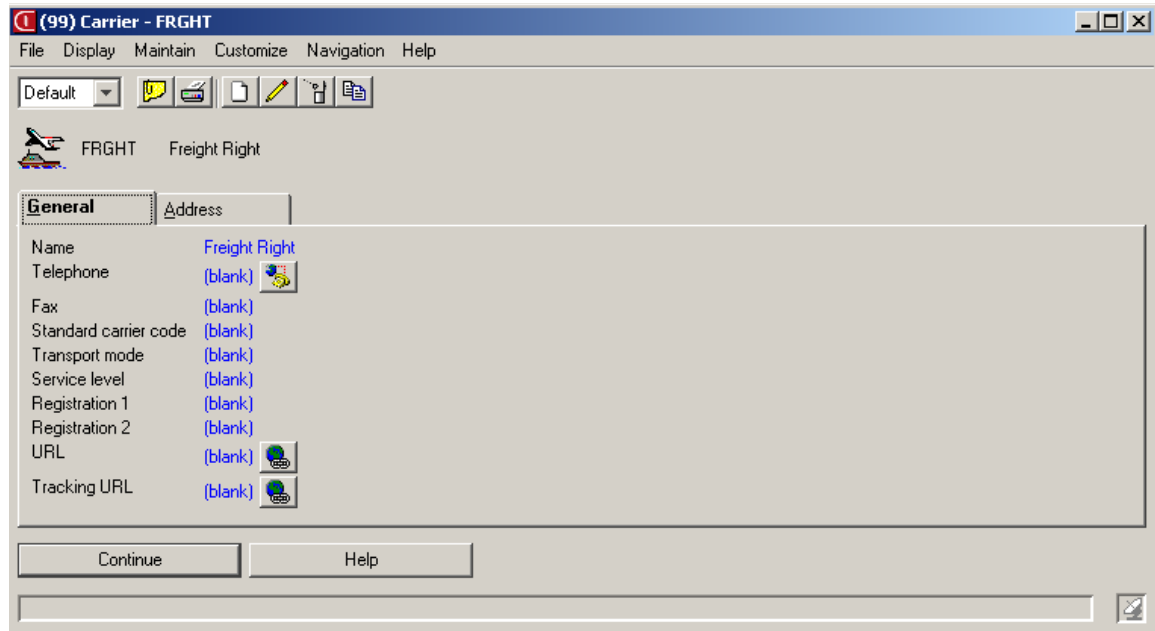
Card	Displays this information
General	Carrier information including contact information, transport mode, and service level.
Address	Carrier address information.

Container Types

You use the Container Types object to set up categories for the containers that you use for shipping. The definition for container type includes dimension information helpful in determining the quantity of an item that you can ship in that type of container.

The Container Types list window displays a list of different types of containers and includes the following information:

```
(99) Container Types                                                    _ | □ | ×
File   Display   Maintain   Customize   Navigation   Help

General  ▼  (all records)  ▼   [toolbar icons]

[icon]  Container Types
```

Type △	Description	Weight	Weight UM	Length	Dimension UM	Width	Height	Volume	Volume UM
BG	Bag	10	LB	10.000	IN	6.000	15.000	900.000	
BRL	Barrel	5	LB	20.000	IN	20.000	48.000	19,200.000	
BX1	Box 20 x 25 x 45	1	LB	20.000	IN	25.000	45.000	22,500.000	
BX2	Box 10 x 10 x 4	1	LB	10.000	IN	10.000	4.000	400.000	
CRG	Cargo	400	LB	20.000	FT	8.000	10.000	1,600.000	
CTN	Carton	3	OZ	5.000	IN	3.000	3.000	45.000	

- Container type
- Container type description
- Container weight
- Container weight unit of measure
- Container length
- Dimension unit of measure
- Container width
- Container height
- Container volume
- Volume unit of measure.

The Default card file for the Container Types object contains one card called General. This card displays information about the container.
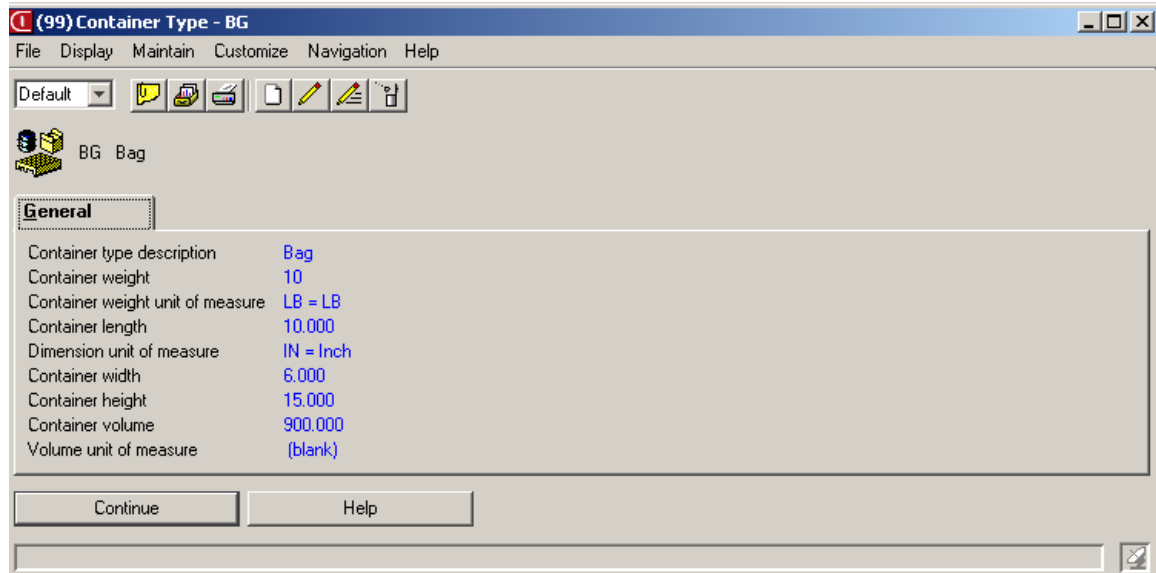
Scheduled Receipts

You use the Scheduled Receipts object to track expected receipts for warehouses. Scheduled receipts are generated for purchased inventory or inventory you are moving between warehouses or inside a warehouse. Scheduled receipts are automatically created from purchase orders and updated with the shipped quantity, scheduled arrival date, and scheduled arrival time. Similarly, XA creates scheduled receipts from shipment notices when the Shipment Notice reports an under-shipment. XA also creates a scheduled receipt when you generate a transfer with scheduled receipt using the transfer item (TW) transaction.

When shipments arrive, you can receive them on the Scheduled Receipts list window. If you use other receiving functions like transaction processing in IM or the shipment objects in MM to receive items, then XA automatically updates the Scheduled Receipts object to reflect the receiving activity.

The Scheduled Receipts list window displays a list of scheduled receipts for purchased and transferred inventory and includes the following information:

Arrival date △	Item	Whs	Open qty	Stk UM	Scheduled qty	Status	Order	Line	Rel	Shipment △
03/03/2008	MPC101	MPA	10.000	EA	10.000	Open	P000399	2	0	
03/03/2008	MPC101	MPA	10.000	EA	10.000	Open	P000400	1	0	
05/06/2008	MPC106	MPA	14.000	EA	14.000	Open	P000401	1	0	
05/06/2008	MPC106	MPA	14.000	EA	14.000	Open	P000403	1	0	
05/09/2008	MPC106	MPA	21.000	EA	21.000	Open	P000406	1	0	
05/09/2008	MPC106	MPA	23.000	EA	23.000	Open	P000407	1	0	

- Arrival date
- Item
- Warehouse
- Open quantity (stocking UM)
- Stocking unit of measure
- Scheduled receipt quantity (stocking UM)
- Scheduled receipt status
- Order
- P.O. line
- P.O. line release
- Shipment (derived).

The Default card file for the Scheduled Receipts object contains five cards:

Card	Displays this information
General	Scheduled receipt information, such as arrival date and time, quantities, purchasing and shipping details.
Logistics (the tab label is Purchase Logistics)	Quantities and date information associated with the scheduled receipt for a purchased item and the scheduled receipt location for the scheduled receipt.
Transfer Logistics	Quantities and date information associated with the scheduled receipt for a transfer item and the scheduled receipt location and warehouse location for the scheduled receipt.
Shipment	Shipment information and the shipment container items for the scheduled receipt.
Scheduled Receipt Comment (the tab label is Comments)	Comments for the scheduled receipt.

On the Maintain menu on the Scheduled Receipts list window or card file, you can perform the following options:

Option	Use this option to
Receive	Receive the scheduled receipt for purchased inventory (partially or completely) to dock, inspection or stock, and return to the vendor some or all of the quantity received.
	Receive the scheduled receipt for transferred items (partially or completely) to inspection or stock.
Receive Purchase Order Complete	Receive completely all the open items on the purchase order. You can use this option as the only option to receive the purchase order when all the items ordered have arrived intact, or you can use this option to receive the rest of the purchase order after you have received the items that require changes using the Receive option in the Scheduled Receipts or Purchase Order Items object.
Receive Shipment Notice Complete	Receive completely all the open items on the shipment notice. You can use this option as the only option to receive the shipment when all the shipment items arrive intact, or you can use the Receive Shipment Notice Complete option to receive the rest of the shipment after the items that require changes are received using the Receive option in the Scheduled Receipts or Shipment Container Items objects. The Receive Shipment Notice Complete option processes a receive transaction for each open shipment container item on the shipment notice, using the default values for all transaction attributes, including the remaining open shipment container item quantity. You can use this option on purchased items and transferred items.

Item Shortages

You use the Item Shortages object to help identify items you are receiving that you need to send immediately to a point of need. The object lists all the customer orders or manufacturing orders/ schedules that still require some of the item scheduled for receipt. XA generates item shortage information, which shows the most current item requirements, when you open the Item Shortages object. XA deletes the information when you sign off the current session.

The Item Shortages object is a lower-level object of Scheduled Receipts. You can view the Item Shortages list window by selecting the Item Shortages option on the Display menu on the Scheduled Receipts list window or Default card file.

The Item Shortages list window displays a list of items and includes the following information:

Order	Needed for	Whs	Contact	Required qty	Required date △	Oper w/u	Rel
M024260	MPA201	MPA	00222	10.000	02/24/2007		0
M024290	MPA201	MPA	00222	294.000	03/28/2007		0
M025590	MPA201	MPA	00222	5.000	08/04/2007		0
M026260	MPA201	MPA	00222	5.000	02/10/2007		0
M026230	MPA201	MPA	00222	4.000	03/30/2007		0

- Order
- Needed for
- Warehouse
- Contact
- Required quantity
- Required date
- M.O. operation where used
- C.O. release.

The Item Shortages object has no Default card file. Double-clicking a row in the Item Shortages list window displays the M.O. Component or C.O. Line Item Default card file for the item.

Scheduled Receipt Locations

In controlled warehouses, you use the Scheduled Receipt Locations object to specify, before entering a receipt, where you want to move or locate an item when it arrives. The location can be either to inspection or to stock. When you receive shipment container items, XA uses the scheduled receipt location as the receipt location for the shipment container item.

The Scheduled Receipt Locations object is a lower-level object of Scheduled Receipts. For the selected scheduled receipt, you can view the Scheduled Receipt Locations list window by selecting the Scheduled Receipt Locations option on the Display menu on the Scheduled Receipts list window or Default card file. You can also view scheduled receipt locations on the Logistics card (the tab label is Purchase Logistics) or Transfer Logistics card in the Scheduled Receipt Default card file and on the Locations Overview (the tab label is Locations) of the Scheduled Receipts card in the Shipment Notice Default card file.

The Scheduled Receipt Locations list window displays the location for a selected scheduled receipt and includes the following information:

- Item
- Warehouse
- Warehouse stock location
- Quantity
- Stocking unit of measure
- Priority.

The Default card file for the Scheduled Receipt Locations object contains one card called General. This card displays information about the location where the item for the selected scheduled receipt goes when received. Information includes quantity and priority.
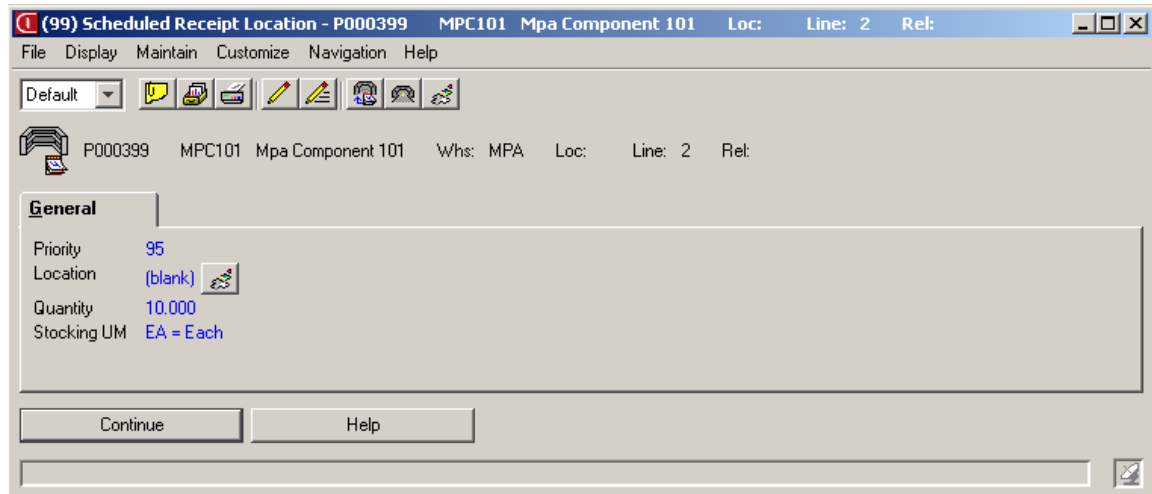
Shipment Notices

Shipment Notices describe expected shipments to warehouses from vendors or from your warehouses.

Multiple items from one or more purchase orders can be on the shipment from a vendor. You can receive Shipment Notices from vendors, for example, using mail, e-mail, fax, or XML documents, which are accepted using System-Link. The Shipment Notice identifies the shipment, the vendor, the receiving warehouse, the scheduled arrival date and time, and the scheduled receipts and quantities for the shipment. Shipping details can be manually loaded into the Shipment Notices object.

Multiple transferred items can be on the shipment for items that you are transferring between warehouses or inside a warehouse. The Shipment Notice identifies the shipment, the sending warehouse, the receiving warehouse, the scheduled arrival date and time, and the scheduled receipts and quantities for the shipment. You can create shipment notices when generating a transfer item (TW) transaction or use an existing shipment notice with a Shipment type of 2 - Transfer.

The Shipment Notices list window displays a list of shipments and includes the following information:

- Warehouse
- Arrival date
- Arrival time
- Status
- Sender
- Shipment
- Carrier.

The Default card file for the Shipment Notices object contains seven cards:

Card	Displays this information
General	Shipment information including the warehouse, the vendor, when the shipment will arrive, transport details, number of scheduled receipts, shipment containers, and shipment container items.
Shipment Overview (the tab label is Overview)	Shipment notices, shipment containers, and shipment container items in an indented outline for the shipment.
Dates	Date information for the dates associated with the shipment.
Addresses	Ship-from address and ship-to address information for the shipment.
Scheduled Receipts	Scheduled receipts for the shipment. This card includes the following tabs:
	Open tab that shows open scheduled receipts.
	All tab that shows all scheduled receipts.
	Locations tab that is an overview of scheduled receipts and locations for items for the shipment.
	Container Items tab that is an overview of scheduled receipts and shipment container items for the shipment.
Containers	Containers for the shipment.
Shipment Notice Comment (the tab label is Comments)	Comments about the shipment.

On the Maintain menu on the Shipment Notices list window or card file, you can perform the following option:

Option	Use this option to
Receive Complete	Receive completely all the open items on the shipment notice. You can use this option as the only option to receive the shipment when all the shipment items arrive intact, or you can use the Receive Complete option to receive the rest of the shipment after you receive the items that require changes using the Receive option in the Scheduled Receipts or Shipment Container Items objects. The Receive Complete option processes a receive transaction for each open shipment container item on the shipment notice, using the default values for all transaction attributes, including the remaining open shipment container item quantity. You can use this option on purchased items and transferred items.

On the File menu, Host Jobs ... option on the Shipment Notices list window or card file, you can generate the following host job:

Host Jobs	Use this host job to
Send Receiving Advice	Send XML receiving advices for shipments where the vendor is set up to send XML receiving advices. You can send receiving advices at any time during the receiving process to report the receiving results for the shipment. XA sends details of the entire shipment on the receiving advice regardless of the number of times you send the receiving advice. Items that are at dock or in inspection do not show activity until you receive them to stock, scrap, or return them.

Shipment Containers

The Shipment Containers object describes the containers for shipments. You use shipment containers to receive items that vendors or the sending warehouse specify are in containers. You can have containers nested inside other containers. By default, XA creates a container with a blank container ID, which you use for shipment notices with no containers specified.

The Shipment Containers object is a lower-level object of Shipment Notices. You can view the Shipment Containers list window by selecting the Shipment Containers option on the Display menu on the Shipment Notices list window or card file. You can also view shipment containers in the Shipment Notice Default card file by selecting the Containers card.

The Shipment Containers list window displays details of containers for a shipment including the following information:

- Warehouse
- Arrival date
- Shipment (derived)
- Container
- Container type
- Returnable
- Parent container (derived)
- Priority.

The Default card file for the Shipment Containers object contains two cards:
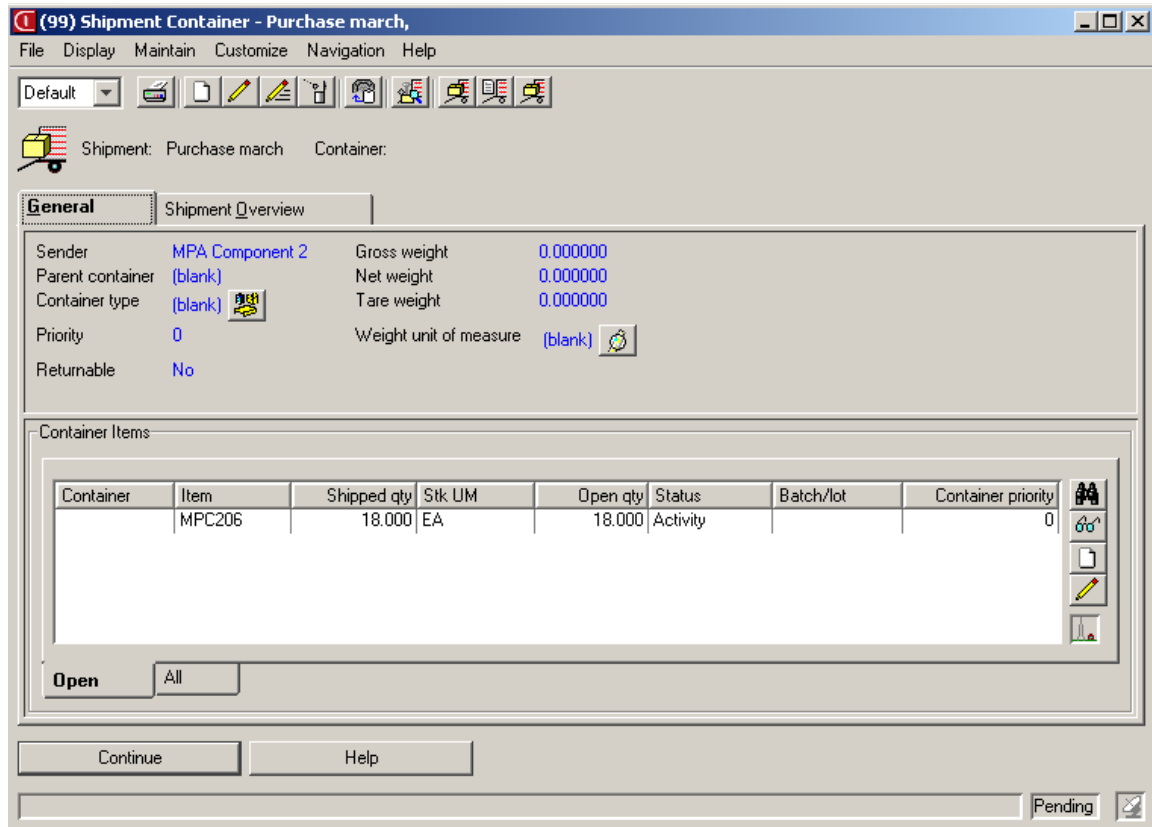
Card	Displays this information
General Compound (the tab label is General)	Container information, including container type, weights, and priority.
	This card also shows a list of items for the shipment container on two tabs that show open container items or all container items.
Shipment Overview	Containers and shipment container items on the shipment, in an indented outline.

On the Maintain menu on the Shipment Containers list window or card file, you can perform the following option:

Option	Use this option to
Receive Complete	Receive completely all the open items for the shipment container and any containers inside the container. You can use this option as the only option to receive the container when all the container items arrive intact, or you can use this option to receive the rest of the container after you receive the items that require changes using the Receive option in the Shipment Container Items object. This option processes a receive transaction for each open shipment container item for the shipment container (and containers in the container), using the default values for all transaction attributes, including the remaining open shipment container item quantity. You can use this option on purchased items and transferred items.

Shipment Container Items

The Shipment Container Items object provides detailed information about the items on shipments and assists with receiving items into inventory. Each shipment container item is associated to a scheduled receipt.

When the vendor sends the scheduled receipt in two or more containers, XA or you can create a shipment container item for each container. When the Shipment Notice specifies two or more batch/lots, XA or you can create a shipment container item for each batch/lot. The total quantity of the shipment container items linked to the scheduled receipt equals the quantity of the scheduled receipt.

For shipment notices that are created for transferred items, there is only one scheduled receipt per item.

The Shipment Container Items object is a lower-level object of Shipment Notices and Shipment Containers. You view the Shipment Container Items list window by selecting the Shipment Container Items option on the Display menu on the Shipment Notices or Shipment Containers list window or card file. You can view shipment container items as a list card by selecting the General card in the Shipment Container Default card file. You can view shipment container items in the context of the related scheduled receipt on the Container Items tab of the Scheduled Receipts card in the Shipment Notice Default card file. Alternatively, you can view shipment container items in the context of containers on the Overview card in the Shipment Notice Default card file.

The Shipment Container Items list window displays a list of items and includes the following information:

Warehouse	Arrival date	Shipment	Container	Item	Shipped qty	Stk UM	Open qty	Status	Batch/lot	Container priority
MPA	03/17/2008	Purchase march		MPC206	18.000	EA	18.000	Activity		0

- Warehouse
- Arrival date
- Shipment (derived)
- Container (derived)
- Item
- Shipped quantity (stocking UM)
- Stocking unit of measure (derived)
- Open quantity (stocking UM)
- Container item status
- Batch/lot
- Container priority.

The Default card file for the Shipment Container Items object contains three cards:

Card	Displays this information
General Compound (the tab label is General)	Item information for the item on the shipment, such as the shipment, container, shipped quantity, and item weights, if provided.
	This card also shows the quantities associated with the shipment container item.
	This card also shows the dates associated with the shipment container item.
Shipment Overview	Shipment containers and shipment container items for the shipment in an indented outline.
Shipment Container Item Comment (the tab label is Comments)	Comments about the shipment container item.

On the Maintain menu on the Shipment Container Items list window or card file, you can perform the following option:

Option	Use this option to
Receive	Receive shipment container items for purchased inventory (partially or completely) to dock, inspection or stock, and return to the vendor some or all of the quantity received.
	Receive the scheduled receipt for transferred items (partially or completely) to inspection or stock.

Materials Management inventory transactions

You use inventory transactions in MM and IM to keep inventory records current and to control inventory. For example, inventory transactions report the issue, receipt, and scrap of items and help you to pick items or transfer items. You can either enter transactions after the item is processed to amend the paper trail of what has happened to the inventory or you can use inventory transactions to generate a business process on inventory.

Some MM inventory transactions are available on the Maintain menu in the Inventory Transaction History object.

You can also generate some inventory transactions using options on the Maintain menu of other XA objects. These options consolidate the inventory transactions you might require to perform a business process, so that you do not need to enter multiple transactions, multiple times. The Receive Purchase Order Complete option in Scheduled Receipts is an example of such an option. When you use this option, you generate the required inventory transactions to receive all purchased items on the selected purchase order using one dialog. For more complicated situations when receiving purchased inventory, you can use the Receive option on the Maintain menu in Scheduled Receipts, for example, to specify the quantity of one purchase order item that you received to stock, sent to be inspected, and returned to the vendor.

For more information about purchase order receive complete and receive options see, "Understanding receiving options" on page 2-5. If you use shipment notices to receive purchased inventory, see "Understanding receiving options" on page 3-26.

For more information about transfer item receive complete and receive options see, "Receiving transfer items" on page 5-21.

Some, but not all, of the MM transactions can be generated in iSeries.

For more details about the following transactions on the Maintain menu in Inventory Transaction History, see Appendix A, "Summary of MM Transactions."

- Issue item (IS)
- Issue sales item (SA)
- Receive item (RC)
- Transfer item (TW).

For more details about the following transactions you access using options on the Maintain menu of other XA objects, see Appendix A, "Summary of MM Transactions."

- Issue transferred item (IW)
- Receive purchased item to dock (RD)
- Receive purchased item to inspection (RI)
- Receive purchased item to stock (RP)
- Receive transfer (RT)
- Receive transferred item (RW)
- Return purchased item (VR)

Information flow

In MM, you can create warehouses, warehouse locations, item warehouses, and item locations to represent the physical location of inventory your company manages.

MM information flow is driven by the tracking of inventory though a life cycle of events in which items might be:

- Received,
- Inspected,
- Scrapped,
- Counted,
- Adjusted,
- Transferred,
- Issued,
- Picked,
- Packed, and
- Shipped.

MM uses transactions to receive, transfer, and count inventory. Other transactions that move, issue, adjust attributes of inventory, or track the inspection of inventory; you perform in IM.

Step	Application	Object
1. Receive Advance Ship Notices		
Receive Shipment Notice as an XML document using System-Link.	MM	Creates shipment notices, shipment containers, shipment container items, and updates related scheduled receipts as required, to describe the shipment.
Create shipment objects when notified of shipping details by phone, fax, e-mail, or mail.	MM	In Shipment Notices, use the Create option to create a shipment notice, add shipment containers, add shipment container items, and update the Scheduled Receipts object as required, to describe the shipment.
Maintain Shipment Notices.	MM	In Shipment Containers, use the Create option to create a shipment container and shipment container items when a shipment notice already exists.
	MM	In Shipment Container Items, use the Create option to create a shipment container item when a shipment notice already exists.
2. Receive items		
Designate purchased items to locations before receipt.	MM	In Scheduled Receipt Locations, use the Change option to change the receipt location.
	MM	In Scheduled Receipts, use the Change button on the Locations section of the Logistics card to change the receipt location.
Receive purchased items.	MM	In Scheduled Receipts, use the Receive Purchase Order Complete option to receive all items on a purchase order.
	MM	In Scheduled Receipts, use the Receive Shipment Notice Complete option to receive all items on a shipment notice.

Step	Application	Object
	MM	In Scheduled Receipts, use the Receive option to receive purchase scheduled receipts. Use the templates on the Receive Scheduled Receipt dialog to select all transactions or receive a scheduled receipt to dock, stock, inspection, or return an item to the vendor.
	MM	In Shipment Notices, use the Receive Complete option to receive all purchased items for a shipment.
	MM	In Shipment Containers, use the Receive Complete option to receive all purchased items for a shipment container.
	MM	In Shipment Container Items, use the Receive option to receive a purchased item for the shipment. Use the templates on the Receive Shipment Container Item dialog to select all transactions or receive a shipment container item to dock, stock, inspection, or return a shipment container item to the vendor.
	PM, AM	In Purchase Orders, use the Receive Complete option to receive all purchased items on a purchase order. In Purchase Order Items or Purchase Order Item Releases, use the Receive option to receive a purchase order item or purchase order item release.
Check item shortages.	MM	In Item Shortages, use the Item Shortages list window to view items that do not have a sufficient quantity to meet demand.
Set automatic receiving advices.	PM, AM	In Vendors, use the Send XML receiving advice option (Purchasing Settings card) to determine when XA will send receiving advices to vendors.
Send receiving advice.	MM	In Shipment Notices, use the Send Receiving Advice host job to send a receiving advice as an XML document to the vendor.
Receive production parent items.	OBPM	In Manufacturing Orders, use Receipt of Material and Material Complete options to receive inventory.
	IM, REP	In IM and Repetitive Production Management (REP), use Transaction Entry to receive inventory.
Receive transferred items.	MM	In Shipment Notices, use the Receive Complete option to receive all the transferred items for a shipment.
	MM	In Shipment Containers, use the Receive Complete option to receive all the transferred items for a shipment container.

Step	Application	Object
	MM	In Scheduled Receipts, use the Receive option to receive transferred scheduled receipts.
	MM	In Shipment Container Items, use the Receive option to receive a transferred item for the shipment.
Receive miscellaneous items.	MM	In Inventory Transaction History, use the receive item (RC) transaction, to receive miscellaneous items not associated with an open order.
3. Inspect items		
Approve or reject items after inspection.	IM	In IM, use the quality control transactions to approve or reject the inspected inventory.
4. Scrap items		
Scrap items from inventory, production, and purchase orders.	IM	In IM, use the scrap transactions to scrap items that are in stock, are manufacturing components, are part of a manufacturing order, or are part of a purchase order.
5. Count items		
Create a physical inventory count group.	MM, OBPM, RBPM, PDM Plus	In Warehouses, use the Physical Inventory host job to create a physical inventory count group.
Create a cycle count group.	MM, OBPM, RBPM, PDM Plus	In Warehouses and Item Warehouses, use the Cycle Count host job to create a cycle count inventory count group.
	MM, RBPM	In Item Locations, use the Cycle Count host job to create a cycle count inventory count group.
	MM	In Warehouse Locations, use the Cycle Count host job to create a cycle count inventory count group.
Add items to an inventory count group.	MM	In Inventory Count Items, use the Create option to add count items to an inventory count group.
6. Adjust items		
Adjust item quantities.	MM	In Inventory Count Groups, use the Post Count Adjustments option to adjust inventory that does not match a count.
Adjust item costs.	IM	In IM, use the adjustment transactions to adjust the cost, location quantity, quality control status, and batch/lot information of items.
7. Transfer items		
Transfer items between warehouses or locations in a warehouse.	MM	In Inventory Transaction History, use the transfer item (TW) transaction to move inventory between warehouses and warehouse locations.

Step	Application	Object
8. Issue items		
Issue component items to production orders.	IM	In IM, use the production issue transactions to issue items and components to production.
Issue miscellaneous items.	MM	In Inventory Transaction History, use the issue item (IS) transaction, to issue miscellaneous items not associated with an open order.
9. Pick items		
Pick items for customer orders.	MM, CSM	In Pick Lists, use the Generate Pick List option to create a pick list of items required for one customer order.
	CSM	In Customer Order and Quotes, Customer Order Line Items, or Customer Order Line Item Releases, use the Generate Pick List host job to create a pick list of items required for one or more customer orders.
	CSM	In Customer Order and Quotes, use the Generate Pick List option to create a pick list of items required for one customer order.
	OBPM	In Customer Demand, use the Generate Pick List host job to create a pick list of items required for one or more customer orders.
Print a pick list.	MM, CSM	In Pick Lists, use the Pick List host report to print a pick list.
Allocate items to customer orders.	CSM	In Customer Order and Quotes, C.O. Line Items, and C.O. Line Item Releases, use the Allocate host job to allocate items to one or more customer orders.
	CSM	In Customer Order and Quotes, use the Allocate option to allocate items to one or more customer orders.
10. Pack items		
Pack items for customer orders.	COM	In COM, use packing options to maintain containers.
11. Ship items		
Ship items for customer orders.	MM, CSM	In Pick Lists, use the Generate Shipment host job to create a shipment using a single pick list or multiple pick lists.
	MM, CSM	In Pick Pack Ship Items, use the Generate Shipment host job to create a shipment using a single pick pack ship item or multiple pick pack ship items.
	CSM	In Customer Order and Quotes, Customer Order Line Items, or Customer Order Line Item Releases, use the Generate Shipment host job to generate shipments.
	MM, CSM	In Pick Lists, use the Generate Shipment option to create a shipment using a single pick list.

Step	Application	Object
	MM, CSM	In Pick Pack Ship Items, use the Generate Shipment option to create a shipment using a single pick pack ship item.
	CSM	In Customer Order and Quotes, use the Generate Shipment option to generate shipments.
Print a packing list.	MM, CSM	In Pick Lists or Shipments, use the Pack List host report to print a packing list.
Send an ASN.	MM, CSM	In Shipments, use the Send ASN option to send an ASN to the customer using EC.
Print a bill of lading document.	MM, CSM	In Shipments, use the Bill of Lading host report to print a bill of lading document.
Allow shipment to be invoiced.	MM, CSM	In Shipments, use the Enable Invoice option to allow the shipment to be invoiced when you generate an invoice for the shipment.
Prevent shipment from being invoiced.	MM, CSM	In Shipments, use the Disable Invoice option to prevent the shipment from being invoiced.
Invoice customer orders.	MM, CSM	In Shipments or Order Shipments, use the Generate Invoice host job to generate invoices for shipments.
	CSM	In Customer Orders and Quotes, use the Generate Invoice host job to generate invoices for customer orders.
	MM, CSM	In Shipments or Order Shipments, use the Generate Invoice option to generate invoices for shipments.
	CSM	In Customer Orders and Quotes, use the Generate Invoice option to generate invoices for customer orders.
Print a pro forma invoice.	MM, CSM	In Shipments or Order Shipments, use the Pro Forma Invoice host report to print a pro forma invoice for order shipments.
	CSM	In Customer Invoices or Customer Order and Quotes, use the Pro Forma Invoice host report to print a pro forma invoice for customer orders.
Assign serial numbers to shipped items.	MM, CSM	In Shipped Items, use the Generate Serial Numbers option to create a group of serial numbers for the shipped item.

Materials Management security

MM establishes security at the object level. The security you set up can be different for each of the MM objects depending on your company's needs. For information about setting up security, see the *Infor ERP XA Browser Concepts Guide and the Cross Application Support User's Guide.*

Chapter 2. Receiving Purchased Inventory

Overview

Chapter 2, "Receiving Purchased Inventory" explains receiving purchased inventory when you do not use Shipment Notices.

If you use Shipment Notices for purchased inventory, refer to:

- Chapter 3, "Receiving Purchased Inventory - Shipment Notices" for information about receiving purchased inventory, in Materials Management (MM), when shipment notices exist.
- Appendix B, "Receiving Procedures with Shipment Notices" for processing rules and examples of under-receiving and over-receiving, in MM, when shipment notices exist.

For information about receiving inventory that you are transferring between warehouses, see Chapter 5, "Transferring Inventory."

For information about receiving outside of MM, refer to:

- The *Procurement Management Concepts Guide*, for information about receiving purchased inventory in Procurement Management (PM).
- The *Inventory Management User's Guide*, for information about receiving purchased inventory in Inventory Management (IM).
- The *Production Monitoring and Control User's Guide*, for information about receiving in Production Monitoring and Control (PM&C).

The Scheduled Receipts, Scheduled Receipt Locations, and Item Shortages objects in MM help you receive purchased inventory.

Scheduled Receipts. This object shows the expected arrivals of purchased items to warehouses. Scheduled receipts help people working in receiving identify the items and purchase orders that require receiving. XA creates scheduled receipts for purchased inventory when XA users add new purchase order items or item releases to purchase orders. Scheduled receipts include information about the arrival date, item, warehouse, scheduled and open quantity, status, purchase order ID, and shipment ID, if a shipment notice exists. The primary use of the Scheduled Receipts object is to help you receive purchased and transferred items.

Scheduled Receipt Locations. This object allows you to specify in advance the warehouse location to use when receiving an item. The location can be either to inspection or to stock. If you do not want to change the scheduled receipt location, the location defaults to the default stock location for the item warehouse. XA creates a scheduled receipt location for each scheduled receipt.

Item Shortages. This object shows all the customer orders or manufacturing orders and schedules that are short for the selected scheduled receipt. You use the Item Shortages object to help you identify urgently required items. XA generates the current item demand information when you open the Item Shortages object.

Two things happen when you select Item Shortages on the Display menu on the Scheduled Receipts list window:

- XA retrieves the item warehouse record for the selected scheduled receipt and subtracts the demand from the on-hand to determine the available quantity. The item has a shortage if the available quantity is negative.
- If the item has a shortage, the XA displays all manufacturing orders, schedules, and customer orders needing some of the item, and the quantity.

Figure 2-1 shows your options for receiving purchased inventory in the Scheduled Receipts object.
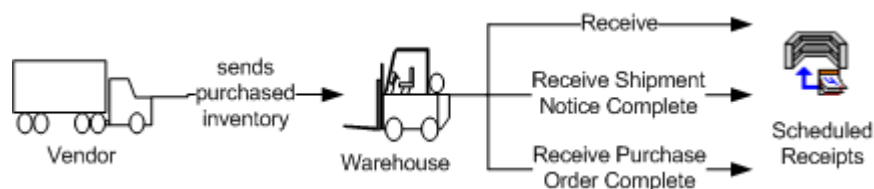
Figure 2-1. Overview of receiving inventory in Scheduled Receipts

Receive option and Receive Complete option. Use these options to receive purchased inventory. You can receive the items using the Receive, Receive Purchase Order Complete, and Receive Shipment Notice Complete options on the Maintain menu of the Scheduled Receipts object. To use the Receive Shipment Notice Complete option you must have a shipment notice associated with the scheduled receipt.

Receiving purchased inventory updates the receiving information in all the objects involved in receiving, including Purchase Orders, Purchase Order Items, Purchase Order Item Releases, Inventory Transaction History, Item Warehouses, and Item Locations.

Receiving

Use the following sections to learn about how the receiving objects are related and how receiving transactions update receiving information and status in all affected receiving objects and keep the receiving quantities in these objects in balance.

Understanding receiving objects

You can use the following objects to receive purchased inventory.

- In PM, use
    - Purchase Orders
    - Purchase Order Items
    - Purchase Order Item Releases.
- In MM, use
    - Scheduled Receipts.

A higher-level object is an object which contains other objects. Purchase order headers can contain purchase order items, and purchase order items can contain purchase order item releases.

A lower-level object is an object which is contained in another object. Purchase order items and purchase order item releases form part of purchase orders.

An object can be both a higher-level object and lower-level object. Purchase Order Items is a higher-level object for Purchase Order Item Releases and a lower-level object for Purchase Orders.

Figure 2-2 demonstrates how the receiving objects in MM and PM are related.

Figure 2-2. Overview of receiving objects

In PM, you create purchase orders with one or more purchase order items. Each purchase order item can have no releases, or one or more releases.

When you create or maintain the purchase order, XA automatically generates one scheduled receipt for each purchase order item (with no releases) or purchase order item release.

Scheduled receipts show the open quantity (quantity not yet received) and status of the purchase order item or purchase order item release associated with the scheduled receipt.

Understanding receiving options

You receive purchased inventory using the Receive or Receive Complete option in one of the receiving objects. The options, Receive and Receive Complete, provide the dialogs for entering receiving information. XA generates the transactions to perform the receiving actions you request on the dialog.

Table 2-1 shows the receiving objects, the receiving options you can use, and the transactions that XA can generate.

Receiving Objects	Receiving options/transactions	
	Receive (RD, RI, RP, VR)	**Receive Complete** (RD, RI, RP)
Purchase Orders		All the purchase order items and purchase order item releases on the purchase order.
Purchase Order Items	A purchase order item.	
Purchase Order Item Releases	A purchase order item release.	
Scheduled Receipts	A scheduled receipt.	**Receive Shipment Notice Complete:** All the items on the shipment notice for the scheduled receipt. **Receive Purchase Order Complete:** All the items on the purchase order for the scheduled receipt.

Table 2-1. Receiving objects and options

The primary purpose of the Scheduled Receipts object is to help you receive purchased inventory. From Scheduled Receipts, you can enter Receive Complete options for the purchase order and shipment notice associated with the scheduled receipt as well as receive the scheduled receipt.

Receive Complete option

The Receive Complete option provides a convenient way to receive a purchase order in one step.

Enter the Receive Complete option in the Purchase Orders object. From the Scheduled Receipts object, you can enter the Receive Shipment Notice Complete option for the shipment notice or Receive Purchase Order Complete option for the purchase order associated with the scheduled receipt.

XA creates as many of the following transactions as it takes to receive objects using the default values:

- Receive purchased item to dock (RD)
- Receive purchased item to inspection (RI)
- Receive purchased item to stock (RP).

Figure 2-3 shows an example of a Receive Purchase Order Complete dialog that opens when you select the Receive Purchase Order Complete option in Scheduled Receipts.
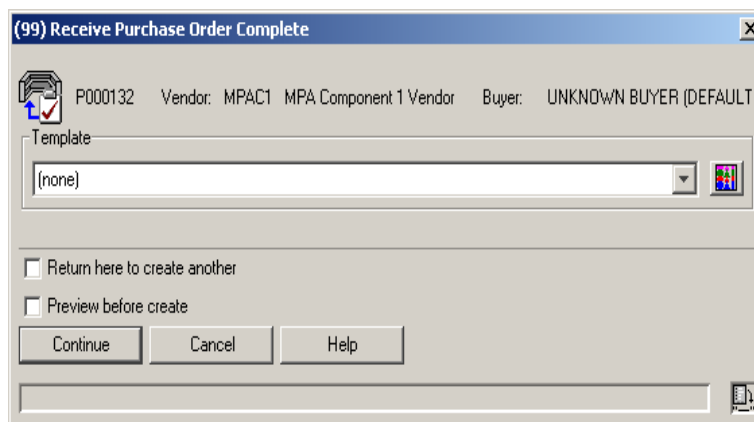
Figure 2-3. Receive Purchase Order Complete dialog

Templates control whether you use the default values for transaction attributes or whether you can override default values for receiving the selected purchase order. The (none) template is a quick way to receive using the default values.

If you want to override values (for all the items on the purchase order), select the All receipts transactions template. This method of receiving is useful, for example, when you receive the entire purchase order, and want to enter a value and apply it to all items on the purchase order.

For example, using the All receipts transactions template, you can change the Received to stock reason attribute for all the scheduled receipts on the purchase order. In the example shown in Figure 2-4, you could change the Received to stock reason to a value created by your company in the Transaction Reasons object.

Figure 2-4. Receive Purchase Order Complete dialog - All receipts transactions template

You cannot use the Receive Complete option if you need to enter or change batch/lot information for some items on the purchase order. You must use the Receive option on these items to enter the batch/lot information.

Receive option

The Receive option provides a convenient way to receive a scheduled receipt, purchase order item, or purchase order item release.

Use the Receive option to receive a scheduled receipt, purchase order item, or purchase order item release or to change receiving information. From the Receive dialog, you can change the quantity received, batch/lot information, and receive all or part of the object to dock, inspection, or stock. You can enter vendor returns for all or part of the object.

For example, the vendor sends you ten damaged items, which you decide to return to the vendor. Use a Receive option to make this change.

Depending on the options you select on the Receive dialog, XA generates the following receiving transactions to receive some or all the item to dock, inspection, stock, or to return the item to the vendor:

XA generates the following transactions, to action your instructions on the Receive dialog:

- Receive purchased item to dock (RD)
- Receive purchased item to inspection (RI)
- Receive purchased item to stock (RP)
- Return purchased item (VR).

The Receive dialog has the following templates:

Template	Provides
(none)	• You do not make any changes using the Receive option. You can preview the default choices before creating the transaction.
All receipt transactions	• Receive purchased item to dock (RD) • Receive purchased item to inspection (RI) • Receive purchased item to stock (RP) • Return purchased item (VR).
Receive to dock	• Receive purchased item to dock (RD) • Return purchased item (VR).
Receive to stock	• Receive purchased item to stock (RP) • Return purchased item (VR).

Table 2-2. Receive templates on the Receive dialog

Figure 2-5 shows an example of a Receive Scheduled Receipt dialog that opens when you select the Receive option for a scheduled receipt for purchased inventory.

Figure 2-5. Receive Scheduled Receipt dialog

Note: The Receive menu option will launch a receive transfer (RT) transaction if the selected scheduled receipt is for a transferred item.

Setting objects complete

XA keeps the receiving quantities and status of objects at the purchase order item, purchase order item release, and scheduled receipt level in balance as receiving actions update these objects. This principle is fundamental to understanding receiving purchased inventory because when you receive completely or set to Complete an object, you can also receive completely associated objects.

Set complete option

When you receive purchased inventory to stock, the object by default is set to Complete only when the quantity received equals or is greater than the quantity ordered. The quantity received is the total of the quantity:

- Received to stock
- Scrapped
- Returned to the vendor for credit.

When receiving to stock, you can set the status of the object to Complete or Partial regardless of the quantity received.

From the Receive option in	Use this attribute to set the status of the object
Scheduled Receipts	Set scheduled receipt status.
Purchase Order Items	Set item status.
Purchase Order Item Releases	Set item status.

Table   2-3.   Set object status

The attributes in the table above provide the following options:

- **Auto set (default):** Set the status to Complete if the quantity received is greater than or equal to the quantity expected.
- **Set complete:** Set the status to Complete regardless of the quantity, as you expect the vendor is not sending any more of the item.
- **Set partial:** Set the status to Partial stock regardless of the quantity, as you expect the vendor is sending more of the item.

Receiving completely a higher-level object

When you receive completely higher-level objects to stock or set them to Complete, XA receives completely all their lower-level objects.

For example, a purchase order has ten purchase order items, each of which has an associated scheduled receipt. You receive completely the purchase order. As each of the purchase order items is set to Complete, its associated scheduled receipt is set to Complete. XA generates the transactions for each purchase order item and scheduled receipt.

When you over-receive or set to Complete higher-level objects that have only one lower-level object, XA applies the entire over-received quantity to the lower-level object. The following example demonstrates how XA applies the received quantity when the higher-level object has two or more lower-level objects.

Multiple purchase order item releases: For example, you over-receive or you set the status of the item to Set complete for a purchase order item that has multiple open purchase order item releases.

- XA applies the received quantity to the open purchase order item releases, up to their remaining open quantity, in dock date and release sequence, and sets them all to Complete.
- If the quantity you received is fewer than the total quantity of the purchase order item releases, and purchase order item releases remain that have no receiving quantity applied to them; XA closes them because the purchase order item is complete.
- If the quantity you received is more than the total quantity of the purchase order item releases, then XA applies the extra quantity to the last purchase order item release and sets them all to Complete.

