Infor VISUAL Inventory User's Guide

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Chapter 1: About This Guide

This guide covers features that you use to manage your inventory. The chapters are:

Unit of Measure Maintenance – This chapter describes how to add units of measure and conversion factors.

Part Maintenance – This chapter describes how to add parts to your database.

Warehouse Maintenance – This chapter describes how to set up your warehouses and warehouse locations where you store parts.

Part Traceability – This chapter describes how to trace parts as they move through your enterprise.

Dimensional Inventory – This chapter describes how to set up inventory based on a part's dimensions, such as length.

Inventory Transaction Entry – This chapter describes inventory transactions, including issuing and returning materials to work orders, receiving and returning finished goods, adjusting on-hand inventory quantities, and transferring inventory between part locations within the same warehouse. You can also view inventory transactions generated from other actions, such as shipping a customer order or receiving materials to a work order in Purchase Receipt Entry.

Inter Branch Transfer – This chapter describes how to move inventory from one warehouse to another warehouse.

Material Planning Window – This chapter describes the features of the Material Planning Window, including material netting, material demand and supply analysis, forecasting, and generating work orders and purchase orders based on material requirement needs.

Physical Inventory Count – This chapter describes how to perform a physical count of inventory in warehouse locations.

Consigned Inventory – This chapter describes consignment features. You can consign inventory to both customers and vendors, and both customers and vendors can consign inventory to you.

Inventory Reports – This chapter describes the inventory reports you can use to keep track of parts in transit and to assess inventory value.

Cost Simulation – This chapter describes how to use cost simulation to assess potential changes to materials, labor, burden, service costs, and unit price for parts, resources, and outside services.

Prerequisite Knowledge

You should be familiar with the information in the *Infor VISUAL Concepts and Common Features Guide*.

Related Information

The following guides contain information related to this guide:

- *Infor VISUAL System-wide Guide*
- *Infor VISUAL Purchasing User's Guide*
- *Infor VISUAL Sales User's Guide*
- *Infor VISUAL Manufacturing User's Guide*

Chapter 2: Unit of Measure Maintenance

This chapter includes:

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What is Unit of Measure Maintenance?	2–2
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What is Unit of Measure Maintenance?

Use the Unit of Measure Maintenance program to define and maintain the different units in which to use for material quantities. This enables you to use different units of measure to specify quantities of material purchases, material stocking, and material requirements (in work orders or engineering masters).

You can also establish conversion factors to allow for differences in units of measure. This enables you to purchase in one unit of measure stock in another unit and use in a third. Provided you have defined the necessary conversions, conversions are automatic. The direct conversion is searched for, then the reciprocal is used if that is available. For example, if a conversion from feet to inches is required, a feet to inches conversion is searched for, then, if that is unavailable, an inches to feet conversion is searched for.

The Unit of Measure Maintenance table and the conversions you establish are used throughout many modules.

Adding Units of Measure

Before you can create conversion factors, you must enter the units of measure.

To add units of measure:

1. From the main menu, select **Inventory**, **Unit of Measure Maintenance**.
2. Click **Insert** to insert a new line in the table.

   Note: It does not matter where the cursor is when you click **Insert**, the new entry is at the bottom of the lower table of units. The To table becomes highlighted with an arrow to the left of the Category field.
3. To categorize the unit of measure, select the Category arrow to choose a category. This feature will be used with Infor Evolve components, but is not currently functional.
4. Enter a unique identifier and description for the unit of measure, or click the Unit of Measure browse button to select from a list of ISO codes. If you create your own ID, a check mark is placed in the User Defined column.
5. To map your unit of measure to an ISO code, click the **ISO Unit Code** browse button and select the ISO code in which to use.
6. Click in the Scale column and enter the scale (precision). You can select 0–4.

   For example, a scale of 2 allows you to enter a whole integer with two decimal places after it: 2.34.
7. Click **Save**.

Maintaining Unit of Measure Categories

Note: Unit of Measure Categories will be used with Infor Evolve components. They are not currently used.

Use Unit of Measure Categories to classify your units of measure.

To maintain unit of measure categories:

1. Select **Maintain**, **UOM Categories**.
2. Click **Insert to insert a new line in the table**.
3. Enter a code and description for the category.
4. Click **Save**.

Editing Table Entries

You can only modify scale and description information for your units of measure. For example, you can alter the scale of a particular Unit of Measure to allow for more accurate material measurements.

Note: You cannot change the Unit Of Measure column. If you require to change a ID for a Unit Of Measure, you must set up a new unit of measure and delete the old one.

To edit unit of measure information:

1. Select the unit of measure to edit in the lower table.
2. Move the cursor to the column to make the change.

   A check mark is displayed to the left of the unit of measure.
3. Click **Save**.

   The upper table reflects the changes you made.

Deleting Units of Measure

To delete units of measure:

1. In the lower table, select the row header for the Unit of Measure to delete.
2. Click **Delete Row**.

   An X is displayed beside the row.
3. Click **Save**.

   A warning message is displayed, informing you that all conversion factors that use this unit of measure will be deleted.
4. Click **Yes**.

   If a part references the unit of measure, another warning message is displayed notifying you that a reference to the unit of measure exists and that it cannot be deleted.

Establishing Conversion Factors

Conversion factors give you the ability to purchase in one unit, stock in another, and manufacture in a third.

Note: Each part master may also contain its own conversion table.

To establish conversion factors:

1. In the upper table, select the unit of measure from which to convert.
2. In the lower table, select the unit of measure to which to convert. Click the Unit of Measure browse button to select from a list of ISO codes, or manually enter the non-ISO code in which to use.
3. In the Conversion Factor field, enter the conversion factor (multiplier) that converts the From unit of measure to the To unit of measure.

   You can also enter reciprocal entries to help with your conversions: the figure is computed when you click **Save**. For example, (12) inches per foot and (.0833) foot per inches.

   Remember, you are not converting the Upper unit to the Lower unit, you are specifying the quantity of the From there is in the To. For example, if you selected Inches in the top table and Feet in the bottom table, you would specify 12 because there are 12 inches in a foot.

   Note that to convert units in both directions—the conversion factors are not always the same—you must enter a conversion factor for each direction in which to perform the conversion.
4. Click **Save**.

   Note: If you have already established a conversion factor, the conversion factor is displayed when you select the From and To units.

Chapter 3: Part Maintenance

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What is Part Maintenance?

Use Part Maintenance to add, delete, and edit part information for all the parts in your company's database. A part can be either the raw material or other purchased components required in the manufacturing process, or goods produced during the manufacturing process. A part can be either a finished piece or an intermediate assembly used in another process. The process can be an operation on a different leg of the same work order or a completely different work order. The latter involves a receipt from one work order and an issue to another while the former does not.

Many windows show the information you specify in Part Maintenance.

If you are licensed to use multiple sites, some of the part information is stored at the tenant level and some of the information is stored at the site level.

Starting Part Maintenance

To access Part Maintenance, select **Inventory**, **Part Maintenance**.

Setting Up Part-related Codes

You can use several basic codes to help define part information. Before you specify a part in your database, set up the part-related codes so that they are available for selection when you define the part.

You can use these codes in part records:

- Product Codes
- Commodity Codes
- Price Groups. Use these codes in conjunction with VISUAL Pricebook.

Adding Product Codes

Use the Product Codes dialog box to add new product codes to specify general ledger accounts to use for all parts assigned with a given product code. This includes accounts for Sales Revenue, Adjustments, Inventory, Work in Process, Variances, and Cost of Goods Sold.

To add product codes:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select ****Tenant****. If you are licensed to use a single site, this field is unavailable.
2. Select **Maintain**, **Product Codes**.
3. Click **Insert**.
4. Specify this information:

   Product Code – Specify a unique identifier in the product code column.

   Description – Specify a description of the product code in the Description column.

   Demand Fence 1 and Demand Fence 2 – Specify demand fences for this product code. These demand fences are used for a part if the part does not have specific demand fences but does have a specific product code.

   Active – To make this product code available for use, select this check box.
5. Because you can specify a product code for each part, the default product code on the customer order line item is the product code for the Part ID being sold. You can override this product code manually.
6. In the upper table, select the product code for which to specify account information.
7. In the lower table, click the row for the category of accounting information to specify and double-click the **Account ID** browse button.
8. Select an account from the list by either double-clicking the line or selecting the line and clicking **Select and Close**.
9. Click **Save**.

For each account, a part-specific account is searched for, then a product code account is searched for, then the system default is accessed. For any line you leave blank, your global defaults are used. Likewise, if you specify inventory G/L accounts in the Accounting section of part maintenance, they override any entries you make here. The minimum recommendation is to override all four cost categories, Material, Labor, Burden, and Service.

Deactivating Product Codes

If you no longer use a product code, you can deactivate it. When a product code is deactivated, users cannot specify it on any new records or transactions. Inactive product codes are not displayed in product code drop-down lists or browse tables, and users cannot manually specify an inactive product code in a Product Code field. Inactive product codes used on existing records are not removed.

You can still select an inactive product code in reports that can be filtered by product code.

It is possible to create a new transaction, such as a work order, sales order, or purchase order, with an inactive product code. For example, if you create a new work order from an engineering master that has an inactive product code, then the new work order will also have the inactive product code. When you deactivate a product code, you should review where the product code is used to ensure that you do not inadvertently continue to use the code.

To deactivate a product code, the code must meet these criteria:

- The product code cannot be used on an active part. An active part is a part that has not been designated Obsolete.
- The product code cannot be used on a service charge.

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select ****Tenant****. If you are licensed to use a single site, this field is unavailable.
2. Select **Maintain**, **Product Codes**.
3. Clear the **Active** check box.
4. Click **Save**.

Adding Commodity Codes

Use Commodity codes to define classes of materials, especially your purchased parts and materials. Commodity codes are used for searching and sorting in material planning.

To add commodity codes:

1. Select **Maintain**, **Commodity Codes**.
2. Click **Insert** to insert a new line in the table.
3. Specify a unique identifier for this Commodity Code.
4. Click **Save**.

Specifying User Dimensions for Codes

If you use dimensional reporting, you can attach user dimensions for commodity codes and for product codes.

Product code and commodity code user dimensions can be used in these transactions:

- Receivable Invoice
- Shipment
- Payable Invoice
- Purchase Receipts
- Inventory Adjustments
- Work Order Issues
- Work Order Labor
- Work Order Service
- Work Order Finished Goods

You can set up different user dimensions for each code. Use the User Dimensions dialog box to specify which user dimensions to associate with a particular code. Use the User Dimensions Priorities dialog box available in the Accounting Window to determine when the user dimension IDs should be used. See "Cost Centers" on page 2-1 in the General Ledger guide.

To associate user dimensions with codes:

1 From the Product Code or Commodity Code table, click **User Dimensions...**.

2 In the left pane, each user dimension group is listed. Expand the list under the user dimension group to view the transactions in which code user dimensions can be used.

To assign the same dimensions to all transaction types, click the name of the dimension group in the left pane. All Subledgers is inserted in the Subledger field.

To assign dimensions to a particular transaction type, select the appropriate transaction type. The transaction type is inserted in the Subledger field.

3 Click **Insert**.

4 Specify this information:

Valid From – Specify the date the dimension assignment becomes effective.

Debit Dimension – Double-click the browse button and select the dimension to use for account debits.

Credit Dimension – Double-click the browse button and select the dimension to use for account credits.

5 Click **Save**.

Setting Up Price Groups

If you use VISUAL Pricebook, you can set up pricing by price groups. Use this dialog to set up price group IDs, then assign them to your parts.

To create price groups:

1. In Part Maintenance, open a part record. This activates the Price Group menu selection. You do not have to assign a part group to the part that you select.
2. Select **Maintain**, **Price Groups**.
3. Click **Insert**.
4. Specify the name of the price group.
5. Click **Save**.

Adding Parts

If you are licensed to use multiple sites, you can select a site and define all part information when you are creating a part. Some of the information you define is stored at the tenant level. If you click the Save button before you complete the part record, you must select the **Tenant** option in the Site ID field to continue specifying information for certain fields. For more information, refer to“Editing Part Information” on 3-26 in this guide.

To add parts:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to which you are adding this part. If you are licensed to use a single site, this field is unavailable.

2 In the Settings section, specify the type of part you are adding. Select one or more of these options:

Fabricated – If you manufacture this part, select the **Fabricated** check box. If the part is a raw material, clear the check box. If you clear the Fabricated check box, the Purchased check box is selected. It is presumed that you always purchase raw materials.

Purchased – If you purchase this part from a vendor, even if that vendor fabricates the part, select the **Purchased** check box.

Consumable – If this part has a Part ID but you do not receive the part into inventory, select the **Consumable** check box. At the time of receipt, consumables are expensed.

Demand History – To store a summarized demand history for this part for exporting to a forecasting function, select the **Demand History** check box.

Inv Tx Locked – To prevent all inventory activity against this part, select the **Inv Tx Locked** check box.

Kit – If this part is part of a larger multi-part kit, select the **Kit** check box. This check box is available only if you are licensed to use VISUAL DCMS.

Detail Only – To indicate that this part is not a finished item of a work order, select the **Detail Only** check box. If you select this check box, many of the fields in the Part Maintenance window are deactivated.

Stocked – If you commonly stock this part, select the Stocked check box. This field is informational only.

Tool/Fixture – If you use this part as a tool or fixture in your manufacturing process, select the **Tool/Fixture** check box. Tool/Fixture parts are highlighted in the Manufacturing Window.

Auto Issue – Select this check box to auto-issue this part to operations. You do not need to manually enter an inventory transaction to issue the parts.

To complete the setup of auto-issue parts, see "Auto-issue Parts" on page 3–21 in this guide.

Supply then Leadtime – This check box is active only if you did not select the **Use All Supply Before Applying Lead-time in Material Checks** check box in Site Maintenance.

To consider material supply beyond work orders' required dates, select this check box. When you select this check box, the scheduler ignores a work order's required date when locating material supply. When sufficient supply is located, the work order is scheduled. If sufficient supply cannot be located, then the material's lead time is used to determine when the work order can be scheduled.

To consider material supply only up to the work order's required date, clear this check box. When you clear this check box, the scheduler does not look beyond the required date for supply when there is insufficient supply at the required date. In this case, it applies the part's or requirement's lead time to determine if sufficient supply can be obtained by the required date, or to determine when it can obtain sufficient supply.

If you selected the **Use All Supply Before Applying Lead-time in Material Checks** check box in Site Maintenance, then all supply is considered beyond work orders' required dates for all parts in the site. You cannot override the setting for a particular part. To specify this setting on a part-by-part basis, clear the **Use All Supply Before Applying Lead-time in Material Checks** check box in Site Maintenance.

The Concurrent Scheduler considers purchase orders, purchase order delivery schedules, Coproducts, work orders, and, if netting planned orders, planned orders, as supply.

3 Complete the information in the header. Specify this information:

Part ID – Specify an ID for the part.

Part Description – Specify a description for this part in the Description field.

Stock UM – Click the **Stock UM** browse button, and select the unit of measure in which you stock this part.

For example, if you purchase this part by weight but stock it by length, you must select the appropriate length unit of measure.

Shipping Weight – Specify the shipping weight for the standard shipping quantity in the Shipping Weight field. For example, if you usually ship this part by the case, specify the case weight.

Weight UM – Click the **Weight UM** browse button and select the unit of measure for the Shipping Weight.

Eng Master ID – If this is a fabricated part, specify the default manufacturing ID that shows how to construct the part. If an engineering master is designated as inactive in the Manufacturing Window, you cannot use the master in the part record. You can only specify an active engineering master in this field.

Product Code – Click the browse button or arrow and select the Product Code to use for this part.

Use Product Codes to group parts into classes, usually those parts that you sell as products. Product Codes specify which General Ledger accounts should be affected by transactions against a class or group of Part IDs.

You can use Product Codes to sequence and filter a variety of material planning functions and many different reports.

Process Type – Click the browse button or arrow and select the process type for this part.

Assign a process type to track the performance lead time of this part. Performance lead time measures the duration of the sales cycle. See "Performance Leadtime Processes" on page 3–54 in this guide.

Commodity Code – Click the **Commodity Code** arrow and select the commodity code to use for this part.

Use Commodity codes to group parts, usually purchased parts or raw materials.

You can use commodity codes to sequence and filter a variety of material planning functions and many different reports.

Case Qty/Pallet Qty – If you work with these parts in case or pallet quantities, specify the quantity per case/pallet in the Case/Pallet Qty fields.

4 Click **Save**. The current date is inserted in the Create Date field.

Specifying Costing Information

Add costing information for the part in the Costing tab. If you use standard costing, the costs that you specify in the costs and burden sections are used when determining the costs of transactions. If you use average or actual costing, the costs that you specify are used as estimates when you use the part in the Manufacturing Window.

To add costing information for parts:

1 Click the Costing tab.

2 In the Costs section, specify this information:

Material – For fabricated parts, enter the per unit cost of the raw material you use to produce the part. For purchased parts, enter the per unit cost you incur in the purchase of this part.

Labor – For fabricated parts, enter the labor cost standard to produce this part. For purchased parts, this field is unavailable.

Fixed – This field is available for purchased parts only. If you have any fixed costs associated with purchased parts, such as vendor setup charges, specify the costs in the Fixed field. Fixed charges are not per unit charges. They are one-time only charges regardless of quantity.

Burden – For fabricated parts, enter your estimated cost of the burden to produce this part.

For purchased parts, you cannot specify a value in this field. If you specify a value in the Purchase Burdens section, the value is inserted into this field.

Service – For fabricated parts, enter the estimated cost of outside services necessary to produce this part.

Total – The total of all costs is calculated and inserted in this field.

For fabricated parts, you can use the Implode Costs function to determine the costs for the part instead of specifying your own values in the cost fields. When you implode costs, the costs of the raw materials and shop resources used to construct the fabricated part are examined and inserted into the fields in the Costs section. Refer to Imploding Costs.

3 In the Issue Burdens section, specify the costs incurred internally when issuing the part to a work order. This does not include shipping costs.

Percent – If a percentage of the material cost is incurred when the material is issued, specify the percent in this field.