Receiving completely a lower-level object

When you receive completely lower-level objects to stock or set them to Complete, XA sets each higher-level object, in turn, complete when the higher-level object also has all its lower-level objects complete.

For example, you have one scheduled receipt for a purchase order item on a purchase order that has no other purchase order items left to receive. Either only one purchase order item on the purchase order exists, or you have already received completely the other purchase order items. You receive the entire scheduled receipt quantity. As the scheduled receipt is set to Complete, the purchase order item is set to Complete. As the purchase order item is set to Complete, the purchase order is set to Complete.

Receiving procedures

This section uses the information provided in:

- "Understanding receiving objects" on page 2-3
- "Understanding receiving options" on page 2-5
- "Setting objects complete" on page 2-10

to demonstrate the most appropriate receiving procedures for common receiving situations.

Consider the following suggested procedures when receiving purchased inventory:

- Receiving according to how the shipment was unpacked
- Receiving on the highest-level object.

Receiving according to how the shipment was unpacked

The first consideration is the method you prefer to receive your purchased inventory. Often, you determine the object and receive option you use according to how you unpacked the shipment. For example, if you require an item urgently, but you do not have time to unpack the entire purchase order, you can receive a single scheduled receipt in the Scheduled Receipts object.

Receiving on the highest-level object

The second consideration is how to reduce the amount of data entry. In most cases, you use the Scheduled Receipts object, as the primary purpose of this object is to help you receive purchased inventory. However, when you receive purchase orders completely, you can reduce the amount of receiving information you enter.

Your purchased inventory is complete and correct when you have no changes to make to receiving locations, batch/lots, or quantities. If the purchased inventory you receive is complete and correct, you use Purchase Orders to receive the purchase order items or item releases with the least data entry.

If your purchased inventory is not complete and correct but only has minor changes that you need to enter, then you enter these changes using the Receive option. When you have entered the changes, you then choose the object that most efficiently receives the rest of the purchased inventory.

For example, a shipment contains all the items for one purchase order. The most efficient method is to receive the whole shipment using the Receive Complete option in Purchase Orders or the Receive Purchase Order Complete option in Scheduled Receipts. If you use the Receive option using any of the lower-level objects, you could potentially enter many Receive options.

You must be careful when receiving higher-level objects complete. As discussed in "Setting objects complete" on page 2-10, when you receive completely a higher-level object, XA receives complete all the lower-level objects. If the lower-level object on which you first use the Receive option must have an open quantity remaining, you cannot use the Receive Complete option on its higher-level object. For example, when you enter vendor returns that require resupply and you have not yet received the resupply inventory.

Procedure for reducing data entry. This example demonstrated in Figure 2-6, "The most efficient procedure for receiving the shipment," on page 2-13 describes receiving on the purchase order after first using the Receive option to process changes. When you receive all the scheduled receipts that require changes, you can use the Receive Purchase Order Complete option to

receive the rest of the purchase order. This example also describes receiving when only part of the purchase order is in the shipment.

In this example, three purchase orders, which have no batch/lots requiring additional information, arrive in a shipment. The second purchase order has a purchase order item for which you want to change its default scheduled receipt location. The third purchase order has a purchase order item that is not part of the shipment.
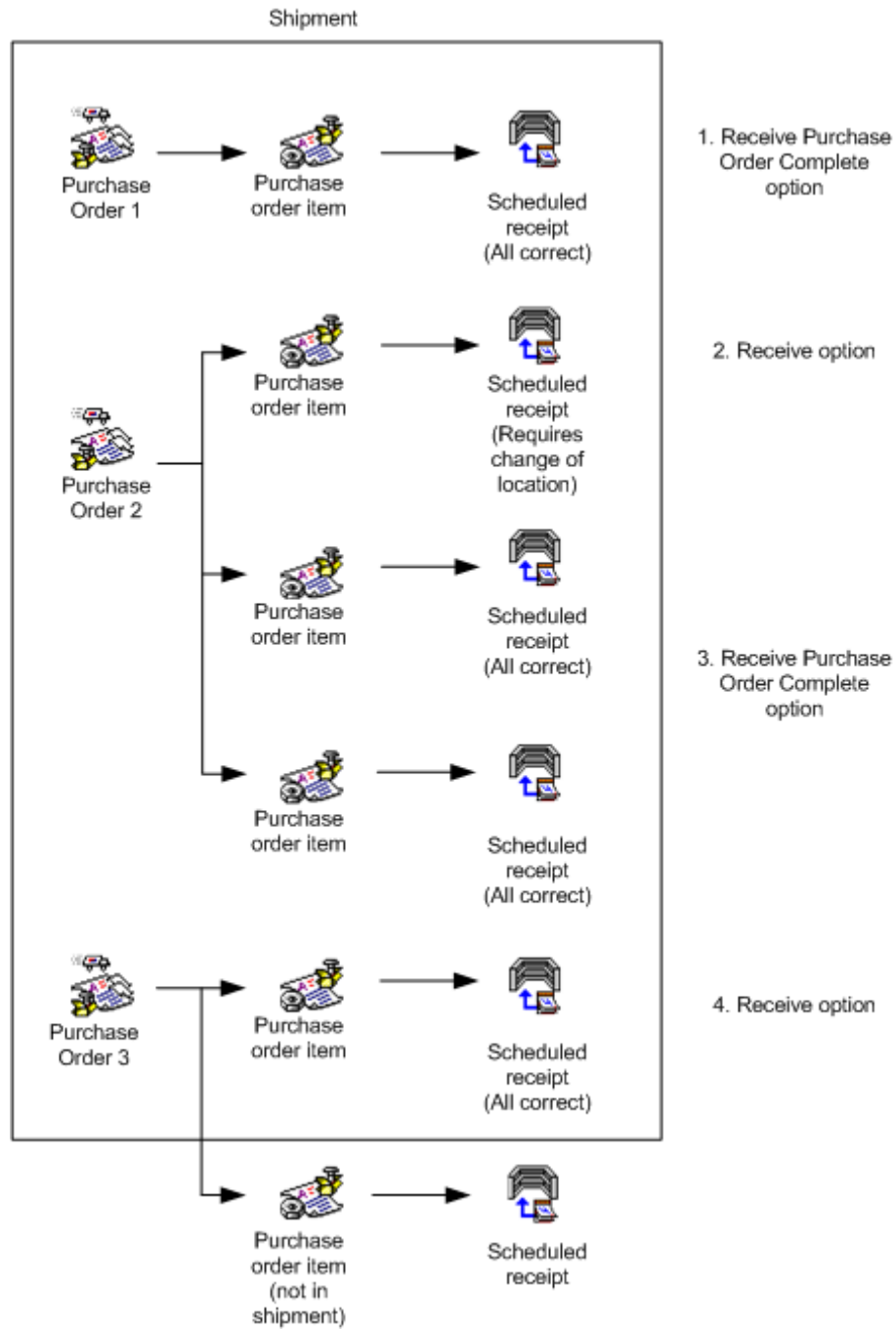
Figure 2-6. The most efficient procedure for receiving the shipment

The most efficient procedure for receiving the shipment is to use:

1. The Receive Purchase Order Complete option to receive Purchase Order 1, as the scheduled receipts on the purchase order do not require changes.

2. The Receive option to receive the first scheduled receipt on Purchase Order 2, as it requires changes.

3. The Receive Purchase Order Complete option to receive the rest of Purchase Order 2.

4. The Receive option to receive the first scheduled receipt on Purchase Order 3, as you do not want to receive the purchase order completely until all the scheduled receipts arrive.

Chapter 3. Receiving Purchased Inventory - Shipment Notices

Overview

This chapter explains the use of Shipment Notices, including how to create shipment notices, receive purchased inventory with shipment notices, and send to vendors receiving advices. For information about using shipment notices with transferred items, see Chapter 5, "Transferring Inventory."

If you do not use Shipment Notices, refer to:

- Chapter 2, "Receiving Purchased Inventory" for information about receiving purchased inventory in Materials Management (MM) without shipment notices.
- The *Procurement Management Concepts Guide*, for information about receiving purchased inventory in Procurement Management (PM).
- The *Inventory Management User's Guide*, for information about receiving purchased inventory in Inventory Management (IM).
- The *Production Monitoring and Control User's Guide*, for information about receiving in Production Monitoring and Control (PM&C).

Shipment Notices are documents your vendor provides to notify you of expected deliveries. Shipment Notices can also be called Advance Ship Notices (ASNs). ASNs are most commonly defined as an electronic notification of shipping details. Shipment Notices do not have to be sent electronically.

Shipment notices (in Infor ERP XA) can be created or maintained by an integrated system using System-Link. System-Link is the application used by XA to exchange XML documents with other applications. For example, a vendor using Infor SRM SupplyWEB sends an ASN to System-Link, which creates a shipment notice in XA. For more information about setting up SupplyWEB to work with XA, see *Integrating Infor ERP XA and SupplyWEB.*

Additionally, you can create shipment notices manually when vendors provide you with shipping information that is not received using System-Link. For example, if a vendor sends you an e-mail to inform you a shipment is delayed by two days and attaches the shipment manifest, you can track the change by creating a shipment notice using the items included in the shipment manifest.

You view and maintain Shipment Notice information using the Shipment Notices, Shipment Containers, and Shipment Container Items objects. When a Shipment Notice is received and a shipment notice is created in MM, the detailed information about the shipment, the containers, the items, and the quantities in the shipment update the corresponding scheduled receipt to ensure it

contains the most up-to-date information available about the purchase order or orders the vendor is shipping. Figure 3-1 demonstrates what happens when the vendor sends a Shipment Notice.
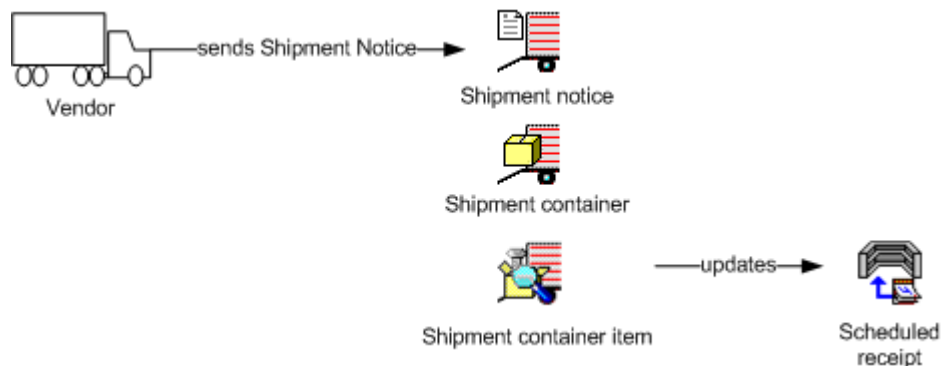

Figure 3-1. Overview of vendor sending a Shipment Notice

Shipment Notices. This object contains information about the shipment, the vendor, the receiving warehouse, the scheduled arrival date and time, and other general information about the shipment. You use the Shipment Notices object to view shipping details and to receive the shipment when the shipment arrives.

Shipment Containers. This object describes the containers in the shipment including any sub-containers and the type and weight of the container. The Shipment Containers object can support complex structures like containers inside other containers, containers with multiple items, and items in containers at several levels.

Each shipment notice includes a default container. The default container has a blank container ID. Any items the vendor has not specified as part of a container, in the shipping details, are added to the default container. A container that has another container directly inside is called a parent container. A container that is not in another container but has containers inside is called a top container.

In the example shown in Figure 3-2, the trailer is the top container A, which contains two parent containers, pallets B and C. On each pallet are two boxes containing items. They are respectively containers D, E, F, and G. Also in the trailer is an item that is not in any of the boxes or pallets in the trailer. This item is in the top container A.
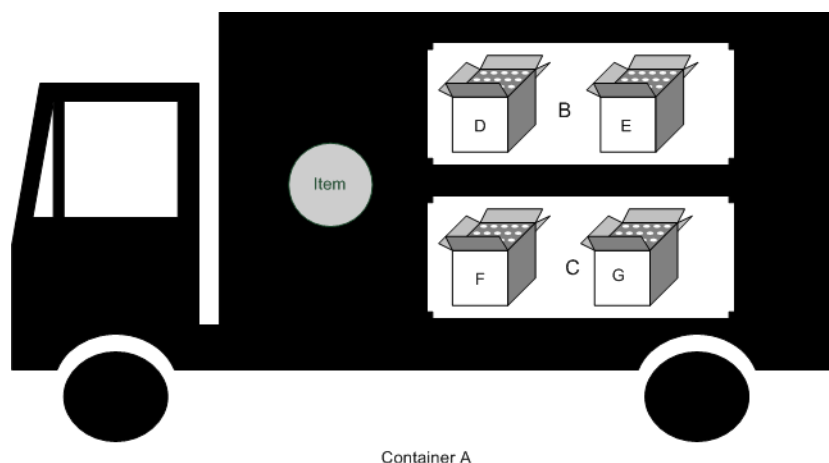

Container A

Figure 3-2. Example of a container structure

Note: The number of container levels XA supports is unlimited. You decide the level of detail on the Shipment Notice by specifying your requirements to the vendor who sends the Shipment Notice. When you create shipment notices, you enter as many containers as you need to describe the shipment. If you do not want to describe containers, create all the shipment container items in the default container. If your shipment notices are created through System-Link and the vendor does not send container information, XA creates the shipment container items in the default container.

When the shipment arrives, you can use the Shipment Containers object to receive entire containers at the same time.

Shipment Container Items. This object shows the quantity, batch/lot ID, and weights of a purchase order item or purchase order item release the vendor shipped in a container. XA links each shipment container item to the scheduled receipt for the purchase order item or purchase order item release in the shipment. When the shipment arrives, you can use the Shipment Container Items object to receive items in the shipment. You can change the receiving location for the item and receive item quantities to dock, stock, inspection, or return items to the vendor. When receiving to stock, you can use the option, Set container item status, to completely receive the shipment container item or leave the shipment container item open regardless of the quantity received.

Scheduled Receipts. This object shows the expected arrivals of purchased inventory to warehouses. Scheduled receipts help people working in receiving identify the items and purchase orders that require receiving. XA creates scheduled receipts when XA users add new purchase order items or item releases to purchase orders. Scheduled receipts include information about the arrival date, item, warehouse, scheduled and open quantity, status, purchase order ID, and shipment ID, if a shipment notice exists. The primary use of the Scheduled Receipts object is to help you receive items.

Scheduled Receipt Locations. This object allows you to specify, in advance, the warehouse location to use when receiving an item. The location can be either to inspection or to stock. If you do not want to change the scheduled receipt location, the location defaults to the default stock location for the item warehouse. XA creates a scheduled receipt location for each scheduled receipt.

Item Shortages. This object shows all the customer orders or manufacturing orders and schedules that are short for the selected scheduled receipt. You use the Item Shortages object to help you identify urgently required items. XA generates the current item demand information when you open the Item Shortages object.

Two things happen when you select Item Shortages on the Display menu on the Scheduled Receipts list window:

- XA retrieves the item warehouse record for the selected scheduled receipt and subtracts the demand from the on-hand to determine the available quantity. The item has a shortage if the available quantity is negative.
- If the item has a shortage, XA displays all manufacturing orders, schedules, and customer orders needing some of the item, and the quantity.

Figure 3-3 shows your options for receiving purchased inventory when a shipment notice exists.
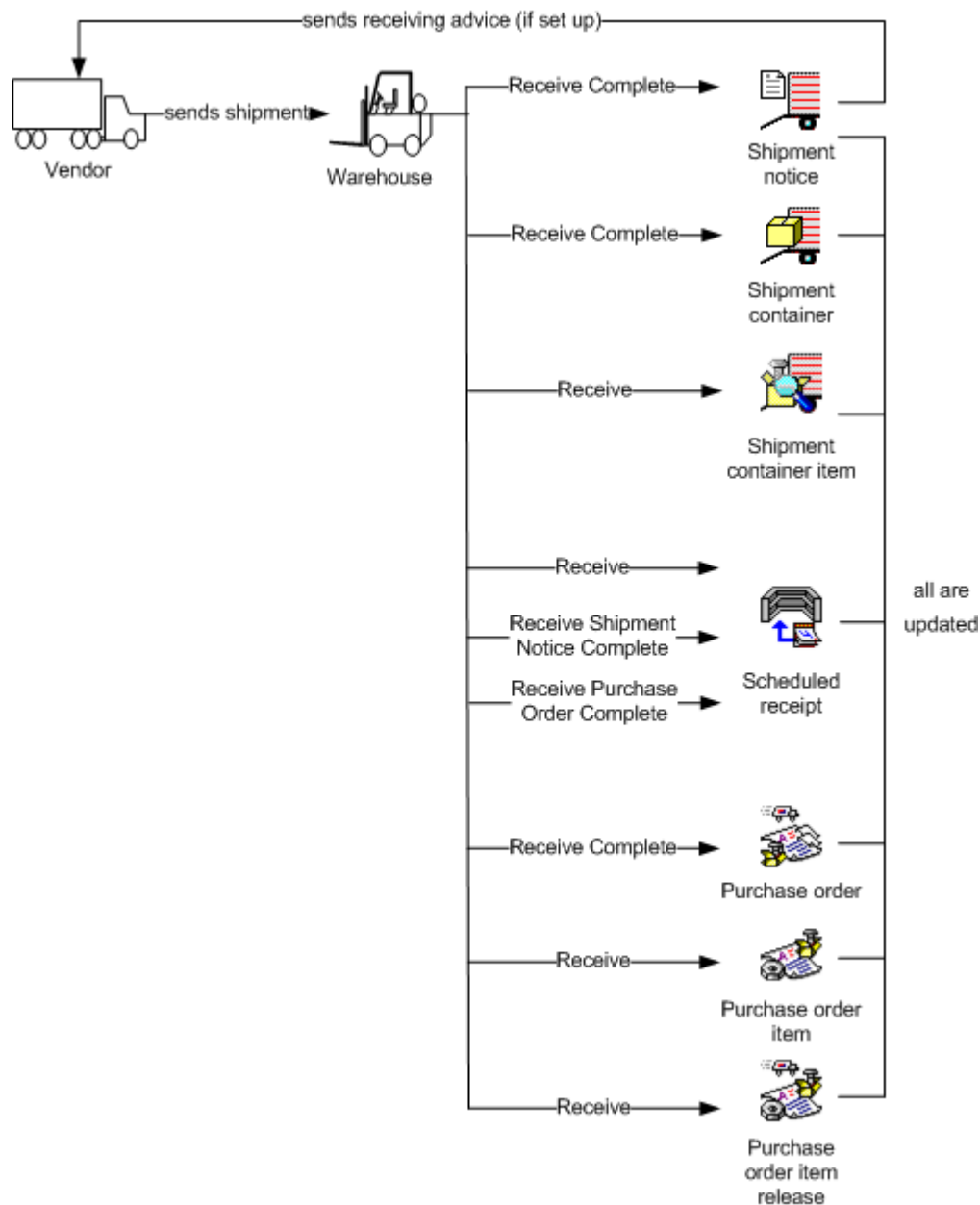

Figure 3-3. Overview of receiving purchased inventory when a shipment notice is present

Receive option and Receive Complete option. Use these options to receive purchased inventory. You can receive the entire shipment, an entire shipment container, or a single shipment container item or scheduled receipt. From the Scheduled Receipts object, you can also receive entire purchase orders or shipments. In PM, you can receive purchase orders, purchase order items, and purchase order item releases.

Receiving purchased inventory updates the receiving information in all the objects involved in receiving, including Purchase Orders, Purchase Order Items, Purchase Order Item Releases, Inventory Transaction History, Item Warehouses, and Item Locations.

Receiving advices. Use these electronic documents to inform vendors of the receipt of purchased inventory. When you use shipment notices, you can send receiving advices at any point during the receiving process.

You can delete shipment notices before activity occurs. XA deletes the scheduled receipts associated with the deleted shipment notice if the purchase order for the scheduled receipt is purged; otherwise, XA unlinks the scheduled receipts from the shipment notice.

You can delete shipment notices after activity occurs, but you receive a warning if the associated purchase orders are not purged. XA deletes the scheduled receipts associated with the deleted shipment notice if the purchase order for the scheduled receipt is purged; otherwise, XA unlinks the scheduled receipts from the shipment notice.

Creating shipment notices

Shipment Notices for purchased inventory usually contain the following information:

- Shipment ID
- Vendor sending the shipment
- Warehouse receiving the shipment
- Expected date and time of arrival
- Comments about the shipment
- Containers, pallets, and boxes in the shipment
- The structure of the containers (for example, when a container is inside another container)
- Items and quantities shipped
- Purchase order reference.

Creating a shipment notice

This example assumes you want to create a shipment notice, shipment containers, and shipment container items at the same time in the Shipment Notices object for purchased inventory.

Select Create on the Maintain menu for Shipment Notices.

Figure 3-4. Create Shipment Notice dialog

On the Create Shipment Notice dialog enter warehouse, vendor, shipment ID information, and adjust the arrival date and time as required. The Shipment ID cannot duplicate an existing shipment ID for the same vendor. After you create the shipment, you cannot change the Shipment, Warehouse, and Vendor attributes. To add shipment containers and shipment container items, select Preview before create before you click Create.

The Create Shipment Notice card file opens.

Figure 3-5. Create Shipment Notice card file - General card

Enter the information about the shipment on the appropriate cards in the Create Shipment Notice card file. For example, you can enter the date and time the shipment is leaving the vendor, and the date and time the shipment is to arrive at the warehouse. You can enter the vendor address or warehouse address, or override an existing vendor or warehouse address for the shipment.

Select the Comments card if you want to add comments about the entire shipment such as "Notify buyer that shipment has arrived," or comments the vendor has provided on the Shipment Notice such as: "If you have questions regarding your shipment, please contact your salesperson, or call us at 1-800-555-1234 and press 2 for customer service."

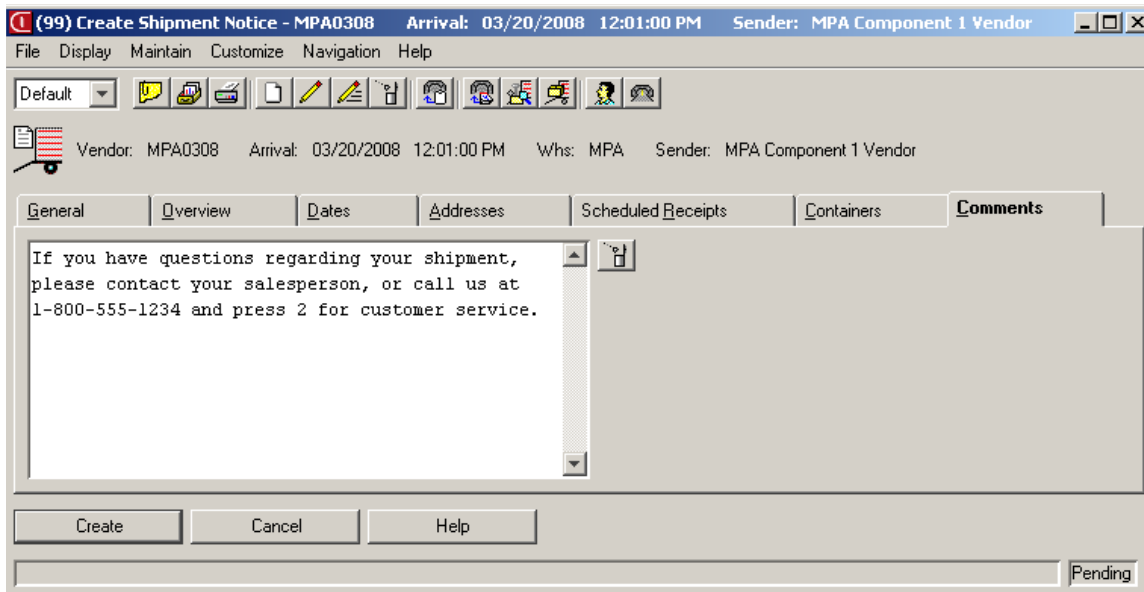*Figure 3-6. Create Shipment Notice card file - Comments card*

Every shipment notice contains a default container, which has a blank container ID. Figure 3-7 shows the Containers card, which only has a default container. If you do not want to specify containers on the shipment notice, create all your shipment container items in the default container.
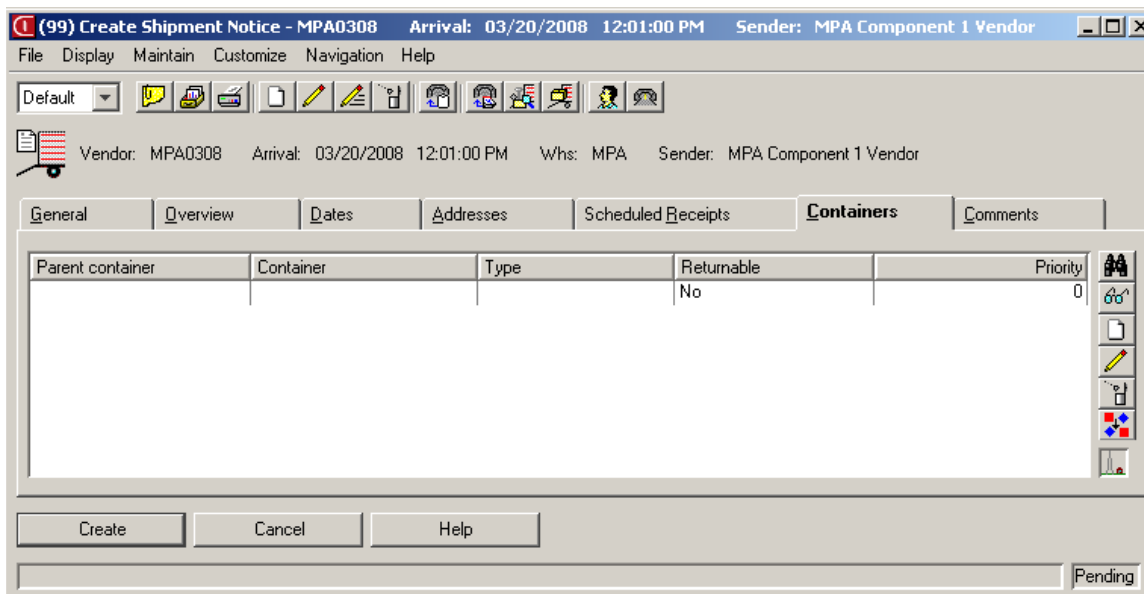

Figure 3-7. Create Shipment Notice card file - Containers card

If you do specify containers on the shipment notice, you can make the container structure as complex as you require. For example, you can create a container structure, which has multiple levels of containers and multiple containers at each level. The shipment's container structure can show containers that are inside other containers and the items contained in each container at any level. For an example of a container structure, see Figure 3-2, "Example of a container structure" on page 3-3.

You must create the top container and parent containers before you create the containers inside them. You identify the parent container when you create the container.

Before you complete the creation of the shipment notice, you add any shipment containers by clicking the Create button at the right of the Containers card.

Figure 3-8. Create Shipment Container dialog

On the Create Shipment Container dialog, you enter the name of the parent container if the container you are creating is in another container, the name of the container you are creating, and the container type. All containers (except the default container) must have a valid container type, as specified in the Container Types object. You can also indicate if the container can be reused and the priority for receiving the container. To add more information about the container and to add container items, select Preview before create before you click Create.

Enter the information about the shipment container, such as gross, net, and tare weight for the container, on the General card in the Create Shipment Container card file.

Figure 3-9. Create Shipment Container card file - General card

Before you create the shipment container, add any shipment container items by clicking the Create button at the right of the Container Items section of the General card.

The Create Shipment Container Item dialog opens.

Figure 3-10. Create Shipment Container Item dialog

On the Create Shipment Container Item dialog, you can use the Find Scheduled Receipt ... button beside the Item attribute to see a list of scheduled receipts that are eligible to include on this shipment notice. Scheduled receipts are eligible where they are for the same warehouse and vendor as the shipment notice and are not part of another shipment notice. If you know and enter part of the item number before you click the Find Scheduled Receipt ... button, the list of scheduled receipts is also limited to scheduled receipts that match the item information you enter. Enter or change the quantity, batch/lot, and purchase order information on the Create Shipment Container Item dialog. If you want to add weight information or comments about the shipment container item, select the option to Preview before create before you click Create.

The Create Shipment Container Item card file opens.

Figure 3-11. Create Shipment Container Item card file - General card

On the Create Shipment Container Item card file, you can enter the gross, net, and tare weight of the item. If the item has an ordering unit of measure that differs from its stocking unit of measure and you change the shipped quantity, click the Set Shipped quantity (stocking UM) default button to update the quantities in the second unit of measure on the card.

If you have company or vendor shipping comments to add about the shipment container item you created, select the Comments card and Shipment tab. You can also add receiving comments to the Receiving tab, for example, if you want to record special handling procedures that people unpacking the purchased inventory need to follow when they receive the items.
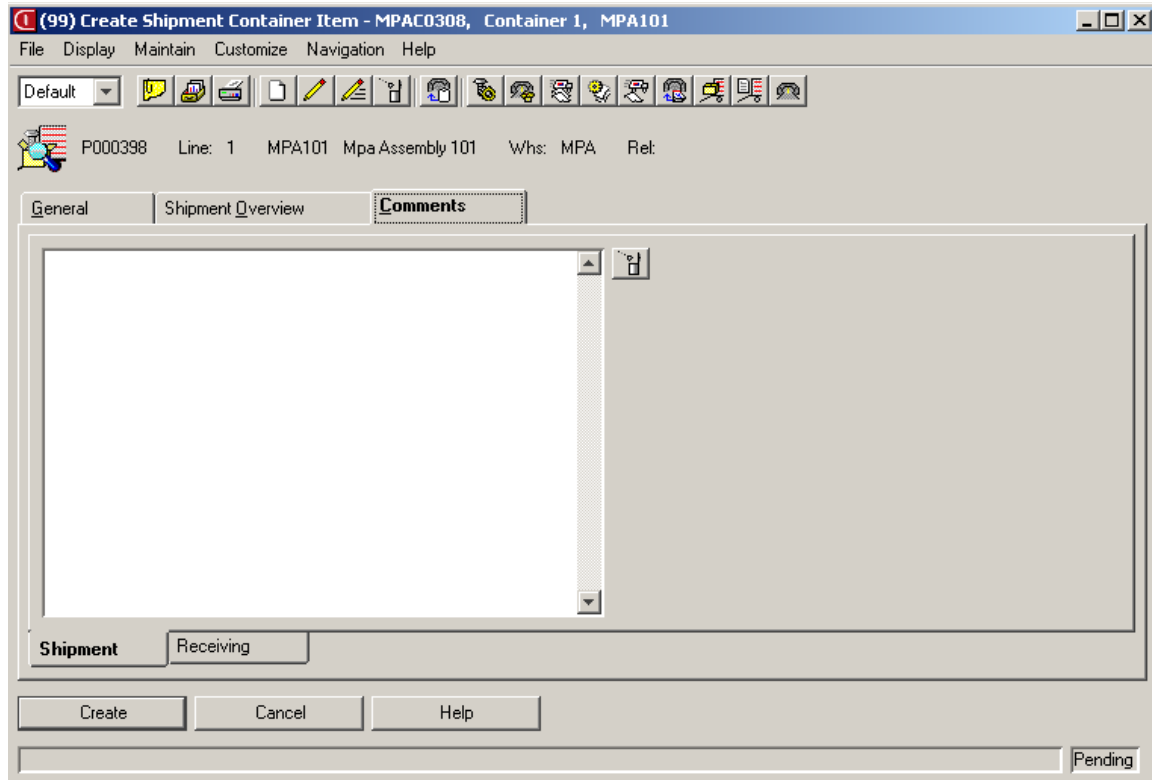
Figure 3-12. Create Shipment Container Item card file - Comments card - Receiving tab

Note: XA creates shipment container item comments using System-Link on the Shipment tab.

XA creates the shipment container item when you click the Create button on the Create Shipment Container Item card file. You return to the Create Shipment Container card file, where you repeat the process to create any other shipment container items specified on the Shipment Notice.

If the vendor sends scheduled receipts in multiple containers, you might want to create a shipment container item for the scheduled receipt quantity in each container. From the Create Shipment Container Item dialog for each shipment container item you are creating, use the Find Scheduled Receipt button ... to select the scheduled receipt. On the Create Shipment Container Item dialog, you need to adjust the shipped quantity to the scheduled receipt quantity shipped in the container for which you are creating the shipment container item. The scheduled receipt values do not change until XA creates the shipment container items and shipment notice. Each time you create a shipment container item, the shipped quantity displays the total quantity of the scheduled receipt.

XA creates the shipment container when you click the Create button on the Create Shipment Container card file. You return to the Create Shipment Notice card file, where you repeat the process to create the shipment containers you need to specify the structure of the shipment. As you create each container, you can add the shipment container items that the vendor is shipping in that container.

Note: If you created your shipment container items in the default container, click Continue on the Shipment Container card file to change the default container, as XA has already created the container.

As you create the structure of the shipment, XA updates the Overview card on the Create Shipment Notice, Create Shipment Container, and Create Shipment Container Item card files with the current overview of the shipment. The Overview card provides the complete picture of the shipment you are creating and is useful for determining whether you are creating the shipment correctly.
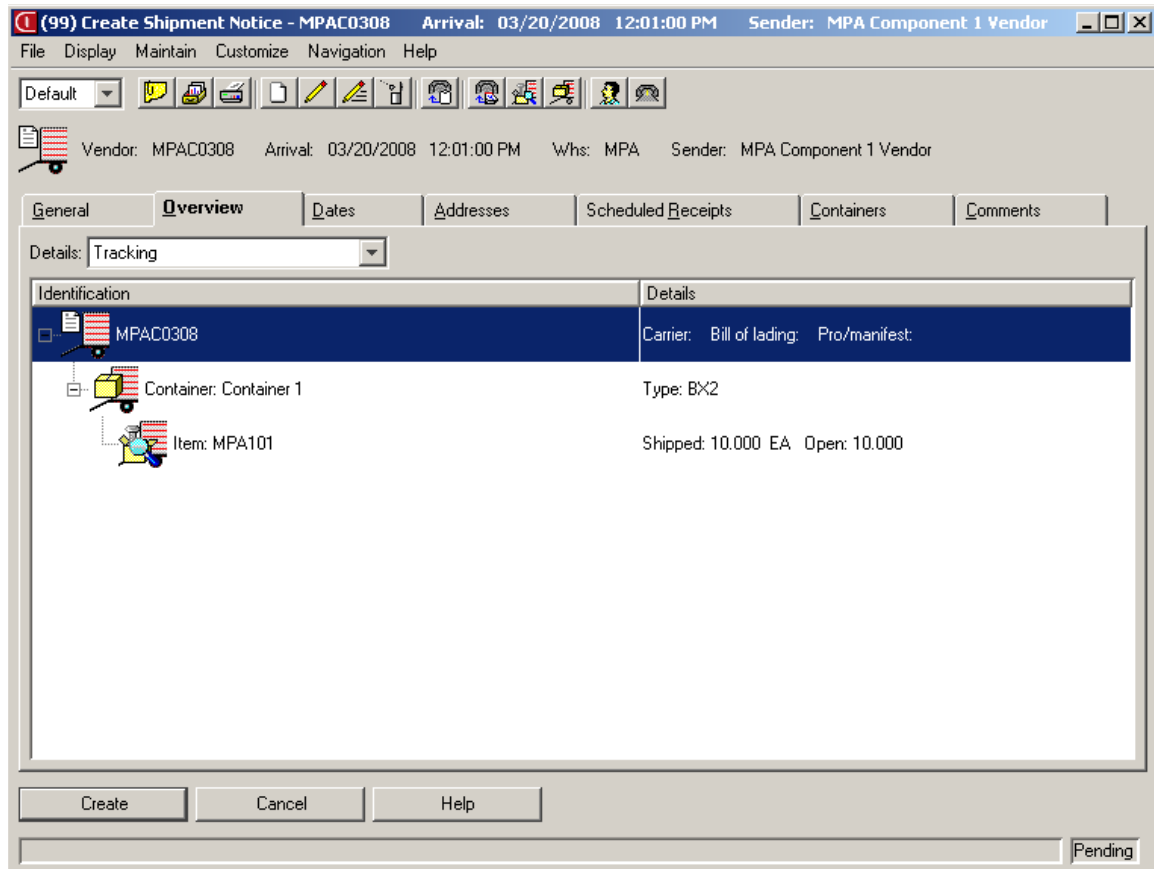
Figure 3-13. Create Shipment Notice card file - Overview card

Figure 3-13 shows the Overview card for this example of creating a shipment notice, shipment container, and shipment container item in the Create Shipment Notice card file. In Figure 3-13, only one container is created and in the container is only one item.

You can use the Overview card to add containers and items. For example, you view the Overview card and realize you have another item to add to Container 1. You double-click the Shipment Container line for Container 1 to view the Shipment Container card file and add shipment container items.

Click the Create button on the Create Shipment Notice card file. The Please Confirm prompt opens, if you created containers, items, or comments for the shipment notice.
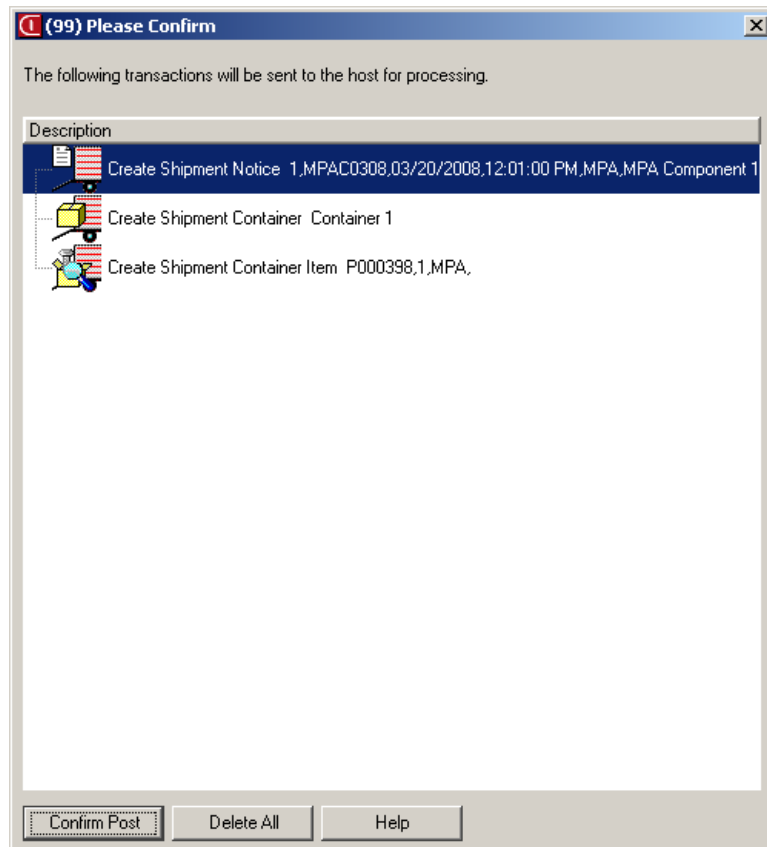
Figure 3-14. Please Confirm Create Shipment Notice prompt

Click Confirm Post to create the shipment notice, shipment containers, shipment container items, and comments.

Shipment notice updates the scheduled receipt

When shipment notices are created, XA compares the shipped quantity with the scheduled receipt quantity and updates the scheduled receipt according to the rules listed in Table 3-1. For more information about how XA compares ordered quantities to shipped quantities, see "Receiving with shipment notices" on page 3-19.

If the shipped quantity is	XA
Equal to the scheduled receipt quantity	• Links the scheduled receipt to the shipment notice and creates shipment container items in containers or the default container.
More than the scheduled receipt quantity	• Links the scheduled receipt to the shipment notice and creates shipment container items in containers or the default container. • Sets the Shipped quantity status in Scheduled Receipts to 1 - Over shipped. • Increases the scheduled receipt quantity to the shipped quantity.
Fewer than the scheduled receipt quantity	• Reduces the scheduled receipt quantity to the shipped quantity. • Links the scheduled receipt to the shipment notice and creates shipment container items in containers or the default container. • Sets the Shipped quantity status in Scheduled Receipts to 2 - Under shipped. • Creates a scheduled receipt for the quantity not reported as shipped.

Table   3-1. Shipment notice updates the scheduled receipt

When the shipment notice is created, XA updates the following information in the Scheduled Receipts object:

- Shipment ID
- Arrival date
- Arrival time
- Quantity
- Weight
- Flag showing if multiple batch lots exist for container items in the shipment
- Shipped quantity status.

Creating a shipment notice after receiving has occurred

Usually, when you create shipment notices, they are from Shipment Notices you receive before the shipment arrives. However, you can create shipment notices during or after receiving because you need a shipment notice to send a receiving advice to the vendor.

When you create shipment notices after you have partly or completely received scheduled receipts in that shipment, XA copies the receiving data from the scheduled receipts into the Shipment Container Items object as XA creates the shipment container items.

The shipped quantity reported on the Shipment Notice cannot be fewer than the total quantity already received to dock, received to inspection, or received to stock, scrapped, and returned. XA does not allow you to enter a quantity fewer than the quantity received when creating shipment notices manually. When XA is creating a shipment notice the vendor sent through System-Link, XA does not create a shipment notice where the shipped quantity is fewer than the total quantity already received. The vendor can resend a corrected Shipment Notice, or you can create a manual shipment notice with quantities that equal the received quantity.

When creating a shipment notice to send a receiving advice, you can use the Find Scheduled Receipt ... button and Received, no shipment subset to help you identify the scheduled receipts to include on the shipment notice. On the Create Shipment Container Item dialog, use the Find Scheduled Receipt ... button beside the Item attribute to see a list of scheduled receipts that are eligible to include on this shipment notice. Select the Received, no shipment subset to view a list of scheduled receipts that:

- Have no shipment notice associated with them,
- Have the same warehouse and vendor as the shipment notice you are creating,
- Have been received, and
- Require a receiving advice.
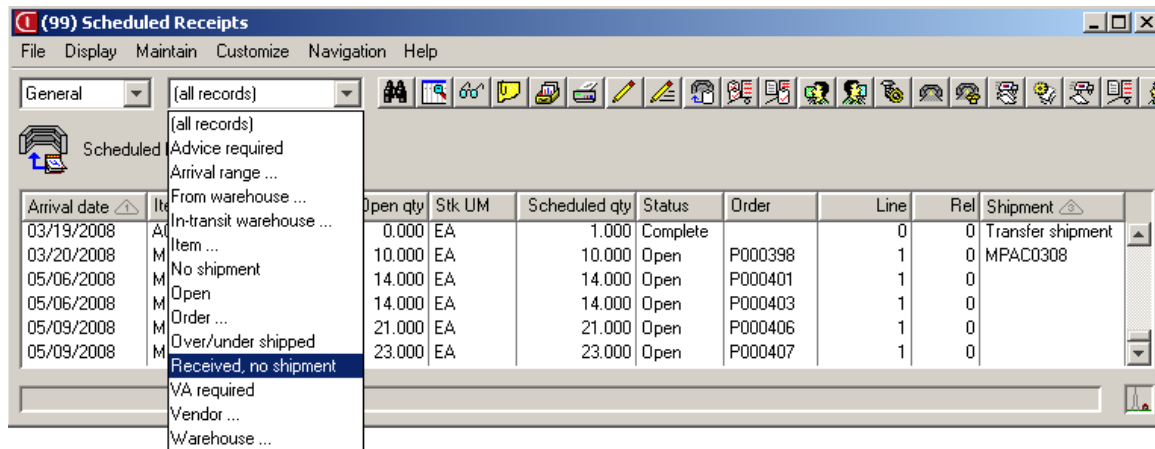
Figure 3-15. Find Scheduled Receipt ... list window - Received, no shipment subset

For more detailed information about manually creating shipment notices, see "Creating a shipment notice" on page 3-7.

Receiving with shipment notices

Use the following sections to learn about receiving purchased inventory using shipment notices:

- "Understanding receiving objects" on page 3-19
- "Understanding receiving options" on page 3-26
- "Setting objects complete" on page 3-31.

Then, use this information to enter receiving transactions using the most efficient object and receive option.

- "Receiving procedures" on page 3-35.

Understanding receiving objects

When you use shipment notices, you can use the following objects to receive purchased inventory.

- In PM, use

    - Purchase Orders
    - Purchase Order Items
    - Purchase Order Item Releases.
- In MM, use

    - Scheduled Receipts
    - Shipment Notices
    - Shipment Containers
    - Shipment Container Items.

Object levels

Figure 3-16, "Overview of the receiving objects" on page 3-20 provides an overview of the relationship that exists among:

- Purchase Orders
- Purchase Order Items
- Purchase Order Item Releases
- Scheduled Receipts
- Shipment Notices
- Shipment Containers
- Shipment Container Items.

The figure illustrates the object levels, and how the Scheduled Receipts object links the PM and MM receiving objects

A higher-level object is an object that contains other objects. For example:

- Purchase orders can contain purchase order items, and purchase order items can contain purchase order item releases.
- Shipment notices can contain shipment containers, and shipment containers can contain shipment container items.
- Scheduled receipts can contain shipment container items.

A lower-level object is an object that is contained in another object. In the preceding examples, purchase order items, purchase order item releases, shipment containers, and shipment container items are all lower-level objects because they are contained by higher-level objects.

An object can be both a higher-level object and a lower-level object. In the preceding examples, a purchase order item can be a higher-level object when it contains purchase order item releases. It is also a lower-level object because it is contained by a purchase order. Similarly, a shipment container is a higher-level object when it contains shipment container items and it is a lower-level object because it is contained by a shipment notice.