Per Unit – If burden is applied per unit when the material is issued, specify the per unit cost in this field.

You can specify either a percent or a per unit cost, or both. The burden cost is applied when the part is issued to a work order.

4 In the Purchase Burdens section, specify the costs incurred when purchasing the part. This does not include shipping costs. These fields are available only if the part is a purchased part.

Percent – If a percentage of the material cost is incurred when materials are purchased, specify the percent in this field. The percent value is multiplied by the material cost and the result is inserted in the Burden field.

Per Unit – If burden is applied per unit when the material is purchased, specify per unit cost in this field. The value is inserted in the Burden field.

Total Cost w/ Burden – If you use Actual costing, the total cost of the part plus the purchase burden is displayed in this field.

5 In the Price Controls section, specify this information:

ABC Code – To populate this field, use ABC analysis. ABC analysis assesses how frequently a part is used and assigns a value of A, B, or C to reflect the usage. For more information, refer to“Using ABC Analysis” on 3-62 in this guide.

Effectivity Date Price for Shipments – Specify the action to take if a customer-specific price cannot be found for this part when a customer order is shipped. This field overrides the default setting specified in Application Global Maintenance. Specify one of these options:

Yes – To prevent the shipment of this part if a valid unit price cannot be found in the Customer Pricing table for the date of shipment, specify Yes. If you select this option, you must specify Shipments or Both in the By Order/Ship Date column when you set up customer-specific pricing. See "Specifying Pricing by Customer" on page 3–38 in this guide

No – To use the price specified in the customer order if no price exists in the customer’s part pricing table, select No.

Warn – To display a warning if no price exists in the customer’s part pricing table, click this option. If you continue with the shipment, the price specified in the customer order is used.

To use the setting specified in Application Global Maintenance, leave this field blank.

Price Group – If you use VISUAL Pricebook and want to set up pricing information by price group, specify the group ID.

Bid Rate Category – Specify the bid rate category for this part. Use bid rate categories to analyze budgets and quotes for this part. Set up bid rate categories in Application Global Maintenance.

6 In the Sales Price section, specify this information:

Unit Price – Specify the unit price for this part. This price is used on customer orders only if a unit price cannot be found in these areas:

- Customer Price table
- Unit Prices by Discount Code table
- Market Price table

Wholesale Price – Specify a wholesale unit price for the part. Depending on the settings you specify in Customer Maintenance, VAT may be calculated based on the wholesale price instead of the unit price.

7 Click the **Save** button.

Specifying Planning Information

Add the planning related information for your part on the Planning tab. The Planning tab is displayed if you are running the Material Resource Planning module.

You can define planning information for each independently planned warehouse to which you have assigned the part. You can also define part information for all universally planned warehouses.

To add planning information for parts:

1 Click the **Planning** tab.

Material Requirement Planning (MRP) uses the information on the Planning tab when planning orders or analyzing part demand and supply.

2 In the Warehouse ID field, click the arrow and select the independently planned warehouse whose planning information you are defining. To define information for all universally planned warehouses, select **Universal**

3 Specify this information:

Planner User ID – Specify the name of the person responsible for material planning for this Part ID. Use this field for sorting and searching in material planning. The planner does not have to be a valid database user or employee.

Buyer User ID – Click the browse button and select the person responsible for buying this part.

Safety Stock Qty – Specify the amount in excess of real demand of this part to store in your inventory. This excess stock covers fluctuations in demand caused by unplanned orders, scrap, or other events.

Lead Time (in days) – Specify the number of days required to replenish parts. For example, lead time could be made up of manufacture time and delivery. This value is used to compute order release and want dates when only one of these two dates is known. You should enter a Lead Time if you are using MRP or scheduling.

Min/Max Order Qty – Specify the minimum and maximum suggested quantity used by MRP when placing a planned order. Use this number as a material planning guide. An entry of zero means there is no minimum. This number does not restrict other types of orders and is only used by MRP when creating planned orders.

Multiples of – Specify the multiple to use when MRP plans an order for tis part. The quantity specified on the planned order is divisible by the value you specify. For example, if part A is ordered in multiples of 100, and the quantity required after an MRP run is 67, a planned order with a quantity of 100 is created.

For parts with an order policy of Master Schedule, the planned order quantities displayed in the Current MRP Plan line are expressed as a multiple of the value you specify. The Current MRP Plan line does not necessarily match the demand line. For example, if you specify 500 in the Multiples of field, and the actual demand is 550, then the planned order quantity is 1000. If you did not specify a value in the Multiples of field, the demand line and current MRP plan line would match.

Order Policy – Specify the order policy to use when you create planned orders with MRP. Select one of these options:

Not Planned – To buy this item only when the on hand quantity is less than Order Point Quantity, select the **Not Planned** option.

Discrete – To replenish exactly the quantity by which the demand exceeds supply after subtracting safety stock from supply, select the **Discrete** option.

Period Supply – To create planned orders that meet demand during a period you specify, select this option. When you select this option, specify a value in the Days of Supply field to determine the size of the period. MRP generates planned orders to meet the shortfall on a specific date plus the number of days you specify in the Days of Supply field.

Fixed – To replenish stock using the fixed quantity specified in Order Qty, select the **Fixed** option. Fixed functions similarly to EOQ.

EOQ (Economic Order Quantity) – To replenish using exactly the quantity that is needed, select the **EOQ** option.

Master Schedule – To replenish stock only according to the master schedule, select the **Master Schedule** option.

Days of Supply – This field is available if you select Period Supply as your order policy. Specify the number of days in a supply period.

Order Qty – This field is available if you selected Fixed as your order policy. Specify the quantity to order when a planned order is created.

Order Point Qty – This field is available if you selected Not Planned as your order policy. Specify the smallest quantity of this part to keep on hand. When your inventory equals or falls below the value you specify, then an order should be placed.

Order Up To Qty - This field is available if you select Not Planned as your order policy. Specify the maximum quantity that can be ordered for this part on a planned order.

Annualized Usage – Enter the estimated or calculated annualized usage of this part. You can use this number during ABC analysis. It can only be entered manually or updated by a custom program.

Demand Fence 1 – The number of days in a real demand period. This value overrides product code and global settings.

Demand Fence 2 – The number of days in a mixed demand period. This value overrides product code and global settings.

Do Not Inherit Demand Warehouse – Clear this check box to automatically assign the part to the warehouse specified in the Header Card on an Engineering Master, Work Order, or Project Master (Projects/A&D users only). You can override this setting on a case-by-case basis on any Material Cards that use this part.

Select this check box if you do not want to automatically assign the part to the warehouse specified on the Header Card. If you select this check box, Inherit Demand Warehouse check box on the Material Card in unavailable for selection. You can issue the part as needed in Inventory Transaction Entry.

Inventory Controlled by ICS – This feature is inactive and is reserved for future use.

Rate Based Fabrication – Select this check box to indicate that the part is a rate-based part. A rate-based part is a fabricated part that you produce in predictable daily quantities. Because the daily run rate is predictable, the quantity produced per day is used to determine when supply of the part is anticipated to be available to meet demand. See “Rate-based Parts” on 5-1 of the Manufacturing guide.

Specifying Accounting Information

Use this tab to specify the general ledger accounts to use when an inventory transaction is performed with this part. If you do not specify accounts, the default accounts specified in the GL interface in Financials Application Global Maintenance are used.

To specify accounting information:

1. Click the **Accounting** tab.
2. Click the browse buttons and select the General Ledger accounts to credit or debit when an inventory transaction is performed with this part. If you do not enter a General Ledger account number in any of these fields, the default accounts you specify in Financials Application Global Maintenance are used. Specify these accounts:
   - Material
   - Labor (fabricated, not purchased parts only)
   - Burden
   - Service (fabricated, not purchased parts only)
3. Click the **Def Sales Tax Group ID** button to select a default tax group to be used with this part on Customer Orders. The system will use this ID on Customer Orders if no other Tax Groups for this part have been defined in the Sales Tax Group by Part ID dialog box. See "Assigning Sales Tax Groups by Part ID" on page 3–42 in this guide.

Adding Default Information

Use the Defaults tab to specify default vendor and warehouse information for this part.

To specify default information:

1 Click the **Defaults** tab.

2 Specify this information:

Preferred Vendor ID/Preferred Vendor Name – Specify the default vendor from whom you purchase this part. The price breaks this vendor provides are used for cost estimation in the Manufacturing Window and the Estimating Window. You can specify the preferred vendor either by browsing for the Vendor ID or the Vendor Name. To browse for a vendor by ID, click the browse button and select the ID. The name associated with the ID is inserted in the Vendor Name field. To browse for a vendor by name, click the Vendor Name browse button and select the name. The Vendor ID is inserted in the Vendor ID field.

Manufacturer – Specify the name of the manufacturer of the part.

Manufacturer Part ID – Specify the ID that the manufacturer of this part uses to identify this part.

Default Package Type – Specify the default packaging type used in the shipment of this part.

Default NMFC Code ID – Specify the default National Motor Freight Code ID for this part.

Inspection Required – If this part must be inspected upon receipt, select this check box. If you select this check box, specify a default inspection warehouse and location. If this part does not require inspection, clear this check box.

Primary Warehouse ID – Select the default Warehouse used to receive and issue this part.

Primary Location ID – Select the default warehouse location to use to receive and issue this part.

Auto-issue Warehouse ID – If you selected the Auto Issue check box in the Settings section, specify the ID of the warehouse that issues this part.

Auto-issue Location ID – If you selected the Auto Issue check box in the Settings section, specify the ID of the location that issues this part.

Inspection Warehouse ID – Select the Warehouse into which you receive parts for inspection.

Inspection Location ID – Select the Warehouse location into which you receive parts for inspection.

3 Enter the shipping dimensions of this part in the Ship Dimensions field.

Adding User Defined Information for Parts

Add the User Defined information for your part on the User Def tab.

1 Click the **User Def** tab.

This User Defined tab contains ten fields you can define for your own use.

2 Enter appropriate information into the User Defined fields. Select a Field Layout ID from the list box. Define Field Layout IDs in the User Defined Field Labels dialog box available from the Maintain menu. See "Setting Up User-defined Field Labels" on page 4–20 in the Concepts and Common Features guide.

Adding Piece Tracking Information for Parts

Add the piece tracking information for your part on the Piece Tracking tab.

1 Click the **Piece Trk** tab.

2 If you plan on dimensionally inventorying this part, select the **Part Is Inventoried Using Piece Tracking** check box.

   When you select this check box, the dimension check boxes become active.

3 Select at least one dimension by which to track this part. You can select:

   - Length
   - Width
   - Height

4 Click the **Dimension U/M** browse button and select the unit of measure to use to enter dimensions for this part.

Adding Specification Information for Parts

Add the specification information for your part on the Specifications tab.

1 Click the **Specifications** tab.

2 Select the option for the specification to add. You can select:

   - Part
   - Part Customer Order
   - Part Purchase Order
   - Part Manufacturing

3 Enter specifications for the part in the text block.

Adding Intrastat and VAT Information for Parts

Add the intrastat and VAT information for your part on the Intrastat/Vat tab.

Note: If you have not enabled VAT or Intrastat in Accounting Entity Maintenance, the tab is not displayed in the Part Maintenance window. If you enable only one of VAT or Intrastat, the tab title displays only the option you enabled. For example, if you only enabled Intrastat, the tab is named Intrastat. Any items on the tab related to VAT would either not be displayed or be unavailable.

1 Click the **Intrastat/VAT** tab.

   You can enter information in the following fields:

   VAT Code – Click the **VAT Code** browse button and select the value added tax code to assign to this part. This field is available in VAT-enabled databases only.

Intrastat Exempt – If you are using intrastat but this part is exempt, select the **Intrastat Exempt** check box.

Tariff Code – Click the **Tariff Code** browse button and select the tariff code to assign to this part. The tariff code defines the class of good being transported.

Originating Country ID – Click the **Originating Country ID** browse button and select this part's country of origin.

Net Weight – Enter the net weight per part unit in the Net Weight field.

Gross Weight – Enter the gross weight per part unit in the Gross Weight field.

Weight U/M – Click the Weight U/M browse button and select the unit of measure to use for the weights of this part.

Volume – Enter the volume per part unit in the Volume field.

Volume U/M – Click the Volume U/M browse button and select the unit of measure to use for the volume of this part.

Excise Unit Price – Enter the unit price used by customs and excise, in your system currency, in the Excise Unit Price field. This is a statistical value that is not an actual part price.

Adding Order Management Information for Parts

Use the Order Management tab to specify order management information for your part. Order Management features allow you to control the manner in which you sell parts to customers and manage the replenishment of those parts.

1. Click the **Order Mgt** tab.
2. In the Parts section, specify this information:

   Substitute Parts – Substitute parts are parts that you can sell to a customer in place of the specified part. For example, you may make a generic and a name brand version of a product. The generic version could be a substitute part for the name brand version. To specify substitute parts:

   a. Click the **Substitute Parts** browse button.
   b. Click **Insert**.
   c. Double-click the **Substitute Part ID** browse button and select the substitute part.
   d. In the Rank column, specify the order in which the substitute part is displayed in the Order Management window.
   e. Click the **Save** button.

   Cross Selling Parts – Cross-selling parts are parts that through similar structure, functionality, or price, you can logically group or sell with the current part on a customer order. The use of cross-selling parts is exclusive to the Order Management module. To specify a cross-selling part:

   a. Click the **Cross Selling Parts** browse button.
   b. Click **Insert**.

c Double-click the browse button and select the part to cross-sell.

d Click **Save**.

Part Aliases – Part aliases are alternate names, abbreviations, or other designations for a Part ID. The use of part aliases is exclusive to the Order Management module.

a Click the **Part Aliases** browse button.

b Click **Insert**.

c Specify this information:

Alias ID – Specify a part alias ID.

Description – Specify a description of the part alias ID.

Type – Click the arrow and select the type associated with this alias ID.

d Click **Save**.

3 In the Harmonized Tariff Schedule section, specify this part's HTS information:

HTS Code – Click the HTS Code browse button and select the code to use from the list.

Default Country of Origin – Click the **Default Country of Origin** browse button and select the country of origin to assign to this part. The system lists any country used in a customer record, customer ship-to address, customer address, vendor record, vendor address, and vendor remit-to address.

Material Code – Specify a material code for this part.

Material Codes are unique identifiers for parts that you ship to international customers. If you use Shipment Tracking to track the location of shipments and inventory holdings, you may want to assign material codes to parts. You do not have to use Shipment Tracking to use this feature.

Adding Drum Buffer Rope Information for Parts

If you are licensed to use drum-buffer-rope, add the Drum Buffer Rope information for your part on the DBR tab.

To specify this information:

1 Click the **DBR** tab.

2 Enter the following DBR information for this part:

Planner User ID – Enter the name of the person responsible for material planning for this Part ID. Use this field for sorting and searching in material planning. The planner does not have to be a valid database user and is not a required field.

Buyer User ID – Enter the name of the person responsible for buying this Part ID. Use this field for sorting and searching in material planning. The buyer does not have to be a valid database user and is not a required field.

Safety Stock Qty – Enter the amount in excess of real demand of this part that you plan to keep in order to cover fluctuations in demand caused by unplanned orders, scrap, or other events.

Demand Horizon (in days) – Enter the number of days in advance to look for demand for this part.

Min/Max Order Qty – Enter the minimum and maximum suggested quantity used by MRP when placing a planned order. This number is used as a material planning guide. An entry of zero means there is no minimum. This number does not restrict other types of orders and is only used by MRP when creating planned orders.

Multiples Of – Enter the number by which you want DBR to calculate quantities of this part. For example, if DBR is working with a quantity of 67 and you have specified 100, the DBR Scheduler will increase the quantity to 100.

Leadtime Buffer (in hours) – Enter the number of hours (24 hours per calendar day) to use for the lead-time buffer when you are purchasing this part.

Minimum Leadtime (in hours) – Enter the minimum lead-time in hours (24 hours per calendar day) to use when you are purchasing this part in an expedited mode.

Replenishment Level – Enter the stock quantity below which you do not want your stock levels to fall. When your stock level falls below the replenishment level, VE automatically generates a work order for fabricated stocked parts.

If you have a demand (customer order) for this part, VISUAL creates a separate work order for the make to stock parts.

Emergency Stock % – For stocked materials, whether you purchase them or make them, when your on hand quantity reaches the Emergency Stock % of the replenishment level, it is time to expedite the acquisition of more of this material.

In TOC terms, when this happens, the part is in the Red Zone of its inventory buffer.

Yellow Zone Stock % – Enter the quantity of stock at which level you want the DBR Schedule to recognize demand.

Demand Fence – Enter the number of days in a real demand period.

Adding Configuration Management Information for Parts

Add the configuration information for your part on the Configuration tab.

1. Click the **Configuration** tab.
2. Enter the following information:

   Stage – Click the Stage arrow and select the stage for this part. You can select:

   - Design
   - Manual
   - Pilot
   - Release.

   Revision ID – Enter the identification of the current revision for this part.

   Drawing # – Enter the drawing number for this part.

Drawing Revision – Enter the revision number for the drawing of this part.

Drawing File – Use the browse button to select the location of the drawing file for this part.

Alternate Parts – Click the Alternate Parts button to add alternate parts. Alternate parts can be used in place of the current part in engineering masters, quote masters, and work orders. You can specify a master list of alternate parts in Part Maintenance. You can tailor the alternate part list to a particular master in the Manufacturing Window.

Note: When you issue an alternate part to a work order in Inventory Transaction Entry, the alternate part you issue must have the same unit of measure as the original part. Keep this is mind as you build the alternate part list.

a Click the **Insert** button.

b Double-click the browse button in the column header. A list of available parts is displayed.

c Select the part to use from the list. Double-click the part or select it and click the **Select and Close** toolbar button.

d Enter a rank for the alternate part. The rank indicates the order of preference for the part. If more than one alternate part is available in a master, the user should choose the part with the highest rank.

e Click the **Save** button.

ECN Controls Revision – If you control this part with ECNs, select the **ECN Controls Revision** check box.

To use Windows Explorer to search for your drawing file, enter the drive designator in the field and click the Explorer browse button. Windows Explorer opens to the location you entered in the field.

Caution: Classifying a part as obsolete is a serious and far-reaching step and something you should consider doing before taking a more drastic measure such as deleting the part from your database.

Obsolete – Because you can store virtually limitless quantities of parts in your database, you may find over a period of time you have many parts you no longer need—for example, one-off custom parts. To preserve the integrity of the Part's data record for historical and reporting purposes, thereby potentially greatly reducing the chance of erroneous part entry, you can classify a part as obsolete. VISUAL removes the part from the active parts list and restricts its use.

To designate this part as being obsolete, select the **Obsolete** check box.

A dialog box is displayed prompting you to confirm the status change. To continue, click the **Yes** button.

When you save the part, VISUAL checks for existing inventory activity for the part, it allows the status change and places tight restrictions on any and all activities involving the part.

Before you can designate a part as obsolete, it must not be used in an active customer order, purchase order, customer quote, vendor RFQ, work order, or engineering master. If the part does not meet these criteria, the system displays a dialog box indicating that you cannot mark this part obsolete. Click the **OK** button and clear the **Obsolete** check box.

For more information on how obsolete parts can impact the way you use VISUAL applications, refer to the chart.

Application	Restrictions	Exceptions
Customer Order Entry	Cannot use obsolete parts in orders with a status of Release or Firmed.	Order must have a status of Closed/ Cancelled/Void to enter obsolete parts.
Purchase Order Entry	Cannot use obsolete parts in orders with a status of Release or Firmed.	POs must have a status of Closed/Cancelled/ Void to enter obsolete parts.
Estimating Window/Vendor RFQ	Cannot use obsolete parts in quotes/RFQs unless the status is Closed or Cancelled/Void	Quotes/RFQs must have a status of Closed/Cancelled/Void to enter obsolete parts.
Manufacturing Window	Obsolete parts cannot be added to new or existing BOMs. This includes work orders, engineering masters and quote masters. VISUAL disallows the selection or entry of an obsolete part in the header, leg, material requirement, or coproduct. This prevention includes cutting and pasting, as well as the dragging and dropping of a leg or requirement that references an obsolete part.	Work Orders, Quote Masters, and Engineering Masters must have a status of Closed/Cancelled/Void to enter obsolete parts.
Material Planning Window	The Firm/Release Planned Order function in the Material Planning Window does not allow the creation of a new work order that references an obsolete part in the BOM structure.	
VDIU	The Data Import Utility (VDIU) does not allow references to obsolete parts. The BOM structure that contains the obsolete part should be rolled back and a message written to the appropriate log file. Because the VDIU function is an integral part of the configurator interface for customer orders and quotations, this prevents configurations that reference an obsolete part.	

Application	Restrictions	Exceptions
Inventory Transaction Entry	You cannot create or delete any inventory transactions against an obsolete part. This includes receipts, issues, adjustments in, and adjustments out. This implicates Inventory Transaction Entry, Shipping Entry, Purchase Receipt Entry, Inter-Branch Transfer Shipping Entry, and Inter-Branch Transfer Receipt Entry. Labor Ticket Entry also disallows the auto-issue to an obsolete part.	
Physical Inventory Count	Because you cannot enter inventory transactions for obsolete parts, Physical Inventory Count and the cycle counting function in Part Maintenance ignore obsolete parts and their associated warehouse locations when generating tags. The use of an obsolete Part ID is not allowed when entering or reentering counts.	
Interbranch Transfers	Cannot use obsolete parts in IBTs unless the status is Closed or Cancelled/Void	IBTs must have a status of Closed/Cancelled/ Void to enter obsolete parts.

To make a part available again, clear the **Obsolete** check box. If the product code specified for the part is inactive, you are warned that you cannot clear the Obsolete check box. Either select a different product code for the part or reactivate the product code.

Auto-issue Parts

An auto-issue part is a material requirement that is automatically issued to a work order when labor transactions are made. Users do not have to manually enter inventory transactions to issue the part to a work order.

To auto-issue parts, these criteria must be met:

- The Auto Issue check box must be selected for the part.
- The part must be stored in at least one auto-issue warehouse location.
- A default auto-issue warehouse and location combination must be specified for the part.
- If you have created auto-issue locations in multiple warehouses, at least one default location must be specified for each warehouse.
- The part cannot have a trace profile. Traceable parts cannot be auto-issued.

If you select the Auto Issue check box for a part, but do not assign the part to an auto-issue location, then auto-issue transactions are not made. Similarly, if you assign a part to an auto-issue location, but do not select the Auto Issue check box, then auto-issue transactions for the part are not made. If a warehouse has auto-issue locations, but none of the locations are designated as the default for the warehouse, then auto-issues are not made from the warehouse.

To create an auto-issue part:

1. Select **Inventory**, **Part Maintenance**.
2. In the Site ID field, select the site that uses the auto-issue part. Auto-issue is set up at the site level.
3. Click the **Part ID** browse button and select the part to auto-issue.
4. In the Settings section, select the **Auto Issue** check box.
5. Click the **Defaults** tab.
6. Specify this information:

   Auto-issue Warehouse ID – Specify the default warehouse to use for auto-issue transactions for this part.

   Auto-issue Location ID – Specify the default location to use for auto-issue transactions for this part.
7. Click **Save**.
8. Optionally, specify additional auto-issue warehouses and locations:
   - **a** Select **Maintain**, **Warehouse Locations**.
   - **b** Click **Insert**.
   - **c** Double-click the **Warehouse ID** button and select a warehouse.
   - **d** Double-click the **Location ID** button and select the location.
   - **e** Select the **Auto Issue** check box.
   - **f** If the location is the default auto-issue location for the warehouse, select the **Default Whs Auto Issue** check box. Each auto-issue warehouse must have a default warehouse auto-issue location.
   - **g** Click **Save**.

Warehouse Locations and Auto-issue Transactions

To determine the location that is used for auto-issues, this hierarchy is used:

- If a warehouse is specified on the header of the Material Requirement card and a location is specified on the Planning tab of the Material Requirement card, then the location that is specified on the Planning tab is used.
- If a warehouse is specified on the header of the Material Requirement card but no location is specified on the Planning tab, then the location that is designated as the default auto-issue location for the warehouse is used.

- If no warehouse is specified on the header of the Material Requirement card, then the default auto-issue location that is specified on the Defaults tab in Part Maintenance is used.

Auto-issue and Issue Negative Settings

The Issue Negative settings that you specify in Site Maintenance do not affect auto-issue warehouses. Quantity in auto-issue warehouses can be driven negative regardless of the issue negative settings that are specified for the site.

Auto-issue Transaction Quantities and Timing

Use Site Maintenance to specify the auto-issue method. The auto-issue method that you select is used to determine when to issue materials to operations. You can issue materials after the first run labor ticket is created for an operation, when a labor ticket has been created with a status of Run Complete, or incrementally based on the quantity completed on each labor ticket.

Use Preferences Maintenance to specify whether to include fixed scrap and deviated quantities in the calculation for the quantity to auto-issue.

Specifying an Auto-issue Method in Site Maintenance

1. Select **Admin**, **Site Maintenance**.
2. In the Entity ID field, select the parent entity of the site for which you are specifying the auto-issue setting.
3. In the Site ID field, select the site.
4. Click the **Defaults** tab.
5. In the Auto Issue Method section, click one of these options:

   Based on Operation Qty Complete – Click this option to auto-issue material requirements incrementally based on the quantity or percent completed on each labor ticket. For example, presume that the operation is for a quantity of 5 and the Qty Per for the material requirement is 1. If a quantity of 2 is completed on a labor ticket, then 2 units of the material requirement are issued (presuming that there is no fixed scrap or deviated quantity). If an operation is closed before all quantities are completed, then the material requirement is also closed short. This option is the default option

   Based on the Full Requirement Qty on First Labor Ticket – Click this option to auto-issue the full material requirement quantity after the first run labor ticket is reported for the operation. If you backflush labor without creating labor tickets, then the full material requirement is issued after the first backflush quantity.

   Depending on how you set up Preferences Maintenance, the issued quantity can include fixed scrap and extra materials for deviated quantities that are reported on the first labor ticket.

If a labor ticket has already been created for the operation or a quantity has already been backflushed, then additional material is not issued. For example, if you created a labor ticket for an operation and then increased the quantity of the material requirement, the additional requirement will not be issued.

Note: If operations are in process when you select this auto-issue method, additional materials are not issued to any in-process operation. To complete material issues for in-process operations, you must manually issue the materials.

Based on Full Remaining Req Qty on Run Complete – When you use this option, materials are issued in proportion to the quantity or percent complete on the operation until the Run Complete labor ticket is saved to the operation. When the Run Complete labor ticket is saved, all remaining material requirements are issued to the operation, even if the operation is closed short. If you backflush labor during the shipment of customer orders, then the full remaining quantity of a material requirement is issued when the full quantity of the order line has been shipped or when the line is closed short.

Depending on how you set up Preferences Maintenance, this quantity can include fixed scrap and extra materials for deviated quantities.

6 Click **Save**.

Specifying Auto-issue Preferences

1 Select **Admin**, **Preferences Maintenance**.

2 In the Section Filter field, select **LaborEntry**.

3 Click **Insert Row**.

4 In the LaborEntry section, specify these preferences:

Entry	Description
AutoIssueFixedScrap	Specify **Y** to also auto-issue the fixed scrap that is specified for the material requirement. If you specify Y, the fixed scrap is issued in the first auto-issue transaction that is made for the operation. Specify **N** if you do not want to auto-issue fixed scrap. If you specify N, fixed scrap quantities must be issued manually. If you do not specify a setting, then fixed scrap is auto-issued.

Entry	Description
AutoIssueMaterialReq	Specify **Y** to auto-issue material requirements to cover deviated quantities. For example, if the Qty Per for the material requirement is 1, and you complete 5 acceptable units and 2 deviated units, then a total of 7 units of the material requirement is issued to the operation. If you also auto-issue fixed scrap, then the fixed scrap quantity is also issued. If you use the **Based on the Full Requirement Qty on First Labor Ticket** auto-issue method, then deviated quantities that are reported on the first labor ticket are included in the total amount of material auto-issued to the operation. Deviated quantities that are specified on subsequent labor tickets are not included in the auto-issue calculation. Specify **N** if you do not want to issue material for deviated quantities. If you do not specify a setting, then requirements are not auto-issued for deviated quantities.

5 Click **Save**.

Adding a Picture

You can add a picture of the part to the part record. Depending on your settings in Preferences Maintenance, you can display the picture directly on the Part Maintenance window. Add pictures to parts at the tenant level.

To add a picture:

1 In the Site ID field, specify ****Tenant****.

2 In the Part ID field, specify the ID of the part.

3 Select **Edit**, **Picture/Object...**.

4 Click **Paste From**.

5 Navigate to the file containing the picture, and then click **Open**. The picture is imported.

6 Click **Close**.

If you display the picture directly in the Part Maintenance window, you can click the picture to open the Picture/Object dialog box. You must view the part at the tenant level to change the picture. If a picture has not been added to the part record, then you must select **Edit**, **Picture/Object...** to access the Picture/Object dialog.

Displaying the Picture in the Part Maintenance Window

To display the picture in the Part Maintenance window, set up the ShowPicture preference setting.

To set up the preference:

1. Select **Admin**, **Preferences Maintenance**.
2. Click **Insert**.
3. Specify this information:

   Section – Specify **PartMaintenance**.

   Entry – Specify **ShowPicture**.

   Value – Specify **Y**.
4. Click **Save**.

Editing Part Information

If you are licensed to use a single site, click the browse button and select the part to edit. Edit any information as necessary, except the part ID. Editing the Part ID creates a new part.

If you are licensed to use multiple sites, you must edit certain information at the tenant level and certain information at the site level.

To edit a part, you must make the appropriate selection in the Site ID field. To edit tenant-level information, select **Tenant** in the Site ID field. The fields that contain tenant-level information become available. After you edit tenant-level information and click the Save button, the current date is inserted in the Modified Date field.

To edit site-level information, select the site ID where the part exists. If the part exists in multiple sites, you must edit site-level information on a site-by-site basis. After you edit site-level information and click the Save button, the current date is inserted in the Modified Date field.

You must edit this information at the tenant level:

- Part Description
- Kit setting
- Shipping Weight
- Weight UM
- Commodity Code
- Case Quantity
- Pallet Quantity
- Price Group
- Effectivity Date Price for Shipments
- Default Sales Tax Group ID
- Manufacturer
- Manufacturer Part ID

- Default Package Type
- Default NMFC Code ID
- Ship Dimensions
- Used Defined Fields
- Specifications
- Piece tracking information
- Intrastat information except for Excise Unit Price
- Order Management information
- Configuration Management information except for the Obsolete check box. The Obsolete check box can be edited at either the tenant or site level.
- Part picture

You must edit this information at the site level:

- Eng Master Eng ID
- Process Type
- Costs, Issue Burdens, Purchase Burdens, and Selling Price
- All Warehouse and Part Location information

You can define all other information at either the tenant or the site level. If you do not specify information at the site level, the tenant level information is used. When the site-level information is different from the tenant-level information, the text in the field is displayed in blue. For options and check boxes, the label is displayed in blue.

After you save site-level information for a part, the part is added to the site's part table.

If you edit a part's drawing number, drawing revision, drawing file, specifications, or customer pricing, you can use the Resetting Part Information function to update transactions. See "Resetting Part Information" on page 3–48 in this guide.

Reviewing Create Date and Modified Date Information

Use the Create Date field to review when a part was added to the tenant and to each site. Use the Modified Date field to review when the date of the last change to tenant-level and site-level information.

To review tenant-level information, select **** Tenant **** in the Site ID field and then select the part. The Create Date shows when the part was added to the tenant. The Modified Date shows the date that tenant-level information was last edited.

To review site-level information, select the site in the Site ID field and then select the part. The Create Date shows when the part was added to the site. The Modified Date shows the date that information for the part in the selected site was edited.

Note: The Create Date and Modified Date fields were added in VISUAL 9.0.1. If you upgraded your VISUAL database from an earlier version of VISUAL, then the create date for all parts that were in the database at the time of the upgrade will match the date that the database was upgraded.

Adding Parts Without IDs

You can set up pricing tables for parts without Part IDs. Only the vendor Part ID is required to use this information to place a purchase order. This is helpful if you buy parts for a specific job for which your company has not assigned Part IDs.

You can specify these parts, enabling your purchasing department to order them using the vendor Part ID. This function is not specific to the current part in the Part Maintenance window; you can use it at any time.

If you are licensed to use multiple sites, you must select a site ID in the site ID field before you can access the Vendor Parts Supplied dialog box.

To add parts without IDs:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Select **Maintain**, **Vendor Parts Supplied**.
3. Click the **Vendor ID** browse button and select the vendor supplying the non-Part ID.

   The upper table shows all parts for the vendor you selected. This includes regular inventory parts that were also given a vendor Part ID using Vendors Supplying this Part.
4. Click **Insert**.

   While in the Part ID section, you can specify many parts by pressing the ENTER key after each entry to go to the next line (or press the TAB key to go to the next line). If you exit the vendor Part ID table to specify price information, you must click **Save** before returning to specify more vendor Part IDs. Failure to do so causes the information you specified outside the vendor Part ID table to be lost.
5. If applicable, specify the prices and quantity breaks for the part in the price break table.

   This information is used when creating purchase orders.

   Specify this information:

   Quote Date – Click the **Quote Date** calendar button and select the date to use for this quote.

   This date is used to manage timely updates of price quotations. The default date is the current date, but you can change it to any date.

   Purchase U/M – Click the **Purchase U/M** browse button and select the unit of measure in which you purchase this part.

   When you receive this part, it is converted from the Purchasing U/M to the Stocking U/M.

   Effective Date – Click the **Effective Date** button and specify the date that the vendor pricing becomes effective. If you specified a contract ID, this is the date that the pricing in the contract line number becomes effective.

   Expiration Date – Click the **Expiration Date** button and specify the date that the vendor pricing expires. If you specified a contract ID, this is the date that the pricing on the contract line item expires.
6. Click **Save**.

Adding Parts to Sites

This procedure applies to multi-site licenses only.

If you use multiple sites, you can assign the same part to different sites. After you assign a part to a site, you can edit any site-specific information to make the information unique to the site. For more information, refer to“Editing Part Information” on 3-26 in this guide.

You can add a part to a site directly in the Part Maintenance window. To add a part to a site, click the **Site ID** arrow and select the site, then click the Part ID browse button and select the part. If the part does not exist in the site, you are asked to add the part to the site.

You can add multiple parts to a site at one time by using the Site Parts dialog box.

You can add the same part to multiple sites at one time using the Sites for Part dialog box.

Adding Multiple Parts to a Site

You can add multiple parts to a site at one time.

You can also access this function in Site Maintenance.

To add multiple parts to a site:

1. In the Site ID field, click the **Site ID** arrow and select the site to which you are adding parts.
2. Select **Maintain**, **Site Parts**.
3. The site ID you selected in Part Maintenance is inserted in the Site ID field. To add parts to a different site, click the **Site ID** arrow and select the site to which you are adding parts.
4. To add a part to the site, select the **Add to Site** check box. To select all parts, click **Select All for Add**.
5. Click **Save**. The selected parts are added to the site.

Adding a Part to Multiple Sites

To add a part to multiple sites:

1. In the Part Maintenance window, click the **Part ID** browse button and select the part to add to multiple sites.
2. Select **View**, **Part Sites**.
3. Select the **Show All Sites** check box. The Exists in Site and Add to Site columns and the Save and Close buttons are displayed.
4. To add the part to a site, select the **Add to Site** check box.
5. Click **Save**.

Deleting Parts

If you are licensed to use a single site, refer to “Deleting Parts in a Single-site Environment.”

If you are licensed to use multiple sites, refer to “Deleting Parts in a Multi-site Environment.”

Deleting Parts in a Single-site Environment

Caution: Deleting a part permanently removes the information from your database and is not recoverable. You cannot delete a part if the part is used anywhere else, or has any transactions against it.