The Scheduled Receipts object links purchase order items or purchase order item releases to shipment container items.
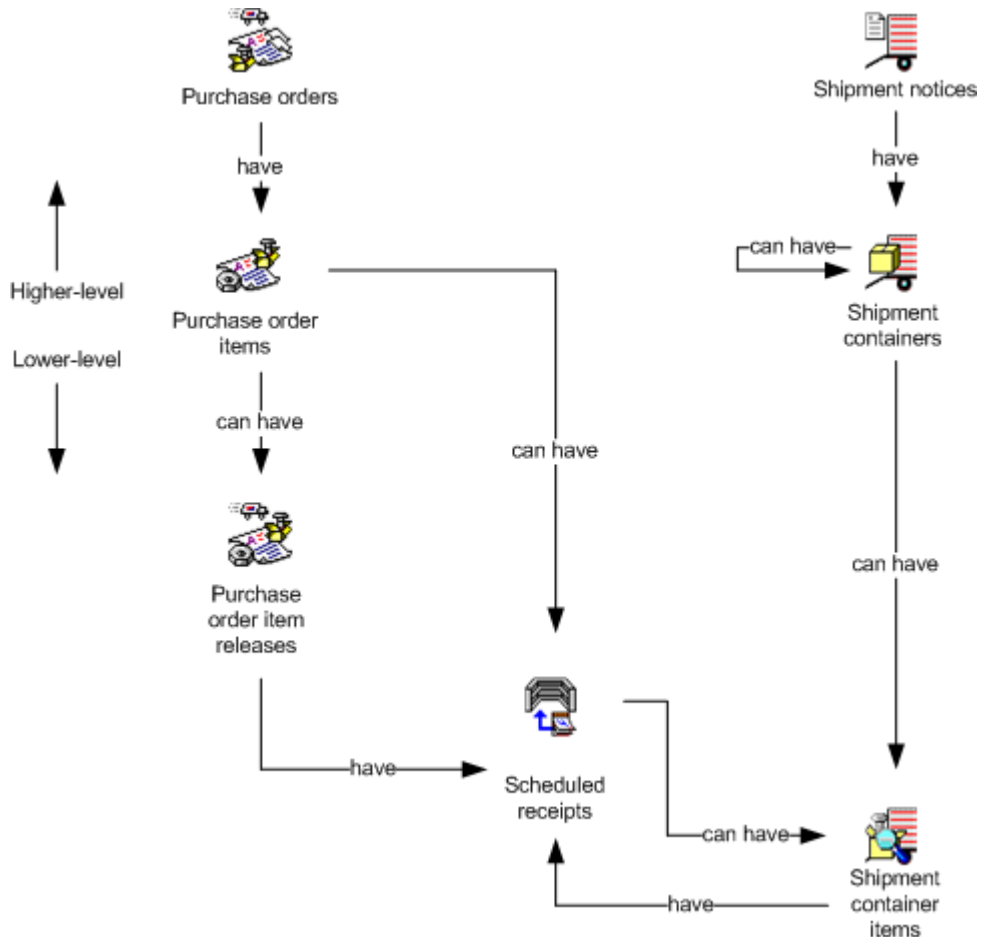
Figure 3-16. Overview of the receiving objects

XA always assures received quantities and status for purchase orders, scheduled receipts, and shipment notices are always in balance regardless of what object you use to enter the receipt. For example, XA automatically updates a receipt of a shipped item on its corresponding purchase order item.

Object relationships

In PM, you can create purchase orders with one or more purchase order items. A purchase order item, if it is a blanket release item, can have one or more purchase order item releases.

When you create or maintain the purchase order, XA automatically generates one scheduled receipt for each purchase order item, if the item is not a blanket release item, or generates one

scheduled receipt for each purchase order item release, if the purchase order item is a blanket release item.

If you use shipment notices, XA associates a scheduled receipt with the shipment notice and the one or more shipment containers that contain the item the vendor is shipping. XA associates a scheduled receipt with one shipment container item if the vendor sends the item in one container and the scheduled receipt has no batch/lots or only one batch lot. XA associates a scheduled receipt with multiple shipment container items when the vendor ships the item in two or more shipment containers, or when the scheduled receipt has multiple batch/lots.

If you track shipment information but do not specify containers on the shipment notice, all of the scheduled receipts are in the default container. In this situation, XA associates each scheduled receipt with one shipment container item, unless the scheduled receipt has multiple batch/lots.

Usually, one scheduled receipt is associated with one purchase order item. XA assumes the received quantity for purchase orders, scheduled receipts, and shipment notices are always correct. For example, XA automatically receives a shipment container item on its corresponding purchase order item because of the assumption that the quantities of the item are the same. However, in some situations, the quantity of the item on the shipment notice does not match the order quantity of the purchase order item. For an example of how XA creates scheduled receipts to track quantities not reported on the shipment notice, see the following section, "Object quantities before receiving" on page 3-22.

Object quantities before receiving

Without shipment notices, scheduled receipts show the open quantity (quantity not yet received) and status of the purchase order item or purchase order item release associated with the scheduled receipt.

When the shipment notice is created, it contains the quantity the vendor is shipping. The shipment notice updates the scheduled receipts to show the shipped quantity. The shipped quantity can be equal to, fewer than, or greater than the P.O. ordered quantity.

Shipped quantity equals the P.O. ordered quantity. This example demonstrated in Figure 3-17 describes the situation where a shipment notice confirms the quantity you ordered is the quantity the vendor is shipping.

This example also shows the purchase order item order quantity equals the scheduled receipt shipped quantity, and the scheduled receipt shipped quantity equals the total of the shipment container item quantities.

You create a purchase order item for a 100. XA creates a scheduled receipt for the purchase order item. When you receive the shipment notice, it specifies 100 of the item are arriving in two boxes, each containing 50. Two shipment container items are associated with the scheduled receipt.
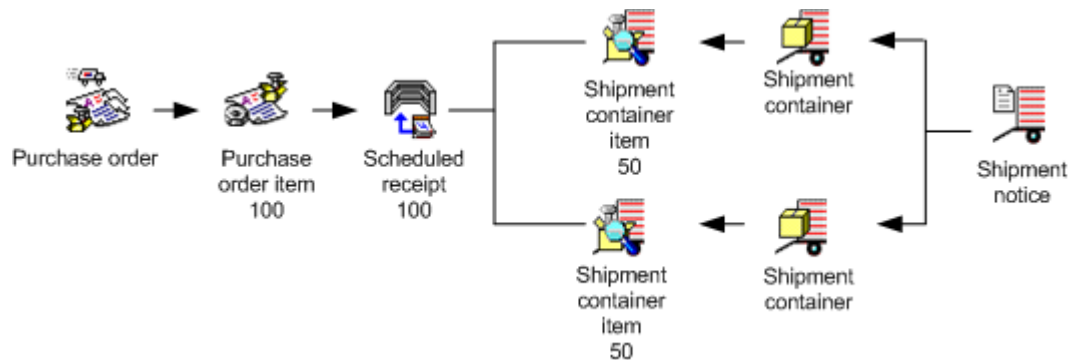
Figure 3-17. Best-case situation

The purchase order item, scheduled receipt, and shipment container item quantities are in balance because the purchase order item and scheduled receipt quantities are equal and the total of the shipment container item quantities equals the scheduled receipt quantity.

Shipped quantity is more than P.O. ordered quantity. The example demonstrated in Figure 3-18 describes the situation where the shipped quantity is more than the P.O. ordered quantity.

This example shows that XA applies the shipped quantity to the scheduled receipt but leaves the order quantity of the purchase order item unchanged.

You create a purchase order item for 100. XA creates a scheduled receipt for the purchase order item.

Figure 3-18. Shipment notice shows an over-shipment

When the shipment notice is received, it specifies 110 of the item are arriving in two boxes, one box containing 50 and the other box containing 60. Two shipment container items are associated with the scheduled receipt; one shipment container item has a quantity of 50 and the other shipment container item has a quantity of 60. The expected shipment total for the item is 110.

Figure 3-19 demonstrates how XA handles the Shipment Notice reporting an over-shipment.
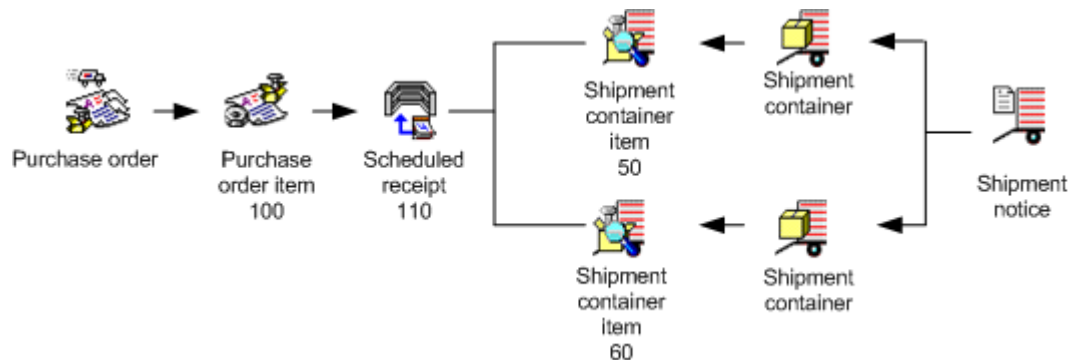
Figure 3-19. XA increases scheduled receipt quantity

The shipped quantity on the scheduled receipt is set to 1 - Over shipped. XA increases the scheduled receipt quantity to the quantity shipped.

Shipped quantity is fewer than the P.O. ordered quantity. This example demonstrated in Figure 3-20 describes the situation where the shipped quantity is fewer than the P.O. ordered quantity.

This example shows that XA generates another scheduled receipt associated with the same purchase order item or purchase order item release but which has no shipment associated with it.

The first scheduled receipt (shipment notice) has a shipment notice and tracks the quantity the vendor is shipping. XA updates this scheduled receipt to indicate an under-shipment.

The second scheduled receipt (no shipment notice) has no shipment notice and tracks the quantity ordered for which the vendor has not yet sent a shipment notice.

You create a purchase order item for 100. XA creates a scheduled receipt for the purchase order item.
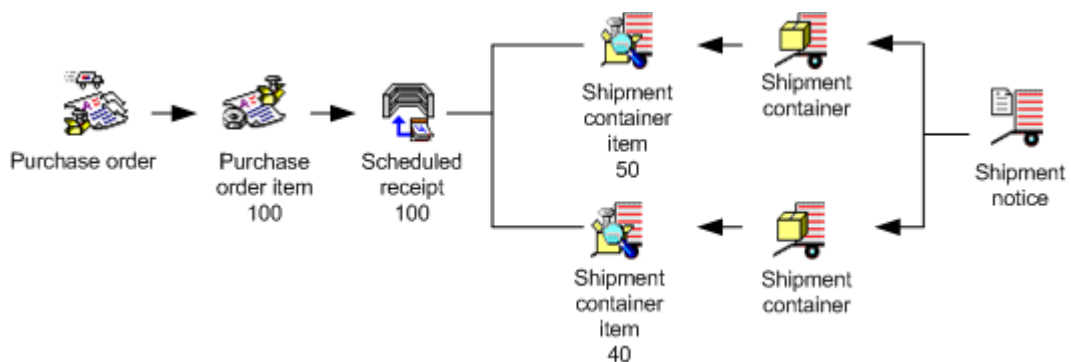
Figure 3-20. Shipment notice shows an under-shipment

When the shipment notice is received, it specifies 90 of the item are arriving in two boxes, one box containing 50 and the other box containing 40. Two shipment container items are associated with the scheduled receipt; one shipment container item has a quantity of 50 and the other shipment container item has a quantity of 40. The expected shipment total for the item is 90.
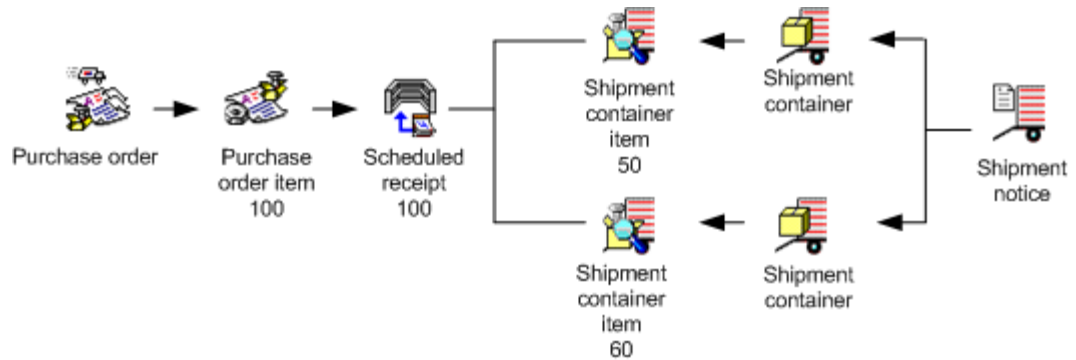
Figure 3-21 demonstrates how XA handles the Shipment Notice reporting an under-shipment.
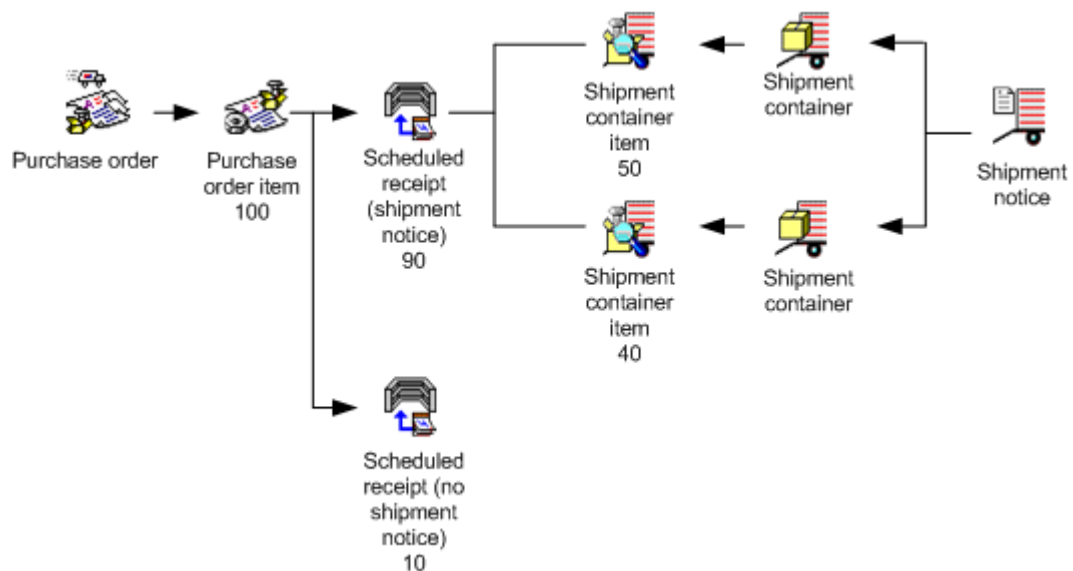
Figure 3-21. XA creates a scheduled receipt (no shipment notice)

A scheduled receipt (shipment notice) tracks the items the vendor is shipping, and is associated with the shipment. The Shipped quantity status for this scheduled receipt (shipment notice) is set to 2 - Under shipped. A second scheduled receipt (no shipment notice) quantity tracks the unshipped quantity, keeping the scheduled receipts in balance with the purchase order item.

Understanding receiving options

You receive purchased inventory using the Receive or Receive Complete option in one of the receiving objects. The Receive and Receive Complete options provide the dialogs for entering receiving information. XA generates the transactions to perform the receiving actions you request on the dialog.

Table 3-2 shows the receiving objects, the receiving options you can use, and the transactions XA can generate.

Receiving Objects	Receiving options/transactions	
	Receive (RD, RI, RP, VR)	**Receive Complete** (RD, RI, RP)
Purchase Orders		All the purchase order items and purchase order item releases on the purchase order.
Purchase Order Items	A purchase order item.	
Purchase Order Item Releases	A purchase order item release.	
Scheduled Receipts	A scheduled receipt.	**Receive Shipment Notice Complete:** All the items on the shipment notice for the scheduled receipt.
		Receive Purchase Order Complete: All the items on the purchase order for the scheduled receipt.
Shipment Notices		All the items on the shipment notice.
Shipment Containers		All items in a container, and in any containers in that container.
Shipment Container Items	A shipment container item.	

Table   3-2. Receiving objects and options

The primary purpose of the Scheduled Receipts object is to help you receive purchased inventory. From Scheduled Receipts, you can enter Receive Complete options for the purchase order and shipment notice associated with the scheduled receipt as well as receive the scheduled receipt.

Receive Complete option

The Receive Complete option provides a convenient way to receive a shipment notice, shipment container, or purchase order in one step.

Enter the Receive Complete option in the Shipment Notices, Shipment Containers, and Purchase Orders objects. From the Scheduled Receipts object, you can enter the Receive Shipment Notice Complete option for the shipment notice or Receive Purchase Order Complete option for the purchase order associated with the scheduled receipt.

XA generates as many of the following transactions as it takes to receive objects using the default values:

- Receive purchased item to dock (RD)
- Receive purchased item to inspection (RI)
- Receive purchased item to stock (RP).

Figure 3-22 shows an example of a Receive Shipment Notice Complete dialog that opens when you select the Receive Complete option in Shipment Notices.
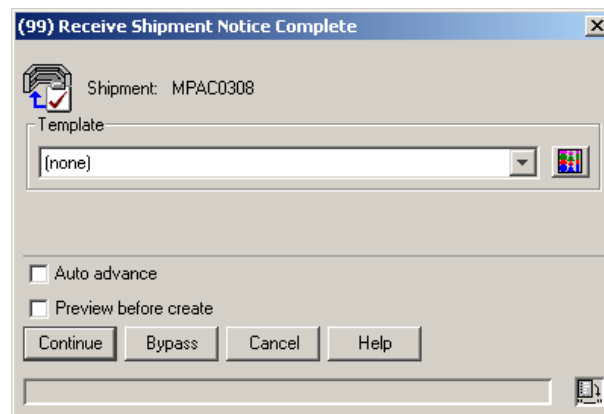
Figure 3-22. Receive Shipment Notice Complete dialog

Note: The Receive menu option will launch a receive transfer (RT) transaction if the selected scheduled receipt is for a transferred item.

Templates control whether you use the default values for transaction attributes or whether you can override default values for receiving the selected shipment notice. The (none) template is a quick way to receive using the default values.

If you want to override values (for all the items on the shipment notice), select the All receipts transactions template. This method of receiving is useful, for example, when you are receiving the entire shipment to stock, and want to enter a value and have it apply to all items in the shipment.

For example, using the All receipts transactions template, you change the Received to stock reason attribute for all the shipment container items on the shipment notice. In the example shown in Figure 3-23, you could change the Received to stock reason to a value your company created in the Transaction Reasons object.

Figure 3-23. Receive Shipment Notice Complete dialog - All receipts transactions template

You cannot use the Receive Complete option if you need to enter or change batch/lot information for some items in the shipment. You must use the Receive option on these items to enter the batch/lot information.

Receive option

The Receive option provides a convenient way to receive a scheduled receipt, shipment container item, purchase order item, or purchase order item release.

Use the Receive option to receive a scheduled receipt, purchase order item, purchase order item release, or shipment container item, or to change receiving information. From the Receive dialog, you can change the quantity received, batch/lot information, and receive all or part of the object to dock, inspection, or stock. You can enter vendor returns for all or part of the object.

For example, the vendor sends you ten damaged items, which you decide to return to the vendor. Use a Receive option to make this change.

Depending on the options you select on the Receive dialog, XA generates the following receiving transactions to receive some or all the item to dock, inspection, stock, or to return the item to the vendor:

- Receive purchased item to dock (RD)
- Receive purchased item to inspection (RI)
- Receive purchased item to stock (RP)
- Return purchased item (VR).

The Receive dialog has the following templates:

Template	Provides
(none)	• You do not make any changes using the Receive option. You can preview the default choices before creating the transaction.
All receipt transactions	• Receive purchased item to dock (RD). • Receive purchased item to inspection (RI). • Receive purchased item to stock (RP). • Return purchased item (VR).
Receive to dock	• Receive purchased item to dock (RD). • Return purchased item (VR).
Receive to stock	• Receive purchased item to stock (RP). • Return purchased item (VR).

Table 3-3. Receive templates on the Receive dialog

Figure 3-24 shows an example of a Receive Shipment Container Item dialog that opens when you select the Receive option using a shipment container item for a purchased inventory scheduled receipt.
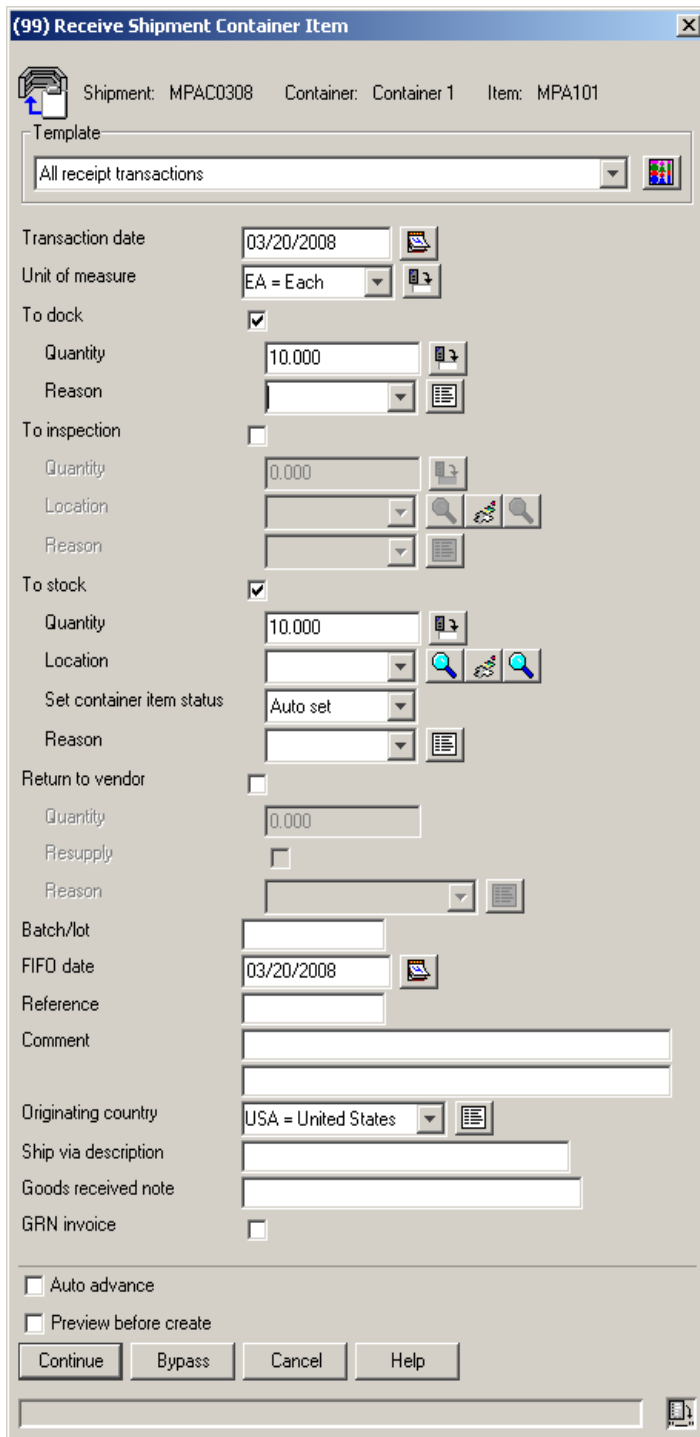

Figure 3-24. Receive Shipment Container Item dialog

Note: The Receive menu option will launch a receive transfer (RT) transaction if the selected scheduled receipt is for a transferred item.

Setting objects complete

XA keeps the receiving quantities and status of objects at the purchase order item, purchase order item release, scheduled receipt, and shipment container item level in balance as receiving actions update these objects. This principle is fundamental to understanding receiving purchased inventory because when you receive completely or set to Complete an object, you can also receive completely associated objects.

Set complete option

When you receive purchased inventory to stock, the object by default is set to Complete only when the quantity received equals or is greater than the quantity expected. The quantity received is the total of the quantity:

- Received to stock
- Scrapped
- Returned to the vendor for credit.

The quantity expected depends on whether a shipment notice is associated with the scheduled receipt. When no shipment notice exists, the quantity expected is the quantity ordered. When a shipment notice exists, the quantity expected is the quantity shipped (from the shipment notice).

When receiving to stock, you can set the object status to Complete or Partial regardless of the quantity received.

From the Receive option in	Use this attribute to set the status of the object
Scheduled Receipts	Set scheduled receipt status.
Shipment Container Items	Set container item status.
Purchase Order Items	Set item status.
Purchase Order Item Releases	Set item status.

Table 3-4. Set object status

The attributes in the table above provide the following options:

- **Auto set (default):** Set the status to Complete if the quantity received is greater than or equal to the quantity expected.
- **Set complete:** Set the status to Complete regardless of the quantity, as you expect the vendor is not sending any more of the item.
- **Set partial:** Set the status to Partial stock regardless of the quantity, as you expect the vendor is sending more of the item.

Receiving completely a higher-level object

When you receive completely higher-level objects to stock or set them to Complete, XA receives completely all their lower-level objects.

Figure 3-25 demonstrates the following example, which describes receiving completely a higher-level object. A shipment notice has one shipment container with one shipment container item. One scheduled receipt is associated with the shipment container item. The scheduled receipt is for the last open purchase order item on a purchase order.

You receive completely the shipment notice. XA receives completely the shipment container and shipment container item on the shipment notice. XA also receives completely the scheduled receipt associated with the shipment container item because the scheduled receipt has no other lower-level objects open. The purchase order item and, in turn, the purchase order are set to Complete as they are higher-level objects with all lower-level objects complete.
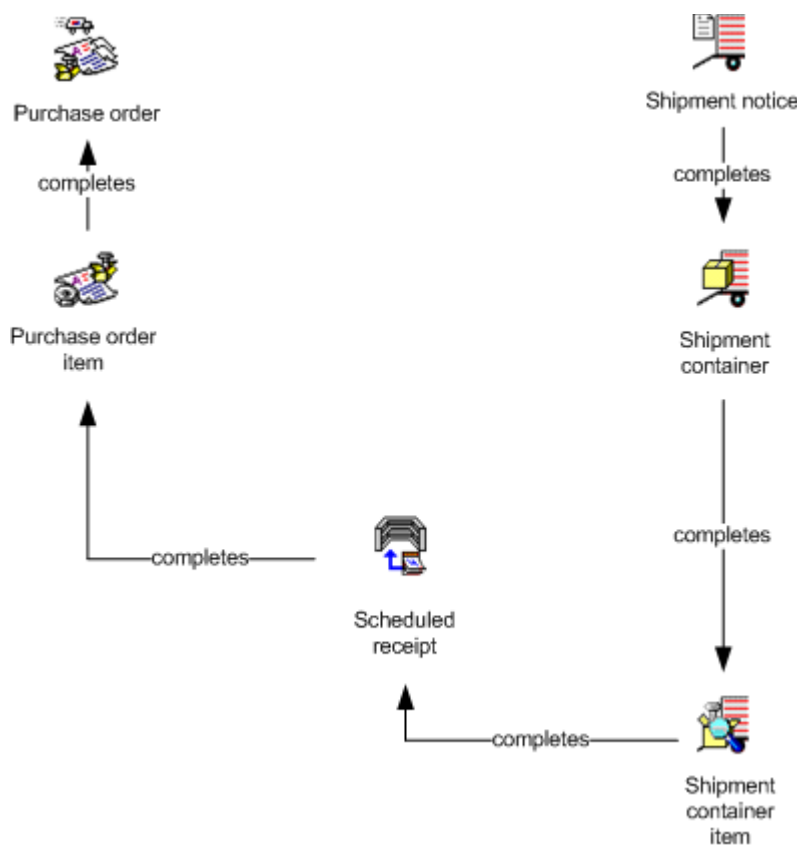

Figure 3-25. Overview of receiving on higher-level objects

When you over-receive or set to Complete higher-level objects that have only one lower-level object, XA applies the entire over-received quantity to the lower-level object. The following three examples demonstrate how XA applies the received quantity when the higher-level object has two or more lower-level objects.

Multiple purchase order item releases: For example, you over-receive or you set the Set item status to Set complete for a purchase order item that has multiple open purchase order item releases.

- XA applies the received quantity to the open purchase order item releases, up to their remaining open quantity, in dock date and release sequence, and sets them all to Complete.
- If the quantity you received is fewer than the total quantity of the purchase order item releases, and purchase order item releases remain that have no receiving quantity applied to them; XA deletes them because the purchase order item is complete.
- If the quantity you received is more than the total quantity of the purchase order item releases, then XA applies the extra quantity to the last purchase order item release and sets them all to Complete.

Multiple scheduled receipts: For example, you over-receive or you set the Set item status to Set complete for a purchase order item or purchase order item release that has multiple open scheduled receipts.

- XA applies the received quantity to the scheduled receipts that have a shipment notice before scheduled receipts without a shipment notice. XA applies the received quantity to the scheduled receipts up to their remaining open quantity, in arrival date and time sequence, and sets them all to Complete.
- If the quantity you received is fewer than the total quantity of the scheduled receipts and scheduled receipts remain that have no receiving quantity applied to them, XA deletes them because the purchase order item is complete, unless they are associated with a shipment notice.
- If the quantity you received is more than the total quantity of the scheduled receipts, then XA applies the extra quantity to the last scheduled receipt and sets them all to Complete.

Multiple shipment container items: For example, you over-receive or set the Set scheduled receipt status to Set complete for a scheduled receipt that has multiple open shipment container items.

- XA applies the received quantity to the open container items up to their remaining open quantity, in container priority and then container item creation sequence.
- If the quantity you received is fewer than the total quantity of the shipment container items and shipment container items remain that have no receiving quantity applied to them, XA reduces their open quantities to zero.
- If the quantity you received is more than the total quantity of the shipment container items, XA applies the extra quantity to the last shipment container item.

Receiving completely a lower-level object

When you receive completely lower-level objects to stock or set them complete, XA sets each higher-level object, in turn, complete when the higher-level object has also all its lower-level objects complete.

Figure 3-26 demonstrates the following example of receiving completely a shipment container item, which is a lower-level object to a shipment container. In this example, you have one scheduled receipt for a purchase order item on a purchase order that has no other items remaining to receive. XA associates the scheduled receipt for the purchase order item with one shipment container item. This shipment container item is the last item left to receive on the shipment notice and on the purchase order with which it is associated.

You receive the entire quantity on the shipment container item, which receives completely the scheduled receipt, purchase order item, and purchase order because all the lower-level objects in the purchase order are now complete. When you receive completely the shipment container item, XA receives completely the associated shipment container and shipment notice because all the lower-level objects in the shipment notice are now complete.
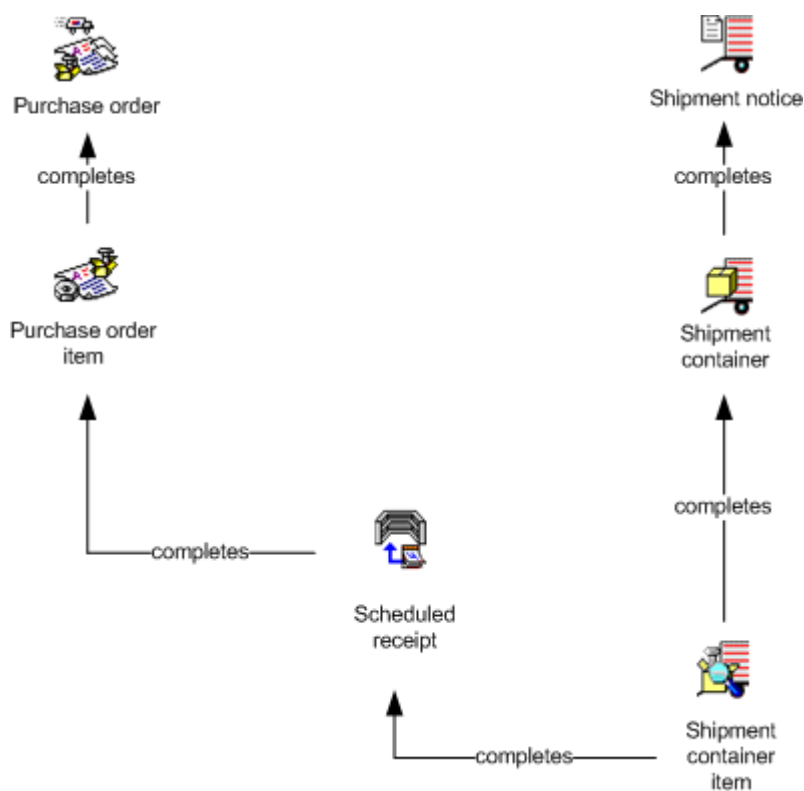
Figure 3-26. Overview of receiving on lower-level objects

Receiving procedures

This section uses the information provided in:

- "Understanding receiving objects" on page 3-19
- "Understanding receiving options" on page 3-26
- "Setting objects complete" on page 3-31

to demonstrate the most appropriate receiving procedures for common receiving situations.

Consider the following suggested procedures when receiving purchased inventory:

- Receiving according to how the shipment was unpacked
- Receiving on the highest-level object
- Over-receiving or under-receiving on scheduled receipts and shipment container items.

Receiving according to how the shipment was unpacked

The first consideration is your preferred method of receiving purchased inventory. Often, you determine the object and receive option you use according to how you unpacked the shipment. For example, if you prefer to unpack one container at a time and then enter the receiving details (no changes required) before starting another container, you can receive complete the container in the Shipment Containers object. If you require an item urgently, but you do not have time to unpack the entire shipment or container, you can receive a single shipment container item in the Shipment Container Items object.

Receiving on the highest-level object

The second consideration is how to reduce the amount of data entry. Usually, you use the Scheduled Receipts object, as the primary purpose of this object is to help you receive purchased inventory. However, when you receive purchase orders, shipment notices, and shipment containers completely, you can reduce the amount of receiving information you enter.

Your purchased inventory is complete and correct when you have no changes to make to receiving locations, batch/lots, or quantities. If the purchased inventory you receive is complete and correct, you use the object or objects that receive the greatest number of purchase order items or purchase order item releases with the least data entry, which is usually the highest-level object.

If your purchased inventory is not complete and correct but only has minor changes that you need to enter, then you enter these changes using the Receive option. When you have entered the changes, you then choose the object that most efficiently receives the rest of the purchased inventory.

You must be careful when receiving higher-level objects complete. As discussed in "Setting objects complete" on page 3-31, when you receive completely a higher-level object, XA also receives complete all the lower-level objects. If the lower-level object on which you first use the Receive option must have an open quantity remaining, you cannot use a Receive Complete option on its higher-level object. For example, if you entered vendor returns that require resupply and you have not yet received the resupply inventory. For more information about keeping the purchase order item or purchase order item release open, see "Over-receiving or under-receiving" on page 3-37.

Procedure for reducing data entry. This example demonstrated in Figure 3-27, "The most efficient procedure for receiving the shipment" on page 3-36 describes receiving on the highest-level object after first using the Receive option to process changes.

A shipment contains three containers, which supply the items for two entire purchase orders. The most efficient method is to receive the shipment using the Receive Complete option in Shipment Notices or Receive Shipment Notice Complete option in Scheduled Receipts.

If you use the Receive Purchase Order Complete option, you need to enter the Receive Complete option twice, one for each purchase order. If part of the purchase order is in another shipment, which you have not received, you cannot use the Receive Purchase Order Complete option.

If you use the Receive option using any of the lower-level objects, you could potentially use many Receive options.

If you need to change some items, you can use the Receive option on the lower-level objects. In this example, you need to change the scheduled receipt location of one shipment container item. When you have made the required change, you choose the object that most efficiently receives the rest of the shipment. Again, this object is usually the highest-level object.
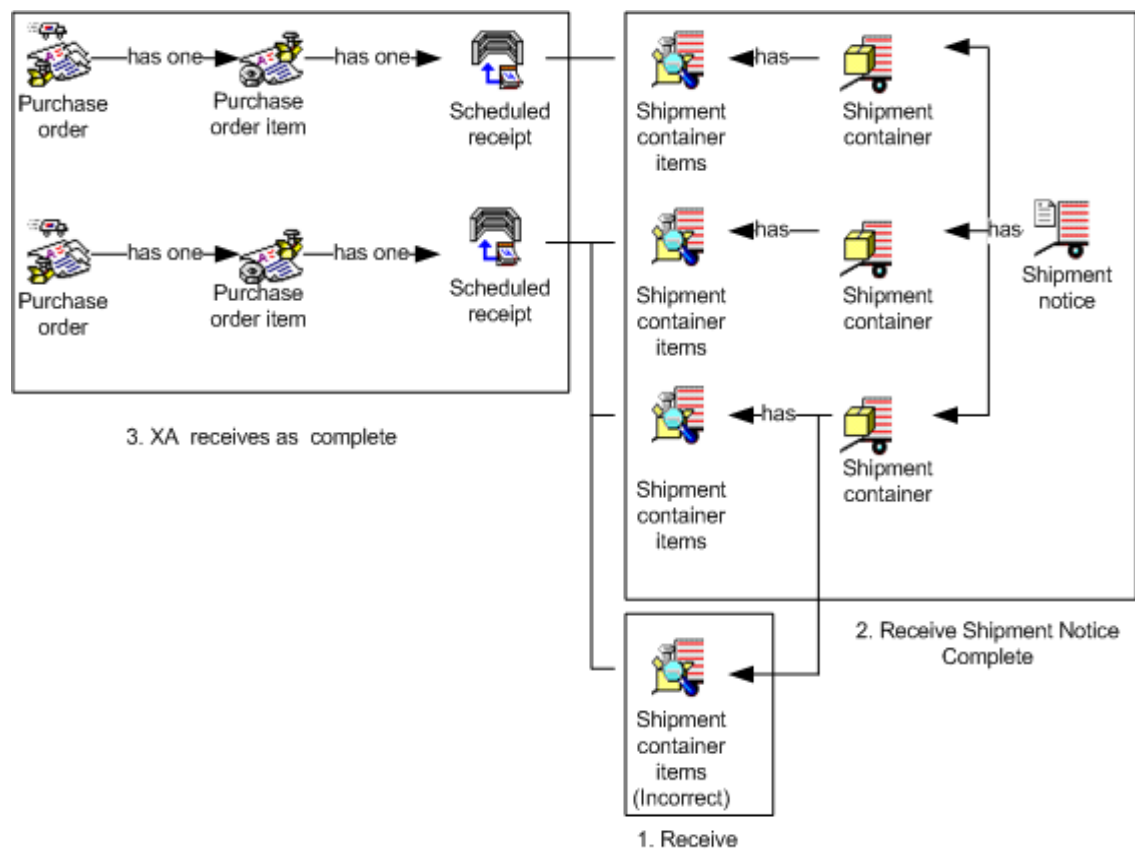

Figure 3-27. The most efficient procedure for receiving the shipment

The most efficient procedure for receiving this shipment is:

1. Receive completely the shipment container item that requires a change of location using the Receive option on the Shipment Container Items object.

2. Receive the rest of the shipment using the Receive Complete option in Shipment Notices or the Receive Shipment Notices Complete option in Scheduled Receipts.

3. XA automatically receives completely the associated purchase orders, purchase order items, and scheduled receipts. When the scheduled receipt is complete, all its higher-level objects

are also set to Complete because these higher-level objects have no other open lower-level objects.

Over-receiving or under-receiving

The third consideration is to decide the procedure for receiving when you want to over-receive or under-receive and set complete on an object.

When under-receiving, you have the option to set the purchase order item or purchase order item release to Complete because you know the vendor is not sending any more of the item or item release. If you do not need the missing quantity, use the Receive option on the purchase order item or purchase order item release and the Set complete option to receive the items. XA receives completely the scheduled receipt and shipment container item.

Alternatively, when under-receiving, you have the option of keeping the purchase order item or purchase order item release open because you expect the vendor is sending more of the purchase order item or purchase order item release.

This example demonstrated in Figure 3-28 describes what not to do if you want to keep a purchase order item open but complete the scheduled receipt and shipment container item when under-receiving.

You create a purchase order item for a quantity of 100. The Shipment Notice specifies the item is arriving in one container. One shipment container item is associated with the scheduled receipt. When the shipment arrives, it contains 90. You need all 100 of the item.
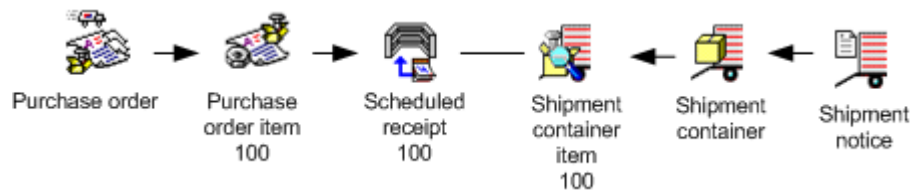

Figure 3-28. Receiving fewer items in the shipment

Note: You do **not** want to use the following methods:

- Receive Complete option on the purchase order because you have not received the correct quantity and you still want the purchase order open to receive the remaining quantity when it arrives.
- Receive option on the purchase order item using the Set item status to set the purchase order complete because you still want the purchase order item open to receive the remaining items.
- Receive option on the purchase order item or scheduled receipt or shipment container item, using the Set item status to auto set the purchase order item, which leaves you with a purchase order item or scheduled receipt partly consumed and the shipment container item open quantity reduced to 10.
  If you use this method, you need to complete the shipment container item by entering a receive using a quantity of zero and setting the shipment container complete using the Set complete option.

In the example above, where the vendor sends fewer items than the vendor notified on the Shipment Notice, you need to receive on either the Scheduled Receipts or Shipment Container Items object using the Set complete option to set the object complete but still keep the purchase order item open for future receiving.

Table 3-5 provides a summary of special receiving scenarios that can occur when you use shipment notices and you over-receive or under-receive. Appendix A, "Summary of MM Transactions" provides examples of how XA handles the receiving procedure you decide to use.

Receiving scenario	Receive procedure	Result
One purchase order item and one scheduled receipt, with shipment notice for the entire quantity.	1. Over-receive on the purchase order item.	XA updates the quantity in the purchase order item, scheduled receipt, and shipment container item(s); and sets them complete.
		For an example of this scenario, see "Scenario 1. Over-receive on a purchase order item" on page B-6.
	2. Under-receive and set to Complete on the purchase order item.	XA updates the quantity in the purchase order item, scheduled receipt, and shipment container item(s); and sets them complete.
		For an example of this scenario, see "Scenario 2. Under-receive on a purchase order item" on page B-7.
One scheduled receipt, with shipment notice for the entire quantity.	3. Over-receive on the scheduled receipt.	XA updates the quantity in the scheduled receipt, shipment container item(s), purchase order item or the purchase order item release; and sets them complete.
		For an example of this scenario, see "Scenario 3. Over-receive on a scheduled receipt" on page B-8.
	4. Under-receive and set to Complete on the scheduled receipt.	XA updates the quantity in the scheduled receipt and shipment container item(s), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA creates a scheduled receipt (no shipment notice) for the quantity you did not receive.
		For an example of this scenario, see "Scenario 4. Under-receive on a scheduled receipt" on page B-9.
One scheduled receipt, with a shipment notice for part of the quantity and one scheduled receipt without a shipment notice for the other part of the quantity.	5. Over-receive on the scheduled receipt (shipment notice).	XA updates the quantity in the scheduled receipt and shipment container item(s), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA reduces or deletes the scheduled receipt (no shipment notice).
		For an example of this scenario, see "Scenario 5. Over-receive on one of multiple scheduled receipts" on page B-10.

Table 3-5. Summary of receiving scenarios when over-receiving and under-receiving

Receiving scenario	Receive procedure	Result
	6. Under-receive and set to Complete on the scheduled receipt (shipment notice).	XA updates the quantity in the scheduled receipt and shipment container item(s), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA increases the scheduled receipt (no shipment notice) by the quantity you did not receive on the scheduled receipt (shipment notice).
		For an example of this scenario, see "Scenario 6. Under-receive on one of multiple scheduled receipts" on page B-11.
	7. Over-receive on the shipment container item.	XA updates the quantity in the shipment container item and scheduled receipt, and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA reduces or deletes the scheduled receipt (no shipment notice).
		For an example of this scenario, see "Scenario 7. Over-receive on a shipment container item" on page B-12.
	8. Under-receive and set to Complete on the shipment container item.	XA updates the quantity in the shipment container item and scheduled receipt (shipment notice), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA increases the scheduled receipt (no shipment notice) by the quantity you did not receive on the scheduled receipt (shipment notice).
		For an example of this scenario, see "Scenario 8. Under-receive on a shipment container item" on page B-13.
One scheduled receipt, with shipment notice for the entire quantity, in two shipment containers.	9. Over-receive on one shipment container item.	XA updates the quantity in the shipment container item and sets it complete. XA updates the quantity in the scheduled receipt and purchase order item or purchase order item release. The scheduled receipt, purchase order item or purchase order item release remain open even if they have a quantity of zero. XA does not change the other shipment container item.
		For an example of this scenario, see "Scenario 9. Over-receive on one of multiple shipment container items" on page B-14.

Table   3-5.   Summary of receiving scenarios when over-receiving and under-receiving

Receiving scenario	Receive procedure	Result
	10. Under-receive and set to Complete on one shipment container item.	XA updates the quantity in the shipment container item and sets it complete. XA updates the quantity in the scheduled receipt and purchase order item or purchase order item release. XA does not change the other shipment container item. XA creates a second scheduled receipt for the quantity you under-received.
		For an example of this scenario, see "Scenario 10. Under-receive on one of multiple shipment container items" on page B-15.

Table 3-5. Summary of receiving scenarios when over-receiving and under-receiving

Sending receiving advices

A receiving advice reports the receiving results for a shipment. To send a receiving advice to the vendor, you must first set the vendor's media preferences to send receiving advices through System-Link as an XML document. You also can specify whether XA automatically sends receiving advices during receiving by setting the option, Send XML receiving advice, on the Purchasing Settings card in Vendors. The receiving advice is sent:

- **Manual:** When you run the Send Receiving Advice host job in the Shipment Notices object.
- **Shipment complete:** When you receive complete (Shipment Notices status is Complete) all the items in the shipment and the Advice required attribute is set to Yes.
- **Shipment item complete:** When you receive complete (Scheduled receipt status is Complete) an item in the shipment and the Advice required attribute is set to Yes.

For more information about setting preferences for receiving advices, see online help for the Vendors object.

Any time during the receiving process, you can send a receiving advice using the Send Receiving Advice host job. For example, you have a delay in the receiving process. The option, Auto-send XML receiving advice (Send XML receiving advice on the Purchasing Setting card in Vendors), is set to 1 - Shipment complete. You want to inform the vendor of the items received so far, but you do not want to change the setting for the Send XML receiving advice option. Therefore, you generate a receiving advice for items received to date using the Send Receiving Advice host job in the Shipment Notices object.
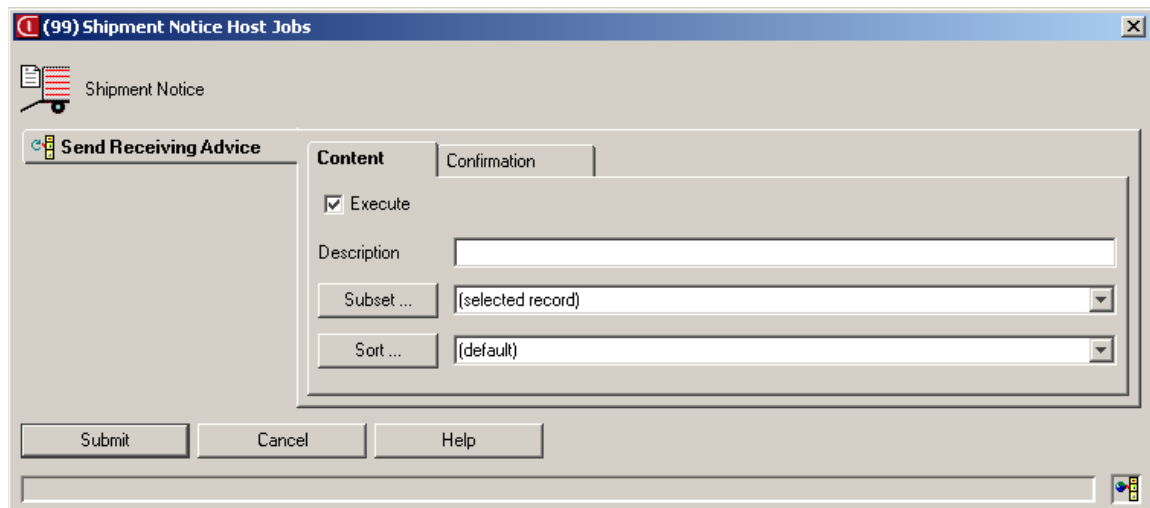
Figure 3-29. Shipment Notice Host Jobs - Send Receiving Advice tab

When the shipment is received complete, XA generates another receiving advice showing all the items are received.