Because deleted part information is unrecoverable, consider classifying the part as Obsolete. If you find that you require the use of that part at a later date, you can re-enable the obsolete part.

To delete a part:

1. Click the **Part ID** arrow and select the part to delete.
2. Click **Delete**.
3. Click **Yes** to confirm your deletion.

The Part Maintenance window contains the part information, but the part has been removed from the database.

Deleting Parts in a Multi-site Environment

If you are licensed to use multiple sites, you can delete parts from your sites and delete parts from your tenant. Before you can delete parts from your tenant, you must delete them from your sites.

Because deleted part information is unrecoverable, consider classifying the part as Obsolete. If you find that you require the use of that part at a later date, you can re-enable the obsolete part. You can mark a part Obsolete at the site level.

Deleting Parts from a Site

To delete a part from a site:

1. Click the **Site ID** arrow and select the site to use.
2. Click the **Part ID** browse button and select the part to delete from the site.
3. Click **Delete**.
4. Click **Yes** to confirm the deletion.

5 To clear the current information from the Part Maintenance window, click **Yes**. To retain the current part information in the Part Maintenance window, click **No**. While the information for the deleted part remains in the window, the part has been removed from the site.

Deleting Parts from the Tenant

To delete a part from the tenant:

1 Delete the part from all sites. Refer to “Deleting Parts from a Site.”

2 Click the **Site ID** arrow and select ****TENANT****.

3 Click the **Part ID** browse button and select the part to delete from the tenant.

4 Click **Delete**.

5 Click **Yes** to confirm the deletion.

6 To clear the current information from the Part Maintenance window, click **Yes**. To retain the current part information in the Part Maintenance window, click **No**. While the information for the deleted part remains in the window, the part has been removed from the database.

Maintaining Purchasing Price Information

Use these options available on the Maintain menu to specify the vendors that sell this part to you:

- Vendors Supplying This Part
- Vendor Parts Supplied
- Purchase Contract

If you are licensed to use multiple sites, you must define Vendors Supplying This Part and Vendor Parts Supplied at the Site level. You can view Purchase Contracts at either the tenant level or the site level.

Establishing Vendors for a Part

You can establish price and preference information for each vendor that supplies a part. Although you can purchase any part from any vendor defined in Vendor Maintenance, use Vendors Supplying this Part to set up explicit preferred and alternate vendors for each purchased part. Preferred vendors are the suppliers that your company has researched and found to be best in quality, capability to deliver the part, price, or a combination of all three.

If you are licensed to use multiple sites, you must add preferred vendors at the site level.

To add preferred vendors:

1. Select **Inventory**, **Part Maintenance**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site ID for which you are adding vendors. If you are licensed to use a single site, this field is unavailable.
3. In the Part ID field, click the browse button and select the Part ID for which you are adding vendors. You must select a purchased part to activate the Vendors Supplying This Part dialog box.
4. Select **Maintain**, **Vendors Supplying This Part**. The dialog box shows the vendors that are currently assigned to the part.
5. Click **Insert**.
6. Double-click the **Vendor ID** browse button and select a vendor from the list.
7. To set this vendor as the default vendor for this part, click **Set Preferred Vendor**.

   You can only select one preferred vendor for each part.
8. Click **Save**.
9. If you have finished adding vendors for a part, click **Close**.

Deleting Vendors from the Table

To delete vendors from the Vendors Supplying Part table, select the vendor in the table and click Delete. The vendor information is removed from the Vendors Supplying Part table, but the vendor is not removed from your database.

Specifying Multiple Vendor Part IDs for the Same Part

Sometimes, a vendor may sell you more than one part that meets the same specification. For example, a vendor may sell you two different 100 ohm resistors that can be used interchangeably. When a vendor sells multiple parts that correspond to one of your parts, you can use the Vendors Supplying This Part dialog box to specify the multiple vendor part IDs to associate with one of your part IDs. You can customize the pricing for each vendor part.

To add multiple vendor part IDs for a single part:

1. Select **Inventory**, **Part Maintenance**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site ID for which you are adding vendors. If you are licensed to use a single site, this field is unavailable.
3. In the **Part ID** field, click the browse button and select the Part ID for which you are adding vendors. You must select a purchased part to activate the Vendors Supplying This Part dialog box.
4. Select **Maintain**, **Vendors Supplying This Part**.

   The dialog box shows the vendors that are currently assigned to the part.
5. Click **Insert**.
6. Double-click the **Vendor ID** browse button and from the list select the vendor with multiple items to be associated with one Part ID.

   The Vendor ID and Vendor Name are inserted.
7. Click in the **Vendor Part ID** field and enter a unique name.
8. Click **Save**.

   The vendor part inherits the vendor settings of an active vendor, or a preferred vendor.
9. Click **Close** when you have finished adding all of the items for one vendor associated with one Part ID.

Adding Vendor Quotes

If your vendor has quoted you pricing for the part, specify the vendor part pricing information in the Vendor Parts Supplied dialog box. You can access this dialog box by selecting **Maintain**, **Vendor Parts Supplied** or by clicking **Edit Quotes** in the Vendors Supplying Part dialog box.

You can also create a contract ID to apply to the pricing. You can use this contract ID in Purchase Order Entry to set the correct unit price.

If you are licensed to use multiple sites, you must create vendor quotes on a site-by-site basis.

NOTE: You can also create vendor pricing in Vendor RFQ Entry. When you approve a vendor quote in Vendor RFQ Entry, you can automatically update the pricing specified for the vendor on the part record. When you approve the quote, select the Create Part Master Vendor-quotes check box. The pricing structure specified on the RFQ is copied to the part record. See “Approving Quotes” on page 6-12 in the Purchasing guide.

To add vendor quotes for the part:

1 Perform one of these steps:

- Select **Maintain**, **Vendors Supplying This Part**. Select the vendor part ID and click **Edit Quotes**.
- Select **Maintain**, **Vendor Parts Supplied**. Select the vendor, and then select the line containing the vendor part ID.

2 Specify this information:

Contract ID – If you have a formal contract with the vendor to provide certain pricing, specify a contract ID. If you purchase the part from the vendor, you can use the contract ID in Purchase Order Entry to generate the correct unit price. If you do not specify a contract ID, a formal pricing contract with the vendor is not created.

Contract Line Number – If you have a formal contract with the vendor, specify the contract line number that refers to the part’s pricing structure.

Vendor Contract – If the vendor has its own identification system for the contract, specify the contract ID.

Vendor CLIN – Specify the vendor contract line item number that refers to the part’s pricing structure.

3 Specify the prices and quantity breaks for the part in the price break table.

This information is used when creating purchase orders.

Specify this information:

Quote Date – Click the **Quote Date** calendar button and select the date to use for this quote.

This date is used to manage timely updates of price quotations. The default date is the current date, but you can change it to any date.

Purchase U/M – Click the **Purchase U/M** browse button and select the unit of measure in which you purchase this part.

When you receive this part, it is converted from the Purchasing U/M to the Stocking U/M.

Effective Date – Click the **Effective Date** button and specify the date that the vendor pricing becomes effective. If you specified a contract ID, this is the date that the pricing in the contract line number becomes effective.

Expiration Date – Click the **Expiration Date** button and specify the date that the vendor pricing expires. If you specified a contract ID, this is the date that the pricing on the contract line item expires.

4 In the Quantity and Price table, specify the quantity breaks, prices, and leadtimes the vendor provided. The way you enter prices depend upon your Purchase Quote Type setting in Application Global Maintenance. If you have specified Qty Break tables, then the default price applies to quantities from 1 to the quantity you specify in the first quantity break. If you have specified Up To Quantity, then the default price applies to quantities greater than the largest up-to quantity you specify.

   You must specify a default price. Optionally, you can specify a default leadtime.

   For other quantities, specify this information:

   Quantity – Specify the quantity break or up-to quantity.

   Price – Specify the price for each up-to or break quantity.

   Leadtime – Optionally, specify how many days it takes for the vendor to deliver the quantity. This field is informational only. You can use it to help you decide which vendor quote to accept, but the value is not used in material planning or scheduling.

5 Click **Save**.

Viewing Purchase Contracts

Use the Purchase Contracts dialog box to view the contracts in your database. You can view contracts created in Part Maintenance, Outside Service Maintenance, and Vendor RFQ Entry. Most of the information in the window is read-only; you can edit the description, status, and status reason fields.

To view purchase contracts:

1 Select **Maintain**, **Purchase Contract**.

2 Click the Contract ID browse button and select the contract to view.

   This information is displayed in the header:

   Description – Specify a description for the contract.

   Vendor ID – The ID of the vendor with whom you are specifying the contract.

   Vendor Contract ID – The supplier contract ID you specified on the Vendor RFQ header or the Quote Entry window. If you did not specify a contract ID, one is created.

   Status – Click the arrow and specify the contract's status. You can select from Open, Closed, or Cancelled/Void.

   Status Reason – Click the browse button and select a reason for the status. Set up reason codes in Application Global Maintenance.

   This information is displayed in the table:

   Ln # – The contract line number.

   Vendor CLIN – The supplier contract line item number you specified in the Specify Vendor Quote dialog box.

   Part ID – If the quote is for a part, the part ID.

Service ID – If the quote is for a service, the service ID

Description – The description of the part or service.

Effective Date – The date that the pricing for the contract line becomes effective. The date you specified in the Enter Vendor Quote dialog box is displayed.

Expiration Date – The date that pricing for the contract line expires. The date you specified in the Enter Vendor Quote dialog box is displayed.

Vendor Part ID – The vendor's part ID for the part on the line.

Vendor Service ID – The vendor's service ID for the service on the line.

3 Click **Save**.

Printing a Purchase Contracts List

Print a Purchase Contracts List report to view the contracts you have made with vendors.

To print a purchase contract list:

1 Select **File**, **Print Purchase Contracts**.

2 Specify this information:

Starting Date and Ending Date fields – To view contracts created during a certain time frame, specify a starting date and ending date in the starting date and ending date fields.

Start Vendor ID and End Vendor ID fields – To view contracts for certain vendors, select the Vendor ID option in the Sequence section, then specify a Start Vendor ID and an End Vendor ID. The contracts for the vendor IDs specified in the Start Vendor ID and End Vendor ID fields will be exported, along with all vendor IDs that occur alphabetically between the start vendor ID and end vendor ID.

You can use the Date fields and Vendor ID fields in conjunction with each other to view contracts made with certain vendors over a particular period of time.

Orders – To view the currently selected contract only, select the Current Contract option. If you select this option, the Vendor ID fields and the Status fields are displayed. Select All Contracts to view any contract that fits the parameters you specify.

Sequence – Select the sort order for the report. Select Contract ID to sort the report by contract ID. Select Vendor ID to sort the report by vendor.

Status – Select the status of the contracts to view in the report. Select one or more of the following statuses: Open, Closed, Cancelled. If you selected the Current Contract option in the Orders section, the Status selections are disabled.

Type – Select the type of report to export. Select Standard to view the Contract ID, Vendor Contract ID, Description, Vendor ID, Vendor Name, Status, and Create Date in the report. Select Detail to view all of the information in the Standard report, plus the RFQ line number, part or service ID, item description, contract effective date, contract expiration date, vendor CLIN, vendor part ID, vendor service ID, purchase UOM, currency ID, and the quantity and pricing breakdown.

3 Select the output options for the report, then click **Ok**.

Printing the Purchase Contract Usage Report

Print the Purchase Contract Usage Report to view the purchase orders that reference vendor contracts.

To run the purchase contract usage report:

1. Select **File**, **Print Purchase Contract Usage Report**.
2. Specify this information:

   Starting and Ending Contract ID – Select the range of contracts to view in the report. To view only one contract, specify the same contract ID in the Starting Contract ID and Ending Contract ID fields.

   Sequence – Select the sort order for the report. You can select By Vendor ID, By Part ID, or By Contract ID.

   Specify the output for the report.
3. Click **Ok**.

   The report lists the vendor ID, vendor name, order ID, order date, buyer, currency ID, line #, service or part ID, description, vendor part ID, contract ID, contract line #, vendor contract ID, vendor CLIN, quantity, unit of measure, unit price, min charge, fixed charge, and received date.

Maintaining Sales Pricing Information

You can set up sales pricing for parts at a variety of levels. For example, you can set up a specific pricing structure for a particular customer, or you can set up price structures by market. This section describes how pricing is determined when you enter a customer order. It also describes how to set up sales pricing for parts.

Customer Order Pricing Hierarchy

When you enter a customer order, the price for the part on the customer order line is determined using this hierarchy:

1. If a price for the part has been specified in the customer price table (CUST_PRICE_EFFECT), this price is used.You can specify pricing information for customers in Part Maintenance and in Customer Maintenance. When you specify a pricing structure for a part, you also specify the dates that the pricing is effective. The table stores prices in the customer currency.
2. If a price is not found in the Customer Pricing Table, then the price for the part by discount code is used. Specify discounts in the Unit Prices by Discount Code dialog box. This information is stored in the DISCOUNT_PRICE table.
3. If a part does not have a customer price or discount price defined, a market price for that part in the customer's market and the document currency is searched for. This data is located in the MARKET_PRICE table, which is similar in structure to the CUSTOMER_PRICE table. The table contains part prices by market and Currency ID. Market defaults and currencies are stored in the MARKET table. Define the pricing information in Unit Prices by Market dialog box.
4. If a part does not have a MARKET_PRICE record, the MARKET table is queried for the default currency for the market area, and then the MARKET_PRICE table is queried for a price in the default currency of the market.
5. If neither a specific customer nor market price exists for a particular part, the Unit Price specified in the Selling section on the Costing tab of Part Maintenance is used. If you are licensed to use multiple sites, this price is site-specific. The MARKET table is then searched to find a market price rate adjustment for the customer's market.

The steps above determine the price for a part, but not necessarily in the currency of a customer order.

Specifying Pricing by Customer

To give individual customers price breaks based on the quantity of parts they purchase, set up a pricing table for each customer to whom to give price breaks.

You can set up multiple price break tables for the same customer providing you use different Selling U/Ms. For example, for one customer, you can set up Price Break Tables for quantities less than a pallet load. You can also set up Price Break Tables for the same customer for quantities that require shipment by the pallet load.

If you are licensed to use multiple sites, the customer pricing information is maintained at the tenant level.

If you specify pricing for a customer, then the pricing is used on orders for the customer.

To add unit prices by customer:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select a site. While you maintain customer pricing at the tenant level, you must select a site ID to access the dialog box in case a currency is not specified on the customer record.
2. Click the **Part ID** browse button and select the part for which to set up customer pricing.
3. Select **Maintain**, **Customer Pricing**.
4. Click **Insert**.
5. Specify this information:

   Customer ID – Double-click the **Customer ID** browse button and select the customer for whom you are setting up this price break table.

   Customer Part ID – Specify the ID your customer uses for the part.

   Selling U/M – Specify the unit used to sell this part to the customer. By default, the stock unit of measure specified for the part is inserted. To specify a different unit of measure than the default unit, a conversion factor must exist between the two units.

   Effective Date – Specify the date on which this price break structure will take effect. To specify today's date, place your cursor in the column and press T. To open a calendar, place your cursor in the column and press the space bar.

   Discontinue Date – Specify the date on which to discontinue this pricing structure.

   By Orders/Ship Date – Click the arrow to select which record type to use to determine if the customer pricing is in effect. Select one of these options:

   Both – Select this option if the both date of the customer order and the date of the shipment are used to determine if the customer pricing is in effect. If the date of the order or shipment is between the dates specified in the Effective Date and Discontinue Date columns, then the pricing specified in the price break table is applied.

   Orders – Select this option if the date of the customer order is used to determine if the customer pricing is in effect. If the date of the order is between the dates specified in the Effective Date and Discontinue Date columns, then the pricing specified in the price break table is applied.

   Shipments – Select this option if the date of the shipment is used to determine if the customer pricing is in effect. If the date of the shipment is between the dates specified in the Effective Date and Discontinue Date columns, then the pricing specified in the price break table is applied.
6. In the Price Break Table section, for each Quantity level at which to give discounts, specify the quantity and price.

   If you have specified a Unit Price in the Selling Price section of the Costing tab in the Part Maintenance window, the Default price is specified in the table.

Specify the price information in the customer's currency. The customer's currency is displayed beneath the table.

7 Click **Save**.

Requiring Customer-specific Pricing at Shipment

To require that customer-specific pricing be in place when you ship a part, use the Effectivity Date Price for Shipments setting. This setting is available in Application Global Maintenance and in Part Maintenance. Use the setting in Application Global Maintenance to specify the default setting for all of your parts. See "Specifying Default Information" on page 2–8 in the System-wide guide. Use the setting in Part Maintenance to override the default setting for a particular part. See "Specifying Costing Information" on page 3–9 in this guide.

If you require that customer-specific pricing be in place when yo ship a part, you must specify either Both or Shipments in the By Orders/Ship Date field.

Setting Unit Prices by Discount Code

Before you can set up unit prices by discount code, you must first set up the discount codes in Customer Maintenance. See "Specifying Discount Codes" on page 2-26 in the Sales guide.

You can define a unit price matrix for a discount code. Use discount codes to set up general unit price quantity breaks based on a discount category, rather than defining customer-specific pricing. If required, you can specify a discount code with a percentage of zero, and use this feature to control the unit price matrix without giving a percent discount.

When you enter a customer order, the discount code pricing is used if customer-specific pricing has not been specified. See "Customer Order Pricing Hierarchy" on page 3–38 in this guide

If you are licensed to use multiple sites, maintain discount code pricing by site.

To specify unit prices by discount code:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

2 In the Part Maintenance window, click the **Part ID** browse button and select the part for which to set up unit prices by discount code.

3 Select **Maintain**, **Unit Prices by Discount Code**.

4 Click **Insert**.

5 Specify this information:

Discount Code – Double-click the browse button and select the discount code to use. The table shows the description for the code you selected.

Selling U/M – Specify the unit used to sell this part. By default, the stock unit of measure specified for the part is inserted. To specify a different unit of measure than the default unit, a conversion factor must exist between the two units.

6 In the right table, specify the default price and up to ten quantity price combinations in ascending quantity sequence.

7 Click **Save**.

Setting Unit Prices by Market

Before you can specify unit prices by market, set up market codes. See "Maintaining Market Information" on page 3–42 in this guide. To assign a customer to a market, use Customer Maintenance. See “Adding Customers” on page 2-3 in the Sales guide.

When you enter a customer order, the market-specific prices you set up are used if customer-specific prices or discount codes prices have not been set up. See "Customer Order Pricing Hierarchy" on page 3–38 in this guide.

When you set up prices for a part by market, the prices you specify in the Unit Prices by Market dialog are used as-is when you enter a customer order. The market adjustment is not applied to the price when you enter a customer order.

If you are licensed to use multiple sites, unit prices by market are set up at the tenant level.

To add unit prices by market:

1 Select **Maintain**, **Unit Prices by Market**.

2 Click **Insert**.

3 Specify this information:

Market ID – Double-click the **Market ID** browse button and select a Market ID for the part.

Currency – Specify the currency for the pricing. By default, the currency defined for the market is inserted.

Selling U/M – Specify the unit used to sell this part. By default, the stock unit of measure specified for the part is inserted. To specify a different unit of measure than the default unit, a conversion factor must exist between the two units.

4 Specify the unit price and quantity combinations in the right table panel. Specify price breaks in ascending order. For example, specify 10 in the first row to specify the price for quantities up to 10. Specify 20 in the second row to specify the price for quantities between 11 and 20, and so on.

In the first line, specify the default unit price. The default is used if the quantity does not fall within one of the ranges you specify.

5 Click **Save**.

Markets, Taxes, and Currency Conversions

In addition to the specific pricing you set up for a customer, market, sales taxes, and currency conversion have impact on the price a customer pays for a part.

If you are licensed to use multiple sites, this information is not site-specific. You do not need to select a Site ID to specify the information described in this section.

Assigning Sales Tax Groups by Part ID

Before you can assign sales tax groups by Part ID, you must first create Sales Tax Groups. See “Sales Tax Group Maintenance” on page 5-1 in the Sales guide.

Use the Sales Tax Groups by Part ID dialog box to define the sales tax group to use for various combinations of Part ID, Customer ID, and Customer Address ID. For example, you can assign a sales tax group for PART A when it is sold to CUSTOMER 1 and a different sales tax group for PART A when it is sold to CUSTOMER 2. Also, you can assign sales tax groups for the part based on the customer shipping address. For example, you can assign a sales tax group for PART A when it is shipped to CUSTOMER 1's MAINE location, and a different sales tax group for PART A when it is shipped to CUSTOMER 1's VIRGINIA location.

To assign a Sales Tax Group to a combination of Part ID, Customer ID, and Customer Ship To ID:

1. Click the **Part ID** browse button and select the part for which to set up sales tax groups.
2. Select **Maintain**, **Sales Tax Group by Part ID**. If you specified a default Sales Tax Group ID on the Accounting tab in Part Maintenance, the value is inserted in the Default Sales Tax Group ID field.
3. Click **Insert**.
4. Specify this information:

   Customer ID – Specify the ID of the customer who pays the tax on this part.

   Shipto ID – To associate the sales tax group with a particular shipping address, double-click the **Shipto ID** browse button to select the address to use. The Addr # associated with the Shipto ID you selected is inserted. If the sales tax group applies to all customer addresses, leave this field blank.

   Sales Tax Group ID – Double-click the browse button to select the Sales Tax Group to assign to this part/customer or part/customer/shipto ID combination. The name associated with the Sales Tax Group ID in the Sales Tax Group Name field is inserted.
5. Click **Save**.

Maintaining Market Information

Use the Market Maintenance dialog box to specify markets and market adjustment rates. After adding markets, use Customer Maintenance to assign a customer to a market. For example, an Italian customer can have a market designation with Euro as its Currency ID.

You can also set up part sales prices by market. See "Setting Unit Prices by Market" on page 3–41 in this guide.

The market adjustment you specify is applied to customer order pricing only if no customer-specific pricing, discount-specific pricing, or market-specific pricing is associated with the customer. The market adjustment rate is applied to the unit price specified in the Selling Price section of Part Maintenance. See "Customer Order Pricing Hierarchy" on page 3–38 in this guide

To add markets:

1 Select **Maintain**, **Markets**.

2 Click **Insert**.

3 Specify this information:

Market ID – Specify a unique identifier for the new market.

Description – Specify a description for the market.

Currency – Double-click the **Currency** browse button to select the currency to associate to the market from the list.

Market Rate – Specify the factor to use to adjust part prices in this market. The default of 100 is treated as 1 in the calculation. For example, 105 is treated as a 5 percent positive adjustment.

4 Click **Save**.

Maintaining Currency Price Indexes

Use the Currency Price Index feature to establish stable conversion rates for currencies experiencing large exchange rate fluctuations and stabilize varying part prices over short periods of time.

A part price list index is a list of user-defined conversion rates that remain relatively fixed. This method of currency conversion allows part prices to remain more stable over time. These price conversions are used:

- If a customer order has a different currency than the currency of the price, the CURR_PRICE_INDEX table is used.
- If the user specified an exchange rate for the two currencies involved, the required conversion is completed.
- If no data is found, the most recent rate from the CURRENCY_EXCHANGE table is used in calculating the correct currency value for the order.

To add currency price indexes:

1 Select **Maintain**, **Currency Price Index**.

2 Click **Insert**.

3 Specify this information:

From Currency ID – Double-click the **From Currency ID** browse button and select the currency from which to add an exchange rate.

To Currency ID – Double-click the **To Currency ID** browse button and select the currency to which to add an exchange rate.

Exchange Rate – Specify the exchange rate to use to convert the currency specified in the From Currency ID field to the currency specified in the To Currency ID field.

4 Click **Save**.

Resetting Material Requirement Costs

If you have made changes to your part costs, you can use the Reset Material Requirement Costs function to reset the estimated material costs used in quote masters, work orders, and engineering masters. You can choose to update work orders with certain statuses. You can also choose to update masters or work orders created before or after a certain date.

Note: Because resetting material requirement costs has the potential to affect many work orders, use caution in making the decision to Reset Your Material Requirement Costs.

If you are licensed to use multiple sites, material requirement costs can be reset on a site-by-site basis only. You must select a Site ID before resetting material requirement costs. The material requirement costs are reset for only for that site's masters and work orders.

To reset material requirement costs:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site whose costs to reset. If you are licensed to use a single site, this field is not available.
2. To reset costs for a particular part, specify the part in the Part ID field. If you are resetting costs for all parts in the site, you can leave the Part ID field blank.
3. Select **Maintain**, **Reset Material Requirement Costs**.
4. To reset the costs for the part selected in the Part Maintenance window only, click **Current Part Only**. To reset costs for all parts, click **All Parts**. If you are licensed to use multiple sites, all parts within the site you selected in Part Maintenance are updated if you click All Parts.
5. Specify the types of masters to update. Select one or more of these options:
   - Engineering Master Material requirements
   - Work Order Material Requirements
   - Quote Master Material Requirements
6. To reset material costs based on the status of each material requirement, select the **According to Material Requirement Status** check box and select the statuses to use:
   - Unreleased
   - Firmed
   - Released
   - Closed
   - Cancelled
   - All

   This selection applies to work orders only.
7. To reset material costs based on Work Order or Master creation date, select the **According to W/O or Master Creation Date** check box. Use the calendar buttons to select the After or Before dates to use.
8. Click **OK**. As your material costs are updated, the Reset Materials Cost dialog box shows the current part being updated. When processing is finished, a dialog box is displayed listing the number of material requirements updated.
9. Click **OK**.

Calculating Standard Unit Costs

You can use Implode Costs to automatically calculate the standard unit costs (those listed in the Costs section of Part Maintenance) for fabricated parts. This is done by referencing the engineering master for the part, and summing costs for all required materials, labor, and outside services.

The Costing Between Levels section of Accounting Entity Maintenance controls how costs are “rolled up” when there are multiple levels of fabricated parts. This is only relevant when an engineering master has another fabricated part as a material requirement. If you select **Fold to Material Cost**, the material, labor, burden, and service costs for the required part is added, and that value contributes only to the material cost for the parent part. If you select Keep Separate Costs, each of the four cost categories individually contribute to those categories for the parent part.

A top level part is a fabricated part that is not used as a required material of any other fabricated part. Often, these are the parts that are sold as products.

The Multi Level option controls how Implode Costs follow chains of fabricated parts. If selected, implode costs is performed recursively for each fabricated part required in the engineering master, until only purchased parts are found. During this process, the estimated unit costs in the material requirements for these fabricated parts are also updated. If not selected, then the costs associated with the material requirements are used directly, as is. The Permanently Save option controls if the recursive implosion is permanently saved in each part master.

If you are licensed to use multiple sites, Implode Costs can only be used at the site level.

Note: Carefully consider any changes to standard costs when using a standard cost system. Most standard cost accounting systems operate under a principle where standards for existing parts are set and frozen for a given period, often an entire fiscal year. Implode Costs has the capability of changing the standards for ALL parts in your database.

To automatically calculate standard costs:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site whose costs to implode. If you are licensed to use a single site, this field is unavailable.
2. Select **Maintain**, **Implode Costs**.
3. Select the parts to implode. You can select:

   Current Part only – Click this option to implode costs only for the current part in the Part Maintenance window.

   Selected Parts – When you click this option, the Selected Parts browse button becomes active. Click this button to select fabricated parts from a table. You can select a single part or multiple parts. If you are licensed to use multiple sites, only the parts found in the site you selected in the Part Maintenance window are displayed.

   All top-level parts – Click this option to implode costs for all top level parts. If you are licensed to use multiple sites, only the top-level parts in the site you selected in the Part Maintenance window are imploded.
4. To save the results of the implosion at each part level, select the **Permanently Save All Levels** check box.
5. To implode costs through multi-levels from the selected part down, select the **Multi Level** check box.

6 Click **OK**.

Note: If you do not select Permanently Save All Levels, the implosion results show only in the Costing section of the current screen. Permanently Save All Levels is selected and cannot be changed when you select ***All Top Level Parts***.

The Implode Cost dialog box shows a progress meter.

If any parts were not correctly imploded, a dialog box displays a list of the parts that were not correctly imploded.

Resetting Part Information

If you change a part's drawing number, drawing revision, drawing file, or specifications, you can use the Reset Part Information function to update other records that use this information. You can update engineering masters, work orders, quote masters, customer orders, and purchase orders. For customer orders, you can also reset unit prices based on the information in the Customer Pricing dialog box. You can also use the Reset Part Information function to update universally planned materials by commodity code.

If you are licensed to use multiple sites, you can select **Tenant** in the Site ID field to update parts in all sites. You must select **Tenant** to update specifications. To update records in a specific site, select the site in the Site ID field before accessing the Reset Part Information dialog box.

To reset part information:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select **Tenant** to update all of your sites or to update specification information. To update a particular site, click the **Site ID** arrow and select the appropriate site. If you select a site ID, you cannot update specifications.

   If you are licensed to use a single site, this field is unavailable.

2. To update a specific part, click the **Part ID** browse button and select the part.
3. Select **Maintain**, **Reset Part Information**.
4. To only reset information for the current part selected in the Part Maintenance window, select the **Current Part Only** option. To reset information for all parts, select **All Parts**.
5. Select the part information to update. Select one or more of these options:
   - Drawing #
   - Drawing Rev
   - Drawing File
   - Specifications

   If you are licensed to use multiple sites, all of this information is maintained at the tenant level.

6. To update material requirements, click the **Requirements** tab. To include material requirements in the update, you must make one of these selections:
   - Select the According to W/O or Master Creation Date check box
   - Select the According to Material Requirements Status check box, and select at least one status.

   Specify this information:

   Requirement types – Select the types of material requirements to update. Select from these options:
   - Engineering Master Material Requirements
   - Work Order Material Requirements
   - Quote Master Material Requirements

   To update information found on Headers and Sub ID header cards, select the **Include Headers and Sub IDs** check box. To update information on material requirement cards only, clear this check box.

According to Material Requirement Status – To reset part information based on the status of each material requirement, select this check box and select the statuses to use:

- Unreleased
- Firmed
- Released
- Closed
- Cancelled
- All

According to W/O or Master Creation Date – To update work orders and masters created during a particular time period, select this check box. Specify the creation dates using the calendar buttons to select the After or Before dates. To update all requirements that match the statuses you selected in the Filters section and the types you selected in the Requirement Types section, clear this check box.

To exclude material requirements from the update, clear both the Date Range check box and the According to Material Requirements Status check box.

7 To update customer orders, click the **Customer Orders** tab. To include customer orders in the update, you must make one of these selections:

- Select the According to Customer Order Order Date check box
- Select the Customer Order Status check box, and select at least one status.

Specify this information:

Customer Order Status – To reset part information based on the status of each customer order, select the **According to Customer Order Status** check box and select the statuses to use:

- Unreleased
- Firmed
- Released
- Closed
- Cancelled
- All

According to Customer Order Date – To recalculate part costs based on Customer Order order date, select the **According to Customer Order Date** check box. Use the calendar buttons to select the After or Before dates to use.

Recalculate Using Unit Prices from Customer Pricing – To recalculate customer order line unit costs based on the unit prices from Customer Pricing, select this check box. If you do not want to update the pricing on customer orders, clear this check box.

To exclude customer orders from the update, clear the According to Customer Order Order Date and Customer Order Status check boxes.

8 To update purchase orders, click the **Purchase Orders** tab. To include purchase orders in the update, you must make one of these selections:

- Select the According to Purchase Order Order Date check box
- Select the Purchase Order Status check box, and select at least one status.

Specify this information:

According to Purchase Order Status – To reset part info based on the status of each purchase order, select this check box and select the statuses to use:

- Unreleased
- Firmed
- Released
- Closed
- Cancelled
- All

According to Purchase Order Order Date – To recalculate part costs based on Purchase Order order date, select this check box. Use the calendar buttons to select the After or Before dates to use.

To exclude purchase orders from the update, clear the According to Purchase Order Order Date and Purchase Order Status check boxes.

9 To update universally planned parts by commodity code, click the **Commodity Code** tab. Select the **Reset Universally Planned Material Per Commodity Code** check box, and then select the commodity codes from the table.

If you do not want to update universally planned parts, clear the Reset Universally Planned Material Per Commodity Code check box.

10 Click **OK**. When processing is finished, a dialog box is displayed listing the number of records updated.

Specifying Part Locations

Parts are stored within locations in your warehouses. The part location is required in inventory transactions. In Part Maintenance, you can specify which existing warehouses and locations can store parts. To create new warehouses and locations, use Warehouse Maintenance. See "Adding Warehouses" on page 4–5 in this guide.

Before you set up part locations, set up Hold Reason codes. If a part is on hold in a location, it cannot be used for inventory transactions.

Specifying Hold Reasons

Parts can be held “On Hold” for many reasons: for example, RMA, or inspection. Use the Hold Reason Codes dialog box to specify the codes to use for hold reasons

To specify hold reason codes:

1. If you are licensed to use multiple sites, click the Site ID arrow and select **Tenant**. If you are licensed to use a single site, this field is unavailable.
2. Select **Maintain**, **Hold Reasons**.
3. Click **Insert**.
4. Specify this information:

   Hold Reason ID – Specify an ID for the hold reason.

   Description – Specify a description of the ID.
5. Click **Save**.

Specifying Warehouse Locations

In Part Maintenance, you can assign parts to any existing warehouse location.

If you are licensed to use multiple sites, you must select a site ID before you can access the Warehouse Locations dialog box.

You can also add parts to warehouse locations in Warehouse Maintenance. See "Setting Up Location/Part Associations" on page 4–11 in this guide.

To add warehouse locations:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. In the Part ID field, click the **Part ID** browse button and select the part to assign to warehouse locations.
3. Select **Maintain**, **Warehouse Locations**. The table shows all warehouse locations where the part can currently be stored.

4 Click **Insert**.

5 Specify this information:

Warehouse ID – Double-click the browse button and select the warehouse from the list. If you are licensed to use multiple sites, the browse table shows only those warehouses that belong to the site you selected. After you select a warehouse, the ID of the associated site is inserted in the Site ID field.

Location ID – Double-click the browse button and select the location within the warehouse from the list.

Status – Specify the status of the part when it is stored in this location. Select one of these statuses:

Available – Select this status if the part is currently available. Available parts can be used in transactions. This is the default status.

Unavailable – Select this status if the part is currently unavailable for use. Unavailable parts cannot be shipped or issued. Unavailable quantities are not considered in material netting calculations.

On Hold – Select On Hold if this part is currently on hold. On-hold parts cannot be shipped or issued.

Locked – To prevent any transactions for the part in this warehouse location, select this check box. If you select this check box, parts cannot be issued from or received into this location.

Primary – To set this warehouse location as the primary location for this part, select the **Primary** check box. This setting updates the primary location in the Part Maintenance default values.

Auto Issue – To set this warehouse location as the default location for auto-issues, select the **Auto Issue** check box. This setting updates the auto issue location in the Part Maintenance default values.

Default Whse Auto Issue – To set this warehouse location as the default warehouse for auto-issues, select the **Default Whs Auto Issue** check box.

Default Part Auto Issue – To set this location as the default location for auto issues of the part from the warehouse, select the **Default Part Auto Issue** check box. If you have multiple warehouses that can auto issue the part, you must specify one default part auto-issue location for each warehouse.

Part Inspect – To set the requirement that this part in this location must be inspected, select the **Part Inspect** check box. This setting updates the inspection location in the Part Maintenance default values (and vice versa).

Whs Inspect – To set this warehouse location as this part's warehouse inspection location, select the **Whs Inspect** check box.

Transit – If this location is a transit location for the part, select the check box in the Transit column. Transit locations are primarily used in interbranch transfers.

Hold Reason ID – If you are using this location for On Hold parts, double-click the **Hold Reason ID** browse button and select the hold reason to associate with parts in this location. If you specify a hold reason, the status column is automatically set to On Hold.