A receiving advice always sends details of the entire shipment regardless of the number of times the advice is sent for the shipment. Items at dock or inspection do not show activity until you scrap, return, or receive to stock the items.

When no shipment notice exists for a shipment and the vendor requires a receiving advice, you must first create a shipment notice to send a receiving advice. For more information about creating a shipment notice, see "Creating shipment notices" on page 3-7 and "Creating a

shipment notice after receiving has occurred" on page 3-17. After you create the shipment notice, XA sends the vendor a receiving advice according to the Send XML receiving advice option.

When the receiving advice is sent, XA updates the Advice required attribute in Shipment Notices and Scheduled Receipts to No.

Deleting scheduled receipts and shipment notices

When the purchase order item or purchase order item release is received completely, XA changes the Scheduled receipt status to Complete and the scheduled receipt no longer displays in the Scheduled Receipts subset, Open, but you can view them using the (all records) subset until the purchase order is purged.

XA does not delete shipment notices automatically, but you can delete a shipment notice any time. Deleting a shipment notice is useful when you need to remove a shipment notice that has errors and the vendor is resending a correct shipment notice.

Purchase order purged. If you delete a shipment notice where all associated purchase orders are purged, XA deletes the shipment notice, shipment containers, shipment container items, and associated scheduled receipts. Figure 3-30 demonstrates deleting a shipment notice when associated purchase orders are deleted.
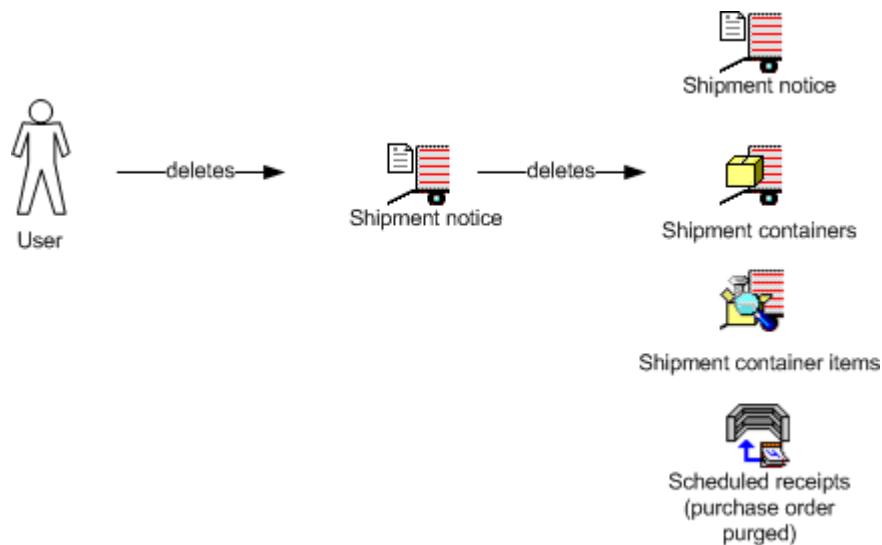
Figure 3-30. Overview of deleting a shipment notice - purchase orders are purged

No receiving activity - purchase order not purged. If you delete a shipment notice that has no receiving activity and purchase order items or purchase order item releases that are not deleted or purged, XA deletes the shipment notice, shipment containers and shipment container items. XA unlinks the associated scheduled receipts from the deleted shipment notice. Figure 3-31 demonstrates deleting a shipment notice when associated purchase orders are not deleted.
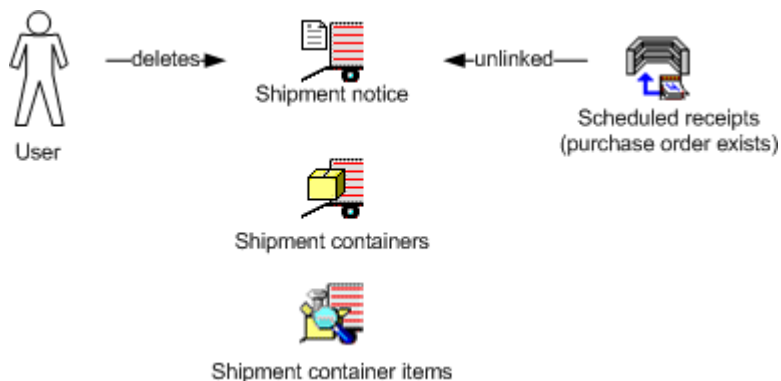
Figure 3-31. Overview of deleting a shipment notice - no activity - purchase orders not purged

Receiving activity - purchase order not purged. If you delete a shipment notice that has receiving activity and purchase order items or purchase order item releases that are not deleted or purged, you receive a warning message. If you continue, XA deletes the shipment notice, shipment containers, and shipment container items. The scheduled receipts associated with the shipment notice are unlinked from the deleted shipment notice. Figure 3-32 demonstrates deleting a shipment notice when associated purchase orders are not deleted and receiving activity has occurred. The scheduled receipt retains any receiving information.

Figure 3-32. Overview of deleting a shipment notice - activity - purchase orders not purged

Receiving activity - purchase order not purged - two scheduled receipts. If XA created a scheduled receipt because the Shipment Notice reported an under-shipment, XA deletes the scheduled receipt (shipment notice) and sets the scheduled receipt (no shipment notice) quantity back to the original quantity. If receiving has occurred against the scheduled receipt (shipment notice), XA transfers the receiving information to the scheduled receipt (no shipment notice). Figure 3-33 demonstrates deleting a shipment notice after receiving has occurred.

For example, you create a purchase order item for a quantity of 100. The Shipment Notice reports the vendor is sending 90 of the item. XA creates a scheduled receipt (shipment notice), and links it to the shipment notice and reduces the scheduled receipt (no shipment notice) quantity to 10. The shipment arrives and you receive a quantity of 50 against the scheduled receipt (shipment notice).
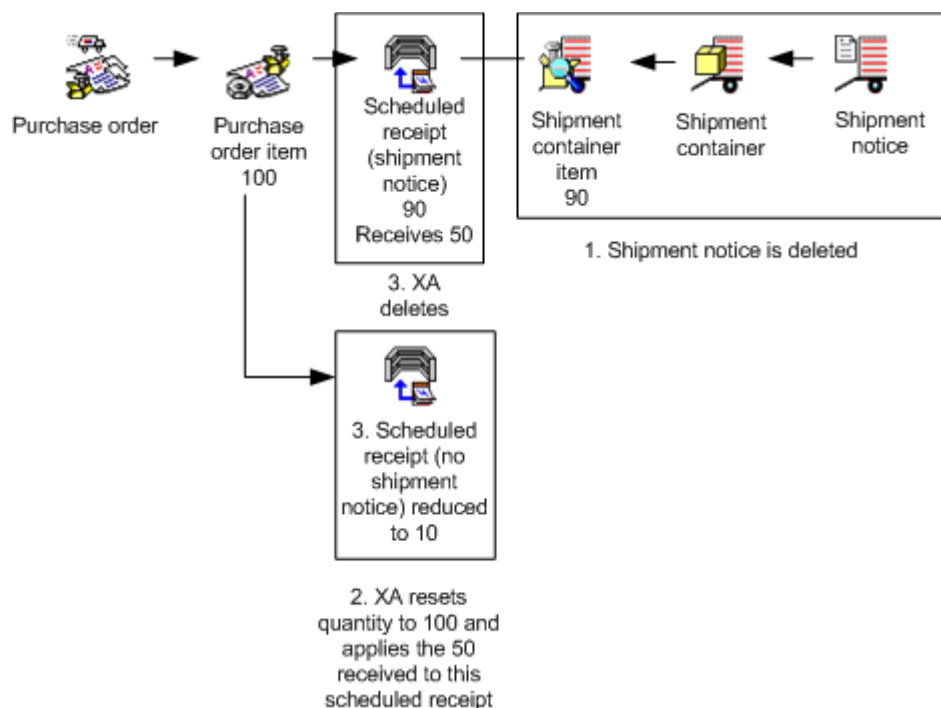
Figure 3-33. Overview of deleting the shipment notice - activity - two scheduled receipts

If you delete the shipment notice and after receiving a warning you continue, the following happens:

1. XA deletes the shipment notice and associated shipment containers and shipment container items.

2. XA increases the scheduled receipt (no shipment notice) quantity back to 100 and shows a quantity of 50 is received.

3. XA deletes the scheduled receipt (shipment notice).

Chapter 4. Counting Inventory

Overview

All companies must keep track of inventory. Inventory includes everything from manufactured items to purchased raw materials to office supplies and equipment. You use the Inventory Count Groups and Inventory Count Items objects to help you maintain accurate inventory totals.

Inventory Count Groups. This object is a collection of items in warehouses or warehouse locations that you want to count as a group.

Inventory Count Items. This object contains one record for each combination of warehouse, item, location, batch/lot, and FIFO date. Each item detail is for an item in a warehouse (uncontrolled) or a location (controlled).

Before starting inventory counting, create the inventory count groups to categorize the items you are counting. When you create the inventory count group, you can generate the documents you need to record the count and activate the count.

If you do not select to activate the count when you are creating the inventory count group, you can use the Inventory Count Items object to edit the items in the inventory count group. If you do not select to print the counting documents when you are creating the inventory count group, you can generate the counting documents after you edit the inventory count items.

For example, to create a group based on a selected warehouse, create an inventory count group using information contained in the Warehouses list window. Then use the Inventory Count Items object to select the group you created and further refine it by adding or deleting items before generating the counting documents.

Figure 4-1 demonstrates how XA is used during the counting process.
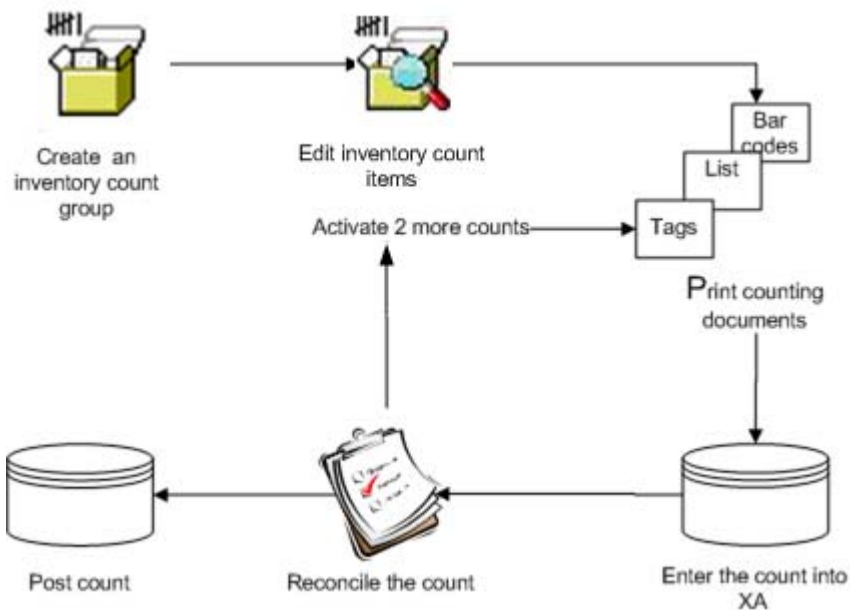
Figure 4-1. Overview of counting process

The counting documents can be lists, tag numbers, or bar codes. After the counters return the counting documents, you enter counting information into the Inventory Count Groups or Inventory Count Items objects to compare with the current inventory information.

After you enter the count, you generate reports to help you decide whether you need to perform another count. You can activate up to three counts for each count group.

Finally, when you are confident the count information is the correct view of the inventory situation, you post the count to update XA with the inventory quantities determined during the count.

Inventory count groups remain in the Inventory Count Groups list window after posting so that you can view the posting date. You subset the list to see the inventory count groups you want. For example, to see the groups you did not post, select the Unposted groups subset.

Creating Inventory Count Groups

Before you start counting inventory, you might want to review the types and methods of inventory counting. You can perform two types of inventory counting:

- **Physical inventory:** You use a total physical inventory when you want to count all items in all locations in the warehouse.

- **Cycle count:** Cycle counting involves taking a sample group of items and comparing their on-hand balances with the quantity found. There are two approaches to cycle count sampling. Each approach serves a different purpose.

  - One approach uses a representative group of items and draws conclusions about the accuracy of the general population of inventory records from the representative sample group. This type of counting is useful when you have many small items, such as nuts and bolts. Rather than count every nut and bolt, you count a sample box and conclude every box contains the same number of items.

  - Another approach audits sample groups of items on a regular or daily basis and cycles all the inventory population through the audit routine during the year. This approach is an attempt to audit and adjust all inventory records to ensure an accurate inventory balance at least once a year. You might choose this type of counting when you cannot disrupt operations to perform a total physical inventory. You minimize the impact by counting select areas at different times.

When you decide what you want to count, you also define the type of inventory count you should perform. If you plan to count everything, then the physical inventory is the type of count to use. If you need to define what you count into smaller groups, then the cycle count is the type of count to use. The cycle count has the most flexibility for defining the items in your inventory count groups.

Creating an inventory count group

When you are ready to perform a count on your inventory, you first create an inventory count group to define the items in the count. You determine where you create an inventory count group considering what object you are currently in, the type of count you want to perform, and the type of information you want to subset and use.

For example, you select a warehouse in the Warehouses list window to create a physical count group for the entire warehouse or you use the subset and sort functions on the Item Warehouses list window to create a list of selected items, in a selected warehouse, that you want to count.

You create inventory count groups using the Host Jobs ... option on the File menu of the following objects:

Type of Count	Warehouses	Warehouses Locations	Item Warehouses	Item Locations
Physical	✓			
Cycle Count	✓	✓	✓	✓

Table   4-1. The objects from which you can create an inventory count group

Note: You cannot create an inventory count group in the Inventory Count Groups object.

The procedure for creating cycle counts is similar to creating physical counts, except the count is typically not for the entire warehouse and you can create cycle counts using more objects depending on the items or locations you want to count.

The following procedure assumes you want to create a physical inventory count group. From the Warehouses list window, select the warehouse or warehouses you want to include in the inventory count group. Select Host Jobs ... on the File menu. The Warehouse Host Jobs window opens. Select the Physical Inventory tab.

Figure 4-2. Warehouse Host Jobs - Physical Inventory - General tab

Select Execute, the subset and sort you want to use, and enter the following information on the Options section of the General tab. The information on the General tab applies to the entire count group.

Compare quantity. The reconciliation process compares the count you enter to a selected balance in the Item Warehouses or Item Locations objects. To see if there is a discrepancy between these two amounts, you create an inventory count group that uses either the Entry on-hand or the Cutoff on-hand quantity. The Entry on-hand is the count XA captures when you enter the count. Cutoff on-hand is the count XA captures when you activate the count.

Exclude line locations. If Repetitive Production Management (REP) is installed and interfacing, you can count the items in production line locations. Answering Yes means the production line locations are not included in the count. Answering No means the production line locations are included, but they must meet one of the other selection criteria on the General tab.

Exclude unapproved items. In a controlled warehouse, you can exclude unapproved items or locations. Unapproved items include items rejected by Quality Control (QC), items whose shelf life is expired, and items waiting inspection from manufacturing or purchasing. Answering Yes means XA does not include unapproved items or locations. Answering No means XA includes

unapproved items or locations but they must meet one of the other selection criteria on the General tab.

Starting tag number. Use this option, if you want to use tag numbers. You use the default number or enter a starting number of your own.

Activate next count. You use this option, to activate the inventory count group when you create the inventory count group. If you select No, you can add or delete inventory count items in the inventory count group in the Inventory Count Items object. Selecting No is useful if you think you might need to add or remove items before counting, or if you want to further subset the inventory count items. For more information about adding or deleting inventory count items, see "Maintaining Inventory Count Items" on page 4-8. You can activate the count later by selecting Activate Next Count on the Maintain menu in Inventory Count Groups or Inventory Count Items. After you activate a count, you can no longer delete inventory count items.

Generate tag numbers. Use this option, if you want to use tag numbers. Answering Yes means XA generates the tag numbers using the starting tag number you defined in the Starting tag number option. If you want to generate the tag numbers later or manually enter the tag numbers later, answer No. If you choose to wait, the Generate Tag Numbers option is available using Host Jobs ... on the File menu in Inventory Count Groups and Inventory Count Items. The Generate Tags option in Inventory Count Items allows you to subset and sort the inventory count items before generating the tags. You can also change the starting tag number for each subset, leaving gaps in the numbers. Leaving gaps in the numbers is useful if you are assigning tags by the person assigned to the count.

Click Submit to create the inventory count group.

Select the Reports tab to create an Inventory Count Entry List, inventory tags, or bar codes when XA creates the inventory count group. On the Inventory Tags tab, you can choose to print both tag numbers and bar codes.
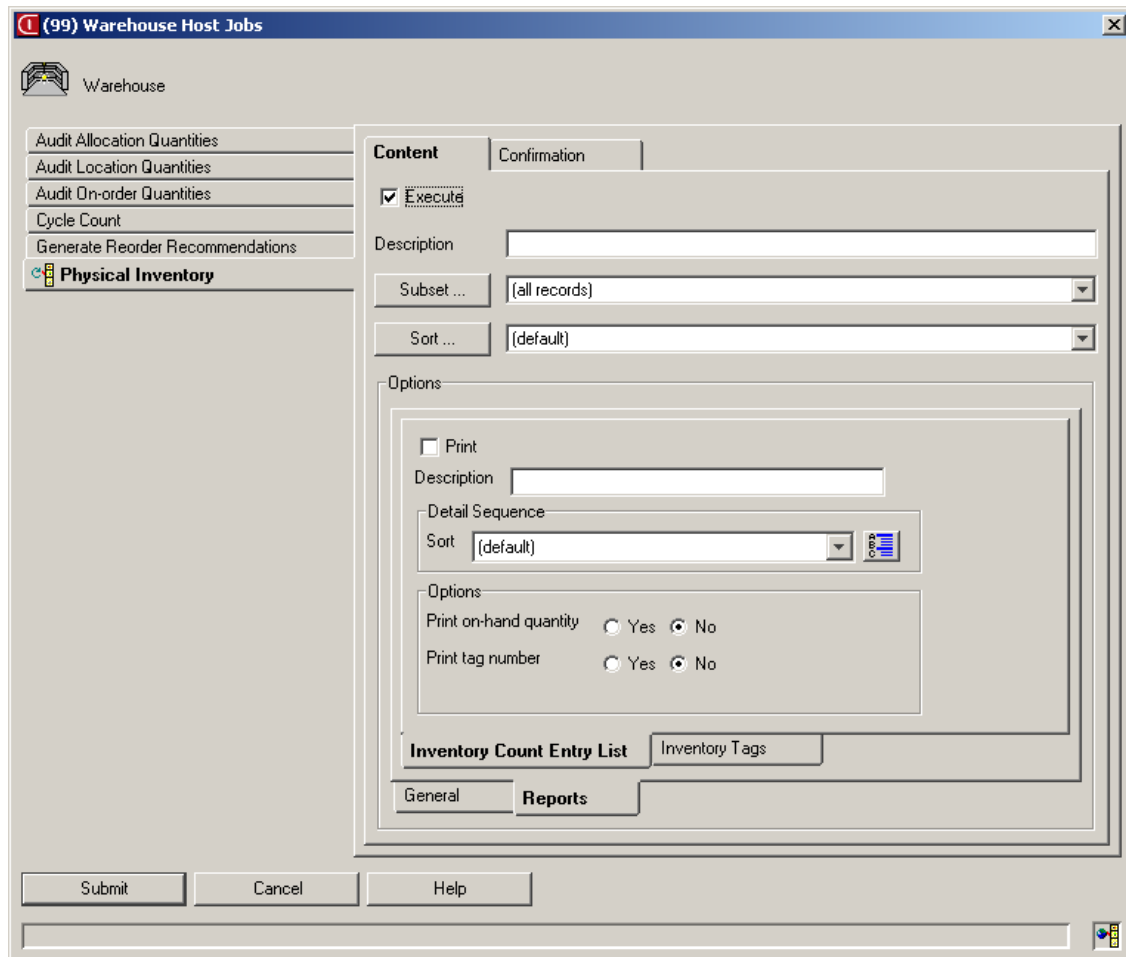
Figure 4-3. Warehouse Host Jobs - Physical Inventory tab - Reports tab - Inventory Count Entry List tab

If you select the Print check box on the Inventory Count Entry List tab or the Inventory Tags tab, the report prints when you click Submit. To print the Inventory Count Entry List or inventory tags after XA creates the inventory count group, select Host Print ... on the File menu of Inventory Count Items.

When you click Submit, a Confirmation prompt opens.
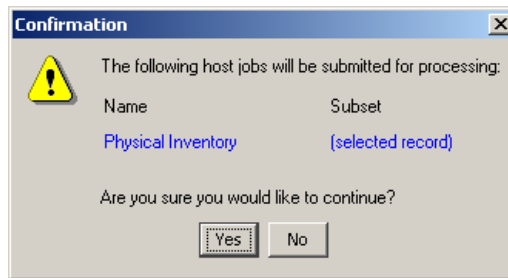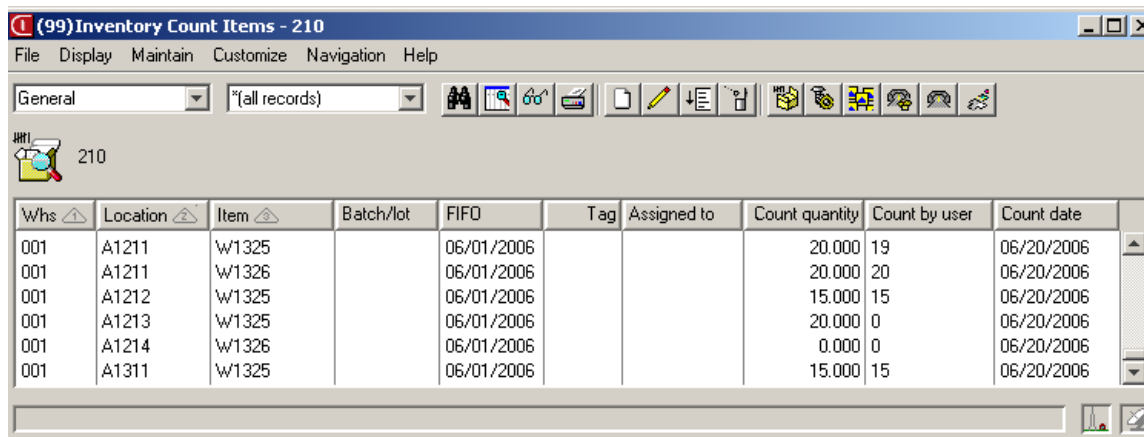
Figure 4-4. Confirmation Physical Inventory prompt

Click Yes to create the inventory count group.

If you did not activate the inventory count group when you created the count, you can activate the count by selecting Activate Next Count on the Maintain menu in Inventory Count Groups or Inventory Count Items.

Maintaining Inventory Count Items

XA generates inventory count items when you create an inventory count group. The Inventory Count Items list window shows all the items in a warehouse or a select group of items, depending how you define your inventory count items when you create the group.

Figure 4-5. Inventory Count Items list window.

If you did not activate the count when you created the inventory count group, you use the Inventory Count Items object to add new inventory count items, delete existing inventory count items, or change information about existing inventory count items. For example, you can add items that do not meet the selection criteria specified in the inventory count group. Similarly, you can delete items that do meet the selection criteria, but which you do not want to include in the count.

After you activate the count, you can no longer delete inventory count items in the count. However, you can void inventory count items if you decide you do not want to count them. To void an inventory count item, see "Voiding an inventory count item" on page 4-11.

Creating an inventory count item

From the Inventory Count Groups list window or card file, select Inventory Count Items on the Display menu to view the list of inventory count items for the selected inventory count group.

Select Create on the Maintain menu. The Create Inventory Count Item dialog opens.

Figure 4-6. Create Inventory Count Item dialog

Enter the appropriate details on the Create Inventory Count Item dialog. When you select Preview before create and click Create, the Create Inventory Count Item card file opens for the new inventory count item.

Figure 4-7. Create Inventory Count Item card file - General card

Enter the appropriate details on the General card and click Create. XA adds the inventory count item to the list of items in the inventory count group.

Deleting an inventory count item

To delete inventory count items, select them in the Inventory Count Items list window and select Delete on the Maintain menu. The Delete Inventory Count Item prompt opens.

Figure 4-8. Delete Inventory Count Item dialog

Click Yes to delete the Inventory Count Item.

Voiding an inventory count item

You cannot delete the inventory count item if you have activated the count. If you do not want to count the item, but cannot delete it, you can void it in the Inventory Count Items object. Select the inventory count item in the Inventory Count Items list window and select Change on the Maintain menu. On the Change Inventory Count Item card file, change the Void attribute to Yes and enter the reason in the Void attribute.

Figure 4-9. Change Inventory Count Item card file - General card

When you click Update, the inventory count item still displays in the list of inventory count items, but it does not appear on any counting documents you print and it is automatically skipped when you enter the count using sequential entry, see "Entering a count using sequential entry" on page 4-16.

Using counting documents

You can perform the count three ways:

- **Counts by lists:** Inventory Count Entry Lists contain all the item numbers you want to count. The person performing the count uses an Inventory Count Entry List to record the count.

- **One tag for one item or location:** XA prints one inventory tag for each item per location. The tag identifies the item, its characteristics, and where your company stocks the item. The counter writes the count on the tag and returns the tag for you to enter in XA. You use the one tag for one item or location method for physical inventory counts.

- **Radio frequency bar coding:** The counter uses a radio frequency device to view the items to count and to enter the count. The device enters the count immediately into XA and reconciles the count with the on-hand quantity. Your company needs radio frequency devices to use this method.

Printing counting documents

XA generates the counting documents either when you create an inventory count group or in the Inventory Count Items object. For more information about how to create counting documents when creating an inventory count group, see "Creating an inventory count group" on page 4-3.

You use the Inventory Count Entry List tab on the Inventory Count Item Host Reports window to print a count list. You use the Inventory Tags tab on the Inventory Count Items Host Reports window to print tags by item or location. These tags can also include bar codes.

The following procedure assumes you want to create a single inventory tag in the Inventory Count Items object. Select one record in the Inventory Count Items list window. Select Host Print ... on the File Menu.

On the Inventory Count Item Host Reports window, select the Inventory Tags tab.

Figure 4-10. Inventory Count Item Host Reports - Inventory Tags tab

Select Print and enter the appropriate details. Click Submit to print the counting document.

The Inventory Tags host report generates one tag for the record you select in the Inventory Count Items list window. XA prints on the tag the inventory count item bar code, on-hand quantity, and tag number. XA prints only one tag because the subset defaults to the selected record. Generating one inventory count item tag is useful if, for example, you lost an inventory count item tag and you do not want to print the entire inventory count group again.

Entering the count

Use Inventory Count Entry Lists or inventory tags to help your counters record their counts. When the counters return their results, you enter the results either randomly, sequentially or in offline files. The random and sequential methods make the recording process easy because you enter a minimal number of required attributes.

You use random count entry when counters return their counting documents out of order. For example, you might have several counters who return the inventory tags to you at different times.

Using random count entry, you do not need to enter details for inventory count items in the order of the count entry list. Instead, you choose to find each inventory count item by bar code, item, or tag number. XA provides three templates on the Random Count Entry dialog for this purpose:

- **Random count entry by barcode:** Scan the bar code on the inventory tag with a scanning device.
- **Random count entry by item:** You enter the warehouse and item number. If the item is in a controlled warehouse, you also need to enter the location, batch/lot, and FIFO as appropriate.
- **Random count entry by tag:** You enter the tag number.

Use sequential count entry to enter each inventory count item in sequence from the Inventory Count Entry List. The sequential count entry method assumes your Inventory Count Entry List and inventory count items are sorted in the same order. When you print the Inventory Count Entry List, XA provides three sorts for sequencing inventory count items:

- **(default):** This sort arranges the inventory count items by warehouse, warehouse location, and item number.
- **By tag:** This sort arranges the inventory count items by tag number.
- **By warehouse/item/location:** This sort arranges the inventory count items by warehouse, item, and warehouse location.

You can also use offline files to load the counts for an inventory count group. The offline file format is based on the Inventory Count Items object.

Entering a count using random entry

Select the Random Count Entry option on the Maintain menu in Inventory Count Groups or Inventory Count Items. The Random Count Entry dialog opens.

Figure 4-11. Random Count Entry dialog

On the Random Count Entry dialog, select from the Template drop-down list the type of document you used to perform the count. Enter the appropriate details. If you use bar codes, you scan the bar code on the inventory tag to enter the count information.

If the counter includes an item that you did not define in the inventory count group, you can add an inventory count item to the inventory count group by setting the attribute, Auto add item, to Yes. Setting this attribute to Yes, lets you add count information when the item you are counting does not match any inventory items in the group.

Note: The inventory count item you enter does not have to be a valid item, so if you type an item incorrectly with this setting set to Yes, you will add an invalid inventory count item to the inventory count group. You cannot delete the inventory count item. If you set Auto add item to No, XA provides a warning stating the "Inventory count item cannot be found."
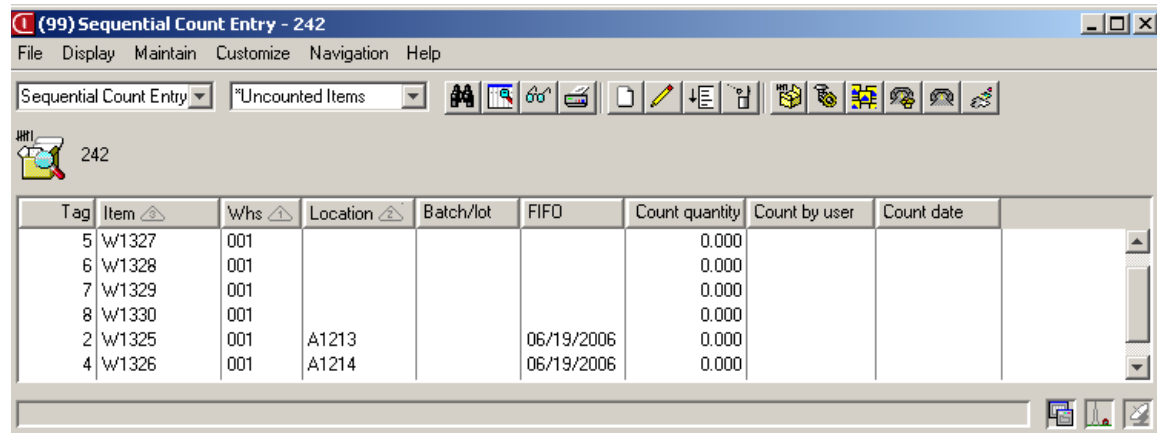
To make entering count information as efficient as possible, select the option, Return here to create another. This option returns you to the Random Count Entry dialog every time you click Continue. Additionally, the Count by user and Count date values default to the previous entry to reduce the amount of information you enter for each item.

Click Continue to enter the count for the item.

Entering a count using sequential entry

If your counters used an Inventory Count Entry List to record their counts, then use the Sequential Count Entry option. If the counters returned the counts to you out of order from the Inventory Count Entry List or your counters used inventory tags, then use the Random Count Entry option.
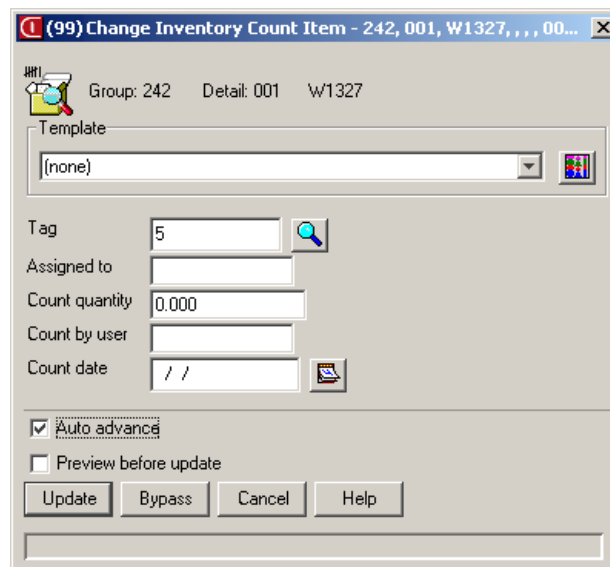
For example, to enter counts into the Inventory Count Entry List, select the Sequential Count Entry option on the Maintain menu in Inventory Count Groups. The Sequential Count Entry list window opens. You can also begin sequential entry on the Inventory Count Items list window.

Figure 4-12. Sequential Count Entry list window

Select the first row in the list window and select the Sequential Count Entry option on the Maintain menu. The Change Inventory Count Item dialog opens.

Figure 4-13. Change Inventory Count Item dialog

Enter the count quantity, count by user, and count date. You do not need to enter the item, warehouse, warehouse location, Batch/lot, or FIFO date as this information is defaulted from the Sequential Count Entry list.

To make entering count information as efficient as possible, select the option, Auto advance. This option returns you to the Change Inventory Count Item dialog every time you click Update.

Click Preview before update if you want to view the Change Inventory Count Item card file before updating the inventory count item.

You might want to skip the next inventory count item, for example, when the counter cannot find an inventory count item. The Bypass button allows you to skip the entry and go the next inventory count item in the list window. XA automatically skips inventory count items if the inventory count item is already entered for the current count, does not have a current count that is active, or is flagged as voided.

Note: When an inventory count item has existing discrete allocations and you enter a count of zero, during posting XA deletes the corresponding location record and its discrete allocations. You decide whether you need to create a discrete allocation for another item and location.

Click Update to enter the count for the item.

Entering a count using offline count entry

As an alternative to entering physical inventory transaction data interactively using XA, you can capture and prepare the information in another application. You can then write this data to a disk file, which resides on System i but outside of XA. Then, you can load the offline files into XA.

You can create offline files on disk using several methods. For example:

- You can create the records with a user-written program on an offline data entry device and write them to a disk.
- You can have another system create the records on tape, which you then copy to a disk.
- You can have a remote location send the records using electronic methods that write these records to a disk file.

Note: Inventory count items must exist in a cycle count group before counts are accepted from the offline file IVCTOF. If XA does not find inventory count items in the inventory count group when processing an offline file, XA issues an error.

When you create the cycle count group with inventory count items, you can select the following options:

- Activate next count must be selected (so that at least count group 1 has been activated). **Note:** Count 1 quantity, count 1 date, and count 1 by user are three attributes you must enter in the offline file IVCTOF. The count you use for posting each record determines where these three attributes go (count quantity 1, 2, or 3; count date 1, 2, or 3; and count by user 1, 2, or 3 in file IVCTDT).
- If tags are not generated or inventory count items in the cycle count group do not have tag numbers, then the data in the offline file must be processed by using Process sequence 1 = By item number or 3 = By turnaround number.

It does not matter how or where the records originate if they reside in a disk file that has the appropriate layout. For your convenience, the install/Tailor Library (AMXLIB) contains a copy of the Physical Inventory Count Offline file, IVCTOF, which you can copy to a user library.

The following information is an example of how to copy IVCTOF from AMXLIBx on System i (to a user library), using the Default file name IVCTOF. **Note:** The last character x in AMXLIBx is the first character of the environment name. Enter CRTDUPOBJ and press F4 to prompt for parameters:

- **From object:** IVCTOF
- **From library:** AMXLIBx
- **Object type:** *FILE
- **To library:** userlibrary
- **New object:** IVCTOF

If necessary, enter ADDPFM and press F4 to prompt for parameters:

- **Physical file:** IVCTOF
- **Library:** userlibrary
- **Member:** IVCTOF

Table 4-2 defines the file layout for the Inventory Counting Offline (IVCTOF) file format. The offline file format is based on the Inventory Count Items object.

Field Key	Alias	Type	Len	Dec	Text overridden	Values Not in domain	Dft/comments
CTGPHX	CTGP	P	7	0	Count group		From the header.
WHIDHX	WHID	P	3		Warehouse		From the header.
ITNOHX	ITNO	A	15		Item number		Created from selection criteria.
WHLCHX	WHLC	A	7		Warehouse location		Created from selection criteria.
BLNOHX	BLNO	A	10		Batch/lot number		Created from selection criteria.
FIFOHX	FIFO	P	7	0	FIFO date		Created from selection criteria.
ITAGHX	ITAG	P	9	0	Tag number		
TRNAHX	TRNA	P	2	0	Turnaround file designator		
TRNNHX	TRNN	P	9	0	Turnaround sequence number		
TRNCH	TRNC	S	1	0	Turnaround check digit		
CTQTHX	CTQT	P	10	3	Count 1 quantity	Required	Can be zero
CTDTHX	CTDT	P	7	0	Count 1 date	Required	Valid date. Default to today's date unless quick entry. Then defaults to previous.
CTUSHX	CTUS	A	10		Count 1 by user	Required	Default to previous during count entry.

Table 4-2. Inventory Counting Offline (IVCTOF) file format

Enter the data into the offline file IVCTOF with the following information:

Process sequence	Information
1 = By item number	• Count Group number. • Warehouse code. • Item number. • Warehouse stock location (if a controlled warehouse). • Batch/lot number (if item is batch/lot controlled). • FIFO date (if FIFO date integrity is turned on).Tag number. (**Note:** Entering a tag number in the offline file does not update the Tag attribute in the inventory count item.) • Count 1 quantity. • Count 1 date. • Count 1 user.
2 = By tag number	• Count Group Number. • Tag number. • Count 1 quantity. • Count 1 date. • Count 1 by user.
3 = By turnaround number	• Count Group Number. • Turnaround file designator. • Turnaround sequence number. • Turnaround number check digit. • Count 1 quantity. • Count 1 date. • Count 1 by user.

Table 4-3. Information to enter in offline files

After you enter the data in the offline file IVCTOF, select the cycle count group in the Inventory Count Groups list window and select Host Jobs ... on the File menu.

The Inventory Count Group Host Jobs window opens. Select the Import Counts tab.
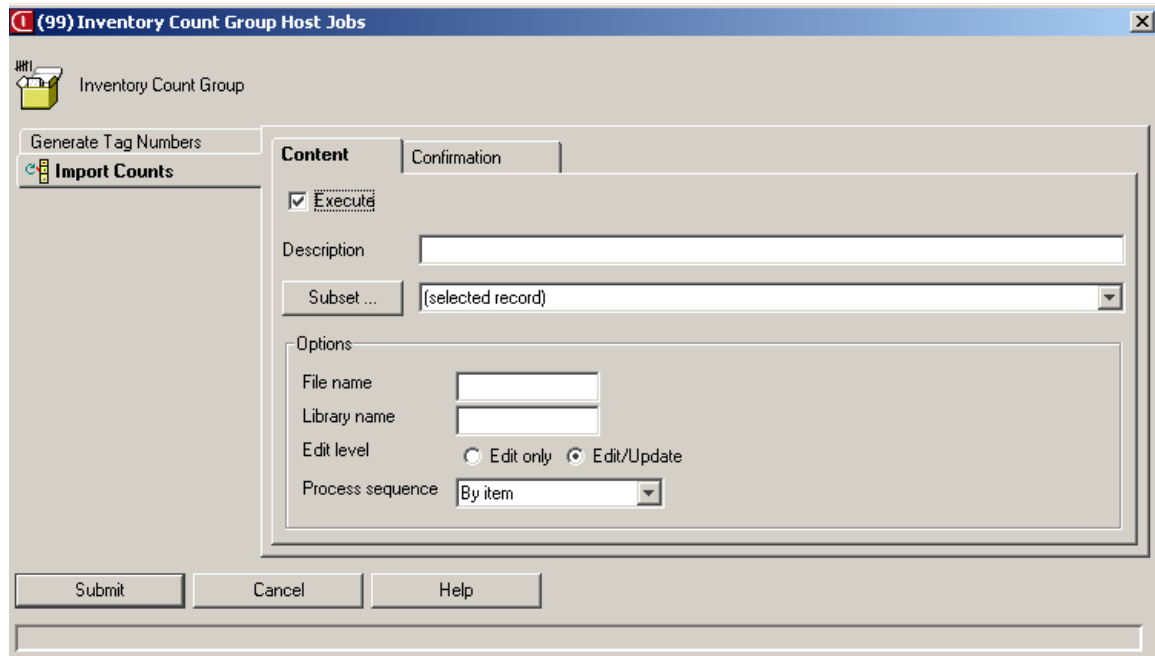
Figure 4-14. Inventory Count Group Host Jobs - Import Counts tab

Select Execute and enter the following information:

- File name of the offline file (IVCTOF)
- Library name where the offline file is saved (usually is in the user library)
- Edit level - Edit only or Edit/Update
- Processing sequence.

Note: If you select Edit/Update, XA deletes records that are correct. Records with errors remain in the offline file. It is highly recommended to select Edit only and check report AXTG6Z0P Inventory Count Offline Edit/Update list for any errors. Correct any errors and then rerun.

The processing sequence you use helps you avoid entering duplicate records. You can choose either By item, By tag number, or By turnaround number. The option you choose depends on how you recorded the count. For example, if you just counted items, you select By item. No two records can have the same warehouse, item, location, batch/lot, and FIFO date. If you used tag numbers, you select By tag number. You must have only one instance of each tag number in the file. If you used bar codes, you select By turnaround number. You must have only one instance of each bar code number in the file.

When you click Submit, the host finds the matching records and updates the count information into the Inventory Count Items object. Inventory count items that successfully update, XA deletes from the offline file. If XA finds errors, it does not update the inventory count group with item information. An error report shows you which inventory count items did not pass the edit and why. You correct the information in the offline file or use the maintenance functions in the Inventory Count Items object to correct the counts.

Printing an Items Counted/Uncounted report

The Items Counted/Uncounted report provides a way to check the counts you entered in an inventory count group. For example, you can use this report to verify the counters returned all the tag numbers and you entered all the inventory count items. You can print the Items Counted/Uncounted report any time during the count entry process. To print the report, select Host Print ... on the File menu on the Inventory Count Items list window or card file. The Inventory Count Item Host Reports window opens. Select the Items Counted/Uncounted tab.
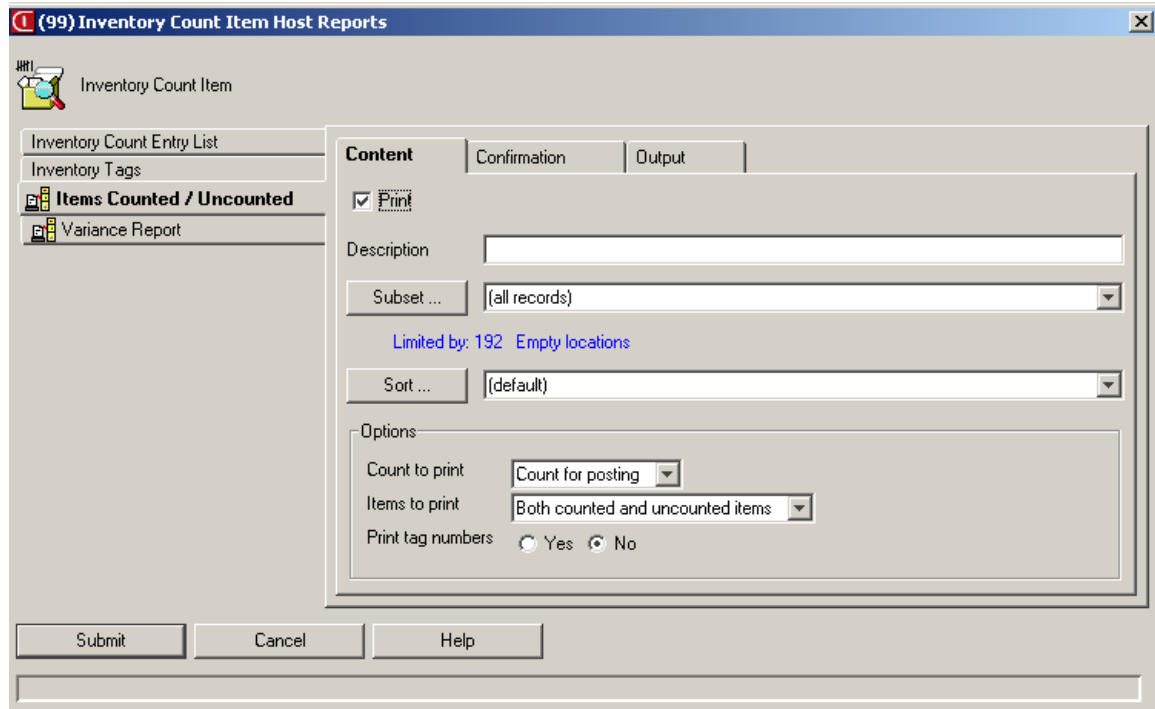
Figure 4-15. Inventory Count Item Host Reports - Items Counted/Uncounted tab

Select Print, and then select the options that make the report useful to you. Use the Count to print option to select the count you want to print:

- 0 = Count for posting
- 1 = Count 1
- 2 = Count 2
- 3 = Count 3.

Use the Items to print option to specify the type of items to be included in the report:

- Counted items only
- Uncounted items only
- Both counted and uncounted items.

If you select either the Uncounted items only or the Both counted and uncounted items options, XA prints the uncounted items with blank lines so that you can use the report as a counting document to gather the missing counts.

Click Submit to print the Items Counted/Uncounted report.

Reconciling the count

The process of reconciling the count involves determining the differences between the quantities in XA and the quantities counted. If you find significant differences between the two quantities, you decide either to perform another count to determine whether you entered the counts correctly, or you accept the quantities counted as correct.