Part/Location Description – Specify a description for this part/location combination.

6 Click **Save**.

Performance Leadtime Processes

Use leadtime lifecycle to measure your performance from quote to cash. You can specify the steps in the process and the projected time each step should take. You can associate steps in your process with these document types:

- Quote
- Sales Order
- Work Order
- Shipment
- RMA
- Invoice
- Payment

You do not need to include every document type in your processes. For example, if you created a process for the sale of in-stock items, you could omit work orders from your process. You create leadtime processes at the site level.

After you design a leadtime process, assign the process to a part. When you create a quote or sales order for the part, rows for each step of the process are created in the PROCESS_ACTIVITY table. As you complete the steps, the PROCESS_ACTIVITY table is updated with the start date, end date, and actual duration of each step. You can use built-in functionality, macros, or a combination to update the PROCESS_ACTIVITY table. The actual duration is compared to the standard that you set up for the step.

You can use graphs and metrics that are built based on information in the PROCESS_ACTIVITY table to compare actual performance to the process standards. You can use these graphs and metrics to identify where your processes can be improved.

You can view leadtime information about a particular sale in the Estimating Window, the Customer Order Entry window, and the Order Management window.

You can evaluate the overall performance of leadtime processes in the Dashboard.

Implementing Leadtime Processes

Complete these procedures to implement leadtime processes:

1. Plan how to measure leadtime steps. You can use built-in functionality, SaveProcess macros, or a combination of the two.
2. After you decide how to measure leadtime steps, specify the UpdateProcessActivity preference in Preferences Maintenance.
3. If you are using SaveProcess macros, create the macros.
4. In Part Maintenance, create leadtime processes.
5. In Part Maintenance, assign leadtime processes to parts.

Planning Leadtime Process Steps

You can use built-in functionality, macros, or a combination of the two to create the steps in your leadtime process. This table describes each option:

Option	How it works	Notes	UpdateProcessActivity Preference Setting
Built-in functionality only	Updates the start date, end date, and percent complete at predefined stages of the sales process, such as releasing a sales order, shipping a sales order, and creating a payment.	Functions out-of-the-box Functionality cannot be customized One process step per document type is allowed	Y
SaveProcess macro only	Updates the start date, end date, and percent complete at stages that you define in the macro.	Multiple steps per document type are allowed. For example, you can create one step for preparing the quote and a second step for receiving approval from the customer. Multiple stages in a single step is allowed. For example, you can use a macro update the quote step to 50% complete when the quote has a status of ready and to 100% complete when the quote has a status of Won.	N
Built-in functionality and macros	Updates the start date, end date, and percent complete at predefined stages. Also updates the start date, end date, and percent complete at stages that you define in the macro.	One process step per document type is allowed. Multiple stages in a single step are allowed. For example, you can use a macro update the quote step 50% complete when the quote has a status of ready. When the quote has a status of Won or Lost, the built-in functionality updates the percent complete to 100%	Y

After you decide which option to use to create leadtime process steps, use Preferences Maintenance to specify your choice.

About Built-in Leadtime Functionality

This table shows how the built-in functionality updates the steps in the leadtime process:

Action	Process step	Result
Change a quote's status to Won, Lost, or Cancel	Quote	Updates the start date of the quote step to equal the quote date. Updates the end date to equal the date that the status was changed. Updates the percent complete for the quote step to 100%. Subtracts the start date of the quote step from the end date of the quote step to calculate the actual days for the step.
Create a sales order	Sales Order	Updates the start date of the sales order step to equal the order date.
	Quote	If the sales order is associated with a quote and the quote step's end date is null, then updates the end date of the quote's step, updates the percent complete of the quote step to 100%, and calculates the number of days to complete the quote step.
Release a sales order	Sales Order	Updates the end date to equal the current date. Updates the percent complete for the Sales Order step to 100%. Subtracts the start date of the sales order step from the end date of the sales order step to calculate the actual days for the step.
	Work Order	If a work order is linked to the sales order and the work order step's start date is null, then the work order step's start date is updated to the current date.

Action	Process step	Result
Fully ship a line or close a line short on a partial shipment	Shipment	If the shipment step does not have a start date, updates the shipment step's start date to the shipment date. Updates the shipment step's end date to the shipment date. If the shipment step does have a start date, updates the shipment step's end date to the last shipped date of the sales order line. Updates the percent complete for the shipment step by dividing the total shipped by the order quantity and multiplying by 100. Subtracts the start date of the shipment step from the end date of the shipment step to calculate the actual days for the step.
	Work Order	Updates the work order step end date to the shipment date. Subtracts the start date of the work order step from the end date of the work order step to calculate the actual days for the step. Updates the percent complete of the work order step to 100%.
	Invoice	If the invoice step does not have a start date, updates the start date of the invoice step to the shipment date.
Partially ship a line and leave the sales order line open.	Shipment	If the shipment step does not have a start date, updates the shipment step's start date to the shipment date.
	Work Order	Updates the percent complete of the work order step by dividing the total shipped by the order quantity and multiplying by 100.

Action	Process step	Result
Create an invoice	Invoice	If the invoice step does not have a start date, updates the invoice step's start date to the sales order date. If all lines on a sales order are invoiced and the status of all sales order lines is Closed, then the invoice step end date is set to the date the invoice is created. Subtracts the start date of the invoice step from the end date of the invoice step to calculate the actual days for the step. Updates percent complete to 100%.
	Payment	If the payment step does not have a start date, updates the payment step's start date with the invoice date.
Create a payment	Payment	If the payment step does not have an end date, the customer order line status is Closed, the sales order line is invoiced, and the payment fully pays the invoice for the sales order line, updates the end date of the payment step to the payment date. Subtracts the start date of the invoice step from the end date of the invoice step to calculate the actual days for the step. Updates percent complete to 100%.

Specifying Leadtime Process Preferences

It is highly recommended that you set up the leadtime process preference at the tenant level. While it is possible to set up the leadtime process preference at the user level, doing so can result in unpredictable leadtime results.

You must have system administrator privileges to perform this procedure.

In Preferences Maintenance, specify whether to use built-in functionality to create leadtime process steps.

1. Select **Admin**, **Preferences Maintenance**.
2. In the User ID field, select ****Tenant****.
3. Specify this information:

   Section – Visual Mfg

   Entry – UpdatedProcessActivity

   Value – Specify **Y** to use built-in functionality. If you specify Y, the built-in functionality is always used. You can use macros in addition to the built-in functionality. Specify **N** to use only macros.

4 Click the **Save** button.

Creating SaveProcess Macros

Use these guidelines to create SaveProcess macros:

- You can create one SaveProcess macro for each document type.
- To ensure consistency, all users should use the same SaveProcess macros. If you store macros in the database, then the SYSADM user should create the macros and share them with other users in Security Maintenance. If you store macros locally, then you should provide all users with copies of the SaveProcess macros.
- The SaveProcess macros must update the PROCESS_ACTIVITY table. To produce meaningful leadtime process graphs, your macros should update these columns:
  - ACTUAL_DAYS
  - START_DATE
  - END_DATE
  - PERCENT_COMPLETE

See "Macros" on page 4–26 in the Concepts and Common Features guide.

Creating Leadtime Processes

To create leadtime processes:

1 Select **Inventory**, **Part Maintenance**.

2 Select **Maintain**, **Process Type**.

3 Specify this information:

Process Type – Specify an ID for the process type.

Site ID – Specify the site where the process is used.

Description – Specify a description of the process.

4 Click the **Insert Row** button.

5 Specify this information:

Process – Specify an ID for the process step.

Description – Specify a description for the process step.

Document Type – Click the arrow and select the document where this process step is used.

Sequence No – Specify where in the process this step occurs.

Standard Days – Specify the number of days this step should take.

6 To add another step, repeat steps 4 and 5.

7 Click the **Save** button.

Deleting a Leadtime Process Type

You can delete a leadtime process type under these conditions:

- The process type is not assigned to a part.
- The process type has not been used in a quote or order

1 Select **Inventory**, **Part Maintenance**.

2 Select **Maintain**, **Process Type**.

3 Select the process type to delete.

4 Click the **Delete** button.

5 In the confirmation dialog, click **Yes**.

Editing a Leadtime Process Type

You can edit a leadtime process provided that the process type has not been used in a quote or order.

1 Select **Inventory**, **Part Maintenance**.

2 Select **Maintain**, **Process Type**.

3 Select the process type.

4 Make your edits.

5 Click the **Save** button.

Assign Leadtime Processes to Parts

To assign a leadtime process to a part:

1 Select **Inventory**, **Part Maintenance**.

2 In the Site ID field, select the site where the leadtime process is used.

3 In the Part ID field, specify the part.

4 In the Process Type field, select the leadtime process to use for the part.

5 Click the **Save** button.

Leadtime Process Templates

You can create a template to use as the basis for other leadtime processes. You can create one process template per site. You cannot assign the template process type to parts.

Creating a Leadtime Process Template

To create a template:

1. Select **Inventory**, **Part Maintenance**.
2. Select **Maintain**, **Process Type**.
3. Select **File**, **Create Template**.
4. To customize the template, edit the description and process steps. Do not edit the Process Type field. The Process Type must be TEMPLATE.
5. Click **Save**.

Using the Leadtime Process Template

To build a leadtime process from the template:

1. Select **Inventory**, **Part Maintenance**.
2. Select **Maintain**, **Process Type**.
3. In the Process Type field, select **TEMPLATE**. The template is loaded into the dialog.
4. In the Process Type field, specify a new name for the process.
5. Edit the process as necessary. See "Creating Leadtime Processes" on page 3–59 in this guide.
6. Click **Save**.

Restoring the Template to Original Settings

To restore the template to the original settings:

1. Select **Inventory**, **Part Maintenance**.
2. Select **Maintain**, **Process Type**.
3. Select **File**, **Create Template**.
4. A message is displayed that asks if you want to replace the existing template. Click **Yes**.

Using ABC Analysis

ABC analysis classifies Part IDs by the value and the usage of the item. Parts that cost the most or are used most frequently are “A” items. Parts that cost the least or are used least are “C” items. All other parts are “B” items. A part’s ABC code determines how often you should count the part through Cycle Counting. There are four ABC analysis methods:

Projected usage method – Each part has a field called **Annualized Usage** in the Planning area of Part Maintenance. This value reflects your estimated or calculated annualized usage of the part.

Forecasted usage method – Uses the forecast table to determine the annualized usage of the part and can specify the ending date range for this method.

Actual usage method – Uses inventory transactions (actual usage) to determine the annualized usage of the part. Specify what can be used, such as the year to date usage, or last year’s usage, or the preceding number of months of usage.

Planned Usage – Uses requirements to determine planned usage of the part. Specify the starting and ending dates of the requirements to include in the total.

Whichever usage method you use, the unit cost used is from the Total cost in the Costing tab of Part Maintenance. A dollar value is computed by multiplying the usage quantity by the unit cost.

The parts whose value falls into the top A percent of values of all parts chosen for analysis receive an A code. The next B percent receive B codes and the next C percent C codes. You can also assign codes manually through Part Maintenance.

If you are licensed to use multiple sites, you must use ABC Analysis at the site level.

To access ABC analysis:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where to run ABC analysis. If you are licensed to use a single site, this field is unavailable.
2. Select **Maintain**, **ABC Analysis**.
3. In the Product Code field, specify the product code on which to run the analysis. To run the analysis on all parts, leave this field blank.
4. Click the criterion for the analysis:

   Projected Usage – To project usage for parts based on their demand history, click this option.

   Forecast Usage – To forecast usage for your parts, select the **Forecasted Usage** option. Click the calendar buttons and select the dates between which to forecast.

   Actual Usage – To use actual usage of your parts, select the **Actual Usage** option. When you select Actual Usage, you can select when the usage took pace:

   Year to Date – To use the current year to date figures, select the Year to Date option.

   Last Year – To use your last years figures, select the **Last Year** option.

   Prior ‘n’ Months – To specify a period of time, select the Prior ‘n’ Months option and specify the number of months in the field.

   Planned Usage – To run an ABC Analysis on your planned usage, select the Planned Usage option and use the calendar buttons to select the date range.

5 In the settings section, specify percentage of parts to give A, B, and C classes.

Note: Percentages cannot exceed a total of 100.

6 Click **Run**.

After you run ABC analysis, the proper code is inserted into the ABC Code field on the Costing tab. If you had inserted an ABC code, this code is over-written if necessary.

Setting Up Cycle Count

Cycle counting is a process of arranging for a cross-section of all parts to be counted periodically, usually according to their value or level of activity. You can set details such as Warehouse ID, Days between counts, and Last day of count. The same part can be counted in different warehouse locations. If the part is available in multiple locations, you can make multiple entries by filling the details for each entry. Use this function to assign a count frequency for the selected Part ID only, in the specified warehouse only.

To set up cycle count:

1. Click the **Part ID** browse button and select the part to set up for cycle counting.
2. Select **Maintain**, **Cycle Count Setup**.
3. Click **Insert**.
4. Specify this information:

   Warehouse ID – Specify the ID of the warehouse where the count is performed. the site associated with the warehouse is inserted in the Site ID field.

   Days Between Counts – Specify how often to count this part in this warehouse.

   Last Count Date – The date of the last count is inserted.
5. Click **Save**.

Setting Cycle Count Setups for All Parts

You can set up cycle count setup entries for all groups of parts defined by Part ID, warehouse locations, product codes, ABC code, or some combination of all four. You can also set details such as starting and ending Warehouse ID, product code, and ABC code.

To set cycle count setups for all parts:

1. In the Part Maintenance window, select **Maintain**, **Cycle Count Setup for all Parts**.
2. In the Selection Options section, specify the parts and warehouse for which you are setting up cycle counts. Use the fields to filter the parts to include. To be included in the cycle count set up, a part must meet all the criteria you specify. For example, if you specify a range of parts in the Starting Part ID and Ending Part ID fields but also specify a product code, then only parts with the product code in the range of parts you specified are included. Specify this information:

   Starting Warehouse ID and Ending Warehouse ID – To set up counts in a range of warehouses, specify the first warehouse in the Starting Warehouse ID field and the last warehouse in the Ending Warehouse ID field. To set up counts for all warehouse, leave these fields blank. To set up counts for a single warehouse, specify the same ID in both fields.

   Starting Part ID and Ending Part ID – To set up counts for a range of parts, specify the first part in the Starting Part ID field and the last part in the Ending Part ID field. To set up counts for all parts, leave these fields blank. To set up counts for a single part, specify the same ID in both fields.

Product Code – To set up counts for a certain product code, specify the product code in this field. Leave the field blank to include all product codes.

Commodity Code – To set up counts for a certain commodity code, specify the commodity code in this field. Leave the field blank to include all commodity codes.

ABC Code – To set up counts for parts with a certain ABC code, enter the ABC code in this field. Leave the field blank to include all ABC codes. See Using ABC Analysis.

3 In the Count Settings section, specify when to perform the count:

Count Frequency – Specify the number of days between counts to wait before requiring another count.

Last Count Date – Click the calendar button and select the date on which the count requirement will stop.

4 Click **Run** to create the counts you set up.

Specifying Other Part Information

For each part, you can specify:

- Part Language Descriptions
- Part-specific Unit of Measure Conversion
- Container Information
- Default Thermal Labels

If you are licensed to use multiple sites, this information is specified at the tenant level. You must select **Tenant** in the Site ID field to access the Container Information dialog box.

Specifying Part Language Descriptions

You can customize the description of a part by language ID. If you conduct business internationally, you can tailor the part description for your customers.

To add part language descriptions:

1. Select **Maintain**, **Language Descriptions**.
2. In the Part ID field, specify the part whose description you are customizing.
3. Click **Insert**.
4. Specify this information:

   Language ID – Specify the ID of the language. Set up language IDs in Customer Maintenance. See “Specifying Language IDs” on page 2-34 in the Sales guide.

   Description – Specify the description to use for the part.
5. Click **Save**.

Setting Up Unit of Measure Conversions for Specific Parts

You can set up unit of measure conversions that are specific to a part. For example, a global unit of measure conversion might specify 12 inches = 1 foot—something that applies to all uses of this unit, sometimes it does not. Consider “Barstock” that you purchase in pounds, but use in feet. In this case, the conversion factor may depend on the density of the material, or the width and thickness of the bars. Because you cannot set up a conversion between pounds and feet in the global table, you must use a part specific conversion.

To set the conversion for the part:

1. Click the **Part ID** browse button and select the part for which to set up conversions.
2. Select **Maintain**, **Unit of Measure Conversion**.

   Note: This dialog box functions identically to the one in Unit of Measure Maintenance. The only difference is that the conversions set here apply to this part only.

3 Select the to unit of measure from the upper table.

4 Select the from unit of measure from the lower table.

5 Specify the calculation to be performed to convert your selected units of measure. For example, if you were converting centimeters to inches, you would select IN from the upper table, CM from the lower table, and specify 2.54 in the Conversion Factor field.

6 Click **Save**.

If a conversion factor is specified for a part, then that conversion factor is used when necessary in transactions. If no conversion factor is specified for the part, then the global unit of measure conversion is used.

Copying Conversions to Other Parts

If you have set up conversions for a part, you can copy them to other parts.

To copy conversions:

1 With the appropriate part and conversion open in the Unit of Measure Conversions dialog box, click **Copy to Other Part**.

2 Click the **Part ID** browse button and select the part to which to copy the conversion from the list.

3 Click **OK**.

Creating Containers for Parts

Two types of containers are used for shipments in the automotive industry: returnable containers and disposable containers. Returnable containers offer significant cost-saving and control opportunities over disposable containers.

Some of the benefits are:

- Reduced expendable packaging for part numbers
- Decreased or eliminate the recurring costs of expendable packaging and related costs for waste disposal
- Improved standardized packaging
- Improved inventory accuracy
- Reduced quality control costs
- Improved floor space use and maintain a cleaner work environment
- Decreased likelihood of damage during shipment.

Disposable containers provide expendable packaging for material shipments. For parts shipped in bulk, bags or rolls, disposable containers are the packaging choice.