Use the Variance Report to help you make your decision. You can print the Variance Report after you enter the counts. For each count activated for the item, the report shows the count quantity, the compare quantity (cutoff or entry on-hand), and the variance.

The Variance Report makes it easy for you to see all the inventory count items together to do your analysis. You also see a message if the same inventory count item information is part of another inventory count group. The message is a warning to make sure XA does not update the on-hand balance twice in error.

If you find counts that you entered incorrectly or you want to select another count for posting, you go back into the inventory count group and make changes. When you finish your changes, you can print the Variance Report again to verify you entered the changes correctly.

As part of the reconciliation process, the following attributes are calculated and saved:

- **Variance quantity:** XA calculates the variance quantity by taking the count quantity as entered and subtracting either the cutoff on-hand quantity or the entry on-hand quantity.

- **Variance percent:** The variance percent is the variance quantity expressed as a percent of the compare quantity. For example, if the on-hand is 100 but the count quantity is 85, the variance percent is 15%.

- **Out of tolerance:** XA compares the Variance percent to the Count accuracy tolerance percent in the item warehouse. If the variance percent is the greater of the two, the Out of tolerance attribute for the count number is set to Yes. Items or locations with the Out of tolerance attribute set to Yes get another count automatically when you select the option, Activate next count.

Printing a Variance Report

To print the Variance Report, select the Host Print ... option on the File menu on the Inventory Count Items list window or card file. The Inventory Count Item Host Reports window opens. Select the Variance Report tab.
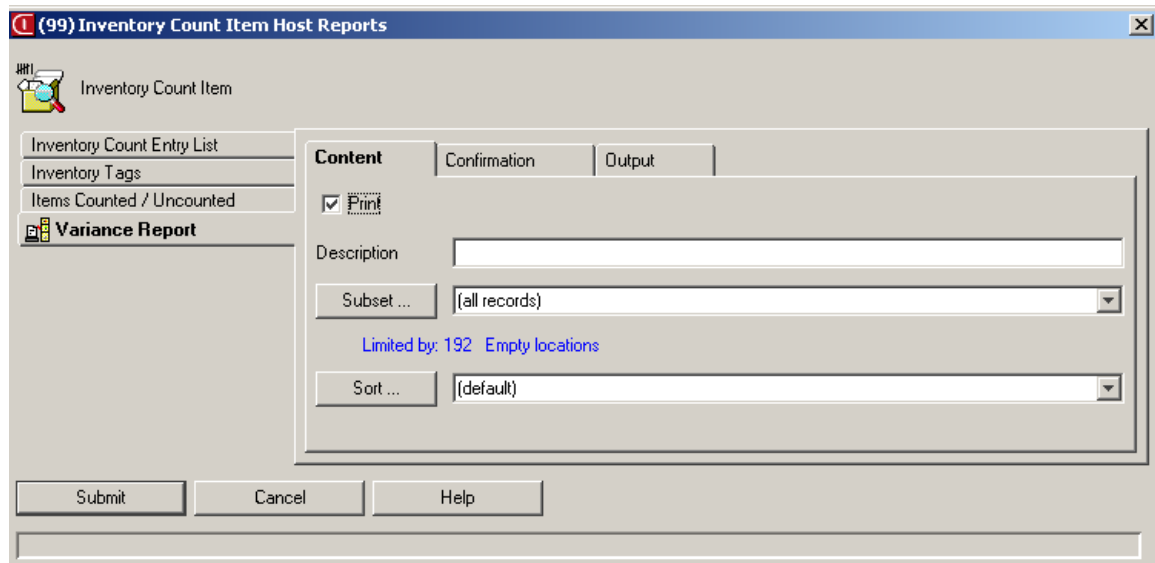

Figure 4-16. Inventory Count Item Host Reports - Variance Report tab

Select Print and then select the options that make the report useful to you. Click Submit to print the report.

Activating two or more counts

You can enter up to three counts for each inventory count item. If you are satisfied with the results and all the items are within tolerance, you post the inventory adjustments. However, if you have inventory count items that are out of tolerance, you can decide to do another count. For example, you might decide to recount if your tolerance is 5, the count for an inventory count item is 10, and the XA on-hand quantity is 50.

When you activate the next count, you activate the items that are out of tolerance or not counted in the last count. You enter the new counts for the items on the second count the same as on the first count.

To activate another count, select the inventory count group and then select the option, Activate Next Count, on the Maintain menu on the Inventory Count Groups list window. A Confirm prompt opens.
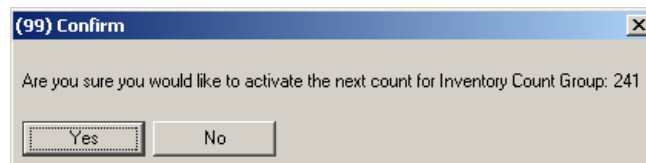
Figure 4-17. Confirm Inventory Count Groups Activate next count prompt

You can also select the inventory count item and then select the option, Activate Next Count, on the Maintain menu of the Inventory Count Items list window. A Confirm prompt opens.
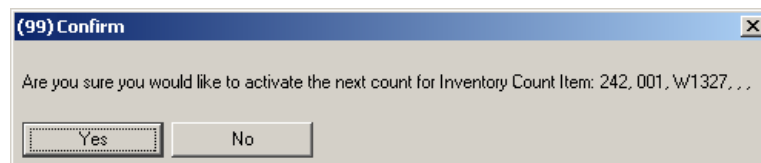
Figure 4-18. Confirm Inventory Count Items Activate next count prompt

On the Confirm prompt, click Yes to activate the next count for the group or item selected.

Posting the count

After you are satisfied you collected and entered all the counts and you have selected which count to use for posting the adjustments, you are ready to post the count. The Post Count Adjustments process updates the inventory balances based on the results of the count. You post an inventory count group once.

To post the count, select the option, Post Count Adjustments, on the Maintain menu on the Inventory Count Groups object. A Confirm prompt opens to make sure you want to continue.
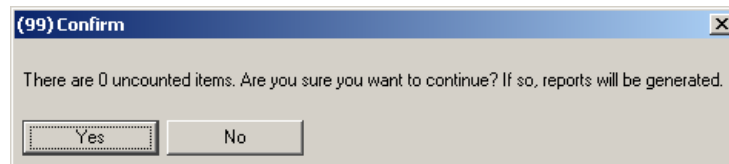
Figure 4-19. Confirm Post Count Adjustments prompt

The Confirm prompt tells you if you have any uncounted inventory count items and how many. You decide whether you need to check the uncounted items before continuing with the post.

Click Yes to post the count. The inventory count group remains in the Inventory Count Groups list window after posting. XA adds the post date to the Post Date column. Select the subset, Unposted groups, to view inventory count groups that are not posted.

The posting process makes the following adjustments:

*   The Post date updates in the Inventory Count Groups list window.
*   The Post status updates to Posted in the Inventory Count Items list window.
*   If the variance quantity is negative, XA decreases the on-hand balance by the variance.
*   If the variance quantity is positive, XA increases the on-hand balance by the variance.
*   If the count item is voided, XA skips the item.
*   XA checks the QC status to determine whether the shelf life expiry date is past. If so, XA changes the status to 6 (shelf life expired) and creates a change item location QC status (SQ) transaction.
*   If you have an outstanding inspection for a receipt, you get a message saying you must either adjust the location quantity by doing another receive purchased item to inspection (RI) transaction or receive production item (RM) transaction for the variance or process a quality control transaction to move the quantity into inventory and then do the count adjustment.
*   If XA cannot find an item location for an item, XA creates an item location automatically.
*   XA updates Item Warehouses with:

    -   Forced cycle count is reset to blank
    -   Last physical/cycle count date is set to the post date
    -   Date for next cycle count is reset to all 9s
    -   Quantity adjusted this period is increased or decreased by the variance quantity
    -   Last date affecting quantity on-hand is set to post date
    -   Requirements planning activity is set to on.

*   XA updates the Inventory Management (IM) Transaction History attribute with all the attributes normally set for the adjust item quantity per count (PH) transaction.

XA passes the generated transactions to IM for updating the inventory files. Two reports print to provide an audit trail of the posting results:

- **Inventory Count Posted Register:** This report shows the inventory count items that updated inventory balances and for which adjust item quantity per count (PH) transactions were generated.
- **Inventory Count Non-Posted Report:** This report shows the reason XA did not post the item:

    - It had no variance

    - It was voided

    - There were no errors.

Chapter 5. Transferring Inventory

Overview

Materials Management (MM) provides you with the ability to track your inventory when you are transferring items. You transfer items when you issue inventory from one warehouse or warehouse location and receive inventory in another warehouse or warehouse location that is part of your company.

Inventory Transaction History. This object contains a list of inventory transactions XA has generated. On the Maintain menu, you can generate the transfer item (TW) transaction, which you use to issue and receive transfer items.

Transfer item (TW) transaction. You can use this transaction two ways.

- If you know both (the sending and receiving) warehouse locations, the transfer item (TW) does the transfer in one step. For example, you have already moved the item you are transferring and you enter a transfer item (TW) transaction to update your inventory records. There is no need to track the inventory after it is issued and before it is received because it is already in the receiving warehouse or warehouse location.
- If you do not yet know where you will put the items or it is some time before they can be received (as when they are being shipped between warehouses), use the Scheduled receipt option on the transaction. For example, you are transferring an item to another warehouse and its delivery takes several days. It is important that you track the item to ensure that it is not lost between warehouses and you do not want your inventory records to show the item as on-hand in the sending warehouse or receiving warehouse while you are moving the item.

Scheduled Receipts. This object shows the expected arrivals of purchased or transferred items to the receiving warehouse. Scheduled receipts help people working in receiving identify and receive items. XA creates scheduled receipts for transfer items when you enter a transfer item (TW) transaction and request a scheduled receipt. The primary use of the Scheduled Receipts object is to help you track and then receive items at the receiving warehouse.

Inventory Statuses. This object allows you to classify items stored in a warehouse location, so that those items are held from some activities, by setting attributes to specify the activity from which the items are to be held. The IN-TRANSIT status, in the Inventory Statuses object, is used exclusively for transferred but not yet received in-transit inventory. It restricts the inventory from all activities except receipt, using the scheduled receipt or shipment notice, into the receiving warehouse specified during the transfer item (TW) transaction.

In-transit warehouse locations. When you enter a transfer item (TW) transaction and specify a scheduled receipt, you indicate to XA that the transferred item is no longer in the sending

warehouse and not yet received at the receiving warehouse. To account for the item, you specify an in-transit warehouse location where the item resides, for the purpose of your records until it is received at the receiving warehouse. In the in-transit warehouse location, you can hide the transferring inventory from planning and control applications such as Material Requirements Planning (MRP), Advanced Planner (AVP), and Thru-Put.

Figure 5-1 shows a transfer with scheduled receipt. From Inventory Transaction History, you enter a transfer with scheduled receipt. This transaction issues the item to the In-transit warehouse you specified. If you want, you can also specify the shipment and shipment container in which you are shipping the item.
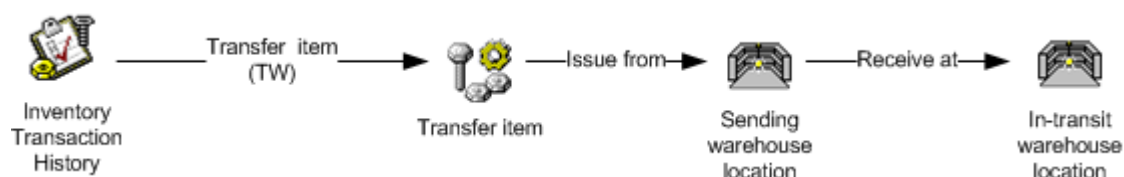
Figure 5-1. Overview of transferring with scheduled receipt

Shipment Notices. This object contains information about the shipment, the sending warehouse, the receiving warehouse, the scheduled arrival date and time, and other general information about the shipment. When you create a transfer with scheduled receipt, you can optionally choose to add the transfer item to a shipment notice or create a shipment notice for the receiving warehouse. You use the Shipment Notices object to view shipping details and to receive the shipment when the shipment arrives at the receiving warehouse.

Shipment Containers. This object describes the containers in the shipment including any sub-containers and the type and weight of the container. The Shipment Containers object can support complex structures like containers inside other containers, containers with multiple items, and items in containers at several levels.

Each shipment notice includes a default container. The default container has a blank container ID. Any items the sending warehouse has not specified as part of a container in the shipping details XA adds to the default container. A container that has another container directly inside is called a parent container. A container that is not in another container but has containers inside is called a top container.

In the example shown in Figure 5-2, the trailer is the top container A, which contains two parent containers, pallets B and C. On each pallet are two boxes containing items. They are respectively containers D, E, F, and G. Also in the trailer is an item that is not in any of the boxes or pallets in the trailer. This item is in the top container A.
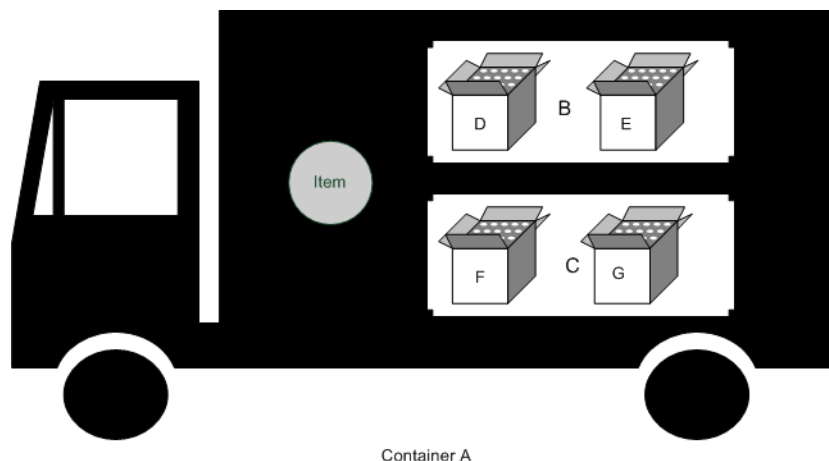
Container A

Figure 5-2. Example of a container structure

Note: The number of container levels XA supports is unlimited. The sending warehouse decides the level of detail on the Shipment Notice when they create the shipment notice. If you do not want to describe containers, you add the transfer item to the default container by not specifying a Container ID on the Transfer Item (TW) dialog.

When the shipment arrives, you can use the Shipment Containers object to receive entire containers at the same time.

Shipment Container Items. This object shows the quantity, batch/lot ID, and weights of a transfer item the sending warehouse shipped in a container. XA creates the shipment container item when you add the transfer item to a new or existing shipment notice at the time you generate the transfer item (TW) transaction. You cannot create a shipment container item for a transfer item or add a transfer item to a shipment notice in the Shipment Containers or Shipment Container Items objects. XA links each shipment container item to the scheduled receipt for the transfer item in the shipment.

When the shipment arrives, you can use the Shipment Container Items object to receive items in the shipment. You can change the receiving location for the item and receive item quantities to stock or inspection. When receiving to stock, you can use the Set container item status option to completely receive the shipment container item or leave the shipment container item open regardless of the quantity received.

Scheduled Receipt Locations. This object allows you to specify in advance the warehouse location to use when receiving the transferred item at the receiving warehouse. The location can be either to inspection or to stock. If you do not change the scheduled receipt location, the location defaults to the default stock location for the item warehouse. XA creates a scheduled receipt location for each scheduled receipt.

Item Shortages. This object shows all the customer orders or manufacturing orders and schedules that are short for the selected scheduled receipt. You use the Item Shortages object to help you identify urgently required items. XA generates the current item demand information when you open the Item Shortages object.

Two things happen when you select Item Shortages on the Display menu on the Scheduled Receipts list window:

- XA retrieves the item warehouse record for the selected scheduled receipt and subtracts the demand from the on-hand to determine the available quantity. The item has a shortage if the available quantity is negative.
- If the item has a shortage, XA displays all manufacturing orders, schedules, and customer orders needing some of the item, and the quantity.

Receive and Receive Complete options. Use these options to receive transferred inventory. You can receive the entire shipment, an entire shipment container, or a single shipment container item or scheduled receipt. Receiving transferred inventory updates the receiving information in all the objects involved in receiving, including Inventory Transaction History, Item Warehouses, and Item Locations.

Figure 5-3 shows receiving the item at the receiving warehouse. When the item is received at the receiving warehouse, you enter a Receive option in Scheduled Receipts. If you entered shipment notice and shipment container information, you have the option of receiving the transferred item in the Shipment Notices, Shipment Containers, or Shipment Container Items objects. You can receive complete a shipment notice in Shipment Notices and Scheduled Receipts. You can receive complete a shipment container in Shipment Containers and you can receive an item in the shipment container in Shipment Container Items.

The Receive or Receive Complete option generates a receive transfer (RT) transaction, which issues the item from the In-transit warehouse and receives the item at the receiving warehouse.
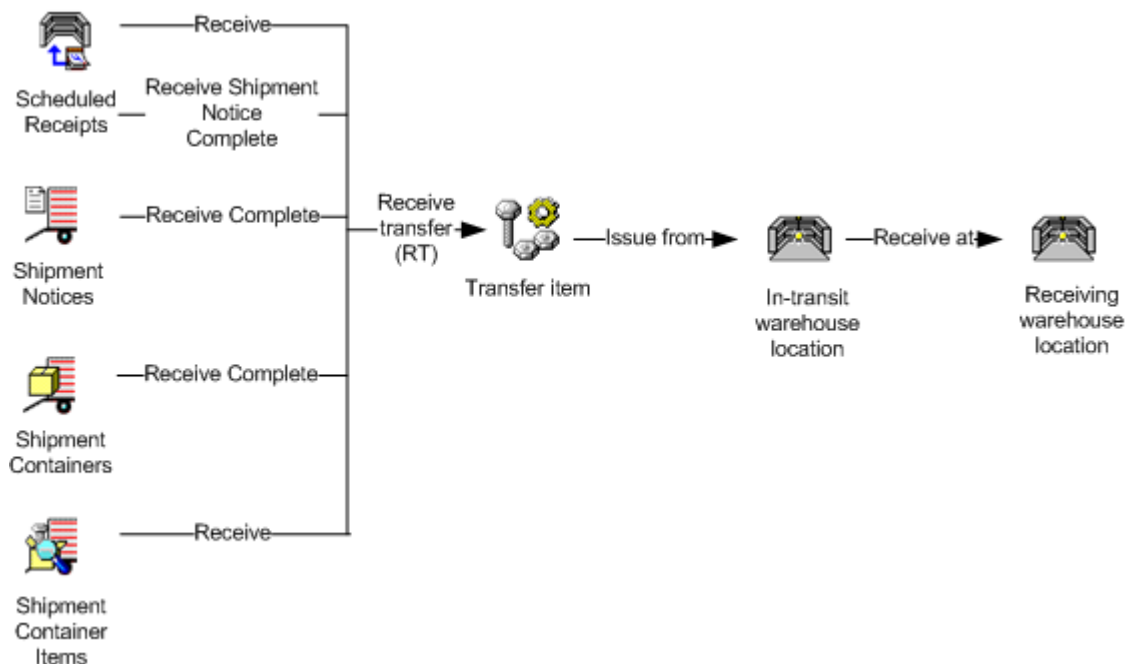
Figure 5-3. Overview of receiving transferred items

XA deletes scheduled receipts when they are received completely unless they are associated with a shipment notice. XA does not delete shipment notices automatically, but you can delete a shipment notice any time.

Creating in-transit warehouse locations

When you create a warehouse location, you use the Aisle and Bay attributes to define the warehouse location. For in-transit warehouses, the Aisle is set to XF. If you have other locations with XF as their first 2 characters, before you can create your first in-transit warehouse location, you must either delete all those locations, or enter a different prefix in the application setting, In-transit location prefix, in MM.

In-transit warehouse locations are used exclusively for items transferred but not yet received. Items are received to an in-transit location only when you enter a transfer item (TW) transaction with scheduled receipt; the item is issued, and a scheduled receipt is created in the receiving warehouse for a later time. Until receipt, the item is stored in the in-transit warehouse location, specified on the transfer item (TW) transaction, for accounting purposes. Likewise, items are issued from an in-transit location only when you receive the transfer scheduled receipt into the receiving warehouse.

In-transit warehouse locations use the IN-TRANSIT status in the Inventory statuses object, which sets the Planning hold attribute to Yes. This attribute ensures that inventory is not used by three XA planning products: MRP, AVP, and Thru-Put, and two XA customer order promising functions: Available To Promise (ATP) and Capable To Promise (CTP).

Items in in-transit warehouse locations are held from planning when planning the warehouse where the in-transit inventory is stored, and their scheduled receipts are treated as supply orders when planning the receiving warehouse.

Note: The inventory status of an item location is set using the inventory status of the associated warehouse location.

There are two ways to set up in-transit warehouse locations:

- Create in-transit locations in the sending warehouse or receiving warehouse and use these locations when issuing the transfer item. Although using this method requires less set up effort, your transferred item still shows as on-hand in the warehouse in which you set up the in-transit location. Since a transfer with scheduled receipt is usually for transferring items between warehouses, this results in overstating the on-hand inventory in the warehouse that contains in-transit location, until the transfer is received.
- Create a warehouse or multiple in-transit warehouses, which you use just for transferring items between you other warehouses. Optionally, you can create warehouse locations for your in-transit warehouse(s). You can use information from the sending warehouse and/or receiving warehouse when you create the in-transit warehouse and locations. However, you do not need multiple locations or multiple warehouses to classify the in-transit items, as their scheduled receipts identify their sending warehouse, receiving warehouse, and in-transit warehouse.

Creating an in-transit warehouse location

The following procedure assumes you want to create a warehouse location for a warehouse that contains only in-transit locations or for an existing warehouse that also contains warehouse locations for inventory that is not being transferred.

From the Warehouse Locations list window, select Create on the Maintain menu. The Create Warehouse Location dialog opens. Select the In-transit location template.
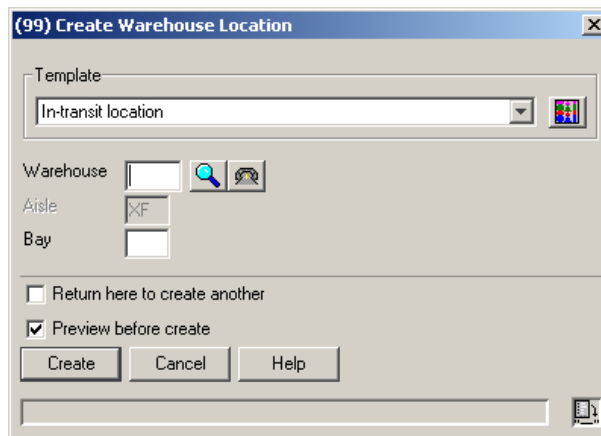
Figure 5-4. Create Warehouse Location dialog

On the Create Warehouse Location dialog, enter the warehouse and information as required. The Aisle value is defaulted to XF (or the prefix specified in the application setting, In-transit location prefix), which designates the warehouse location as an in-transit location. The Bay attribute must be a value between 01 and 99.

To make changes, add comments or location items, select Preview before create before you click Create.

The Create Warehouse Location card file opens.

Figure 5-5. Create Warehouse Location card file - Location Compound card

When you finish entering information for the warehouse location, click Create to create the warehouse location.

A Please Confirm prompt opens, if you added items or comments to the warehouse location.
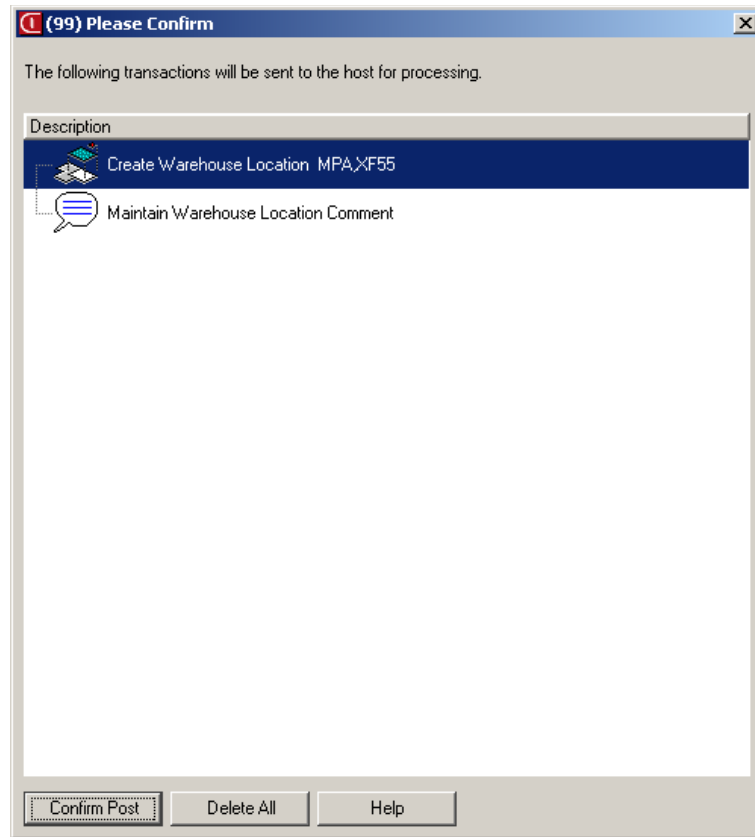
Figure 5-6. Please Confirm Create Warehouse Location prompt

Click Confirm Post to confirm the changes.

Transferring items

You use the transfer item (TW) transaction to transfer items from one warehouse or warehouse location to another warehouse or warehouse location. The transfer item (TW) transaction generates the issue transferred item (IW) transaction and the receive transferred item (RW) transaction to issue and receive the item. In some cases, the receive item (RC) transaction is also generated. For more information about these transactions, see Appendix A, "Summary of MM Transactions."

Transfer without scheduled receipt. You use this type of transfer when you have already moved the transfer item to its new location, or you do not want to track the item between locations and you do not mind that your inventory records show the item in the receiving warehouse during the time it takes to move the item.

If you are issuing and receiving the transferred item at one time, the process of transferring is simple. You generate the transfer item (TW) transaction using the Transfer Item (TW) option on the Maintain menu in Inventory Transaction History. If you have an existing transfer item (TW) transaction that contains the same item and warehouse as the item you are transferring, you can select this transaction before selecting the Transfer Item (TW) option. The item and warehouse defaults on the Transfer Item (TW) dialog. If the warehouse is controlled and there is only one item location for item warehouse for the selected item; the location, available quantity (in that location), batch/lot and FIFO date also default.

On the Transfer Item (TW) dialog enter the necessary item and warehouse information. Do not select the Scheduled receipt attribute. Select Continue to issue and receive the transferred item. The item is received at the receiving warehouse or warehouse location.

Transfer with scheduled receipt. If you do want to track transfer item between warehouses or you are concerned about ensuring the on-hand balances of the transfer item are correct in both the sending warehouse and receiving warehouse, or you want to exclude the transferring item from planning and control, then MM provides you with the ability to issue the item but delay the receipt of the item. This type of transfer is called a transfer with scheduled receipt. "Transferring an item with scheduled receipt" on page 5-11 demonstrates how to enter a transfer with scheduled receipt.

Scheduled receipts for transfers contain the sending warehouse, in-transit warehouse, and receiving warehouse so that you can view where the transfer item is at any time during the transfer process. The scheduled receipt provides you with information about when the transfer item is due at the receiving warehouse. Use this option to:

- Transfer the items out of the sending location.
- Create a scheduled receipt for the items in the receiving location, for visibility and to help receive the items.
- Store the items in an in-transit warehouse or location until they are received, for accounting control and visibility.
- Include multiple in-transit items on a transfer Shipment Notice, to help control shipping and receiving the items.

The Scheduled receipt option requires that the in-transit warehouse and possibly location be specified on the transaction. If the in-transit warehouse is uncontrolled, no in-transit location is required. You can choose to store in-transit inventory wherever you want: in the sending warehouse, the receiving warehouse, or a warehouse or warehouses used only for in-transit inventory. The only requirements are:

- An item warehouse must exist in the in-transit warehouse, to account for the in-transit inventory, shown as on-hand,

- If you need to retain the QC date for shelf life items in-transit, the in-transit warehouse must be controlled, and
- If the warehouse is controlled, you must create in-transit warehouse locations.

For more information, see "Creating in-transit warehouse locations" on page 5-5.

While generating the transfer item (TW) transaction, you can add the item to an existing shipment notice or create a shipment notice. For more information about creating a shipment notice, see "Creating a shipment notice" on page 5-13.

After you have generated the transfer item (TW) transaction, you cannot add the transfer item to a shipment notice.

Transferring an item with scheduled receipt

The following procedure assumes you want to transfer an item with scheduled receipt and add the transfer item to an existing or new shipment notice.

Select Transfer Item (TW) on the Maintain menu in Inventory Transaction History. The Transfer Item (TW) dialog opens.

Figure 5-7. Transfer Item (TW) dialog

On the Transfer Item (TW) dialog enter the warehouse, item, quantity, and other information as required. If you selected a transfer item (TW) transaction in the Inventory Transaction History list window that matches the item and warehouse of the item you want to transfer, the item and warehouse defaults from the record you selected. If the warehouse is controlled and there is only one item location record for the sending item warehouse, XA defaults the location, available quantity (for location), batch/lot, and FIFO date. The quantity you enter must be positive when you are entering a transfer with scheduled receipt but can be negative if this transfer issues and receives to the receiving warehouse.

Select the Scheduled receipt attribute, which changes the attributes below the attribute to maintainable. Enter the arrival date and time. The Arrival date defaults to the current date and the Arrival time attribute defaults to 12:01 PM, if you do not enter a date and time.

Select the In-transit option that you want to use. You can choose to use the in-transit warehouse specified for the sending warehouse, or the receiving warehouse, or you can enter another in-transit warehouse and location in the In-transit warehouse and In-transit location attributes.

If an item warehouse does not exist in the In-transit warehouse for an item you are transferring, you must create one before you generate the transfer item (TW) transaction. You can copy the item balance record from the sending item warehouse or the receiving item warehouse.

If you want to provide a shipment notice to inform and help the receiving warehouse receive the transfer item, choose from one of the following methods:

- **To add the transfer item to an existing shipment notice:** Either enter the Shipment ID in the Shipment attribute or use the Find Shipment ... button and select the appropriate shipment in the Find Shipment Notice ... list window. The Arrival date and Arrival time is defaulted for the transfer item from the shipment notice.
- **To add the transfer item to an existing shipment and container:** Either enter the Container ID in the Container attribute or use the Find Container ... button and select the appropriate shipment and container in the Find Shipment Container ... list window.
- **To add the transfer item to a shipment notice that you have not created yet:** Enter the new Shipment ID and click Continue. An Error prompt opens stating the "Shipment Notice record not found Would you like to create?" Click Yes to create the shipment notice. For more information about creating shipment notices, see "Creating a shipment notice" on page 5-13.

Click Continue. The transfer item (TW) transaction generates an issue transferred item (IW) to remove the item from the sending warehouse and a receive transferred item (RW) to receive the item at the in-transit warehouse or warehouse location you specified. MM creates a scheduled receipt for the transfer item, which you can view in the Scheduled Receipts object. If you chose to use a shipment notice, MM adds the transfer item to the shipment notice as a shipment container item.

Note: You cannot split a transfer scheduled receipt among shipment containers. Each scheduled receipt equals the shipment container item with which it is associated. If you want to show that you shipped the item in multiple containers, then you must create multiple transfers for the same item and add them to separate containers in the shipment.

"Receiving transfer items" on page 5-21 discusses your options for receiving transferred items from the in-transit warehouse to the receiving warehouse.

Creating a shipment notice

You can create a shipment notice before or while you generate the transfer item (TW) transaction. You cannot add a transfer item to a shipment notice after you have generated the transfer item.

The following procedure assumes you want to create a shipment notice and shipment container to transfer items between warehouses.

- **To create the shipment notice before you start the transfer item (TW) transaction:**
  Select Create on the Maintain menu of the Shipment Notices object. The Create Shipment Notice dialog opens.
- **To create the shipment notice while generating the transfer item (TW) transaction:**
  Enter the Shipment ID on the Transfer Item (TW) dialog. Click Continue. For more information about the Transfer Item (TW) dialog, see "Transferring an item with scheduled receipt" on page 5-11. An Error prompt opens stating the "Shipment Notice record not found Would you like to create?"
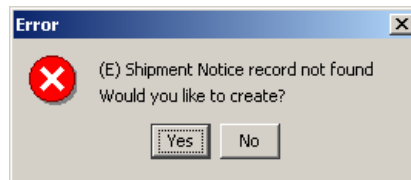
Figure 5-8. Error message Create Shipment Notice

Click Yes to create the shipment notice. The Create Shipment Notice dialog opens with the information defaulted from the Transfer Item (TW) dialog.

Figure 5-9. Create Shipment Notice dialog - from Transfer Item (TW) dialog

On the Create Shipment Notice dialog, enter information as required. The Shipment type must be Transfer. The Shipment ID cannot duplicate an existing shipment ID for the same sending warehouse. To add shipment containers, select Preview before create before you click Create.

The Create Shipment Notice card file opens.

Figure 5-10. Create Shipment Notice card file - General card - from transfer item (TW) transaction

Enter the information about the shipment on the appropriate cards in the Create Shipment Notice card file. For example, you can enter the date and time the shipment is leaving the sending warehouse, and the date and time the shipment is to arrive at the receiving warehouse.

Select the Comments card if you want to add comments about the entire shipment such as "Replacement Stock from Warehouse."
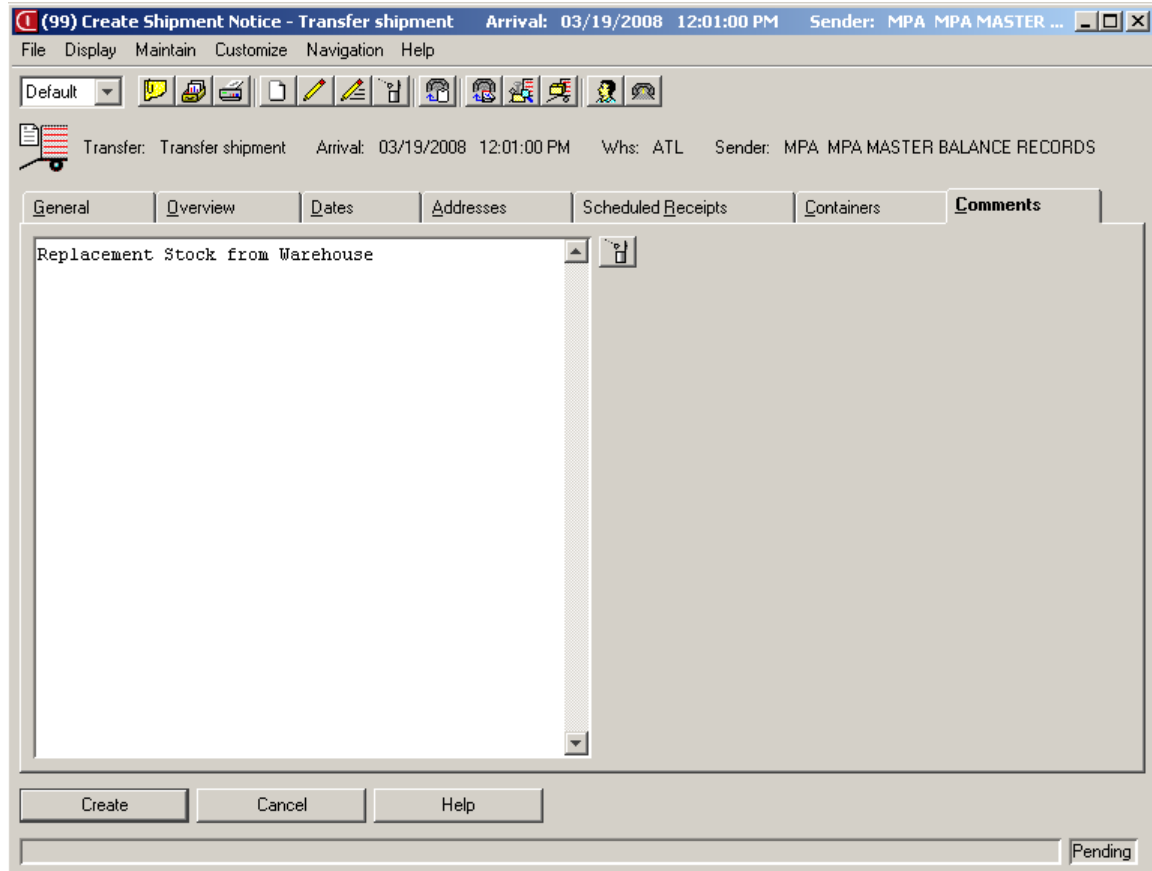
Figure 5-11. Create Shipment Notice card file - Comments card

Select the Containers card if you want to create containers for the shipment notice.
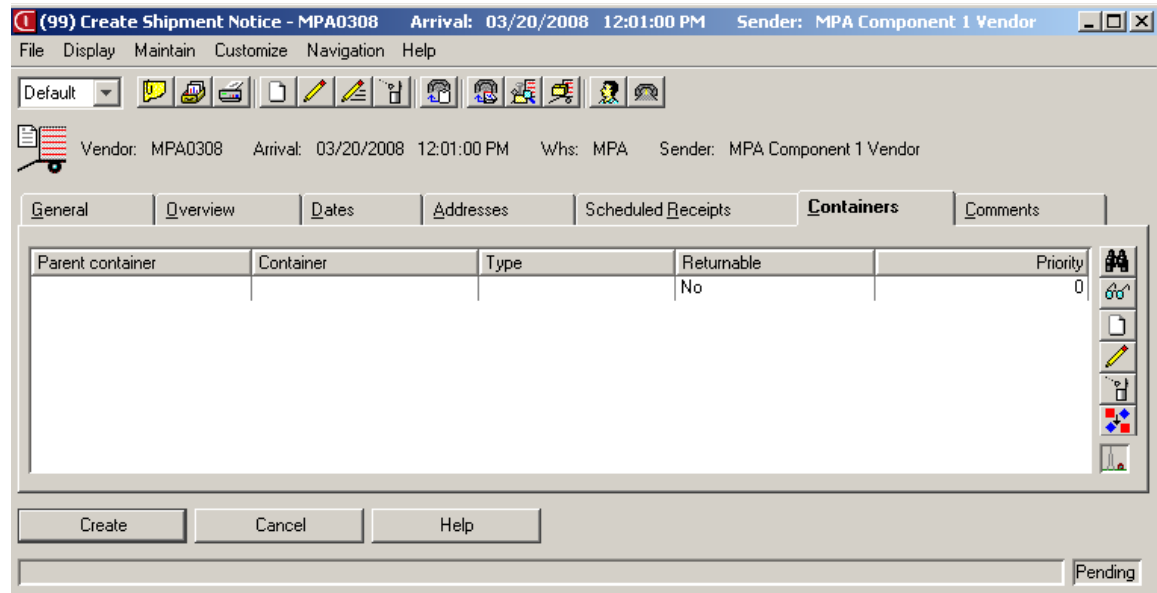
Figure 5-12. Create Shipment Notice card file - Containers card

Every shipment notice contains a default container, which has a blank Container ID. Figure 5-12 shows the Containers card with only the default container showing in the Containers list. If you do not want to specify containers in the shipment, XA creates the shipment container item for the transfer item in the default container.

If you do specify containers in the shipment, you can make the container structure as complex as you require. For example, you can create a container structure, which has multiple levels of containers and multiple containers at each level. The shipment's container structure can show containers that are inside other containers and the items contained in each container at any level. For an example of a container structure, see Figure 5-2, "Example of a container structure" on page 5-3.

You must create the top container and parent containers before you create the containers inside them. You identify the parent container when you create the container.

Before you complete the creation of the shipment notice, you add any shipment containers by clicking the Create button at the right of the Containers card.

The Create Shipment Container dialog opens.
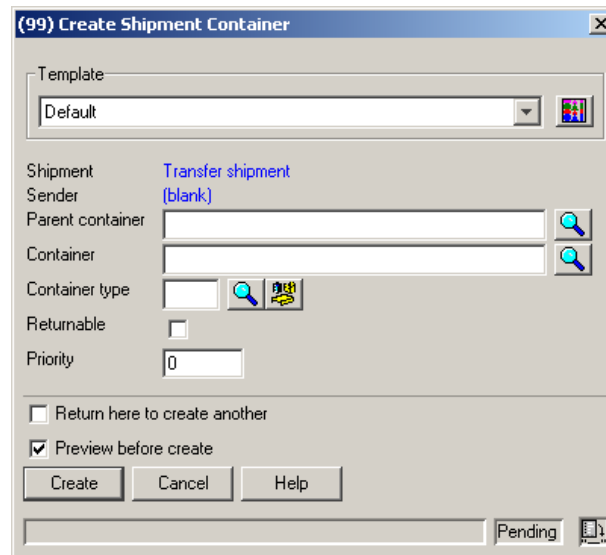
Figure 5-13. Create Shipment Container dialog

On the Create Shipment Container dialog, you enter the name of the parent container if the container you are creating is in another container, the name of the container you are creating, and the container type. All containers (except the default container) must have a valid container type, as specified in the Container Types object. To add information about the container, select Preview before create before you click Create.

The Create Shipment Container card file opens.

Figure 5-14. Create Shipment Container card file - General card

Enter the information about the shipment container on the General Compound card (the tab label is General) in the Create Shipment Container card file. For example, you can enter the gross, net, and tare weight for the container.

You cannot create shipment container items for the shipment container. You use the transfer item (TW) transaction to add items to the container.

XA creates the shipment container when you click the Create button on the Create Shipment Container card file. You return to the Create Shipment Notice card file, where you repeat the process to create the shipment containers you need to specify the structure of the shipment.

Note: You cannot split a transfer scheduled receipt among shipment containers. Each scheduled receipt equals the shipment container item with which it is associated. If you want to show that you shipped the item in multiple containers, then you must create multiple transfers for the same item and add them to separate containers in the shipment.

As you create the structure of the shipment, XA updates the Overview card on the Create Shipment Notice and Create Shipment Container card files with the current overview of the shipment. The Overview card provides the complete picture of the shipment you are creating and is useful for determining whether you are creating the shipment correctly.
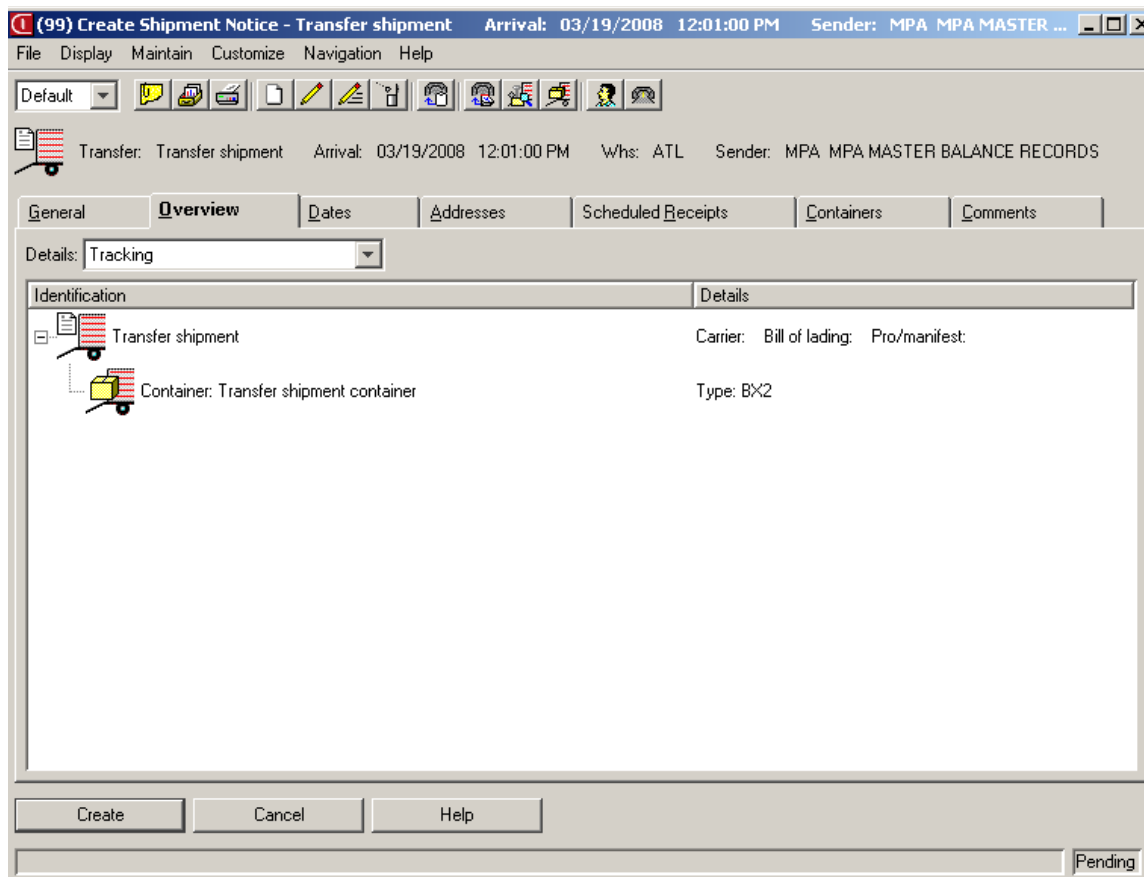
Figure 5-15. Create Shipment Notice card file - Overview card

Figure 5-15 shows the Overview card for this example of creating a shipment notice and shipment container in the Create Shipment Notice card file. In Figure 5-15, only one container is created.

Click the Create button on the Create Shipment Notice card file. The Please Confirm prompt opens, if you created containers, items, or comments for the shipment notice.
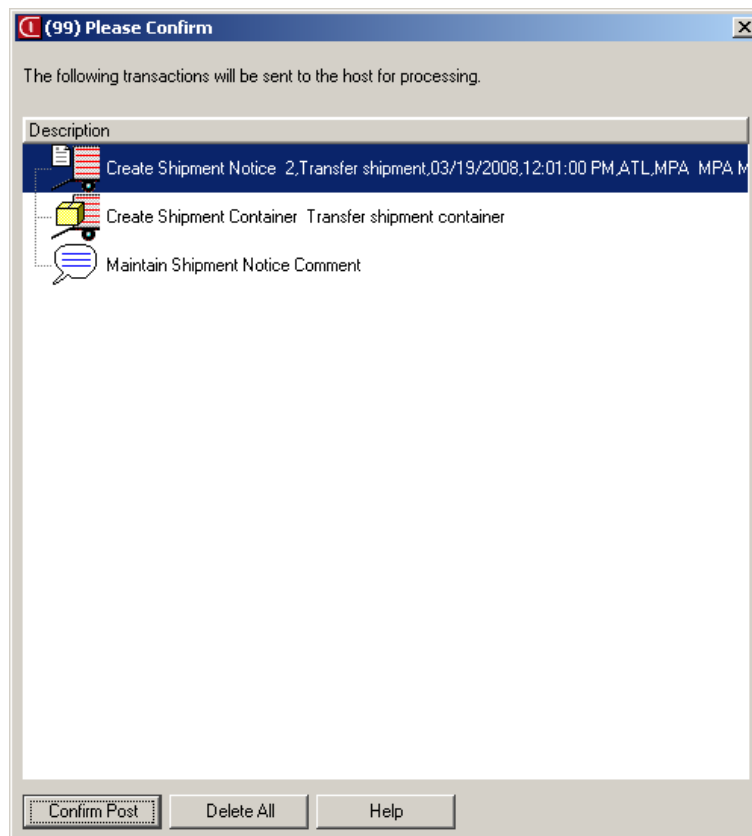
Figure 5-16. Please Confirm Create Shipment Notice prompt

Click Confirm Post to create the shipment notice, shipment containers, and comments.