For both returnable and disposable containers it is important to record the weight of the container, weight of the dunnage, and weight of the tray. Carton quantity, pieces per container, and unit of measure are used to compute total weight for dunnage. Dunnage is a generic term used to identify the entire package you are shipping and can include the skid, any number of cartons or containers on the skid, and any wrapping used to secure the cartons to the skid.

By creating containers for parts, you are creating special shipping instructions that are used when shipping those parts. By specifying container information for a part, you are establishing a relationship between the customer who is to receive the part, the customer shipping address, and the type of container to use to ship the part.

To create containers for parts:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select **Tenant**.
2. In the Part ID field, click the browse button and select the part whose containers you are setting up.
3. Select **Maintain**, **Container Information**.
4. Click **Insert**.
5. Select **Maintain**, **Container Information**.
6. Click **Insert**.
7. Specify this information:

   Customer ID – Double-click the **Customer ID** browse button and select the customer for whom to create container settings.

   Shipto ID – Double-click the **Shipto ID** browse button and select the customer's ship to location. A Shipto ID is a unique identifier for a customer shipping address. This is the customer address to which you are going to ship the part in this container.

   Container Part ID – Double-click the **Container Part ID** and select a Container Part ID for this part going to this customer at this address. The Container Part ID must be different than the regular Part ID. For example, if the parent part has an ID of 1/4PLATE, the Container Part ID cannot be 1/4PLATE. Container lines with duplicate Part IDs are not saved.

   Container UM – To change the unit of measure for the container, double-click the **Container UM** browse button and select a unit of measure for the disposable container that you are going to use to ship this Part ID.

   If a conversion factor does not exist between the Container Part ID's stock unit of measure and the unit of measure you specify here, an error message is returned. To proceed, you must either specify a unit of measure with an acceptable conversion factor or leave the field blank.

   Container Weight – Specify a weight, in pounds, for the container you are going to use to ship this Part ID.

   Std Pieces Per Contain – Specify the standard number of pieces the container holds when shipping the Part ID.

   Skid Part ID – Double-click the Skid Part ID browse button and select the skid Part ID.

   Skid UM – Double-click the **Skid UM** browse button and select a unit of measure for the skid you are going to use to process this Part ID.

A skid is another name for a pallet, or similar platform or area on which you would set material for processing or transport.

The Skid Part ID must be different than the regular Part ID and the Container Part ID. Container lines with duplicate Part IDs are not saved.

This field auto-fills with the part's default stock unit of measure.

If a conversion factor does not exist between the Skid Part ID's stock unit of measure and the unit of measure you specify here, an error message is returned. To proceed, you must either specify another u/m with an acceptable conversion factor or leave the field blank.

Skid Weight – Specify a weight for the skid you are using to handle this Part ID in the Skid Weight column.

This field auto-fills with the part's default shipping weight.

Std Containers per Skid – Specify the standard number of containers the skid holds in the Std Containers per skid column.

Container Type – Click in the Container Type column. Click the arrow and select the Container Type to use. You can select:

- Disposable
- Returnable

Default Container – If this is the default container for this part going to this address, select the check box in the Default Container column.

Create Inv Trans – To create an inventory transaction for this part when you ship it using a container, select the check box in the Create Inv Trans column.

Customer Ship Part ID – Specify the customer's ID for the part.

Dock Code – Specify the dock designation your customer provides.

The address information for the customer you select is specified when you save the container information. If this information is not essential, you can decide to not display these fields.

- Name
- City
- State
- ZIP Code
- Country

8 Click **Save**.

Setting Default Thermal Labels for Parts

Set up thermal labels to use barcode scanners to process part shipments and other transfers.

To set up default thermal labels:

1 In the Part Maintenance window, click the **Part ID** browse button and select the part whose label you want to set up.

2 Select **Maintain**, **Label Settings**.

3 Click the **Label ID** browse button and select the label to use for this part. Use the Label Printer Setup Utility to specify labels.

4 Click the **Label UM** browse button and select a unit of measure for the Label ID.

5 Click **Ok**.

Accessing Infor Product Life Cycle Management

If you are licensed to use Infor Product Life Cycle Management (PLM), you can access PLM directly from Part Maintenance. To access PLM directly from Part Maintenance, you must meet these criteria:

- You must be licensed to use PLM.
- You must be viewing a part in Part Maintenance at the site level.
- You must specify that the site has access to PLM. You can specify this information either in Application Global Maintenance or in Site Maintenance.
- You must specify the URL to use to access PLM for the site. You can specify this information either in Application Global Maintenance or in Site Maintenance.

If you meet these criteria, then the Product Lifecycle Management toolbar button and the Product Lifecycle Management option in the Info menu become active. Click the toolbar button or select **Info**, **Product Lifecycle Management** to access PLM. The current revision of the part you are viewing in VISUAL is opened in PLM.

Specifying Default PLM Access Information in Application Global Maintenance

Use Application Global Maintenance to specify default PLM access information. The information you specify can be used for all sites in your database, or you can choose to override PLM access information on a site-by-site basis in Site Maintenance.

To specify default access information:

1. Select **Admin**, **Application Global Maintenance**.
2. Click the **Defaults** tab.
3. In the PLM Integration section, specify this information:

   Login URL – Specify the external launch URL for Web PLM. If the Login URL is left blank for a site in Site Maintenance, then the site uses this URL to access PLM.

   Enable – To allow direct access to PLM for all sites by default, select this check box. To prevent direct access to PLM for all sites by default, clear this check box. If Default is specified in the Enable field for a site in Site Maintenance, then the site uses the enable setting specified in Application Global Maintenance.
4. Click **Save**.

Specifying Site-specific PLM Access Information in Site Maintenance

Use Site Maintenance to specify whether to use the default PLM access information specified in Application Global Maintenance or to override the default information. The information you specify for a site in Site Maintenance determines how you access PLM when you are viewing a part in that site.

To specify site information:

1. Select **Admin**, **Site Maintenance**.
2. In the Site ID field, specify the site to set up.
3. Click the **Defaults** tab.
4. In the PLM Integration section, specify this information:

   Login URL – If this site uses a unique URL to access PLM, specify the external launch URL for Web PLM. If this site uses the default URL specified in Application Global Maintenance, leave this field blank.

   Enable – Specify whether you can directly access PLM from Part Maintenance when viewing a part for this site. Specify one of these options:

   Default – Specify Default to use the enable setting specified in Application Global Maintenance. If you specify Default and the Enable check box is selected in Application Global Maintenance, then you can access PLM from Part Maintenance when viewing parts for this site. If you specified a URL in Site Maintenance, then that URL is used to access PLM. If you left the Login URL in Site Maintenance blank, then the URL specified in Application Global Maintenance is used to access PLM. If you specify Default and the Enable check box is cleared in Application Global Maintenance, then you cannot access PLM when viewing parts for this site, regardless if you have specified a URL in either Site Maintenance or Application Global Maintenance.

   No – Specify No if you cannot access PLM in Part Maintenance when viewing parts for this site. If you specify this option, you cannot access PLM when viewing parts for this site even if you specify a Login URL in Site Maintenance or Application Global Maintenance.

   Yes – Specify Yes if you can access PLM in Part Maintenance when viewing parts for this site. If you specify this option and you specify a login URL in Site Maintenance, then the URL you specify in Site Maintenance is used to access PLM. If you specify this option and you leave the Login URL field blank in Site Maintenance, then the login URL specified in Application Global Maintenance is used to access PLM.
5. Click **Save**.

Viewing Part Information

Use the Info menu features to monitor vital part information, from part purchase history, to current part balances in inventory.

Viewing Part Purchase History

Use the Part Purchase History feature to view a part's purchasing history. You can view part purchase history only at the site level.

If you are licensed to use multiple sites, you must specify a Site ID to access Part Purchase History. After you access the dialog, you can view information for sites that share the same parent entity as the site specified in the Site ID field.

To view part purchase history:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part whose purchase history to view.
3. Select **Info**, **Purchase History**.

   You can use the selected part from the Part Maintenance window, or you can specify a new site range and part. To specify a new site range and part:

   a. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to use. The drop-down menu is limited to sites that belong to the same entity as the site you selected in Part Maintenance. If you are licensed to use a single site, this field is unavailable.

   b. Click the **Part ID** browse button and select the part to view. If you selected multiple sites, the browse table lists the part ID once for each site. You can select either instance of the Part ID. The information displayed in the Purchase History window is the same.
4. View this information in the table:

   Order Date – The date on which you placed the order.

   Desired Recv Date – The date on which you want the serviced parts returned from the outside service vendor. You can modify this date.

   Promise Date – The date the outside service vendor promised to have the parts returned.

   Last Received Date – The last date on which you last received this part on this order.

   Purchase Order – The unique identifier—Purchase Order ID—for the service order.

   Site ID – The site associated with the order.

   Vendor – The vendor supplying the outside service.

   Purchase Line Number – The purchase order line number for that service.

   Order Quantity – The total part amount to be sent to the outside service vendor.

   Received Quantity – The total serviced part amount returned from the outside service to date.

Currency – The functional currency of the site's parent entity.

Unit Price – The price per unit expressed in the functional currency.

Native Currency – The native currency of the purchase order.

Native Unit Price – The price per unit in the native currency.

Discount % – The discount percentage applied to the order.

Fixed Cost – The one time cost from the purchase order.

Standard Unit Cost – The part cost from Part Maintenance.

Delivery Schedule – This check box is selected if the purchase order contains a delivery schedule.

5 If your database contains many purchase orders, you can sort by and sequence the purchase orders by using the options in the Sort Order and Sort Sequence sections.

6 Click **Close**.

Exporting Part Purchasing Information

You can export the information in the Part Purchasing table to Microsoft Excel or to an XML file.

To export to Excel, select **File**, **Send to Microsoft Excel**. Excel is launched, and the information in the table is written to the file.

To export to an XML file, select **File**, **Send to XML**. Specify this information:

File Name – Specify the name of the exported file.

XML to Write – Specify the type of XML to export. Click one of these options:

Schema – Click this option to export the XML schema. The schema is a list of elements, attributes, and data types. The document shows the structure of the information, but does not include any of the information in the Part Purchasing dialog. A schema has a DTD extension.

Document – Click this option to export the data in the Part Purchasing dialog in an XML file.

Both – Click this option to export both the Schema and the Document.

Tags – Specify how to construct the tags for elements. To use the names of the columns as displayed in the Part Purchasing table, click Columns. To use the names of the database columns, click Use Item Name.

Click **Export**.

Viewing Audit History

If you are auditing information in database tables related to parts, you can view a history of the changes made to a part in the Audit History dialog.

A system administrator must grant you permission to view this dialog.

Use Audit Maintenance to set up the audit. See "Audit Maintenance" on page 5–1 in the System Administration guide.

Information is written to this dialog if you are auditing these database tables:

- PART
- PART_ALIAS
- PART_ALTERNATE
- PART_CROSS_SELLING
- PART_LOCATION
- PART_REPLENISHMENT
- PART_SHIPPING
- PART_SITE
- PART_SUBSTITUE
- PART_UNITS_CONV
- PART_WAREHOUSE
- PART_WHS_REPLENISH
- VENDOR_PART

To view audit history information:

1. Select **Inventory**, **Part Maintenance**.
2. Open a part record.
3. Select **Info**, **Audit History**.
4. This information is displayed:

   ID – The primary key of the database record that was changed.

   User ID – The ID of the user who made the change.

   Date – The date that the change was made.

   Field – The database table and column that was changed.

   Old Value – The original value.

   New Value – The new value.

   Action – The action that occurred to update the date. These actions are used:

   Insert – A new value was created.

   Update – An existing value was changed.

   Delete – A value was deleted.

Exporting Audit Information

You can export information in the Audit table to Excel or to an XML file. The procedures are the same as they are in the Part Purchasing Information dialog. See "Exporting Part Purchasing Information" on page 3–74 in this guide.

Viewing Material Requirements

You can view a complete list of all material requirements on all engineering masters, quote masters, and work orders that require the current part.

If you are licensed to use multiple sites, you must select a site ID before viewing material requirements.

To view material requirements:

1. If you are licensed to use multiple sites, select the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. Select **Info**, **Where Used**.

   This information for each requirement in the table is displayed:

   - Work Order/Master ID
   - Operation Number
   - Piece Number of requirement
   - Quantity required per incoming unit
   - Scrap Percentage
   - Onetime Fixed Quantity required
   - Usage Unit of Measure
   - Quantity Dimensions
4. Click **Save**.

Viewing Warehouse Locations for Parts

You can view a complete list of all of the locations where the selected part is allowed to be stored. This includes Warehouse and Location IDs and descriptions, the status and quantity of the part in each location and other information.

To view warehouse locations for parts:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select **TENANT** to view information for all sites. To view information for a single site, click the arrow and select the site.

   If you are licensed to use a single site, this field is unavailable.

1 Click the **Part ID** button and select the part to view.

2 In the Part Maintenance window, select **Info**, **Locations for this Part**.

3 When you have finished viewing warehouse locations for this part, click **Close**.

Viewing Warehouse Part Availability Information

For each warehouse that carries a part, you can view part availability for the current part.

To view warehouse part availability information:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select **TENANT** to view information for all sites. To view information for a single site, click the arrow and select the site.

   If you are licensed to use a single site, this field is unavailable.

2 Click the **Part ID** button and select the part to view.

3 In the Part Maintenance window, select **Info**, **Warehouses for this Part**.

   The line item table contains these columns:

   Warehouse ID – The ID of the warehouse that carries this part.

   Available Quantity – The quantity of the part available in this warehouse and all of its locations. Though this many parts are available, actual availability can be different for each customer that seeks to purchase this part. See “Customer Order Entry” on page 7-1 in the Sales guide.

   Committed Quantity – The quantity of parts in this warehouse and its locations that you have committed through demand fulfillment to customer orders, interbranch transfers, work material requirements, and inventory. These parts are not locked or unavailable.

   Outbound Quantity – The quantity of parts from interbranch transfers shipped from this warehouse (From Warehouse) but as yet unreceived at the destination warehouse (To Warehouse). To qualify as “outbound,” quantities of parts must be shipped using Interbranch Transfer Shipping Entry. After parts are received, they lose this designation. For more information, refer to“Inter Branch Transfer” on 8-1 in this guide.

   Expected Quantity – The quantity of parts that you expect to receive into this warehouse from purchase orders, work orders, coproducts supply and interbranch transfers. You can allocate expected quantities to customer orders, work order material requirements, interbranch transfers and inventory.

   Expected/Committed Quantity – The quantity of parts that you expect to receive into this warehouse from purchase orders, work orders, coproduct supply and interbranch transfers that you have already committed to the demand fulfillment of customer orders, interbranch transfers, work material requirements, and inventory.

4 Click **OK**.

Viewing All Warehouse Locations

You can view a complete list of all warehouse locations. While you must select a part to access the dialog, the dialog shows all warehouse locations in your system.

To view all warehouse locations:

1. In the Part ID field, specify a part.
2. Select **Info**, **All Locations**.

   If you are licensed to use multiple sites, all sites are displayed in the dialog box.
3. Click **Ok**.

Information Panels

You can view two information panels in Part Maintenance: the Part Panel and the Sites for Part panel. The Part panel displays information about the selected part.

Using the In-context Part View Panel

The Part View Panel contains three tabs: Summary, Chart, and Info. You can configure the Summary and Info tabs to show the information most important to you. See "Setting Up the Summary View" on page 9–6 in the Concepts and Common Features guide and "Setting Up the Info View" on page 9–7 in the Concepts and Common Features guide.

The Part View Panel chart shows information about the current inventory levels for the selected part.

If you specify **Tenant** in the Site ID field, then the bars in the chart show information for all sites, whether or not you are allowed to view the sites. When you click a bar, a grid is displayed showing the part quantities that contribute to the total value of the bar. The grid shows quantities in your allowable sites only. As a result, the total of the quantities shown in the grid may not match the total shown by the bar. If you specify a site in the Site ID field, then the chart shows only information for the selected site.

The chart contains one line and four bars.

The line shows the safety stock quantity.

This table shows the bars displayed in the chart:

Bar	This bar shows...	Click a bar to view
On Hand	The current quantity on-hand.	**Warehouse ID** – The ID of the warehouse where the part is stored. All warehouses that can store the part are listed. **Qty** – The quantity currently stored in the warehouse. Click a warehouse ID to view the locations where the part can be stored. This information is displayed: **Location ID** – The ID of the location in the warehouse where the part can be stored is displayed. **Qty** – The quantity currently on hand in the warehouse location is displayed. **Status** – The status of the part in the warehouse location is displayed.

Bar	This bar shows...	Click a bar to view
Demand	The current demand for the part.	**Type** – The type of transaction generating the demand is displayed. These demand types are used: **CO** – Customer Order **RQ** – Material Requirement **WH** – Interbranch transfer **Warehouse ID** – The ID of the warehouse that supplies the demand is displayed. **Qty** – The quantity of the demand is displayed. Click the type or the warehouse ID to view the demand transactions. This information is displayed: **ID** – The ID of the demand transaction is displayed. Click the ID to open the record. **Qty** – The quantity of the demand transaction is displayed. If the quantity has not been delivered by the date specified in the next column, then the value is displayed in red. **Desired Ship Date/Required Date** – If the demand is generated by a customer order or interbranch transfer, then the desired ship date of the transaction is displayed. If the demand is generated by a material requirement, then the Required Date specified on the Planning tab of the material requirement card is displayed. **Site ID** – The site associated with the transaction is displayed.