If you navigated to the Create Shipment Notice dialog from the Transfer Item (TW) dialog, you are returned to this dialog. If you want to specify your transfer item is packed in a shipment container you have created, either enter the container ID in the Container attribute or use the Find Shipment Container ... button and select the shipment and container in the Find Shipment Container ... list window.

Click Continue. The transfer item (TW) transaction generates an issue transferred item (IW) to remove the item from the sending warehouse and a receive transferred item (RW) to receive the item at the in-transit warehouse and location you specified. MM creates a scheduled receipt for the transfer item and adds the transfer item to the shipment notice as a shipment container item.

Receiving transfer items

When you use the transfer item (TW) transaction without a scheduled receipt, XA issues the item from the sending warehouse and receives it at the receiving warehouse in one step. The following sections describe receiving when the transfer item was issued from the sending warehouse to an in-transit warehouse using a transfer with scheduled receipt, and you now want to receive the transfer item at the receiving warehouse.

You can use either the Receive Complete or Receive option to receive the transferred items. For example, the transferred inventory is correct, you use the object or objects that receive complete the greatest number of scheduled receipts with the least data entry, which is usually the shipment notice. If your transferred inventory has changes that you need to enter, then you enter these changes using a Receive option. When you have entered the changes, you then choose the object that most efficiently receives the rest of the transferred inventory, such as a shipment container or the shipment notice.

When you receive complete higher-level objects to stock or set them to Complete, XA receives completely all their lower-level objects. For example, when you receive completely a shipment notice, XA receives completely the shipment containers, shipment container items, and scheduled receipts on the shipment notice.

When you receive complete lower-level objects to stock or set them complete, XA sets each higher-level object, in turn, complete when the higher-level object has also all its lower-level objects complete. For example, when you receive the entire quantity of the transfer item on the shipment container item, XA receives completely the associated shipment container and shipment notice if all their lower-level objects are complete. The scheduled receipt is set to Complete because there is only one scheduled receipt for each shipment container item.

You must be careful when receiving higher-level objects complete because when you receive completely a higher-level object, XA also receives complete all the lower-level objects. If the scheduled receipt or shipment container item on which you first use the Receive option must have an open quantity remaining, you cannot use a Receive Complete option on the shipment container or shipment notice.

Receiving a transferred item complete

The Receive Complete option provides a convenient way to receive a shipment notice or shipment container for transfer items. You can only use these options if these objects exists for the transfer item.

Enter the Receive Complete option in the Shipment Notices or Shipment Containers objects. From the Scheduled Receipts object, you can enter the Receive Shipment Notice Complete option for the shipment notice associated with the scheduled receipt.

XA generates as many of the following transactions as it takes to receive objects using the default values:

- Receive transfer (RT)
- Issue transferred item (IW)
- Receive transferred item (RW).

This example assumes you want to receive complete a shipment for transferred items. From the Shipment Notices list window, select the shipment notice you want to receive complete. Select Receive Complete on the Maintain menu. The Receive Shipment Notice Complete - Transferred Item (RT) dialog opens.

Or, in the Scheduled Receipts list window, select a scheduled receipt that is part of the shipment you want to receive complete. Select Receive Shipment Notice Complete on the Maintain menu. The Receive Shipment Notice Complete - Transferred Item (RT) dialog opens.

Figure 5-17. Receive Shipment Notice Complete - Transferred Item (RT) dialog

Note: If you select a scheduled receipt or shipment notice for a purchase order item or purchase order item release, the receive complete dialog that opens is for receiving scheduled receipts on a purchase order and cannot be used to transfer an item between warehouses or warehouse locations.

You cannot use receive complete options if you need to enter or change batch/lot information for some items in the shipment. You must use the Receive option on these items to enter the batch/lot information.

Click Continue to receive all the scheduled receipts, containers, and items in the shipment.

XA generates as many receive transfer (RT) transactions as required, including issue transferred item (IW) transactions to issue the items from the in-transit warehouse and receive transferred item (RW) transactions to receive the items at the receiving warehouse.

Receiving a transferred item

The Receive option provides a convenient way to receive a scheduled receipt or shipment container item for transfer items. You can only use the Receive option on a shipment container item if a shipment notice exists for the transfer item.

Use the Receive option to receive a scheduled receipt or shipment container item, or to change receiving information. From the Receive dialog, you can change the quantity received, batch/lot information, and receive all or part of the object stock.

XA generates the following transactions, to process your instructions on the Receive dialog:

- Receive transfer (RT)
- Issue transferred item (IW)
- Receive transferred item (RW)
- Receive item (RC), when an item is over-received or the item is under-received and marked Complete.

Setting objects complete

When you receive transferred inventory to stock, the object by default is set to Complete only when the quantity received equals or is greater than the quantity expected. The quantity expected is the quantity entered on the transfer item (TW) transaction that issued the item to the in-transit warehouse.

When receiving to stock, you can set the object status to Complete or Partial regardless of the quantity received.

From the Receive option in	Use this attribute to set the status of the object
Scheduled Receipts	Set scheduled receipt status.
Shipment Container Items	Set container item status.

Table   5-1.   Set object status

The attributes in the table above provide the following options:

- **Auto set (default):** Set the status to Complete if the quantity received is greater than or equal to the quantity expected.
- **Set complete:** Set the status to Complete regardless of the quantity, as you expect the sending warehouse issued the wrong quantity.
- **Set partial:** Set the status to Partial stock regardless of the quantity, as you expect the sending warehouse is sending more of the item.

When you set a scheduled receipt or shipment container item to Complete and the quantity received does not equal the quantity issued, XA warns you that the quantities do not match and generates a receive item (RC) transaction to account for the difference. The receive item (RC) transaction is positive if more of the scheduled receipt is received and negative if fewer of the scheduled receipt is received. The receive item (RC) is linked to the receive transfer (RT) transaction.

The following procedure assumes you want to receive a scheduled receipt in the Scheduled Receipts object. Select the scheduled receipt you want to receive from the Scheduled Receipts list window. Select Receive on the Maintain menu. The Receive Scheduled Receipt - Transferred Item (RT) dialog opens.

Figure 5-18. Receive Scheduled Receipt - Transferred Item (RT) dialog

Note: If you select a scheduled receipt for a purchase order item or purchase order item release before you select the Receive option, the Receive Scheduled Receipt dialog that opens is for receiving a scheduled receipt on a purchase order and cannot be used to transfer an item between warehouses or warehouse locations.

On the Receive Scheduled Receipt - Transferred Item (RT) dialog enter the attributes you require to receive the scheduled receipt. Click Continue to receive the scheduled receipt.

XA generates a receive transfer (RT) transaction, an issue transferred item (IW) transaction to issue the item from the in-transit warehouse and a receive transferred item (RW) transaction to receive the item at the receiving warehouse.

XA warns you if there is a discrepancy between the issue and receipt quantities. If you set or receive the scheduled receipt complete when discrepancies exist, XA also generates a receive item (RC) transaction to account for the difference.

Reversing transfer transactions

You can only reverse a transfer item (TW) transaction entered in MM, not already reversed, that either:

- **Did not use the Scheduled receipt option:** XA reverses the transfer item (TW) and the associated issue transferred item (IW) and receive transferred item (RW), to transfer the inventory from the receiving location back to the original sending location.
- **Used the Scheduled receipt option and the Scheduled receipt status is Open:** No receiving activity has occurred. XA reverses the transfer item (TW) and the associated issue transferred item (IW) and receive transferred item (RW), to transfer the inventory from the in-transit location back to the original sending location and deletes the open scheduled receipt. If the scheduled receipt is linked to a shipment notice, XA deletes the associated shipment container item. If the shipment notice has no other container items in it, XA warns you that the shipment notice will be deleted.

You can also reverse a receive transfer (RT) transaction, not already reversed, if the scheduled receipt, and optionally a linked shipment notice, is still present. In this case, XA reverses the receive transfer (RT) and the associated issue transferred item (IW) and receive transferred item (RW), and receive item (RC) if present, to transfer the received items from the receiving location back into in-transit.

To reverse either a transfer item (TW) entered in System i, or one that used the Scheduled receipt option and has receiving activity, you must enter a new transfer item (TW) to transfer the item back to the original location.

Figure 5-19 shows a transfer item (TW) transaction that has been reversed and how it looks in the Inventory Transaction History Overview card.
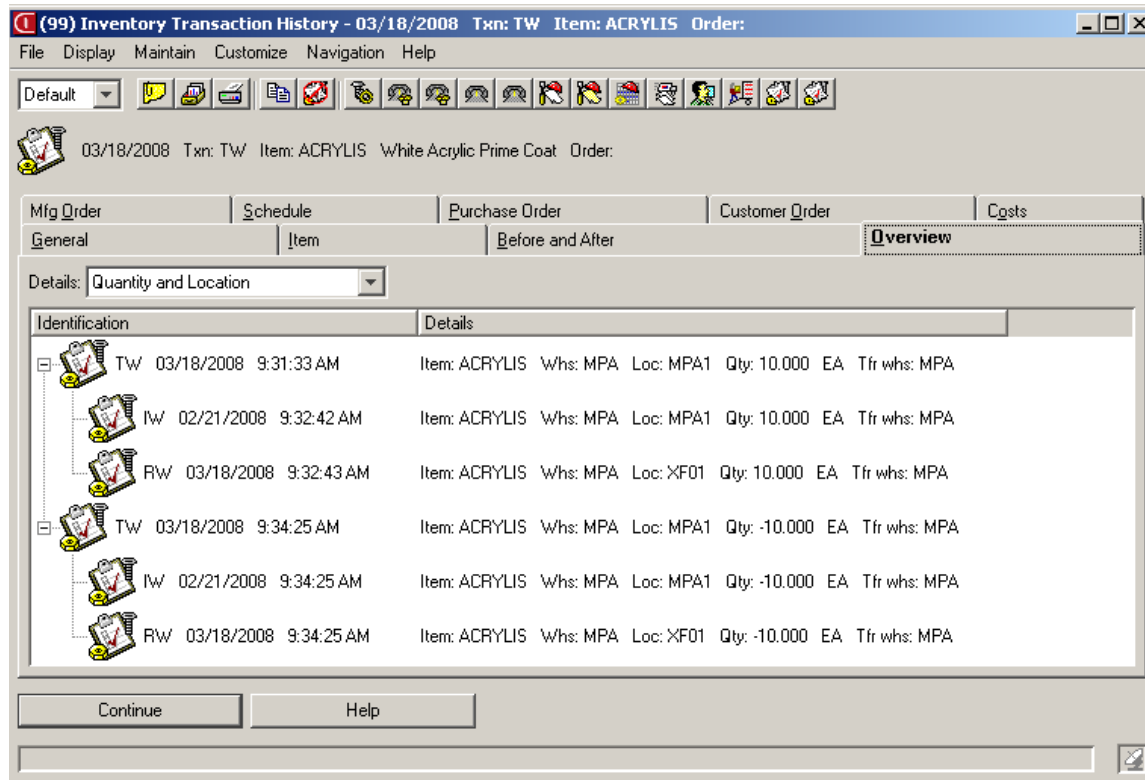
Figure 5-19. Inventory Transaction History - Overview card

This card shows the selected transaction and all directly related transactions, including parent and child transactions, and reversed and reversing transactions, in the sequence processed, starting with the original transaction - not necessarily the transaction you selected.

Reversing a transfer with scheduled receipt

This example assumes you want to reverse a transfer item (TW) transaction that has transferred items to the in-transit warehouse. The transaction has no associated receive transfer (RT) transaction because the items have not been received, from the in-transit warehouse, to the sending warehouse.

Select the transfer item (TW) transaction that you want to reverse from the Inventory Transaction History list window or card file. Select Reverse on the Maintain menu. If the transfer item (TW) transaction has an associated shipment notice (which has no other items), you are warned that the shipment will be deleted.
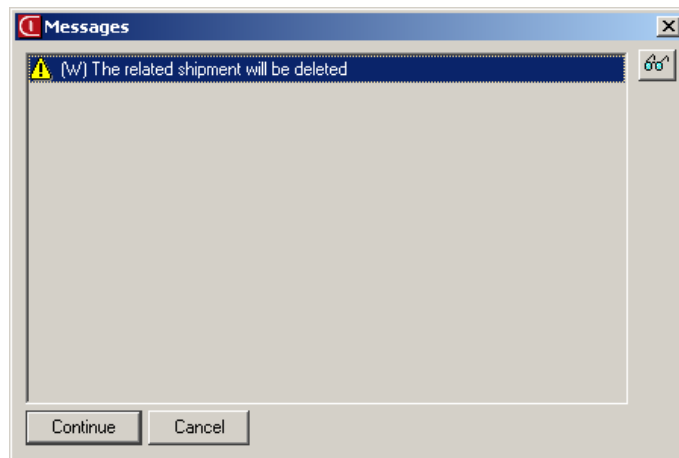
Figure 5-20. Confirm Reverse prompt

Click Continue and a Confirm prompt opens.
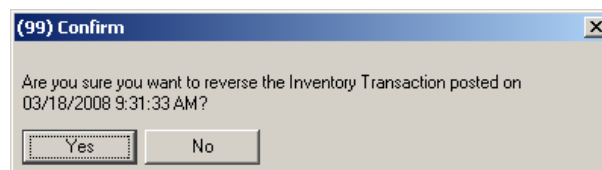
Figure 5-21. Confirm Reverse prompt

Click Yes to reverse the transaction. XA reverses the issue transferred item (IW) and receive transferred item (RW) transactions and deletes the scheduled receipt associated with the transfer. XA deletes any shipment notice or shipment container linked to this transfer provided the shipment notice or container have no other transfer items linked to them.

Chapter 6. Picking for Customer Orders

Overview

Picking, packing, and shipping are activities that process a customer order. When you complete the picking, packing, and shipping required for a customer order, the resulting shipment is ready to be invoiced.

Picking is the process of taking from stock the finished goods to be packed and shipped to a customer. Pick lists are documents that reflect the picking process. They list the items being withdrawn from stock. You can use pick lists to direct and control material picking to fulfill customer orders.

This chapter describes the picking processes between customer order entry and packing. Figure 6-1, "Overview of picking process" on page 6-2 shows the objects involved in picking.

Pick Lists. This object is used to display online all the information that is printed on a pick list. None of the attributes in Pick Lists are maintainable. Warehouse employees use the pick list as an authorization to pick materials. Shipment or packaging employees use the pick list as a statement of what was picked. The pick list might also be used to confirm shipments. Any order, line item, or blanket release not on hold is a candidate for pick list selection. However, a pick list may not be processed for an order that contains only allowances.

Pick List Items. This object is used to display online all the information that is printed on a pick list. Only the Stage location attribute for Pick List Items is maintainable.

Pick Orders. This object shows the customer orders that are on the pick list.

Pick List Ship-tos. This object shows delivery addresses for the customers for which the pick list was generated.

Pick Pack Ship Items. This object contains information about all items picked, packed, and/or shipped, plus any containers packed and/or shipped.

Pick List host report. This host report is optional. After a pick list is generated, you can print the Pick List using the Pick List host report.

Packed Containers. This object describes all the containers in a freight container. Packed containers can hold one or many items. A container can have items from any combination of orders. Containers can be packed in other containers. Packing is an optional process in which you select items to pack, define a container for the items (optional), and confirm the specific items and quantities for the container. If you use controlled warehouses, you also identify the locations from

which the items were picked. You maintain container information in Customer Order Management (COM), including maintaining the quantities in the container, and adding or deleting items before shipping.
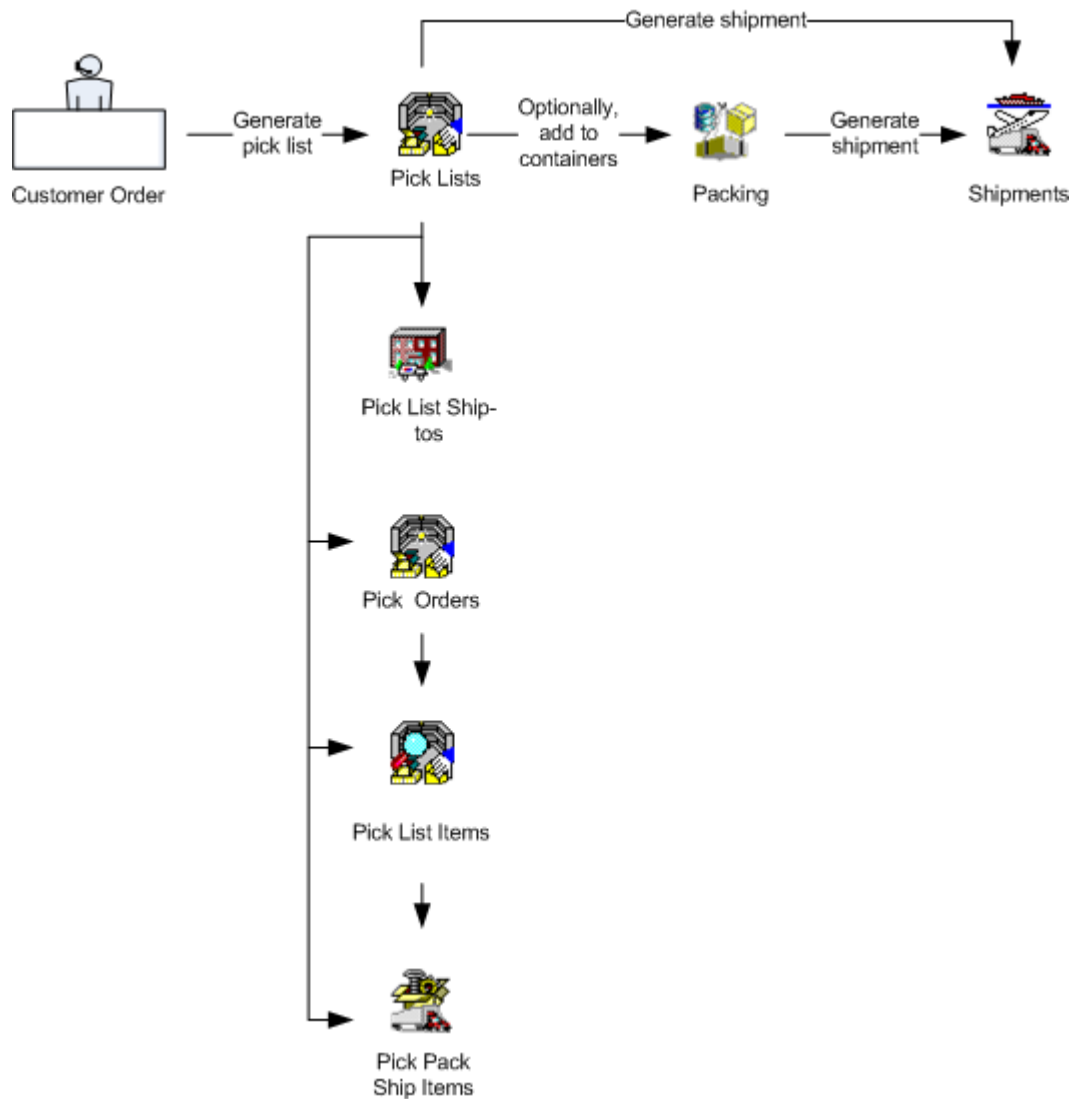
Figure 6-1. Overview of picking process

Setting pick list preferences

You can set preferences for how XA displays information in objects. Use Pick List Preferences to change the information type and way you display information when you generate, print, or delete pick lists. These choices override the default setting for Pick Lists. You can also change some pick list preferences using Customer Orders and Quotes Preferences on the End Order card - Pick List Options tab. For general information about browser preferences, see the *Infor ERP XA Browser Concepts Guide*.

From the Pick Lists list window or card file, select Preferences ... on the Customize menu. The Pick List Preferences card file opens.

Figure 6-2. Pick List Preferences card file - General card

Select (public preference) or see the following sections that describe the preferences you can apply on General card of the Pick List Preferences card file. When you have selected your preferences, click Continue.

Setting generation preferences

Select the value that you want XA to default for the following attributes on the Generate Pick List dialog and host job:

Pick Consolidation. Default the consolidation value that corresponds to how you want to ship the items. Your choices are:

Value	Use to
Default to company	Default the preferences defined in the Companies object to determine how the pick list is consolidated.
One order, one ship-to	Ship an order to one ship-to address. This value defaults One ship-to on the Generate Pick List dialog as the dialog has already selected one order.
One order, all ship-tos	Ship an order to all the ship-to addresses specified on the order. This value defaults All ship-tos on the Generate Pick List dialog as the dialog has already selected one order.
All orders, one ship-to	Ship all orders that you will send to one ship-to address. This value is only available when you use the Generate Pick List host job in the Customer Order and Quotes, C.O. Line Items, C.O. Line Item Releases, and Customer Demand objects.
All orders, one customer	Ship all orders for one customer. This value is only available when you use the Generate Pick List host job in the Customer Order and Quotes, C.O. Line Items, C.O. Line Item Releases, and Customer Demand objects.
All orders, all customers	Ship all item that require shipping. This value is only available when you use the Generate Pick List host job in the Customer Order and Quotes, C.O. Line Items, C.O. Line Item Releases, and Customer Demand objects.

Table 6-1. Pick List Preferences - General tab - Generation section - Pick Consolidation values

Pick short stock quantity. Default the value that corresponds to how you want people picking the items to handle short stock. Your choices are:

Value	Use to
Ignore short stock	Generate a regular pick list. When you select this value, you cannot maintain the Automatic pick confirm attribute.
Short stock, on-hand quantity	Generate a pick list that shows the quantity of the item that is in stock when the quantity in stock is fewer than the quantity the customer ordered. When you select this value, the Discrete allocation attribute is set to Yes and is not maintainable.
Short stock, next pick quantity	Generate a pick list that shows the quantity of the item that is ordered when the quantity in stock is fewer than the quantity the customer ordered. When you select this value, the Discrete allocation attribute is set to Yes and is not maintainable.

Table 6-2. Pick List Preferences - General tab - Generation section - Pick short stock quantity values

Automatic pick confirm. When you select the Automatic pick confirm attribute, XA generates the transactions to move the items to the staging location. XA uses this attribute only when you select Short stock, on-hand quantity or Short stock, next pick quantity for the Pick short stock quantity attribute.

Discrete Allocation. When you select the Discrete allocation attribute, XA allocates the items to the order to prevent the items from being used elsewhere. XA uses this attribute only when you select the Ignore short stock value for the Pick short stock quantity attribute.

Setting print options preferences

Select the value that you want XA to default for the following attributes on the Pick List host report, Generate Pick List dialog, and Generate Pick List host job:

Print pick list. When you select Yes, the pick list prints automatically when XA generates the pick list.

Item barcodes. When you select Yes, item numbers are printed as bar codes on the pick list.

Location barcodes. When you select Yes, item locations are printed as bar codes on the pick list.

Print kit components. When you select Yes, XA includes component items on the documents printed for any order that contains a kit item.

Space for serial numbers. When you select Yes, XA leaves space on the pick list to enter serial numbers for the items picked.

Sequence. Your options are to select Location sequence or FIFO date sequence. The value you select specifies the sequence in which the locations under the items will appear.

Location options. The value you select specifies how you want XA to select locations to print on the pick list. You can use this option only with a controlled warehouse. Your choices are:

Value	Use to
Number to fill order	Print locations with stock until enough is located to fill the order.
Number plus additional	Print locations with stock until enough is located to fill the order and Print the number of additional locations specified.
All	Print all locations.
Number plus low quantity	Print locations with stock until enough is located to fill the order and print all locations with a quantity of ten percent or less of the order amount.

Table 6-3. Pick List Preferences - General tab - Print Options section - Location options

Additional locations. The value you enter specifies the number of extra locations with stock, in addition to the locations needed to pick the order, to be printed on the pick list. Additional locations are searched in the same sequence, either location or FIFO, as the other locations. XA uses the Additional locations attribute only when you select Number plus additional location for the Location options attribute.

Print pro forma packing list. When you select Yes, XA prints a preliminary packing list when the pick list is generated. This attribute does not appear on the Generate Pick List dialog.

Setting deletion preferences

Select the value that you want XA to default for the following attribute on the Delete Pick List dialog:

Delete allocations. When you select Yes for this attribute, XA deletes allocations associated with the pick list including discrete allocations that were created for the item before it was picked. For example, discrete allocations created for an item during order entry are deleted when the pick list is deleted. If you do not select the Delete allocations attribute, the items that were on the pick list are still discretely allocated.

Changing staging locations

Staging, or pick confirmation, is a process of collecting items at a specific warehouse location (from stocking locations) for a shipment that might require extensive preparation or specialized packing for shipment. You use pick confirmation to acknowledge that you moved inventory from its stocking location to a staging location, where they are packed. Pick confirmation requires a controlled warehouse.

Pick confirmation is optional, unless you set the Ship confirmation attribute in the Company Master file to 2 - Pick confirmation required.

Staged items are collected at the default location, unless you override the staging area. You set up default staging areas at the warehouse, customer, ship-to address, order, and pick list levels; which affects all listed items in the object. For example, if you change the staging location at the order or pick levels, then all releases for that order or pick list change to the new staging area. Staging location can also be set on lower-level objects.

You can change the staging location under the following conditions:

- The pick list item is for an order,
- The item number is not blank,
- The location in the warehouse is blank,
- Pick confirmation is required,
- The pick list has not yet been picked, and
- The picked quantity is 0.

To change a staging location, select the pick list item for which you want to change the staging location, in the Pick List Items list window. Select the Change option on the Maintain menu. The Change Pick List Item card file opens showing the General card.

Figure 6-3. Change Pick List Item card file - General card

Enter the stage location and click Update.

Generating pick lists

Pick lists are documents that reflect the picking process. You generate pick lists to identify the items that warehouse employees need to remove from stock and ship-to customers. Warehouse employees use the pick list as an authorization to pick materials. Shipment or packaging employees use the pick list as a statement of what was picked. The pick list might also be used to confirm shipments. Depending on the needs of your company, inventory counters can also use the pick list as a turnaround document to report actual picks for inventory control.

Generating pick lists is optional, unless you set the Ship confirmation attribute (in the Company Master file) to 1 - Pick list required, confirmation not required or 2 - Pick confirmation required.

You can generate pick lists in the Pick Lists object using the Generate Pick List option on the Maintain menu. In Customer Service Management (CSM), you can also generate a pick list using customer orders, quotes, standing orders, and credit memos. When you generate a pick list for customers orders, you can use any customer order, customer order line item, or customer order line item release that is open and not on hold. However, a pick list may not be processed for items on credit memos that are credited to the customers account but not returned to stock or complementary orders.

The following pick consolidation values are available using the Generate Pick List option:

- Default to Company
- One-ship to
- All ship-tos.

Note: From CSM, you can generate pick lists in the Customer Order and Quotes, C.O. Line Items, or C.O. Line Item Releases objects using the Generate Pick List option on the Maintain menu or Generate Pick List host job in these objects. From OBPM, you can generate pick lists in Customer Demand using a Generate Pick List host job. When you use the Generate Pick List host job, you have more pick consolidation values and the ability to define selection criteria based on the manufacturing due date and ship date for C.O. line items and C.O. line item releases.

The following pick consolidation values are available using the Generate Pick List host job:

- Default to Company
- One order, one-ship to
- One order, all ship-tos
- All orders, one ship-to
- All orders, one customer
- All orders, all customers.

When using short stock pick lists, you can ship part of a shipment to customers when the Partial ship attribute in the Customer Master file is set to Yes, indicating the customer accepts partial shipments. This attribute works in conjunction with the Backorders attribute in the same file. Therefore, if you are set up according to the following:

Partial ship	Backorders	Result
Yes	Yes	Partial quantities are printed and updated; the remaining quantities update the pick quantity in XA.
Yes	No	Partial quantities should be printed and updated with the remaining quantities removed from the order (zero next pick quantity)
No	Yes	The release will not be printed, allocated, or updated if the full quantity cannot be allocated.
No	No	Only those items with the full quantity available will print on the stock pick list. Those with only a partial quantity available will not be backordered, but will appear on the Pick List Allocation Audit report. If enough stock becomes available, this item is then included on the next stock pick list.

Table   6-4. Using partial shipments and backorders

Generating a pick list

The following procedure assumes you want to generate a pick list for an order from one company. If you want to generate a pick list for all orders, you need to use the Generate Pick List host job available in the Customer Order and Quotes, C.O. Line Items, C.O. Line Item Releases, or Customer Demand objects.

Select Generate Pick List on the Maintain menu in Pick Lists. The Pick List dialog opens.
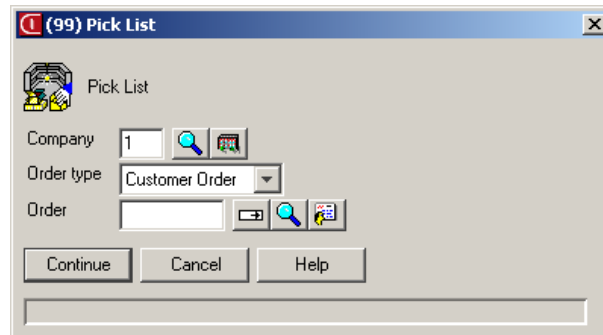
Figure 6-4. Pick List dialog

Enter or find the company, which has orders that require picking. The pick list in this example is for filling a customer order, so select Customer Order as the order type. Enter or find the order number. Click Continue.

The Generate Pick List dialog opens.
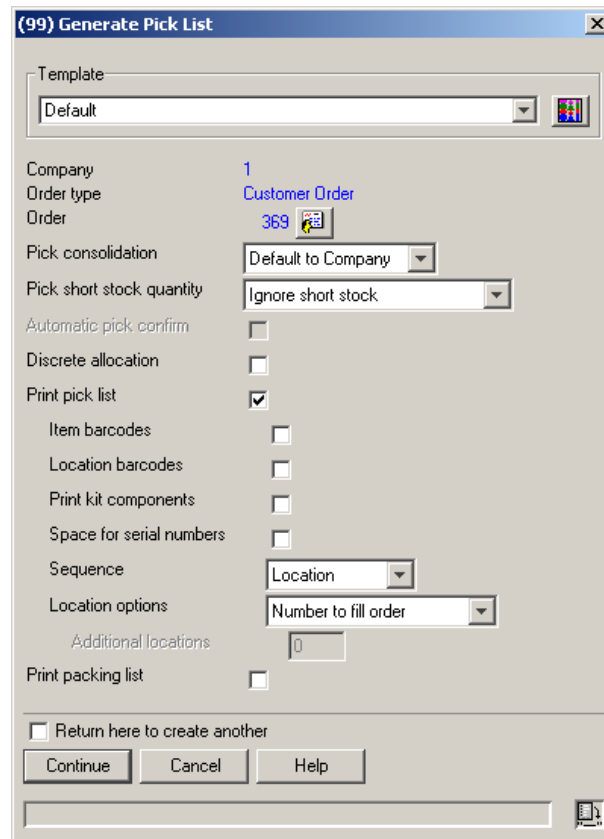
Figure 6-5. Generate Pick List dialog

On the Generate Pick List dialog select the Pick consolidation value that best suits you requirements. Select the Default to Company value to use the preferences defined in the Companies object to determine how the pick list is consolidated. Select the One ship-to value to consolidate the pick list for each ship-to address. Select the All ship-tos value to consolidate the pick list for all ship-to addresses.

Select the Pick short stock quantity value that best suits your requirements. If the item quantity on the pick list is more than the quantity of the item you have in stock, you can either print on the pick list the quantity you have in stock or print both the quantity required and the quantity in-stock.

- **Select Short stock, on-hand quantity:** When the person picking the items is instructed to pick the quantity on the pick list and not be concerned if the quantity is not quantity the customer ordered.
  When you select the Short stock, on-hand quantity, the Discrete allocation attribute is set to Yes and is not maintainable.
- **Select the Short stock, next pick quantity:** When the person picking the items is instructed to pick the in-stock quantity and if there are extra items not showing in the inventory records to also pick these items up to the required quantity.

Select the Automatic pick confirm attribute (when you select Short stock, next pick quantity or short stock, on-hand quantity) and you want XA to move the items to the staging location.

Select the Discrete allocation attribute if you selected Ignore short stock and you want to allocate the items on the pick list so that they cannot be used elsewhere.

Select the Print pick list attribute if you want XA to automatically print a pick list when you generate the pick list. If you select to print the pick list, you can specify what prints on the pick list and in what format it prints.

Select the Item barcodes attribute if you want item numbers printed as bar codes on the pick list. Deselect to print item numbers only.

Select the Location barcodes attribute if you want item locations printed as bar codes on the pick list. Deselect to print item numbers only.

Select the Print kit components attribute if you want to include component items on the documents printed for any order that contains a kit item.

Select the Space for serial numbers attribute if you want to leave space on the pick list to enter serial numbers for the items picked.

Select the value for the Sequence attribute that specifies the sequence in which the locations under the items will appear. Select either Location or FIFO date sequence.

Select the value for the Location options attribute that specifies how you want XA to select locations to print on the pick list. You can use this option only with a controlled warehouse.

- **Select Number to fill order:** To print locations with stock until enough is located to fill the order.
- **Select Number plus additional:** To print locations with stock until enough is located to fill the order and print the number of additional locations specified.
- **Select All:** to print all locations.
- **Select Number plus low quantity:** To print locations with stock until enough is located to fill the order and print all locations with a quantity of ten percent or less of the order amount.

Enter the default value for the Additional locations attribute if you selected Number plus additional and you want to specify the number of extra locations with stock, in addition to the locations needed to pick the order, to be printed on the pick list. Additional locations are searched in the same sequence, either location or FIFO, as the other locations.

Select the Print packing list attribute if you want to print a packing list when XA generates the pick list.

Click Continue. XA creates the pick list record in the Pick Lists list window, assigning it an auto-generated number.

Printing a pick list

Printing the pick list is optional unless you set the Shipment confirmation attribute (in the Company Master file) to 1 - Pick list required, confirmation not required or 2 - Pick confirmation required.

If you select Print pick list on the Generate Pick List dialog, XA automatically prints a pick list when the pick list is generated. Attributes that define what prints and how the pick list is formatted are available to you when you select the Print pick list attribute.

You can print a pick list using the Pick List host report. After the pick list has been printed, you can reprint the pick list only if the Pick list status is 0 - Unpicked and the pick list is not a Kit component pick list.

The following procedure assumes you want to print a pick list after it is generated. Select the pick list in the Pick Lists list window. Select Host Print ... on the File menu. The Pick List Host Reports window opens. Select the Pick List tab.
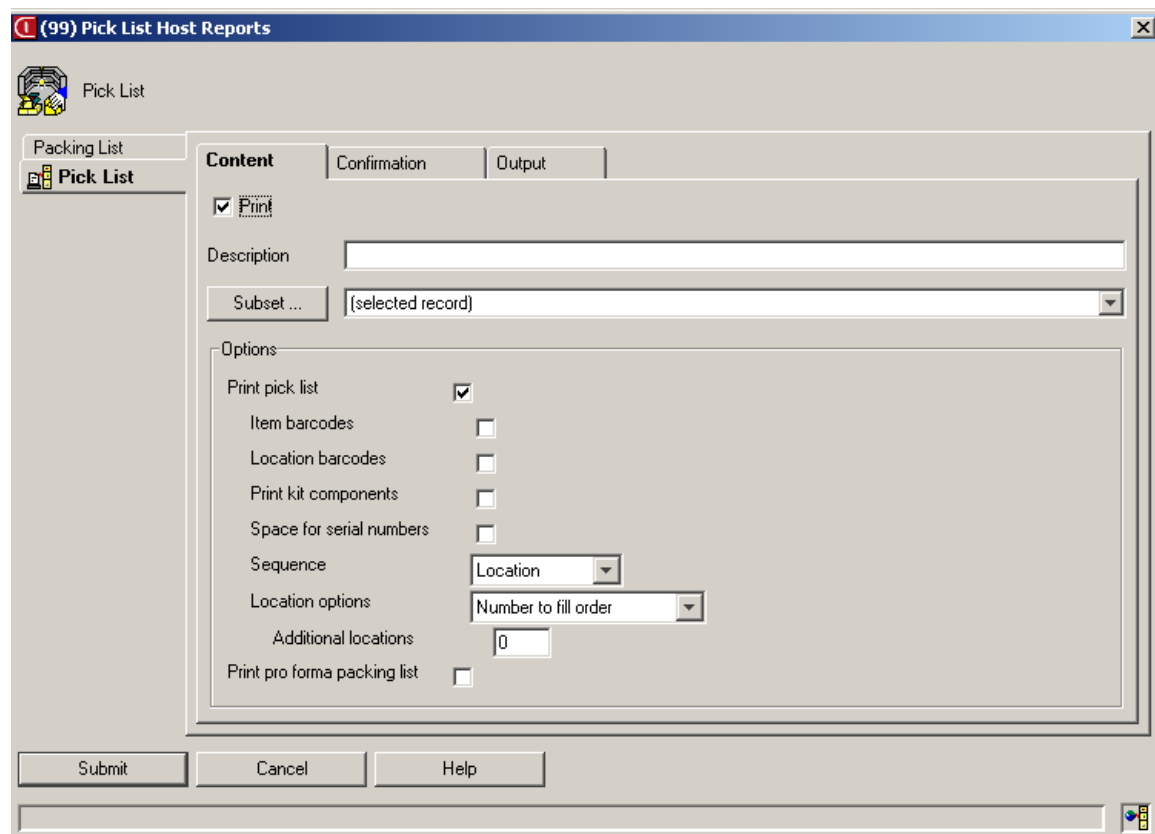
Figure 6-6. Pick List Host Reports window - Pick List tab

Select the following attributes to define the Pick List report.

Select the Print pick list attribute if you want XA to automatically print a pick list when you generate the pick list. If you select to print the pick list, you can specify what prints on the pick list and in what format it prints.

Select the Item barcodes attribute if you want item numbers printed as bar codes on the pick list. Deselect to print item numbers only.

Select the Location barcodes attribute if you want item locations printed as bar codes on the pick list. Deselect to print item numbers only.

Select the Print kit components attribute if you want to include component items on the documents printed for any order that contains a kit item.

Select the Space for serial numbers attribute if you want to leave space on the pick list to enter serial numbers for the items picked.

Select the value for the Sequence attribute that specifies the sequence in which the locations under the items will appear. Select either Location or FIFO date sequence.

Select the value for the Location options attribute that specifies how you want XA to select locations to print on the pick list. You can use this option only with a controlled warehouse.

- **Select Number to fill order:** To print locations with stock until enough is located to fill the order.
- **Select Number plus additional:** To print locations with stock until enough is located to fill the order and print the number of additional locations specified.
- **Select All:** To print all locations.
- **Select Number plus low quantity:** To print locations with stock until enough is located to fill the order and print all locations with a quantity of ten percent or less of the order amount.

Enter the default value for the Additional locations attribute if you selected Number plus additional and you want to specify the number of extra locations with stock, in addition to the locations needed to pick the order, to be printed on the pick list. Additional locations are searched in the same sequence, either location or FIFO, as the other locations.

Select the Print pro forma packing list attribute if you want to print a preliminary packing list when the pick list is generated.

Click Submit to print the Pick List report.

Deleting pick lists

You can delete a pick list before packing or shipping activity has started for items on the pick list. After packing or shipping activity occurs for the pick list, the pick list remains as a record in XA of what was picked. Residual pick lists are not deleted.

You cannot delete a kit component pick list by selecting the kit component pick list record. If you need to delete a kit component pick list, then you must select the pick list that contains the kit parent item for the kit component. When you delete the kit parent item for the kit component, XA removes the kit component pick list. Kit component pick lists are found in the Pick Lists list window, below the pick list that contains their kit parent.

You can remove pick list items from a pick list when:

- The status of the pick list is not closed,
- The pick list item is not a kit component,
- There has been no activity on the pick list item, and
- There has been no pick confirmation activity for the pick list item.

To delete a pick list, select the pick list in the Pick Lists list window and select Delete on the Maintain menu. The Delete Pick List dialog opens.
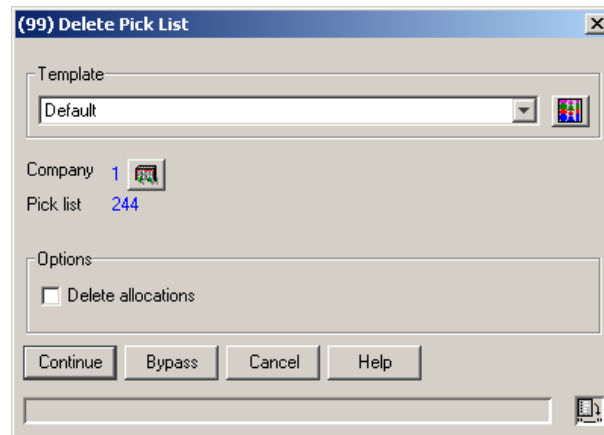
Figure 6-7. Delete Pick List dialog

If you want to delete any discrete allocations associated with the pick list, select the attribute, Delete allocations, in the Options section of the Delete Pick List dialog. When you select this attribute, XA deletes allocations associated with the pick list including discrete allocations that were created for the item before it was picked. For example, discrete allocations created for an item during order entry are deleted when the pick list is deleted. If you do not select the Delete allocations attribute, the items that were on the pick list are still discretely allocated.

Click Continue to delete the pick list.

Chapter 7. Shipping for Customer Orders

Overview

Picking, packing, and shipping are activities that process a customer order. When you complete the picking, packing, and shipping required for a customer order, the resulting shipment is ready to be invoiced. This chapter describes the shipping processes between picking or packing and invoicing. Shipping is the process of sending goods to the customers.

Figure 7-1, "Overview of shipping process" on page 7-2 shows that you can generate shipments in Pick Lists and Pick Pack Ship Items and the objects involved in shipping.

Pick Lists. This object is used to display online all the information that is printed on a pick list. You can generate shipments using pick lists.

Pick Pack Ship Items. This object contains information about all items picked, packed, and/or shipped, plus any containers packed and/or shipped. You can generate shipments using pick pack ship items.

Shipments. This object describes the shipment. One shipment can contain individual items, as well as packed containers. A consolidated shipment can contain multiple orders and ship-to IDs for multiple customers.

With consolidated shipping, you can include one item of a customer order and not include the other items in a shipment. The line items that are not released are available for shipping (or packing) but are not backordered.

Order Shipments. This object describes groups of items shipped at the same time from the same warehouse on the same customer order. A collection of order shipments creates a consolidated shipment. For shipments that are not consolidated, the order shipment contains the same information as the shipment. You use the Order Shipments object to view a list of the shipments created to fulfill the customer order, the date of the shipments, and the addressees to whom the shipments were sent.

Shipped Items. This object contains detailed information about the items that your company has shipped.
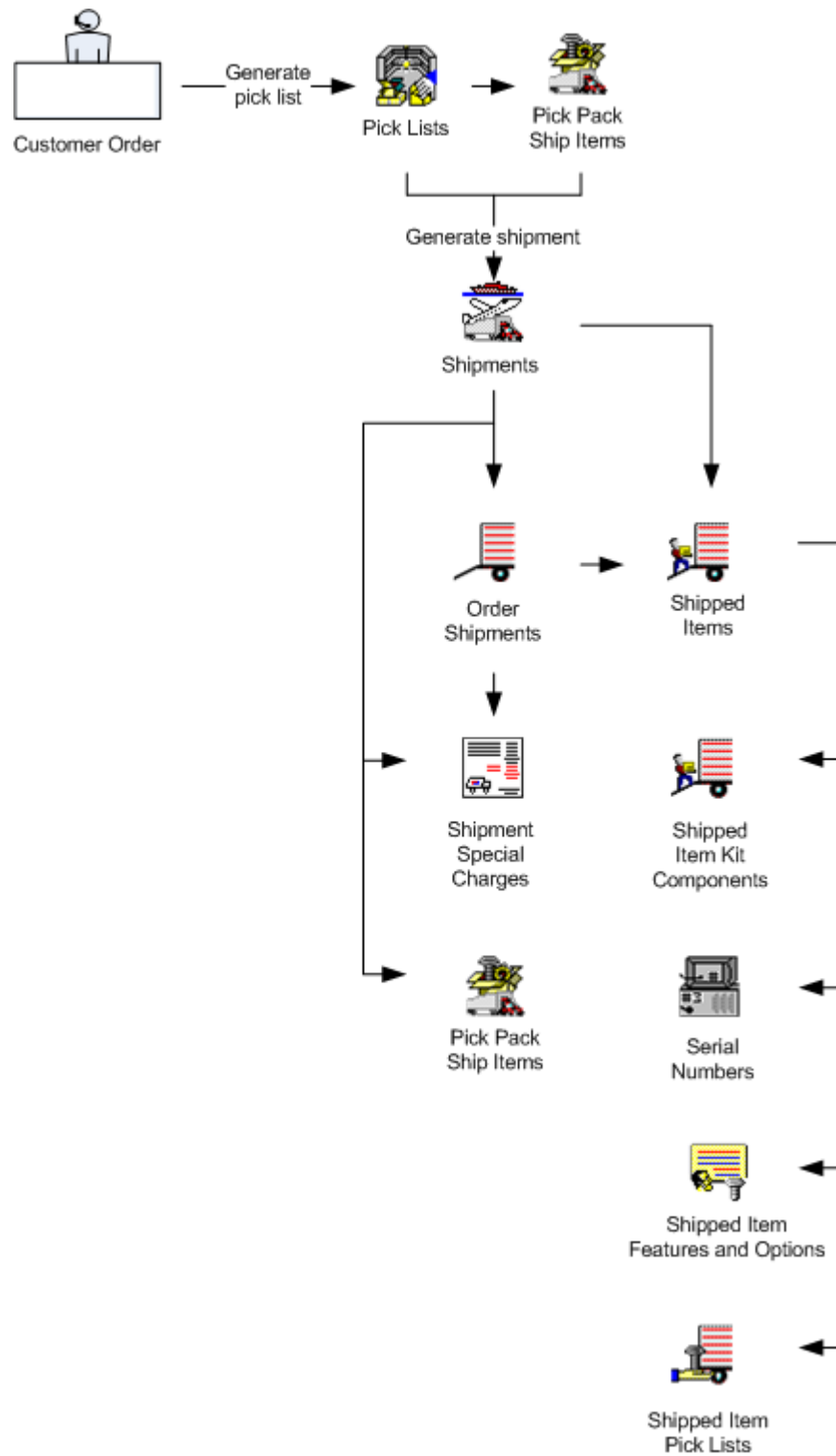
Figure 7-1. Overview of shipping process

Shipped Item Kit Components. For a shipped item that is a kit, the Shipped Item Kit Components object shows the component items that are in the kit. These component items are the items that are shipped when the customer ordered the kit parent item.

Shipment Special Charges. This object contains information about the special charges associated with a shipment, such as the type of charge and its description, amount, cost, and terms discount.

Special charges can be applied to the shipment after the shipment is generated and charges can be prorated across many orders according to either equal division, value, weight, or volume.

Serial Numbers. This object contains information about serial number assigned to each unit of the component that was shipped.

Shipped Item Features and Options. This object shows a list of the features and options selected for a shipped item, based on the s-number entered for the item on the customer order. The s-number indicates the configuration of features and options that apply to the item.

Shipped Item Pick Lists. This object shows the pick lists used to pick the shipped item. You use this object to connect the shipped item information to the pick list item information.

From Shipments and Order Shipments, you can generate invoices and print pro forma invoices. For more information about generating and printing invoices, see the *Customer Service Management Concepts Guide*.

Generating shipments

The Generate Shipment option or host job generates the issue sales item (SA) transaction automatically during the shipment confirmation process. If the item you are shipping is a kit, XA creates an individual issue sales item (SA) transaction for each component in the kit. This transaction is also used to update period sales information used by Material Requirements Planning (MRP) and Master Production Schedule Planning (MPSP).

From Pick Lists or Pick Pack Ship Items, you can generate shipments using a Generate Shipment host job or Maintain menu option.

From Customer Service Management (CSM), you can generate shipments using the Generate Shipment host job in Customer Order and Quotes, C.O. Line Items, or C.O. Line Item Releases and the Generate Shipment option on the Maintain menu in Customer Order and Quotes.

Note: When you use the Generate Shipment host job in Customer Order and Quotes or C.O. Line Items, you can define selection criteria based on the manufacturing due date and ship date for customer order line items and customer order line item releases.

To use a pick list to generate a shipment, the pick list must:

- Not be a kit pick list,
- Have at least one pick list item that is ready to be shipped, but is not in a container or another shipment,
- Not be an InterSite Logistics (ISL) pick list or have any pick list items whose associated order is an ISL order,
- Not have an associated customer order, line item, or line item release that is on hold, and
- Pick confirmation has taken place, if required.

To use a pick pack ship item to generate a shipment, the pick pack ship item must:

- Not be in a container or shipment,
- Contain at least one item, and
- Not have an associated customer order, line item, or line item release that is on hold.

Generating a shipment

The following procedure assumes you want to generate a shipment using the Generate Shipment host job in Pick Lists. The Generate Shipment host job is also available in Pick Pack Ship Items and the Generate Shipment option is available on the Maintain menu of Pick Lists and Pick Pack Ship Items. The options on these dialogs and host job windows are the same.

From the Pick Lists list window, use the Available to ship subset to display list of pick lists that are eligible to ship. Select the pick list(s) for which you want to generate a shipment. Select Host Jobs ... on the File menu and the Pick List Host Jobs window opens.
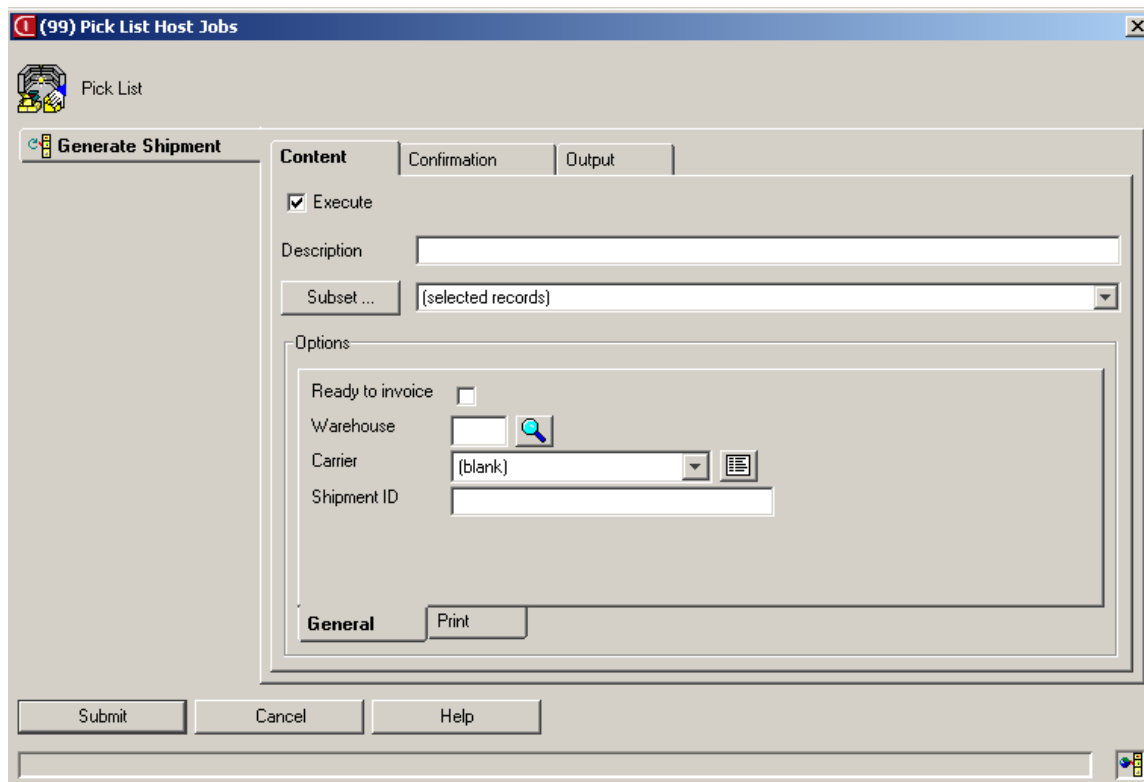
Figure 7-2. Pick List Host Jobs window - Generate Shipment tab - General tab

Select the Ready to invoice attribute, if you want XA to invoice the shipment automatically when the shipment is created without errors. The Carrier attribute must be an existing carrier and can default from the customer order. You use the Shipment ID attribute to reference the shipment.

If you want to generate shipping documents, select the Print tab on the Options section of the Generate Shipment tab.

The print options for the shipment display.
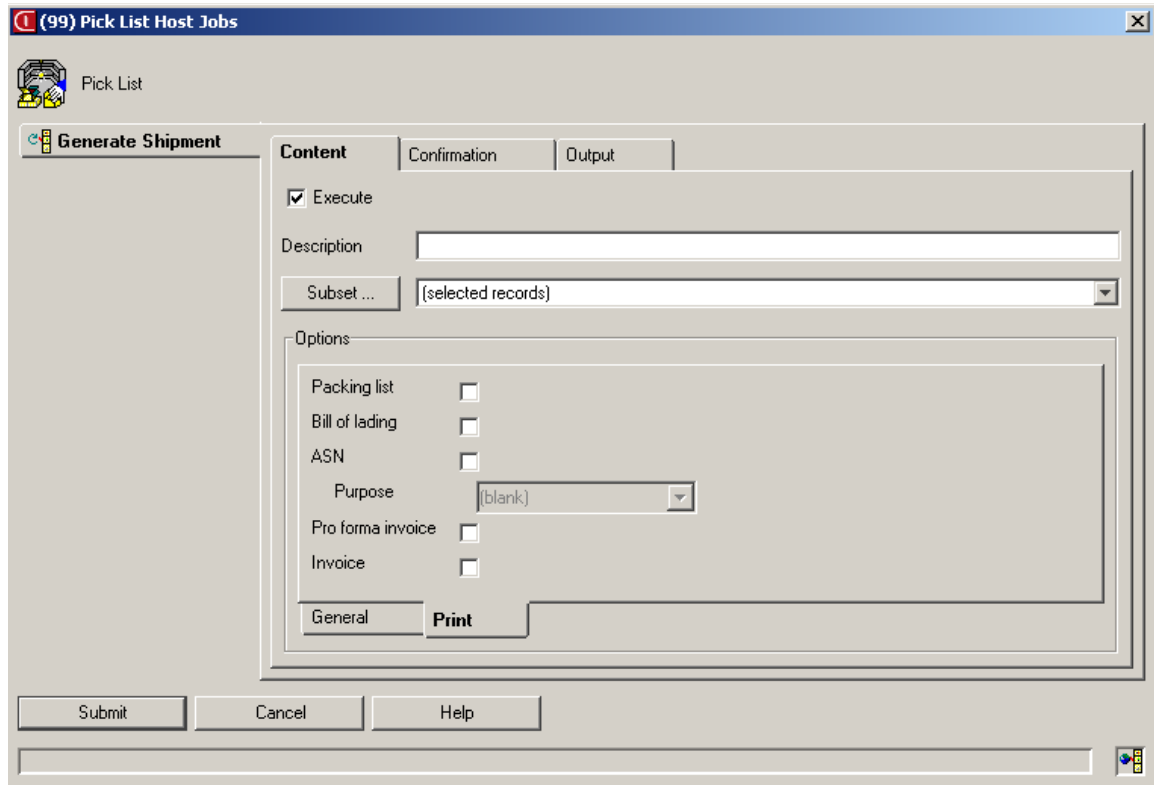
Figure 7-3. Pick List Host Jobs window - Generate Shipment tab - Print tab

You can select the documents that you want to print when XA generates the shipment. The ASN and Invoice documents cannot be printed unless you select the Ready to invoice attribute. You only use the Purpose attribute when you have selected to print the ASN. Electronic Commerce (EC) must be installed to send ASNs.

Click Submit. A Confirmation prompt opens.
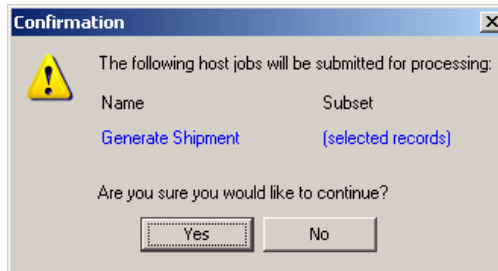
Figure 7-4. Confirmation Generate Shipment prompt

Click Yes, and XA generates the shipment and prints the documents you selected.

Maintaining shipments

After the shipment is generated, you can assign serial numbers to the shipped items, create special charges, and change the attribute, Ready to invoice, for the shipment.

Assigning serial numbers

You assign serial numbers to items when you use serial numbers to record when shipped items have left the warehouse. You assign serial numbers after you generate the shipment and before the items ship. You cannot assign serial numbers to shipped items that already have a serial numbers. You generate serial numbers in the Shipped Items and Serial Numbers objects.

This following procedure assumes you want to create serial numbers in Shipped Items. From the Shipped Items list window, select the shipped item for which you want to create serial numbers. Select Generate Serial Numbers on the Maintain menu. The Generate Serial Numbers dialog opens.

Figure 7-5. Generate Serial Numbers dialog

On this dialog, enter information for the Number to generate and Warranty start date attributes. If you select Use system assigned serial numbers, you do not specify the Starting serial number or Increment attributes as XA provides the serial numbers. Enter the first serial number and the increment information when you do not want XA to determine the serial numbers.

Click Continue. XA creates the serial numbers you specified.

Creating special charges for a shipment

Special charges for a shipment are the charges that apply to the cost of shipping the item to the customer. If you do not know the amount of the charge at the time the order is created, you can add the charge during the shipping process.

When shipping charges apply to two or more orders, you can prorate the charge across orders. The Prorate attribute allows you to specify how the shipment special charge is to be divided: equal division, value, weight, or volume.

You can view special charges for a shipment in Shipments by either selecting the Shipment Special Charges option on the Display menu or by viewing the Special Charges card in the Shipment card file.

When you maintain a shipment special charge, the previously prorated records are removed and generated again. After invoicing, you cannot maintain the shipment special charges.

This example assumes you want to create special charges for a shipment. From the Shipments list window, select the shipment for which you want to create a special charge. Select the Shipment Special Charges option on the Display menu. On the Shipment Special Charges list window, select Create on the Maintain menu. The Create Shipment Special Charge dialog opens. Select the Special Charge template.

Figure 7-6. Create Special Charges dialog - Special charge template

Select the type of special charge that you are creating:

- **Comment, no cost:** Your company incurs no cost or expense and the customer is not billed.
- **Freight, no cost:** Your company incurs no cost, but bills the customer for freight charges.

- **Charge, no cost:** Your company incurs no cost, but bills the customer for charges (not related to freight). Examples are early delivery, multiple ship-to addresses, and special packaging.
- **Charge with cost:** Your company incurs costs and bills the customer for charges and costs.

Enter the description and amount charged to customers for the service or item associated with the special charge. Enter the cost to your company.

Select the prorate option that applies. You can prorate the charge among shipments based on equal division, value, weight, or volume of the shipments.

Select or deselect the Terms discount attribute and enter the tax information, as required.

If you want to change information or to add comments to the special charge, select Preview before create then select Create. The Create Shipment Special Charge card file opens.

Figure 7-7. Create Shipment Special Charge card file - Comments card

Review and enter information on the General card, as required.

Select the Comments card.
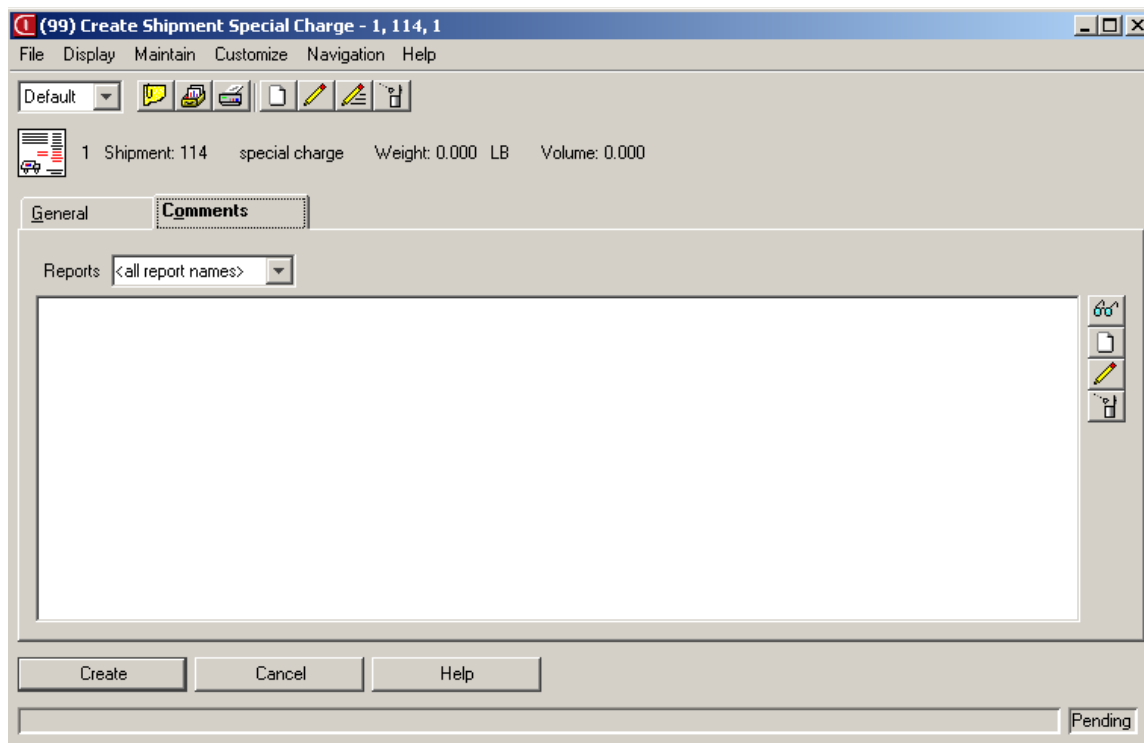
Figure 7-8. Create Shipment Special Charge card file - Comments card

Add text by clicking the Create button and entering a Comment user reference and Description. Select the number of lines for text line print control. Position the cursor in the text area and type the new text. Click Create.

Change existing text by clicking the Change button. On the Change Shipment Comment card, select the Comment card. Type over the text and when you have finished making changes, click Update.

Delete text by selecting the text you want to delete and then clicking the Delete button. The Delete Shipment Special Charge Comment prompt opens. Click Delete.

When you have finished updating the special charge and comments, click Create.

A Please Confirm prompt opens showing the changes you made to the special charge, if you created comments for the special charge.
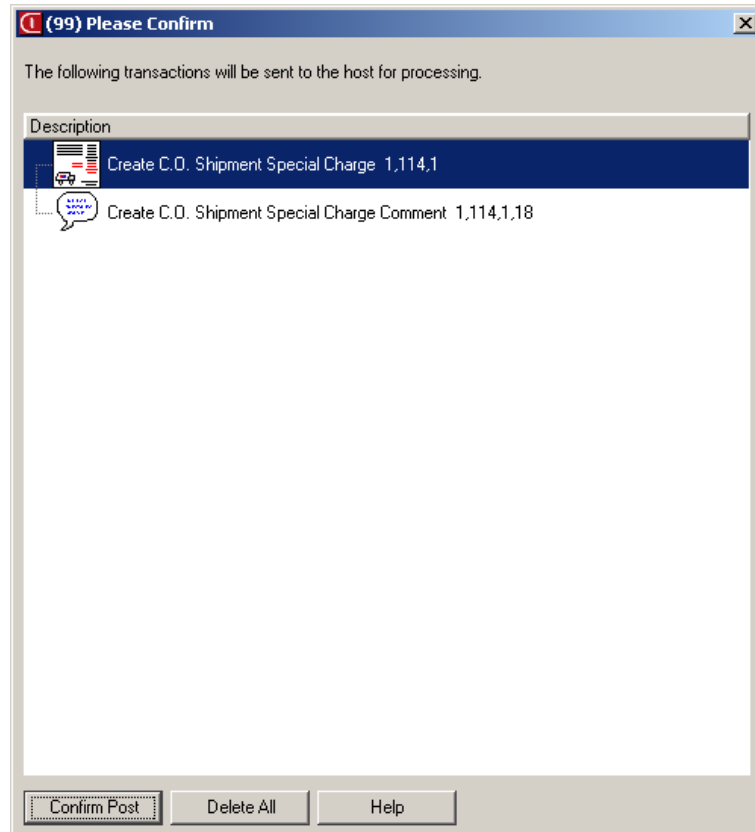
Figure 7-9. Please Confirm Create Shipment Special Charge prompt

Click Confirm Post to confirm the changes.

Generating invoices at shipment

The last step in processing a customer order is to invoice the customer. Generally, you invoice the customer after you have shipped the order. However, if the shipment is generated with no errors, you can choose to invoice when you ship.

The attribute that determines whether XA generates the invoice at shipping is the Ready to invoice attribute found on the Generate Shipment host job or Maintain menu option. However, if you are not generating the shipment but want to maintain this attribute, you can use the Enable Invoice and Disable Invoice options. When you use:

- **Enable Invoice:** The Shipment status must be 00 - Incomplete and no shipped items can have a Credit memo attribute set to R - Return to inventory. The Enable invoice sets the Shipment status to 20 - Shipped, ready to invoice.
- **Disable Invoice:** The Shipment status must be 20 - Shipped, ready to invoice and no shipped items can have a Credit memo attribute set to R - Return to inventory.

Setting the invoice to generate

You can use the Enable Invoice option on the Shipments list window. The following example assumes you want to set a shipment to invoice automatically at shipping. Select the shipment in the Shipments list window. Select Enable Invoice on the Maintain menu. A Confirm prompt opens.
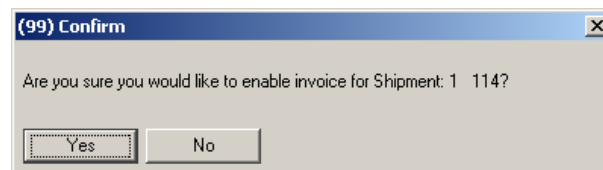
Figure 7-10. Confirm Enable Invoice prompt

Click Yes to change the Shipment status from 00 - Incomplete to 20 - Shipped, ready to invoice.

Setting the invoice not to generate

You can use the Disable Invoice option on the Shipments list window. The following example assumes you want to set a shipment not to invoice automatically at shipping. Select the shipment in the Shipments list window. Select Disable Invoice on the Maintain menu. A Confirm prompt opens.
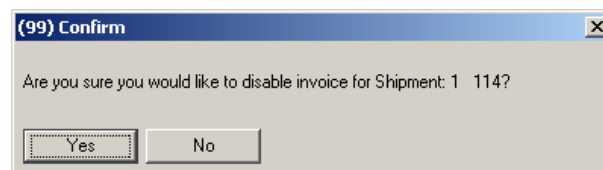
Figure 7-11. Confirm Disable Invoice prompt

Click Yes to change the Shipment status from 20 - Shipped, ready to invoice to 00 - Incomplete.

Printing shipping documents

You can print packing lists, bills of lading, pro forma invoices, and send ASNs when generating a shipment. For more information about generating shipments, see "Generating shipments" on page 7-4. You can also print or send these documents after generating the shipment. The following section describes printing and sending shipping documents after the shipment has been generated.

Printing a Bill of Lading report

You can use the bill of lading as an alternate shipping identifier. It is a contract and receipt for items the carrier is transporting. The bill of lading is sometimes used as the basis for filing freight claims if the shipment is damaged or lost.

To print a Bill of Lading report, the Shipment status must be 00 - Incomplete or 20 - Shipped, ready to invoice and the shipment must be eligible for shipping.

The following procedure assumes you want to print a bill of lading using the Bill of Lading host report. From the Shipments list window, select the shipment for which you want to print a bill of lading. Select Host Print ... on the File menu. The Shipment Host Reports window opens. Select the Bill of Lading tab and then select Print.
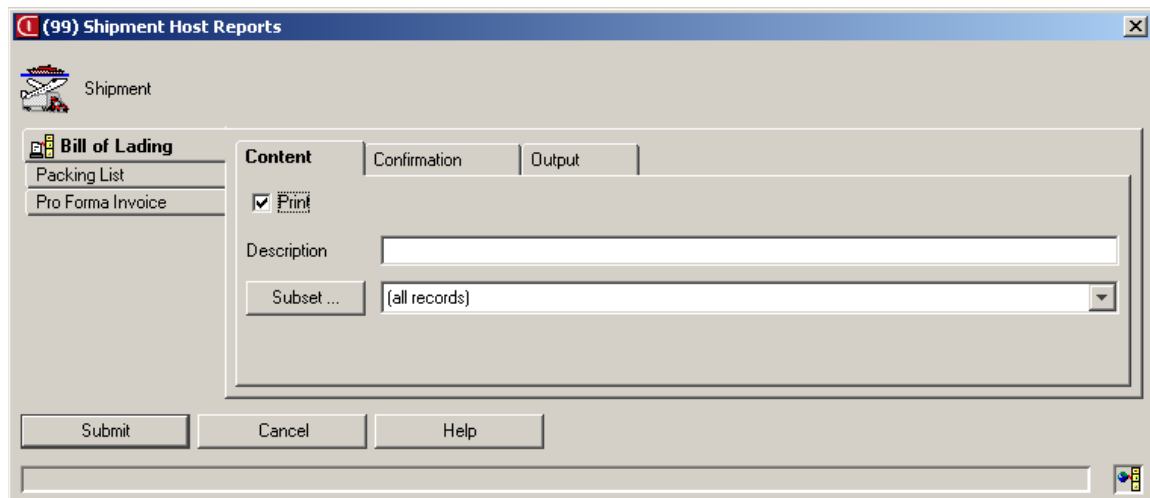
Figure 7-12. Shipment Host Reports window - Bill of Lading tab

Select the options that make the report useful to you. Click Submit to print the report.

Printing a Packing List report

The Packing List report prints items shipping in a container or as part of a shipment. The list is divided by ship-to address and orders for that ship-to. If you add an address for a container, this address is printed as the top cover sheet for the packing list.

For packing lists printed at the shipment level, items assigned to containers print before items in the shipment that are not in containers. The packing list does not indicate which container an item is packed in, only that it is packed in a container.

To print a Packing List report, the Shipment status must be 00 - Incomplete or 20 - Shipped, ready to invoice and the shipment must be eligible for shipping.

The following procedure assumes you want to print a packing list using the Packing List host report. From the Shipments list window, select the shipment for which you want to print a packing list. Select Host Print ... on the File menu. The Shipment Host Reports window opens. Select the Packing List tab and then select Print.
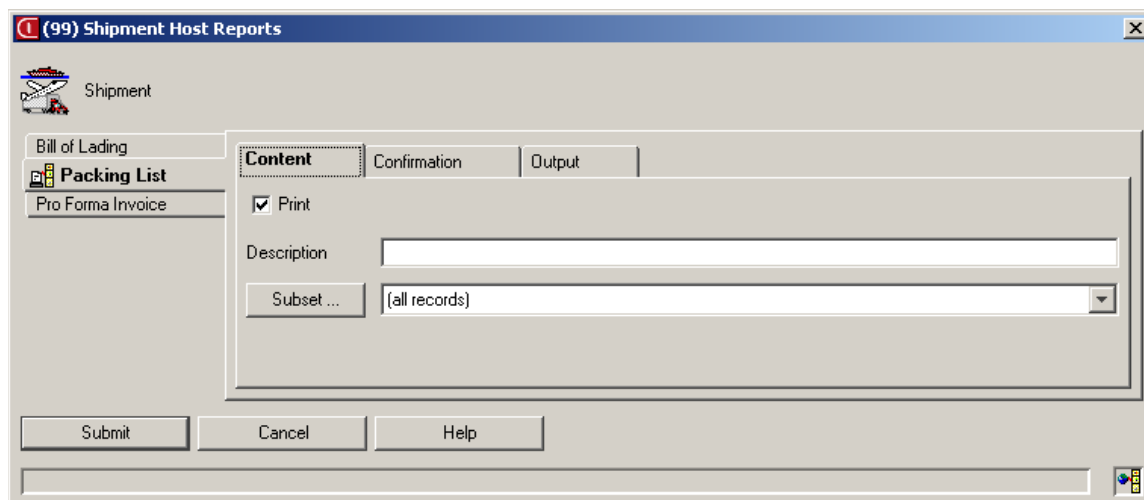
Figure 7-13. Shipment Host Reports window - Packing List tab

Select the options that make the report useful to you. Click Submit to print the report.

Printing a Pro Forma Invoice report

A shipment is a collection of order shipments, so selecting the shipment to print a Pro Forma Invoice report processes the order shipments.

A Shipment can only be selected for Pro forma invoice(s) if the consolidated shipment has a Shipment status of 20 - Shipped, ready to invoice or 30 - Special charge only.

The following procedure assumes you want to print a pro forma invoice using the Pro Forma Invoice host report. From the Shipments list window, select the shipment for which you want to print a pro forma invoice. Select Host Print ... on the File menu. The Shipment Host Reports window opens. Select the Pro Forma Invoice tab and then select Print.
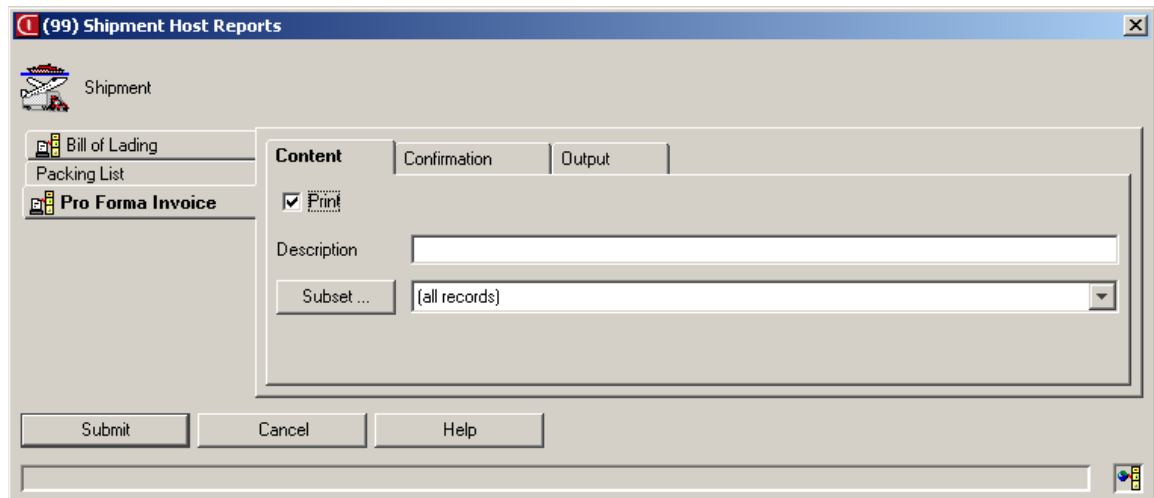
Figure 7-14. Shipment Host Reports window - Pro Forma Invoice tab

Select the options that make the report useful to you. Click Submit to print the report.

Sending an Advanced Ship Notice

An ASN is an electronic notification of shipping details that you send to your customers before you send the shipment. ASNs provide the customer with information about the shipment, including the scheduled arrival date and items in the shipment.

To send ASNs, you must have EC installed and have authorization to send ASNs for customer orders.

The following procedure assumes you want to send an ASN using the Send ASN option. From the Shipments list window, select the shipment for which you want to send an ASN. Select Send ASN on the Maintain menu and the Send ASN dialog opens.
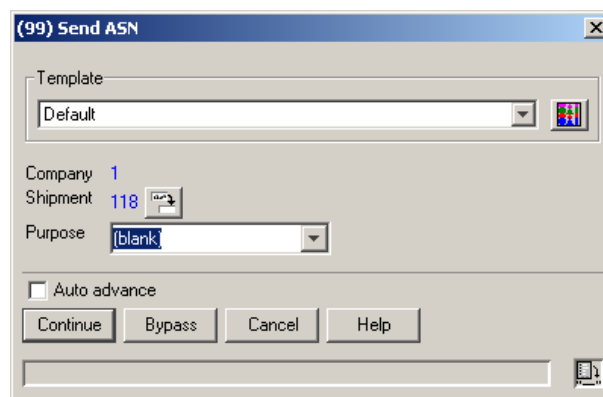
Figure 7-15. Send ASN dialog

Select the purpose for the ASN from the drop-down list. Click Continue to send the ASN.

Deleting shipments

You can only delete a shipment when:

- The Shipment status is 00 - Incomplete or 20 - Shipped, ready to invoice, and
- No related C.O. Line Item Releases:
    - Appear on a shipment, which is not invoiced and is created after the one in question, or
    - Have the Picking complete attribute set to 50 - Complete.

You can only delete a shipped item when the C.O. line item associated with the shipment item does not appear on an shipment, which is not invoice and is created after this shipped item.

To delete a shipment, select the shipment on the Shipments list window and select Delete on the Maintain menu. A Confirm prompt opens.

(99) Confirm

Are you sure you would like to delete Shipment: 1 118

Yes   No
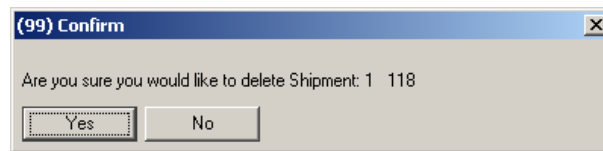
Confirm Delete Shipment prompt

Click Yes to delete the shipment.

Appendix A. Summary of MM Transactions

This appendix outlines the rules that apply when you use inventory transactions on non-inventory items and provides you with a summary of inventory transactions used in Materials Management (MM). See the relevant chapter in MM to see how transactions are used in managing inventory.

Non-inventory items

Items can be inventory items, non-inventory items, or unstocked items. Inventory items are defined in the Item Master, Item Warehouse, and (optionally) Location Quantity files. Inventory items can be allocated to manufacturing orders. In contrast, non-inventory items are miscellaneous and service items that are defined in the Item Master, but are not necessarily defined in the Item Warehouse or Location Quantity files. Non-inventory items cannot be allocated to a manufacturing order. Unstocked items are kits and no inventory transactions are processed for kits. In the Item Master File, inventory items have an inventory code of 1, non-inventory items have an inventory code of 2 or 3, and unstocked items have an inventory code of 4.

Non-inventory items are never:

- Bill of material parents
- Bill of material components
- Part of a manufacturing order (MO)
- Schedule parent items
- Schedule components
- Batch/lot controlled
- Quality controlled (QC)
- Designated inspect on receipt (IOR)
- Discretely allocated.

Non-inventory items that do not have an item warehouse record will not appear in:

- Inventory stock status reports,
- Inventory counting processing, and
- The General Ledger Interface (GLI) (in most cases).

Non-inventory items do not require an item warehouse record. When there is no item warehouse record, there is no item balance record and the cost of the item is not recorded. This has implications for the transactions you want to use with non-inventory items.

Transactions and non-inventory items

In general, transactions for non-inventory items still require a warehouse even when an item warehouse record does not exist. If you do not enter a warehouse in a transaction for a non-inventory item and there is a default planning warehouse for the item, it is defaulted. If the item does not have a default warehouse, then the value 1 is defaulted. In interactive processing, the default value is displayed dynamically on the dialog when the warehouse is not entered. You can override this value, if you wish. The warehouse (entered or defaulted) must be a valid warehouse.

Non-inventory item transactions in a controlled warehouse require a location. The transaction updates the item location, whether or not the item warehouse exists. Purchase order related transactions that have no item warehouse record do not require a location. If you enter a location for a purchase transaction where no item warehouse exists, XA issues a warning message.

For transactions where no item warehouse exists, the previous quantity on-hand and new quantity on-hand in Transaction history are both 0. If an item warehouse does exist, it is updated by the transaction.

Transactions dealing with cost adjustment can be used with non-inventory items only if the item has an item warehouse record.

Transactions dealing with manufacturing orders, manufacturing schedules, quality control, or batch lot number change are not allowed for non-inventory items.

Records are written to the GLI, for non-inventory items, whenever the:

- Interface code for the transaction is 1/ yes,
- Item warehouse is present (in most cases), and
- The transaction has a cost amount.

You prevent XA writing data to the GLI by creating separate rules, in the GLI, for non-inventory transactions that you know will update the GLI.

Table A-1 lists the transactions that send data to the GLI when the transaction interface code is on, an item balance exists, and the transaction has a cost amount. Table A-1 also shows any other requirements and updates.

Does transaction	Work with non-inventory items?	Require an item warehouse?	Require an item warehouse to create record in GLI?	Require an item location in controlled warehouse?	Provide a warehouse location warning?
Issue item (IS)	Yes	No	Yes	Yes	Yes, when location is not entered.
Issue sales item (SA)	Yes	No	Yes	No	Yes, when location is not entered.
Issue transferred item (IW)	Yes	No	Yes	Yes	yes, when location is not entered.
Receive item (RC)	Yes	No	Yes	Yes	Yes, when location is entered.
Receive purchased item to dock (RD)	Yes	No	No	N/A	N/A
Receive purchased item to inspection (RI)	Yes	No	No	Not allowed as not IOR.	N/A
Receive purchased item to stock (RP)	Yes	No	Yes	No	
Receive transfer (RT)	Yes	No	Yes		
Receive transferred item (RW)	Yes	No	Yes	Yes	
Return purchased item (VR)	Yes	No	Yes [a]	Yes, if return from inventory. No, if return from dock.	
Transfer item (TW)	Yes	No	Yes		

Table A-1. Transactions that can be used with non-inventory items

a. Item is returned from inventory

LIFO/FIFO transaction save records are written to LIFITR for non-inventory transactions only when an item warehouse is present and the transaction has a cost amount.

Inventory transactions

The following sections provide a summary of each the inventory transactions available in MM.

Issue item (IS)

The issue item (IS) transaction issues an item, not associated with a production or sales order. Examples are lubricants or uncontrolled floor stock. In IM, this transaction is called a miscellaneous issue (IS).

This transaction is not associated with any type of order, and does not update any order or allocation quantities.

Do not use this transaction when transferring items to other warehouses or locations. Use the transfer item (TW) transaction for all transfers.

The issue item (IS) transaction is available on the Maintain menu in Inventory Transaction History. Select Issue Item (IS) and the Issue Item (IS) dialog opens.

Figure A-1. Issue Item (IS) dialog

You cannot use an issue item (IS) transaction when the warehouse location type is in-transit, the item location is linked to one or more open transfer scheduled receipts, and the issue item (IS) transaction will cause the item location to be negative when the scheduled receipts are received at the receiving warehouse.

You can enter an issue item (IS) transaction using a negative quantity and you can copy or reverse this transaction in Inventory Transaction History.

Issue sales item (SA)

The issue sales item (SA) transaction issues an item to a customer sales order. In IM, this transaction is called a sales shipment (SA).

This transaction updates sales information used by other XA applications.

Do not enter this transaction in Inventory Transaction History to ship an XA customer order. Instead, use:

- The Generate Shipment option in Pick Lists, Pick Pack Ship Items, or Customer Order and Quotes; or
- The Generate Shipment host job in Pick Lists, Pick Pack Ship Items, Customer Order and Quotes, Customer Order Line Items, or Customer Order Line Item Releases objects.

Both options automatically generate an issue sales item (SA) transaction while updating the XA order shipment information.

The issue sales item (SA) transaction is also available on the Maintain menu in Inventory Transaction History. Select Issue Sales Item (SA) and the Issue Sales Item (SA) dialog opens.

Figure A-2. Issue Sales Item (SA) dialog

You cannot use an issue sales item (SA) transaction when the warehouse location type is in-transit, the item location is linked to one or more open transfer scheduled receipts, and the issue sales item (SA) transaction will cause the item location to be negative when the scheduled receipts are received at the receiving warehouse.

If the item has a quantity of zero in the specified location and the application is tailored to allow locations to go negative once or always, a new location record is created in the SLQNTY file during batch update.

The issue sales item (SA) transaction updates the Item Sales file if the SA application is installed and interfacing, unless the item is not a sales analysis item.

You can enter an issue sales item (SA) transaction using a negative quantity. When you return an item is returned (through a negative transaction) and the item requires inspection on receipt, the QC status is set to waiting and the quantity on-hand is not updated.

You can copy or reverse this transaction in Inventory Transaction History.

Issue transferred item (IW)

The issue transferred item (IW) transaction issues an item as part of transferring it to another warehouse or location. In IM, this transaction is called an interwarehouse issue (IW).

XA generates this transaction when you generate a transfer item (TW) transaction. XA also generates this transaction when XA generates a receive transfer (RT) transaction because you used a Receive Complete option to receive transferred items in shipments and shipment containers or a Receive option to receive transfer scheduled receipts or shipment container items. The items are issued from the in-transit warehouse. For more information about these processes, see "Transferring Inventory" on page 5-1.

The issue transferred item (IW) transaction decreases the item warehouse on-hand quantity, unless the item you are transferring is waiting manufacturing or purchasing receiving inspection, in which case it is not included in the item warehouse on-hand.

You cannot copy or reverse this transaction individually in Inventory Transaction History. However, you can copy some transfer item (TW) transactions, and reverse some transfer item (TW) transactions and receive transfer (RT) transactions, and doing so generates this transaction as part of the copy or reverse.

Receive item (RC)

The receive item (RC) transaction receives an item not associated with a purchase or production order. In IM, this transaction is called a miscellaneous receipt (RC).

Do not use this transaction when receiving items transferred to in-transit locations. Use the receive transfer (RT) transaction to receive in in-transit locations.

MM generates this transaction when you receive complete a scheduled receipt for a transferred item using the Receive option on Scheduled Receipts or Shipment Container Items and the issue quantity and received quantity do not match or the scheduled receipt is under-received and marked as Complete. The receive item (RC) transaction is positive if more of the scheduled receipt is received and negative if fewer of the scheduled receipt is received. The receive item (RC) is linked to the receive transfer (RT) transaction. For more information these processes, see "Receiving transfer items" on page 5-21.

The receive item (RC) transaction is available on the Maintain menu in Inventory Transaction History. Select Receive Item (RC) and the Receive Item (RC) dialog opens.

Figure A-3. Receive Item (RC) dialog

If XA generates the receive item (RC) transaction as part of a receive transfer (RT) transaction, information from the issue transferred item (IW) and receive transferred item (RW) transactions are used to generate the receive item (RC) transaction. You can enter a Difference reason and Difference reference on the Receive dialog.

Receiving an item that requires inspection upon receipt does not update the item warehouse on-hand quantity. A quality control transaction must be used to update the on-hand balance.

You can enter a receive item (RC) transaction using a negative quantity and you can copy or reverse this transaction in Inventory Transaction History.

Receive purchased item to dock (RD)

The receive purchase item to dock (RD) transaction receives a purchased item at the dock. In IM, this transaction is called a P.O. receipt to dock (RD).

XA generates this transaction when you use a Receive Complete option to receive to dock purchased inventory on purchase orders, or in shipments and shipment containers. XA also generates this transaction when you use a Receive option to receive to dock purchase order items, purchase order item releases, scheduled receipts, or shipment container items. For more information about these processes, see "Understanding receiving options" on page 2-5 when you do not use shipment notices or "Understanding receiving options" on page 3-26 when you do use shipment notices.

Receive purchased item to inspection (RI)

The receive purchase item to inspection (RI) receives a purchased item at the inspection station from dock. In IM, this transaction is called a P.O. receipt to inspection (RI).

XA generates this transaction when you use a Receive Complete option to receive to inspection purchased inventory on purchase orders, or in shipments and shipment containers. XA also generates this transaction when you use a Receive option to receive to inspection purchase order items, purchase order item releases, scheduled receipts, or shipment container items. For more information about these processes, see "Understanding receiving options" on page 2-5 when you do not use shipment notices or "Understanding receiving options" on page 3-26 when you do use shipment notices.

Receive purchased item to stock (RP)

The receive purchase item to stock (RP) transaction receives a purchased item at inventory from the dock or inspection station. In IM, this transaction is called a P.O. receipt to stock (RP).

XA generates this transaction when you use a Receive Complete option to receive to stock purchased inventory on purchase orders, or in shipments and shipment containers. XA also generates this transaction when you use a Receive option to receive to stock purchase order items, purchase order item releases, scheduled receipts, or shipment container items. For more information about these processes, see "Understanding receiving options" on page 2-5 when you do not use shipment notices or "Understanding receiving options" on page 3-26 when you do use shipment notices.

Receive transfer (RT)

The receive transfer (RT) transaction transfers, or moves, items you are transferring with a scheduled receipt from the in-transit warehouse or location to the receiving warehouse or location.

XA generates this transaction when you use a Receive Complete option to receive transferred items in shipments and shipment containers. XA also generates this transaction when you use a Receive option to receive transferred scheduled receipts or shipment container items. For more information about these processes, see "Receiving transfer items" on page 5-21.

You cannot copy a receive transfer (RT) transaction or enter a receive transfer (RT) transaction using a negative quantity.

The receive transfer (RT) transaction generates an issue transferred item (IW) transaction to issue the item from the in-transit warehouse and a receive transferred item (RW) transaction to receive the item at the receiving warehouse. When the items are completely received, if the quantity received is more or less than the quantity transferred, a receive item (RC) transaction is generated to clear out the in-transit inventory, and to record the difference, for analysis. The Transfer Differences subset in Inventory Transaction History shows receive item (RC) transactions. You can also use the Overview card in Inventory Transaction History to see the original transfer item (TW) transaction, receive transfer (RT) transactions, and all associated transactions.

You can reverse a receive transfer (RT) transaction, not already reversed, only if the scheduled receipt, and optionally a linked shipment notice, is still present. When you reverse a receive transfer (RT) transaction, you also reverse the issue transferred item (IW), receive transferred item (RW), and receive item (RC) transaction (if present) to transfer the received items from the receiving location back into in-transit.

Receive transferred item (RW)

The receive transferred item (RW) transaction receives an item as part of transferring it to another warehouse or location. In IM, this transaction is called an interwarehouse receipt (RW).

MM generates this transaction when you generate a transfer item (TW) transaction. XA also generates this transaction when it generates a receive transfer (RT) transaction because you used a Receive Complete option to receive transferred items in shipments and shipment containers or a Receive option to receive transfer scheduled receipts or shipment container items. For more information about these processes, see "Receiving transfer items" on page 5-21.

The receive transferred item (RW) transaction increases the item warehouse on-hand quantity, unless the item you are transferring is waiting manufacturing or purchasing receiving inspection, in which case a quality control transaction must be used to update the on-hand balance.

You cannot copy or reverse this transaction individually in Inventory Transaction History. However, you can copy some transfer item (TW) transactions, and reverse some transfer item (TW) transactions and receive transfer (RT) transactions, and doing so generates this transaction as part of the copy or reverse.

Return purchased item (VR)

The return purchased item (VR) transaction issues a purchased item back to vendor from either the dock or inventory. In IM, this transaction is called a return to vendor (VR).

XA generates this transaction when you use a Receive option to return to the vendor purchase order items, purchase order item releases, scheduled receipts, or shipment container items. For more information about these processes, see "Understanding receiving options" on page 2-5 when you do not use shipment notices or "Understanding receiving options" on page 3-26 when you do use shipment notices.

Transfer item (TW)

The transfer item (TW) transaction transfers, or moves, items from one warehouse or location to another. In IM, this transaction is called an Interwarehouse transfer (TW).

If you know both (the sending and receiving) warehouse locations, the transfer item (TW) does the transfer in one step.

If you do not yet know where you will put the items or it will be some time before they can be received (as when you are shipping them between warehouses), select the Scheduled receipt attribute in the transaction. Use this option to:

- Transfer the items out of the sending location,
- Create a scheduled receipt for the items in the receiving location, for visibility and to help receive the items,
- Store the items in an in-transit warehouse or location until they are received, for accounting control and visibility,
- Include multiple in-transit items in a transfer Shipment Notice, to help control shipping and receiving the items.

For more information about these processes, see "Transferring Inventory" on page 5-1.

The transfer item (TW) transaction is available on the Maintain menu in Inventory Transaction History. Select Transfer Item (TW) and the Transfer Item (TW) dialog opens.

Figure A-4. Transfer Item (TW) dialog

The Scheduled receipt option requires that the in-transit warehouse and possibly location be specified in the transaction. If the in-transit warehouse is uncontrolled, no in-transit location is required. You can choose to store in-transit inventory wherever you want: in the sending warehouse, the receiving warehouse, or a warehouse or warehouses used only for in-transit inventory. The only requirements are:

- An item warehouse must exist in the in-transit warehouse, to account for the in-transit inventory, shown as on-hand,
- If you need to retain the QC date for shelf life items in-transit, the in-transit warehouse must be controlled, and
- If the warehouse is controlled, you must create in-transit warehouse locations.

Three attributes in the transaction let you specify where the in-transit inventory will be stored: In-transit option, In-transit warehouse, and In-transit location.

Both the transfer item (TW) transaction and the receive transfer (RT) transaction generate an issue transferred item (IW) transaction and a receive transferred item (RW) transaction to issue

and receive the items. The issue transferred item (IW) and receive transferred item (RW) transactions can only be called from transfer item (TW) or receive transfer (RT) transactions, to ensure that in-transit inventory is visible to accounting, that transfer issues and receipts balance, and that any quantity difference is recorded in a receive item (RC) transaction.

As in IM, you cannot transfer to another warehouse an item awaiting manufacturing or purchase receipt inspection associated with a production or purchase order.

If you transfer using a scheduled receipt, you cannot transfer a negative quantity, or an item awaiting manufacturing or purchase receipt inspection, even if not associated with a production or purchase order.

You can copy this transaction in Inventory Transaction History. The copy always uses information from the source transfer item (TW) transaction. If the source transfer item (TW) used a scheduled receipt, the copy also uses information from the associated receive transfer (RT) transaction or scheduled receipt.

You can only reverse a transfer item (TW) transaction entered in MM, not already reversed, that either:

- Did not use a scheduled receipt. XA reverses the transfer item (TW) and the associated issue transferred item (IW) and receive transferred item (RW), to transfer the inventory from the receiving location back to the original sending location.
- Used a scheduled receipt and the Scheduled receipt status is Open. No receiving activity has occurred. XA reverses the transfer item (TW) and the associated issue transferred item (IW) and receive transferred item (RW), to transfer the inventory from the in-transit location back to the original sending location. XA also deletes the open scheduled receipt. If the scheduled receipt is linked to a shipment notice, XA deletes the associated shipment container item. If the shipment notice has no other container items in it, XA warns you that the shipment notice will be deleted.

To reverse either a transfer item (TW) entered in System i, or one that used a scheduled receipt and has receiving activity, you must enter a new transfer item (TW) to transfer the item back to the original location.

Appendix B. Receiving Procedures with Shipment Notices

This appendix provides a summary of the receiving processing rules discussed in Chapter 3, "Receiving Purchased Inventory - Shipment Notices." These rules apply when you are receiving purchased inventory and you use shipment notices. This appendix also provides examples of receiving procedures when you use shipment notices and you are over-receiving or under-receiving purchased inventory.

Receiving processing rules

These rules apply to all receiving transactions you enter against any receiving object, from any source when you use shipment notices with purchased inventory. All receiving transactions you enter from Inventory Management (IM) or Production Monitoring and Control (PM&C) are against purchase order items or purchase order item releases.

1. A receiving transaction updates receiving information including status in the object received, and in all affected related objects. For example, XA keeps in balance at all levels all the affected receiving objects associated with related purchase orders, scheduled receipts, and shipment notices. Therefore, you can receive any object and XA updates all the related objects appropriately.

2. A receipt to stock, by default, sets the status of the object received to Complete if the quantity received is equal to or greater than the quantity expected.

   The quantity received is the sum of (received to stock + scrapped + returned to the vendor for credit). The quantity expected is normally the quantity ordered, but for scheduled receipts linked to a shipment notice and shipment container items, it is the quantity shipped.

   You can override this default to explicitly set (or force) the object status to completely received or partially received by selecting a Set (object) status option of either Set complete or Set partial (instead of the default: Auto set).

3. When a receipt to stock against an object with higher-level objects sets the object to Complete, each higher-level object, in turn, is set to Complete only if all lower-level objects for the higher-level object are complete.

4. When a receipt to stock against an object with lower-level objects sets the object to Complete, all lower-level objects are also set (forced) complete, regardless of the quantity received on the object. XA spreads the quantity received on the higher-level object across lower-level objects as follows:

   - If you enter a receipt on a blanket purchase order item with multiple open purchase order item releases (XA issues a message), XA applies the quantity to the open item releases in dock due date and release sequence, up to the open quantity for each item release. XA

closes all open item releases, regardless of whether a quantity was applied. Any excess quantity is applied (over received) to the latest open item release.

- If you enter a receipt on a non-blanket purchase order item or purchase order item release with multiple open scheduled receipts, XA applies the quantity to the open scheduled receipts in arrival date & arrival time sequence, up to the open quantity for each scheduled receipt. XA applies the quantity to the scheduled receipt linked to the shipment notice first, as the scheduled receipt for the unshipped quantity is always scheduled after the scheduled receipt with a shipment notice. XA closes all open scheduled receipts, regardless of whether a quantity was applied. Any excess quantity is applied (over-received) to the latest scheduled receipt.

- If you enter a receipt on a scheduled receipt with multiple open shipment container items, XA applies the quantity to the open container items in container priority and container item creation sequence, up to the open quantity for each container item. XA closes all open shipment container items, regardless of whether a quantity was applied. Any excess quantity is applied (over-received) to the last container item.

5. When a vendor sends fewer items than were ordered and a shipment notice is created, the scheduled receipt linked to the shipment notice is set to the quantity shipped, and a second scheduled receipt (no shipment notice) shows the ordered and unshipped quantity, for tracking purposes. The scheduled receipt (no shipment notice) keeps the scheduled receipts in balance with the purchase order item or purchase order item release. As XA processes receiving transactions, the scheduled receipt (no shipment notice) quantity is adjusted, as required, to reflect over-receiving and under-receiving, to keep count of the ordered and unshipped quantity, and to keep the scheduled receipts in balance with the related purchase order item or purchase order item release. In summary:

- XA reduces the scheduled receipt (no shipment notice) when you over-receive the scheduled receipt (shipment notice), and deletes the scheduled receipt (no shipment notice) if its quantity becomes zero.

- XA increases the scheduled receipt (no shipment notice) when you under-receive the scheduled receipt (shipment notice) and set it to Complete, or XA creates a scheduled receipt if none exists.

Special receiving scenarios

This section provides you with scenarios for receiving purchased inventory when you are over-receiving or under-receiving purchased inventory and you use shipment notices.

Receiving scenario	Receive action	Result
One purchase order item and one scheduled receipt, with shipment notice for the entire quantity.	1. Over-receive on the purchase order item.	XA updates the quantity in the purchase order item, scheduled receipt, and shipment container item(s); and sets them complete.
		For an example of this scenario, see "Scenario 1. Over-receive on a purchase order item" on page B-6.
	2. Under-receive and set to Complete on the purchase order item.	XA updates the quantity in the purchase order item, scheduled receipt, and shipment container item(s); and sets them complete.
		For an example of this scenario, see "Scenario 2. Under-receive on a purchase order item" on page B-7.
One scheduled receipt, with shipment notice for the entire quantity.	3. Over-receive on the scheduled receipt.	XA updates the quantity in the scheduled receipt, shipment container item(s), purchase order item or the purchase order item release; and sets them complete.
		For an example of this scenario, see "Scenario 3. Over-receive on a scheduled receipt" on page B-8.
	4. Under-receive and set to Complete on the scheduled receipt.	XA updates the quantity in the scheduled receipt and shipment container item(s), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA creates a scheduled receipt (no shipment notice) for the quantity you did not receive.
		For an example of this scenario, see "Scenario 4. Under-receive on a scheduled receipt" on page B-9.
One scheduled receipt, with a shipment notice for part of the quantity and one scheduled receipt without a shipment notice for the other part of the quantity.	5. Over-receive on the scheduled receipt (shipment notice).	XA updates the quantity in the scheduled receipt and shipment container item(s), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA reduces or deletes the scheduled receipt (no shipment notice).
		For an example of this scenario, see "Scenario 5. Over-receive on one of multiple scheduled receipts" on page B-10.

Table B-1. Summary of receiving scenarios when over-receiving and under-receiving

Receiving scenario	Receive action	Result
	6. Under-receive and set to Complete on the scheduled receipt (shipment notice).	XA updates the quantity in the scheduled receipt and shipment container item(s), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA increases the scheduled receipt (no shipment notice) by the quantity you did not receive on the scheduled receipt (shipment notice).
		For an example of this scenario, see "Scenario 6. Under-receive on one of multiple scheduled receipts" on page B-11.
	7. Over-receive on the shipment container item.	XA updates the quantity in the shipment container item and scheduled receipt, and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA reduces or deletes the scheduled receipt (no shipment notice).
		For an example of this scenario, see "Scenario 7. Over-receive on a shipment container item" on page B-12.
	8. Under-receive and set to Complete on the shipment container item.	XA updates the quantity in the shipment container item and scheduled receipt (shipment notice), and sets them complete. XA updates the quantity in the purchase order item or the purchase order item release. XA increases the scheduled receipt (no shipment notice) by the quantity you did not receive on the scheduled receipt (shipment notice).
		For an example of this scenario, see "Scenario 8. Under-receive on a shipment container item" on page B-13.
One scheduled receipt, with shipment notice for the entire quantity, in two shipment containers.	9. Over-receive on one shipment container item.	XA updates the quantity in the shipment container item and sets it complete. XA updates the quantity in the scheduled receipt and purchase order item or purchase order item release. The scheduled receipt, purchase order item or purchase order item release remain open even if they have a quantity of zero. XA does not change the other shipment container item.
		For an example of this scenario, see "Scenario 9. Over-receive on one of multiple shipment container items" on page B-14.

Table B-1. Summary of receiving scenarios when over-receiving and under-receiving

Receiving scenario	Receive action	Result
	10. Under-receive and set to Complete on one shipment container item.	XA updates the quantity in the shipment container item and sets it complete. XA updates the quantity in the scheduled receipt and purchase order item or purchase order item release. XA does not change the other shipment container item. XA creates a second scheduled receipt for the quantity you under-received.
		For an example of this scenario, see "Scenario 10. Under-receive on one of multiple shipment container items" on page B-15.

Table B-1. Summary of receiving scenarios when over-receiving and under-receiving

The following sections provide examples of the receiving scenarios summarized in Table B-1.

Scenario 1. Over-receive on a purchase order item

This example demonstrated in Figure B-1 describes receiving where there is one scheduled receipt and one shipment container item.

This example shows what happens if you over-receive the entire quantity on the purchase order item.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice reports the vendor is sending 100 in one container.
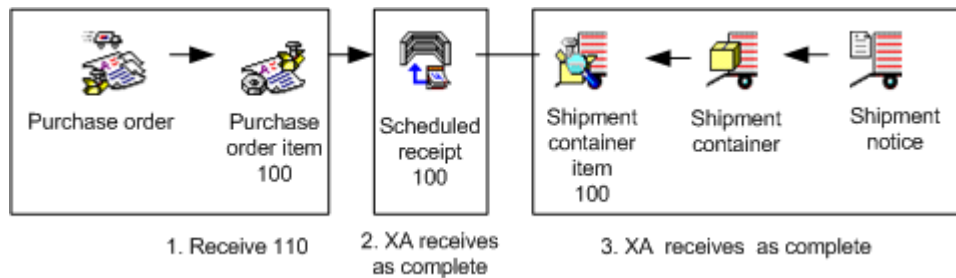
Figure B-1.   Over-receiving on a purchase order item

The following happens when the shipment arrives with a quantity of 110 and you receive the 110 against the purchase order item:

1. You receive completely the purchase order item.
2. XA receives completely the scheduled receipt.
3. XA receives completely the shipment container item, shipment container, and shipment notice.

Scenario 2. Under-receive on a purchase order item

This example demonstrated in Figure B-2 describes receiving where there is one scheduled receipt and one shipment container item.

This example shows what happens if you under-receive the quantity on the purchase order item.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice reports the vendor is sending 100 in one container.
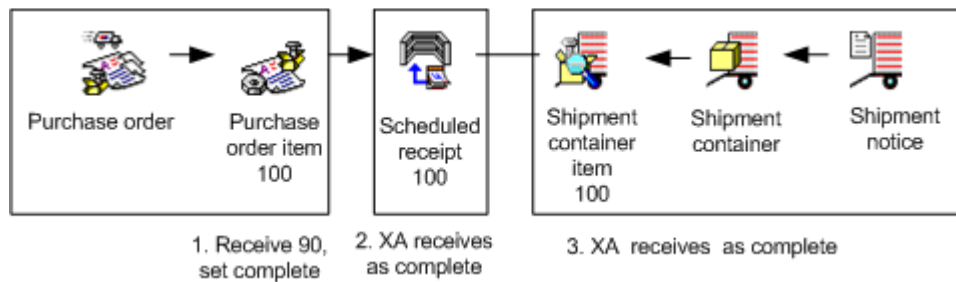
Figure B-2. Under-receiving on a purchase order item

The following happens when the shipment arrives with a quantity of 90 and you receive the 90 against the purchase order item, and set the purchase order item complete:

1. You receive completely the purchase order item.
2. XA receives completely the scheduled receipt.
3. XA receives completely the shipment container item, shipment container, and shipment notice.

Scenario 3. Over-receive on a scheduled receipt

This example demonstrated in Figure B-3 describes receiving where there is one scheduled receipt and one shipment container item.

This example shows what happens if you over-receive the entire quantity on the scheduled receipt.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice reports the vendor is sending 100 in one container.
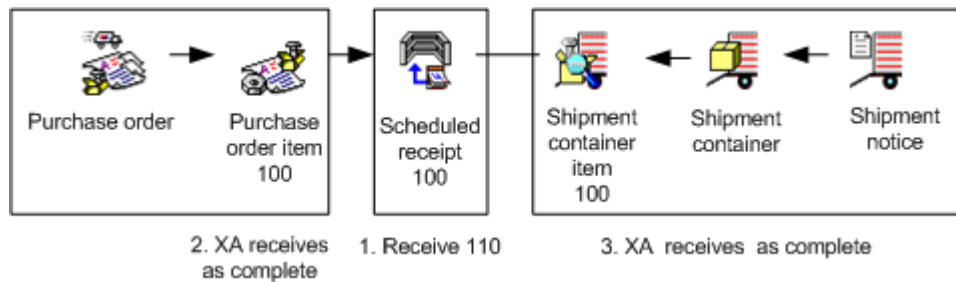
Figure B-3. Over-receiving on a scheduled receipt

The following happens when the shipment arrives with a quantity of 110 and you receive the 110 against the scheduled receipt, and set the scheduled receipt complete:

1. You receive completely the scheduled receipt.
2. XA receives completely the purchase order item.
3. XA receives completely the shipment container item, shipment container, and shipment notice.

Scenario 4. Under-receive on a scheduled receipt

This example demonstrated in Figure B-4 describes receiving where there is one scheduled receipt and one shipment container item.

This example shows what happens if you under-receive the entire quantity on the scheduled receipt.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice reports the vendor is sending 100 in one container.
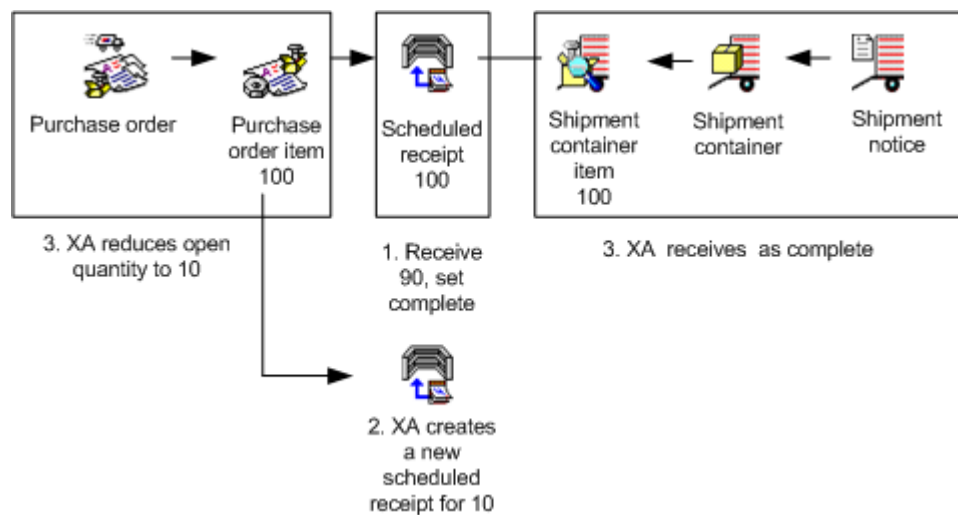
Figure B-4. Under-receiving on a scheduled receipt

The following happens when the shipment arrives with a quantity of 90 and you receive the 90 against the scheduled receipt, and set the scheduled receipt complete:

1. The scheduled receipt is set to Complete.

2. XA creates a scheduled receipt (no shipment notice) for the quantity of 10 on the purchase order item. Because no shipment information exists for the new scheduled receipt, the vendor can send a new shipment notice giving the shipment details for the item.

3. XA receives completely the shipment container item because the higher-level object for the shipment container item is complete. The shipment notice also is set to Complete because only one shipment container item is in the shipment.

   The purchase order item open quantity reduces to 10 because you received 90 on the associated scheduled receipt. The purchase order item remains open as it has an open scheduled receipt.

In the example above, if the scheduled receipt has multiple shipment container items, XA applies the quantity you entered on the scheduled receipt to the container items up to their remaining open quantity, in container priority and then container item creation sequence. Because the quantity you enter is fewer than the total quantity of the shipment container items, you could have one shipment container item with a partial quantity applied to it and shipment container items that have no quantity applied to them. All the shipment container items have their open quantity set to zero when they are set to Complete.

Scenario 5. Over-receive on one of multiple scheduled receipts

This example demonstrated in Figure B-5 describes receiving where the shipment notice reports an under-shipment. For information about how XA creates two or more scheduled receipts for a purchase order item or purchase order item release, see "Shipped quantity is fewer than the P.O. ordered quantity" on page 3-24. In this situation, you have a scheduled receipt with a shipment notice and a scheduled receipt without a shipment notice (assuming the vendor has not sent a second shipment notice).

This example shows what happens if the vendor sends the quantity ordered and you over-receive the entire quantity on the scheduled receipt (shipment notice).

For example, you create a purchase order item with a quantity of 100. The Shipment Notice specifies the vendor is sending 90 of the item in one container. XA links the scheduled receipt to the shipment notice for the items the vendor is shipping. XA creates a second scheduled receipt (no shipment notice) for the missing quantity of 10.
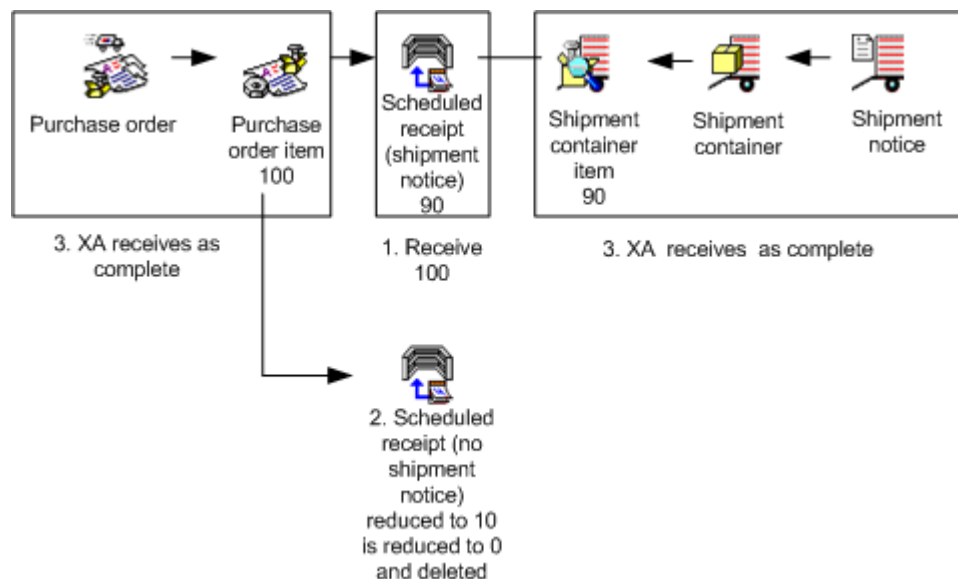
Figure B-5.Over-receiving on a scheduled receipt (shipment notice)

The following happens when the shipment arrives with the quantity ordered and you receive the 100 against the scheduled receipt (shipment notice):

1. You receive completely the scheduled receipt (shipment notice).
2. XA reduces the quantity of the scheduled receipt (no shipment notice) to zero and deletes it.
3. XA receives completely the purchase order item and purchase order, and the shipment container and shipment notice.

If you have not over-received by the entire quantity of the scheduled receipt (no shipment notice), XA reduces the quantity and the scheduled receipt remains. For example, you receive 95 items on the scheduled receipt (shipment notice). XA reduces the scheduled receipt (no shipment notice) from 10 to 5. If a shipment notice is associated with the scheduled receipt (no shipment notice), XA does not change it. You can assume that the vendor intends to send more items.

Scenario 6. Under-receive on one of multiple scheduled receipts

This example demonstrated in Figure B-6 describes receiving where the shipment notice reports an under-shipment. For information about how XA creates two or more scheduled receipts for a purchase order item or purchase order item release, see "Shipped quantity is fewer than the P.O. ordered quantity" on page 3-24. In this situation, you have a scheduled receipt with a shipment notice and a scheduled receipt without a shipment notice (assuming the vendor has not sent a second shipment notice).

This example shows what happens if you under-receive on the scheduled receipt (shipment notice) and set the scheduled receipt complete.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice specifies the vendor is sending 90 of the item in one container. XA links the scheduled receipt to the shipment notice for the items the vendor is shipping. XA creates a second scheduled receipt (no shipment notice) for the missing quantity of 10.
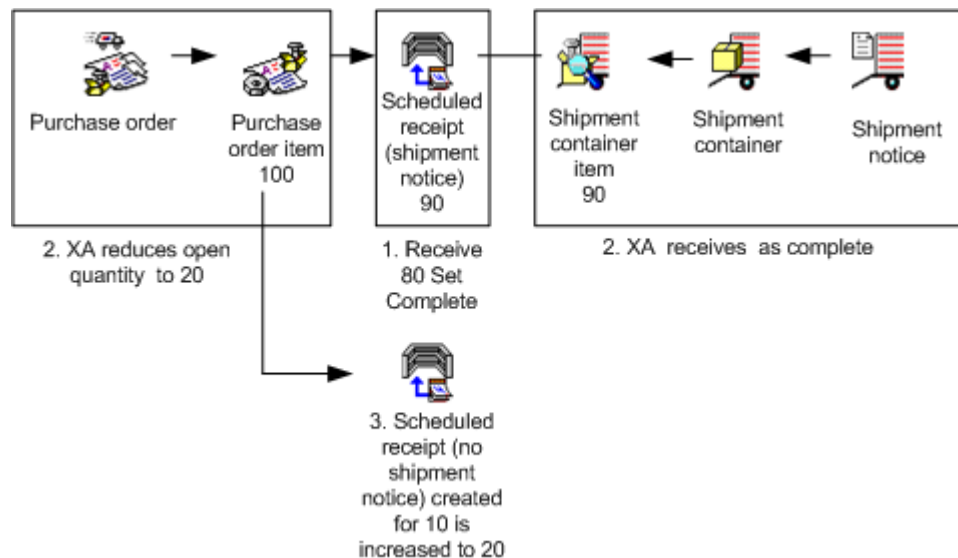
Figure B-6. Under-receiving on a scheduled receipt (shipment notice)

The following happens when the shipment arrives with a quantity of 80 (fewer than the quantity reported on the Shipment Notice) and you receive the 80 against the scheduled receipt (shipment notice) and set the scheduled receipt complete:

1. The scheduled receipt (shipment notice) is complete.

2. XA reduces the purchase order item open quantity to 20 because you received 80. XA receives completely the shipment container item because its associated scheduled receipt is complete. The shipment also is set to Complete because only one shipment container item is in the shipment.

3. XA adds the quantity of 10 to the scheduled receipt (no shipment notice) for 10. The vendor can send a new Shipment Notice giving the correct shipment details for the item because no shipment information exists for the scheduled receipt (no shipment notice).

If the scheduled receipt (no shipment notice) now has a shipment notice, in the above example, XA creates a scheduled receipt and does not change the quantities in the scheduled receipt

(previously had no shipment notice) because you can assume that the vendor intends to send more of the item.

Scenario 7. Over-receive on a shipment container item

This example demonstrated in Figure B-7 describes receiving where the shipment notice reports an under-shipment. For information about how XA creates two or more scheduled receipts for a purchase order item or purchase order item release, see "Shipped quantity is fewer than the P.O. ordered quantity" on page 3-24. In this situation, you have a scheduled receipt with a shipment notice and a scheduled receipt without a shipment notice (assuming the vendor has not sent a second shipment notice).

This example demonstrates what happens if the vendor sends the quantity ordered and you over-receive the entire quantity on the shipment container item.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice specifies the vendor is sending 80 of the item in one container. XA links the scheduled receipt to the shipment notice for the items the vendor is shipping. XA creates a second scheduled receipt (no shipment notice) for the missing quantity of 20.
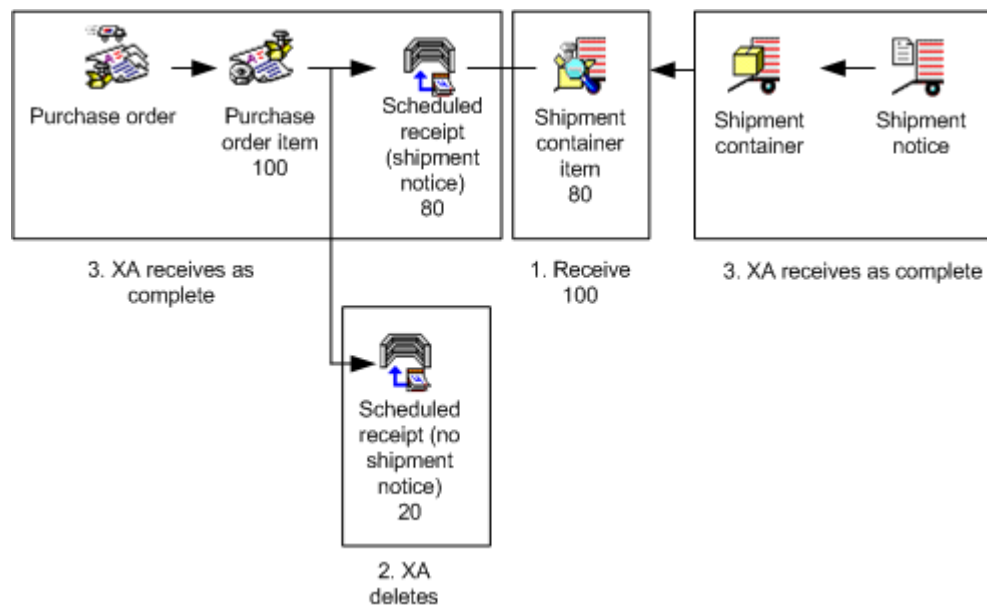
Figure B-7. Over-receiving on a shipment container item - two scheduled receipts

The following happens when the shipment arrives with the quantity ordered and you receive the full 100 against the shipment container item:

1. You receive completely the shipment container item.

2. XA reduces the quantity of the scheduled receipt (no shipment notice) to zero and deletes it.

3. XA receives completely the scheduled receipt (shipment notice) for a quantity of 80 because it is over-received. XA receives completely the purchase order item and purchase order, and the shipment container and shipment notice.

If you have not over-received by the entire quantity of the scheduled receipt (no shipment notice), XA reduces the quantity and the scheduled receipt remains. For example, you receive 90 items on

the shipment container item. XA reduces the scheduled receipt (no shipment notice) from 20 to 10. If a shipment notice is associated with the scheduled receipt (no shipment notice), XA does not change it. You can assume that the vendor intends to send more of the item

Scenario 8. Under-receive on a shipment container item

This example demonstrated in Figure B-8 describes receiving where the shipment notice reports an under-shipment. For information about how XA creates two or more scheduled receipts for a purchase order item or purchase order item release, see "Shipped quantity is fewer than the P.O. ordered quantity" on page 3-24. In this situation, you have a scheduled receipt with a shipment notice and a scheduled receipt without a shipment notice (assuming the vendor has not sent a second shipment notice).

This example shows what happens if you under-receive on the shipment container item and set the shipment container item complete.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice specifies the vendor is sending 90 of the item in one container. XA links the scheduled receipt to the shipment notice for the items the vendor is shipping. XA creates a second scheduled receipt (no shipment notice) for the missing quantity of 10.
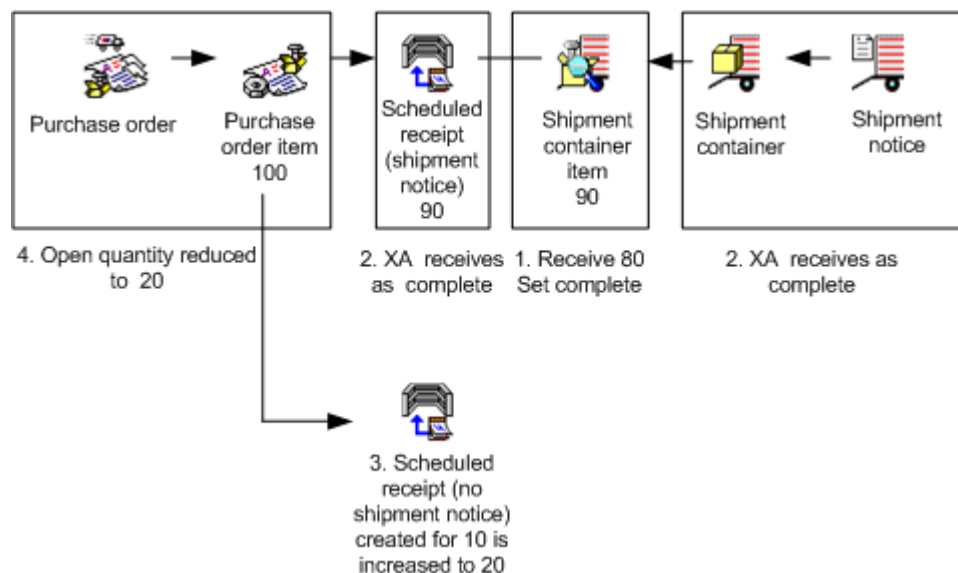
Figure B-8. Under-receiving on a shipment container item - two scheduled receipts

The following happens when the shipment arrives with a quantity of 80 (fewer than the quantity reported on the Shipment Notice), and you receive the 80 against the shipment container item and set the shipment container item complete:

1. Shipment container item is complete.

2. The scheduled receipt quantity also is set to complete because its only associated shipment container item is complete. The shipment notice also is set to Complete because the shipment has only one shipment container item.

3. XA adds the quantity of 10 to the scheduled receipt (no shipment notice) for 10. The vendor can send a new Shipment Notice giving the correct shipment details for the item because no shipment information exists for the scheduled receipt (no shipment notice).

4. The purchase order item open quantity reduces to 20 because you have received 80, and remains open.

If the scheduled receipt (no shipment notice) now has a shipment notice, in the above example, XA creates a new scheduled receipt and does not change the quantities in the scheduled receipt with the shipment notice because you can assume that the vendor intends to send more of the item.

Scenario 9. Over-receive on one of multiple shipment container items

This example demonstrated in Figure B-9 describes receiving where a scheduled receipt has multiple shipment container items.

This example shows what happens if the vendor sends the quantity ordered and you over-receive the entire quantity on one shipment container item.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice reports the vendor is sending two shipment container items each for a quantity of 50.
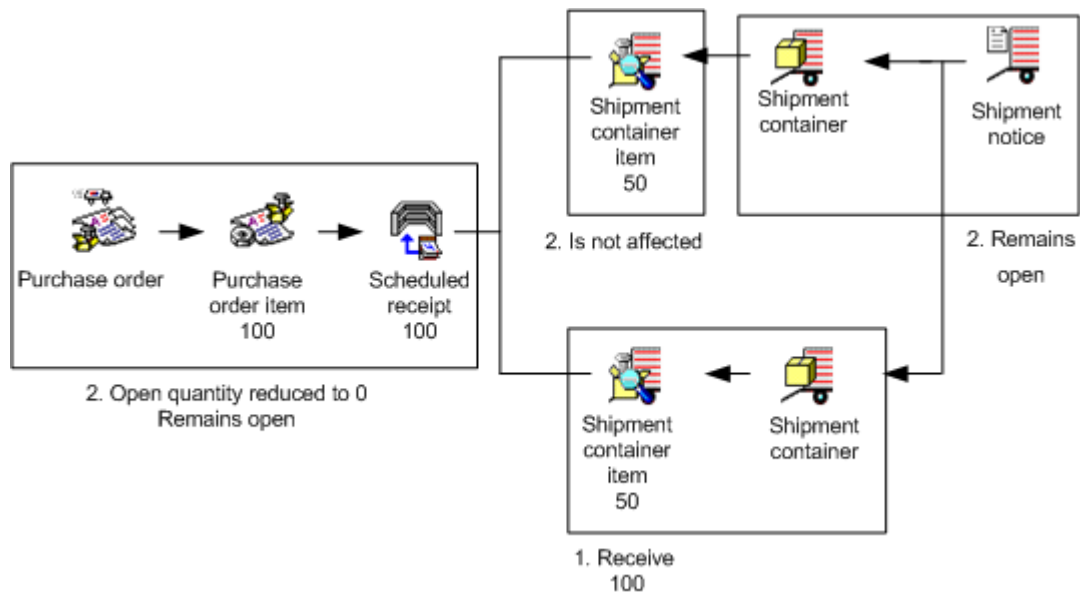
Figure B-9. Over-receiving on one shipment container item

The following happens if instead of receiving the items against the scheduled receipt, you decide to receive a single shipment container item and enter a quantity of 100:

1. You completely receive the shipment container item.

2. The other shipment container item remains open. The purchase order item and scheduled receipt remain open though their open quantity is zero because they still have a shipment container item associated with them that is not complete. The shipment container and shipment notice remain open because they still have a shipment container item that is not complete.

If you do not want the other shipment container item to remain open, as you know the vendor is not sending any more items for purchase order item, then you should receive the quantity of 100

on the scheduled receipt or purchase order item. You could also, in this example, receive 50 on each shipment container item or shipment container, or receive completely the shipment notice.

Scenario 10. Under-receive on one of multiple shipment container items

This example demonstrated in Figure B-9 describes receiving where a scheduled receipt has multiple shipment container items.

This example shows what happens if you under-receive the entire quantity on one shipment container item and set it complete.

For example, you create a purchase order item with a quantity of 100. The Shipment Notice reports the vendor is sending two shipment container items each for a quantity of 50.
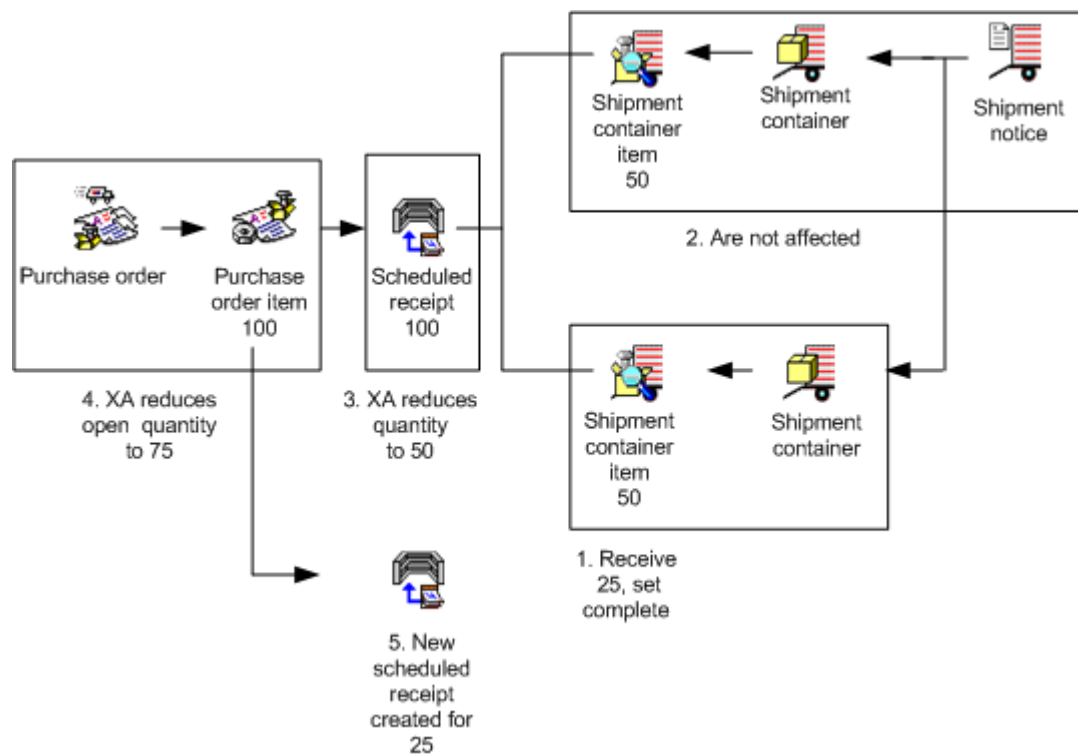
Figure B-10. Under-receiving on one shipment container item

The following happens when the shipment arrives with a quantity of 25 and you decide to receive the 25 on a single shipment container item and set the shipment container item complete:

1. XA sets the shipment container item complete. XA receives completely the shipment container associated with the received shipment container item as the container has only one container item.

2. XA does not change the other shipment container item, shipment container, and the shipment notice remains open.

3. XA reduces the scheduled receipt to 50.

4. XA reduces the purchase order item open quantity to 75.

5. XA creates a scheduled receipt for 25.

If you do not want the other shipment container item to remain open or to create another scheduled receipt, as you know the vendor is not sending any more items for purchase order item, then you should receive the quantity of 25 on the scheduled receipt or purchase order item. Set the object to Complete if the vendor is not sending any more items. Set the set object status to Auto set, if the vendor is sending more items for the other shipment container item.

Glossary

This glossary defines terms that are important for this application. It does not include all Infor XA terms nor all terms established for your system. If you do not find the term you are looking for, refer to the Index in this book or to glossaries in other Infor XA publications.

advance ship notice. An electronic notification, from the vendor or to the customer, regarding a shipment.

application. A program that performs a particular data processing task.

backorder. An order prepared to cover items which cannot be included in the original shipment, but which will be sent when available.

batch/lot control code. The code indicating <Y/N> that an item requires batch/lot control.

bill of lading. An alternate shipping identifier. It is a contract and receipt for items the carrier is transporting. The bill of lading is sometimes used as the basis for filing freight claims if the shipment is damaged or lost.

blanket release. A purchase order that contains multiple shipments of an item on different due dates.

button. Rectangular shape containing text or a symbol that identifies an action that can be taken a window.

card file. A set of detailed information for a single object. Each set contains groupings of related information, shown as a stack of tabbed index cards. Each grouping is shown as a card.

check box. Type of selection attribute that allows you to turn an attribute value on and off.

child transaction. A transaction that is generated by another transaction.

consolidated shipment. A shipment that can contain multiple orders and ship-to IDs for multiple customers.

controlled warehouse. A warehouse in which an item can be stocked in more than one location and can be tracked by batch/lot numbers and FIFO dates.

count type. There are two types of counts. Use Physical Inventory if you plan on counting everything, and use Cycle Count if you want to count smaller groups.

counting documents. Printed documents that help your counters perform inventory counts. Includes inventory count lists and tags.

cycle counting. A continuous inventory count at or near specified frequent intervals of time (weekly, monthly, quarterly). Contrast to physical inventory.

default container. Each shipment notice has a default container with a blank container ID. Displays any items specified in an ASN as not being in a container.

discrete allocation. The ability to selectively allocate items to manufacturing or customer orders. Items are allocated by specific batch/lot, location, and/or FIFO date.

FIFO. See First in first out.

FIFO date. The date the item was received in stock, whether at approved or unapproved status. This attribute is maintainable only if FIFO control is active. On Transaction Processing audit trails, the FIFO date attribute defaults to the transaction date if FIFO control is not active.

first in first out. A method of valuing inventory which assumes that items are consumed in the same sequence in which they are received.

GRN. Goods received note number.

higher-level object. An object that contains other objects.

inspect on receipt code. The code indicating if an item requires inspection on receipt to confirm that it meets design or shelf life standards.

inspection. The examining of completed production or purchased items to see that parts meet tolerances and that work has been properly completed. It may or may not be a separate operation.

in-transit warehouse location. A type of warehouse location that is used exclusively for items transferred but not yet received.

inventoried item. An item used on the shop floor as part of a manufactured item and which is tracked in inventory.

inventory status. A status you use to classify items stored in a warehouse location, so that the items are held from some activities.

inventory tag. Inventory tags can be generated during inventory counting. The tag identifies the item, its characteristics, and where your company stocks the item.

item. Any raw material, manufactured or purchased part, subassembly, assembly, or end-item.

item shortage option. An option on the Scheduled Receipts list window that generates a list of all the orders that are short.

line item. A line of information appearing on a customer or purchase order that identifies the item wanted.

list windows. A window that contains a list of objects, such as a list of items or a list of customers, with multiple columns of information per object.

kit. Is a set of items that are ordered, priced, packaged, and shipped as a unit. Each kit parent item consists of a group of component items. To distinguish between the item number of the kit and the item numbers of the items in the kit, the kit is referred to as the kit parent item and the items in the kit as the kit components.

kit parent item. An item that consists of a group of component items.

kit component. An item that is part of a kit parent item.

lower-level object. An object that is contained in another object.

manifest. An invoice or list of items in a shipment.

manufacturing order. An order issued to the factory to produce a component or assembly.

MRP. Material Requirements Planning.

offline. Pertaining to equipment or devices not under control of the processing unit.

on hand. (1) Pertaining to stock that is immediately available for shipment. (2) Pertaining to items available in the stockroom and within shelf life. Stock now on the receiving dock, in QC, or issued to the shop floor is not considered on hand stock.

on-order. Pertaining to stock that has been requested on manufacturing or purchase orders but has not been received.

over-shipment. When the vendor sends more of the purchase order item or purchase order item release than ordered.

parent container. A shipment container that has another container directly inside it.

parent transaction. A transaction that generates another transaction.

physical inventory. The counting of inventory items to determine the quantity actually on hand. It is usually performed annually as opposed to cycle counting that is usually done with small groups of items on a more frequent basis.

pick confirmation. Is the process of collecting items at a specific warehouse location (from stocking locations) for a shipment that might require extensive preparation or specialized packing for shipment.

pick consolidation. Allows you to specify multiple orders, customers, and ship-to addresses to be included on one pick list.

pick list. Documents that reflect the picking process. They list the items being withdrawn from stock. You can use pick lists to direct and control material picking to fulfill customer orders.

PO blanket item. A purchase order allowing multiple orders or releases of an item.

pro forma invoice. Provide preliminary amount due information for shipped items.

prorate. Distribute charges across many orders according to either equal division, value, weight, or volume.

purchase order. A document sent to a vendor requesting goods or services.

purge. The process that deletes records in the Master and Data files and copies the files to a History file.

receipt location. The location to use when receiving an item.

receipts. Merchandise or stock that is received in inventory.

receive complete option. This option provides a convenient way to receive completely purchase orders, shipment notices, or shipment containers.

receive option. This option provides a convenient way to receive scheduled receipts, shipment container items, purchase order items, or purchase order item releases.

receiving advice. Electronic documents that inform vendors of the receipt of purchased inventory.

receiving warehouse. The warehouse to which the item is being transferred or sent.

reconciliation. Comparing two values of the same measurement and adjusting them to force agreement; for example, reconciling book inventory to the physical count.

release. (1) To authorize an order commitment by changing a planned order into a purchase order or shop order. (2) To specify a date and quantity to be shipped under a blanket order. (3) To ship goods to a customer.

released order. An order that has been issued to the shop floor or a vendor. Once released, it is a commitment that can only be canceled or rescheduled.

scheduled receipt. An individual list item found on the Scheduled Receipts list window. See also receipts.

scheduled receipt (no shipment notice). XA creates this scheduled receipt to track items that are ordered but are not notified on the shipment notice that they will be shipped.

scheduled receipt (shipment notice). A scheduled receipt that has an associated shipment notice.

scheduled receipts object. A collection of purchase order items and purchase order item releases that are not completely received.

sending warehouse. The warehouse from which the item is transferred.

shipment manifest. See manifest.

shipment notice. Describes incoming vendor shipments against purchase orders, including the item and quantities shipped, and the expected arrival date and time at the warehouse.

shipment objects. The Shipment Notices, Shipment Containers, and Shipment Container Items objects.

short stock. A term that indicates the quantity in stock is fewer than the quantity the customer ordered.

staging location. A specific warehouse location used for staging or pick confirmation.

subordinate object. You access subordinate objects through the higher-level object to which the subordinate object belongs. Subordinate objects provide additional information that relates to the higher-level object. See also lower-level object.

system-link. Provides an XML-based interface to the Infor XA applications.

tag number. A number on an inventory tag counting document that you can use during inventory counting and entry.

top level container. A shipment container that is not in another container but has containers inside it.

transaction code. A two-character code that identifies inventory activities such as issues, receipts, scrap, inspect, etc.

transaction date. The date a particular transaction was entered against an item.

transaction history. A sequential record of all transactions related to a major accounting activity. For example, an inventory transaction history includes all transactions related to or affecting inventory balances and costs.

transfer with scheduled receipt. You can generate scheduled receipts for items you are transferring between warehouses using the transfer item (TW) transaction and use these scheduled receipts to receive the transfer item into the receiving warehouse later.

tree structure. A tree structure is a hierarchical list shown with icons. The tree structure can be collapsed to hide layers in the hierarchy or expanded to show layers. This structure is used for information that is meaningful when shown in a sequence of layers.

turnaround number. A number or bar code on an inventory tag counting document that you can use during inventory counting and entry.

unapproved item. Items whose QC type is QC due, Reject, or Waiting.

under-shipment. When the vendor sends fewer of the purchase order item or purchase order item release than ordered.

unit of measure. A code indicating the measurement basis for inventory such as each, pound, tons, gallons, or feet.

variance. The difference between standard and actual performance. Variance analysis can be applied to costs, labor or machine hours, counts and balances, etc.

view. A particular set of columns in a list window. A view has its own unique name and can be public or private.

warehouse stock location. The identification of the physical location of inventory storage.

XML document. XML documents are used by System-Link to exchange information between XA and other applications.

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