Bar	This bar shows...	Click a bar to view
On Order	The current quantity on order. Quantities supplied as a work order co-product are included.	**Type** – The type of transaction generating the supply order is displayed. These supply types are used: **PO** – Purchase Order **WO** – Work Order **WH** – Interbranch transfer **Warehouse ID** – The ID of the warehouse where the supply order will be delivered is displayed. **Qty** – The quantity of the supply order is displayed. Click the type or the warehouse ID to view the supply transactions. This information is displayed: **ID** – The ID of the supply transaction is displayed. Click the ID to open the record. **Qty** – The quantity of the supply transaction is displayed. If the quantity has not been delivered by the date specified in the next column, then the value is displayed in red. **Desired Recv Date/Want Date** – If the supply is generated by a purchase order or interbranch transfer, then the desired receive date of the transaction is displayed. If the supply is generated by a work order, then the Want Date specified on the work order header card is displayed. **Site ID** – The site associated with the transaction is displayed.
Available	The quantity available to issue to transactions.	**Warehouse ID** – The ID of the warehouse where the part is available. **Qty** – The quantity stored in the warehouse that is available to issue. Click a warehouse ID to view this information: **Location ID** – The ID of the location that stores the quantity is stored is displayed. **Qty** – The quantity available at the location is displayed. **Status** – The status of the location is displayed.

Using the Sites for Part Panel

The Sites for Part panel displays information for all sites to which the part currently selected in the Part Maintenance window belongs. To view the Site for Part panel, select **View**, **Part Sites**.

The dialog box lists the sites to which the part has been assigned. To view all sites, click the Show All Sites button.

When you view all sites, you can add the selected part to sites. See "Adding a Part to Multiple Sites" on page 3–29 in this guide

By default, the dialog box shows this information by site:

- Qty on Hand
- Qty on Order
- Qty In Demand
- Qty Avail Iss
- Qty Available MRP
- Qty Committed

You can configure the dialog box to show additional information. Click **Configure Table** to add or remove columns.

Printing Part Reports

Use Part Maintenance to print detailed part information reports. You can print these reports:

Part Information – You can print a short report and a long report. The long report shows details about your parts, including the current quantity in your inventory, the part's basic characteristics, and costs. The short report shows the part ID, part description, current available quantity, the unit of measure, and the total unit cost.

Where Used – This report shows which parts are used as material requirements.

Inactive Inventory – This report shows information about inventory transactions for your parts. Use this report to help you identify obsolete parts.

Printing Part Information

If you are licensed to use multiple sites, you can print part information by site or by the tenant level. If you print part information at the tenant level, only information that you specify at the tenant level is included in the report. For example, cost information is not included in a tenant level report because costing information is specified at the site level. If you print the report at the site level, both site-specific and tenant-level information is included in the report. For example, Drawing Revision numbers are included in the site-level report, even though Drawing Revision is specified at the tenant level.

To print part information:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use in the report. To view a tenant-level report, click the **Site ID** arrow and select **Tenant**.

   If you are licensed to use a single site, this field is unavailable.

2. Select **File**, **Print Part Info**.

3. In the Starting Part ID and Ending Part ID fields, specify the parts to view in the report. To view a range of parts, click the **Starting Part ID** browse button to select the first Part ID in the report, and click the Ending Part ID browse button to select the last Part ID in the report. To view one part in the report, select the same part in the Starting Part ID and Ending Part ID fields. To view all parts, leave the Starting Part ID and Ending Part ID fields blank.

   If you are licensed to use multiple sites and selected a Site ID in the Part Maintenance window, the part ID browse is limited to those parts found in the site you selected. If you leave the Starting Part ID and Ending Part IDs blank, the report shows all parts found in the site.

   If you are licensed to use multiple sites and select **Tenant** in the Site ID field in the Part Maintenance window, all parts in all sites are available in the Starting and Ending Part ID browses.

   If you are licensed to use a single site, all parts in your database are available in the Starting and Ending Part ID browses.

4. To include obsolete (inactive parts) parts in the report, select the **Include Obsolete Parts** check box.

5 To print a short form part listing, select the **Short Form** check box. A short form listing of part information contains only the Part ID, Part Description, Quantity Available, Quantity On Hand, Unit of measure, and Unit Cost. To print a more detailed version of the report, clear the **Short Form** check box.

6 To print barcodes in your report, select the **Print Barcodes** check box and select a barcode type.

Code39 – This type of barcode, also known as Code 3 of 9, contains variable length, discrete symbology. You must have a Code 39 barcode font installed to view the barcode. If you do not have the Code 39 font installed, then the alphanumeric ID is displayed instead with a prefix and suffix. This pattern is used: *%ID%*.

QR Code – This is a two-dimensional or matrix barcode. QR stands for quick response.

7 To print all of the documents associated with the parts, select the **Print Associated Documents** check box.

8 Click the output arrow and select how to view the report:

Print – To send the report to your printer, select the **Print** option.

View – To view the report using the report viewer, select the **View** option.

File – To send the report to text file, select the **File** option. Your report is prepared as a CSV file. In the dialog box, you are prompted to specify the location and file name for the file to be saved.

E-mail – To prepare the report and attach it to an e-mail, select the **E-mail** option. You can attach the report as a PDF or as a CSV file. To attach a PDF, select the **PDF Format** check box. To attach a CSV, clear the **PDF Format** check box. When you click **Ok**, a Microsoft Outlook message is opened and the report is attached.

9 Click **Ok**.

If you selected the Print output, a standard print dialog box is displayed allowing you to select the print quantity and range.

Printing Thermal Labels for Parts

You can print thermal labels for a part, both individually and as a part of a group. Before you can print thermal labels for a part, you must make it eligible for shipment. To make a part eligible, create carton details for it. See "Creating Containers for Parts" on page 3–67 in this guide

To print thermal labels for parts:

1 From the Print dialog box, click **Thermal Labels** to display the Print Thermal Labels dialog box.

The Starting and Ending fields populate the Part ID If you have selected a part.

2 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

3 Select the type of label to print:

- To print single labels, click the **Label ID** browse button to select the label to print.

- To print a group of labels that have been previously set up, click the **Label Group ID** browse button and select the Label Group to print. If you are printing only one label, do not select a group. Your choice is limited to either a Label ID or a Label Group ID.

  The table shows the members of the group when you select a group.

The table shows the Label Type field depending on the type of label you select.

4 To temporarily add more labels to a group that is to be printed, click **Insert** and add any new labels.

5 To limit your print run, click the browse buttons and select the appropriate Starting and Ending IDs to use. You can limit print runs by selecting:

- Part ID
- Warehouse ID
- Location ID

6 For each label in the print table, specify the quantity of labels to print in the Print Qty column.

7 To print multiple labels for containers or pallets, select the **Multiplier** check box—the Print Qty figure you specify becomes a multiplication factor. For example, if you have 2 Pallets and each pallet has 16 cases totalling 32 labels; one for each case. Select the **Multiplier** check box and specify 16 for the Print Qty: 16 labels are printed for every pallet you ship.

8 When you are ready to print your labels, click **Print Labels**.

- Quote Masters
- Work Orders

9 Select the part statuses to include in the report. You can select:

- Unreleased
- Firmed
- Cancelled
- Released
- Closed

10 Click the output arrow and select how to view the report:

Print – To send the report to your printer, select the **Print** option.

View – To view the report using report viewer, select the **View** option.

File – To send the report to text file, select the **File** option. Your report is prepared as a CSV file and a dialog box displays a prompt for you to specify the location and file name for the file to be saved.

E-mail – To prepare the report and attach it to an e-mail, select the **E-mail** option. You can attach the report as a PDF or as a CSV file. To attach a PDF, select the **PDF Format** check box. To attach a CSV, clear the **PDF Format** check box. When you click **Ok**, a Microsoft Outlook message is opened and the report is attached.

11 Click **Ok**.

If you selected the Print output, a standard print dialog box displays, allowing you to select the print quantity and range.

Printing Inactive Inventory Reports

Use the Inactive Inventory Report to view inventory activity for a part or a range of parts for a specified period of time. You can print the report to include all transaction types and classes and parts with zero on-hand balances. You can use this report to monitor materials in your inventory that have few quantity changes thereby assisting you in the decision to classify parts as obsolete.

If you are licensed to use multiple sites, you can print the inactive inventory report by site or at the tenant level. If you print part information at the tenant level, all parts are included in the report. If you print part information by site, only parts assigned to the site are included in the report.

To print inactive inventory reports:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use in the report. To view all sites in the report, click the **Site ID** arrow and select **Tenant**.

   If you are licensed to use a single site, this field is unavailable.

2. Select **File**, **Inactive Inventory Report**.

3. To include a range of parts in the report, click the Starting and Ending Part ID browse buttons and select the range of parts.

   To print a report for one part, specify the same Part ID in both fields. To print a report for all parts, leave both fields empty.

   If you are licensed to use multiple sites and selected a Site ID in the Part Maintenance window, the browse table is limited to parts assigned to the site.

4. To include transactions after a certain date, click the calendar button to select a transactions after date.

5. In the Transaction Type section, select the transaction types to include:

   Issues and Issue Returns – To include issues and issue returns, select this check box. Issues include customer shipments and issues to work orders. Issue returns include customer returns and material issue returns.

   In the report, CLASS = I (Issue); TYPE=I or O (In or Out)

   Receipts and Return Receipts – To include receipts and receipt returns, select the **Receipts and Return Receipts** check box. Receipts include purchase order receipts and receipts of finished goods into inventory. Return receipts include purchase returns and returns of finished goods.

   In the report, CLASS = R (Receipt); TYPE=I or O (In or Out)

   Adjustments In/Out – To include adjustments in and out, select the **Adjustments In/Out** check box.

   In the report, CLASS = A (Adjustment); TYPE=I or O (In or Out)

6 To include parts with a zero on hand quantity in the report, select the **Include Parts With Zero On Hand Quantity** check box.

7 To include obsolete parts in this report, select the **Include Obsolete Parts** check box.

8 Click the output arrow and select how to view the report:

Print – To send the report to your printer, select the **Print** option.

View – To view the report using report viewer, select the **View** option.

File – To send the report to text file, select the **File** option. Your report is prepared as a CSV file and a dialog box displays with a prompt for you to specify the location and file name for the file to be saved.

E-mail – To prepare the report and attach it to an e-mail, select the **E-mail** option. You can attach the report as a PDF or as a CSV file. To attach a PDF, select the **PDF Format** check box. To attach a CSV, clear the **PDF Format** check box. When you click **Ok**, a Microsoft Outlook message is opened and the report is attached.

9 Click **Ok**.

If you selected the Print output, a standard print dialog box displays, allowing you to select the print quantity and range.

Printing Part Where Used Reports

You can view where you are currently using parts in work orders, quote masters, and engineering masters.

If you are licensed to use multiple sites, you can print the Where Used report at the site level only.

To print Where Used Reports:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to view in the report. If you are licensed to use a single site, this field is unavailable.

2 Select **File**, **Where Used Report**.

3 In the Starting Part ID and Ending Part ID fields, specify the parts to view in the report. To view a range of parts, click the **Starting Part ID** browse button to select the first Part ID in the report, and click the Ending Part ID browse button to select the last Part ID in the report. To view one part in the report, select the same part in the Starting Part ID and Ending Part ID fields. To view all parts, leave the Starting Part ID and Ending Part ID fields blank.

If you are licensed to use multiple sites, the part ID browse is limited to those parts found in the site you selected in Part Maintenance. If you leave the Starting Part ID and Ending Part IDs blank, the report shows all parts found in the site.

If you are licensed to use a single site, all parts in your database are available in the Starting and Ending Part ID browses.

4 To include obsolete parts in this report, select the **Include Obsolete Parts** check box.

5 In the Type section, select the types of masters to examine. Select one or more of these check boxes:

- Engineering Masters
- Quote Masters
- Work Orders

6 Select the status of the masters to include in the report. You can select:

- Unreleased
- Firmed
- Cancelled
- Released
- Closed

To include all statuses, you can either select all check boxes or clear all check boxes.

All engineering masters have a status of Unreleased. If you include engineering masters in the report, make sure you select the Unreleased check box or clear all status check boxes.

7 Click the output arrow and select how to view the report:

Print - To send the report to your printer, select **Print**.

View - To view the report using the report viewer, select **View**.

File - To send the report to a text file, select **File**. Your report is prepared as a CSV file and a dialog box displays prompting you to specify the location and file name for the file to be saved.

E-mail - To prepare the report and attach it to an e-mail, select the **E-mail** option. You can attach the report as a PDF or as a CSV file. To attach a PDF, select the **PDF Format** check box. To attach a CSV, clear the **PDF Format** check box. When you click **Ok**, a Microsoft Outlook message is opened and the report is attached.

8 Click **OK**.

If you selected the Print output, a standard print dialog displays, allowing you to select the print quantity and range.

Chapter 4: Warehouse Maintenance

This chapter includes:

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What is Warehouse Maintenance?

With Warehouse Maintenance you can create, edit, and delete warehouse and warehouse location information. You should do this during implementation and before you begin entering your parts in Part Maintenance. You must create at least one warehouse to use during inventory transaction activities.

Independent Warehouse Planning

If you operate multiple warehouses, maintain inventory autonomously, and controlling inventory in each warehouse is required, planning by warehouse affords you great enterprise planning flexibility. Each warehouse can have different planning rules for the same part.

The process of planning by warehouse is separated into three separate functions:

Defining – Consists of establishing planning parameters by part for each warehouse.

Assigning – Involves identifying the warehouse on supply and demand orders.

Executing – Includes the actual running of MRP and the use of a warehouse as a filter for several key reports.

Universal vs. Independent Warehouse Planning

Warehouses set as independently planned can have unique part/warehouse planning parameters for each part/independently planned warehouse combination. MRP considers supply and demand only for that specific independently planned warehouse. If you have not set parameters for a part and an independently planned warehouse, the part's universal parameters are used, but MRP still considers the supply and demand of only the independently planned warehouse.

For example:

Consider that Part A has valid warehouse locations in Warehouse1, Warehouse2, and Warehouse3, and that each location has 20 units of part A. Warehouse2 is identified as an Independently Planned warehouse; Warehouse1 and Warehouse3 are both Universally Planned warehouses. In Part Maintenance, when assigning the part planning parameters, you can select either Warehouse2 (the independently-planned warehouse), or Universal (the default for warehouses not defined as independently-planned, in this case Warehouse1 and Warehouse3); but only Universal has any values.

For this example, the Universal value for safety stock is 25. If there is no outstanding supply or demand requirement for part A when MRP is run, only one planned order is generated. The Universal warehouses (Warehouse1 & Warehouse3) have a combined on-hand value of 40 units (there were 20 in each), which exceeds the safety stock value of 25: no planned order is generated in this case. The independently-planned warehouse2 has an on-hand value of 20, and as no planning parameters exist for Part A in Warehouse2, the Universal safety stock value for Part A, which is 25, is used. Because this is greater than the on-hand value of 20, a planned order is created.

To specify a warehouse as an independently planned warehouse, open the Warehouse Maintenance window, select the warehouse, and select the **Independently Planned Warehouse** check box.

For more information, refer to the “Material Planning Window” on page 9-1 in this guide..

Accessing Warehouse Maintenance

Select **Inventory**, **Warehouse Maintenance**.

Adding Warehouses

Note: You also create warehouses for consignment in Warehouse Maintenance. For more information, refer to the “Consigned Inventory” on page 11-1 in this guide.

If you are licensed to use multiple sites, you create warehouses by Site ID. Warehouse IDs must be unique in your tenant; you cannot use the same warehouse ID in multiple sites.

To add Warehouse and Warehouse Locations:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns this warehouse. If you are licensed to use a single site, this field is unavailable.
2. In the header, specify this information:

   Warehouse ID – Specify a unique identifier for this warehouse.

   Description – Specify a description for the new warehouse in the Description field.

   Country ID – Click the **Country ID** browse button and select the country code for this warehouse.

   Region ID – Click the **Region ID** browse button and select the Region ID for this warehouse.
3. Specify these warehouse characteristics:

   VDW Installed – If the warehouse is a Distribution warehouse, select the **VDW Installed** check box. VDW warehouses can only be used in conjunction with VISUAL Distribution.

   Independently Planned Warehouse – To make this warehouse an independently planned warehouse, select the **Independently Planned Warehouse** check box. Independently planned warehouses are eligible for MRP on an individual basis. Warehouses that are not independently planned belong to the warehouse designation UNIVERSAL.

   WIP/VAS Supported – If the warehouse supports WIP/VAS, select the **WIP/VAS Supported** check box. WIP/VAS is enabled globally in Accounting Entity Maintenance.

   MRP Exempt – If you are running Material Requirements Planning and want to exclude this warehouse from planning runs, select the **MRP Exempt** check box. Only independently planned warehouses are eligible to be MRP Exempt.

   Inventory Not Shared – If you are not licensed to use projects/A&D, this field is not displayed. If you are licensed to use projects/A&D, click the arrow to select if you do NOT want to share the inventory for this warehouse. You can select:

   N – To allow all users to issue (transfer) to other warehouses, select the **N** option.

   P – To allow production planners only to issue (transfer) to other warehouses, select the **P** option.

   Y –To restrict users from issuing (transferring) to other warehouses, select the **Y** option.
4. To add a location to the warehouse, click **Insert**.
5. Specify this information about the warehouse location:
6. Specify a unique identifier for this location in the Location ID column. Because the combination of Warehouse and Location is used, the location identifier is required to be unique to this warehouse. For example, if all of your locations are Shelf 1, Shelf 2, etc. you can use Shelf 1 and Shelf 2 in another warehouse.

7 Click in the Type column and click the arrow. Select a type for this location from the list.

You can select:

Floor Stock – If you are going to use this location for materials you consider floor stock, select the Floor Stock option. You might want to use this option for things you require to stock but do not show on work orders: for example, welding supplies.

Regular – If this location is going to be part of your normal stock, select the Regular option.

Transit – To designate this location as a transit location, select the **Transit** option.

From Customer – If you are working with consignment stock, select the **At Customer** option. Double-click the **Customer ID** browse button and select the customer with whom to associate this location. For more information, refer to the “Consigned Inventory” on page 11-1 in this guide.

From Vendor – If you are working with consignment stock, select the **At Vendor** option. Double-click the **Vendor ID** browse button and select the vendor with whom to associate this location. For more information, refer to the “Consigned Inventory” on page 11-1 in this guide.

Note: If you use Actual or Average Costing methods with FIFO By Part, the From Vendor and From Customer location types are removed from Warehouse Maintenance.

8 Specify a description for this location in the Location Description column.

9 Click **Save**.

Specifying a Warehouse Address

To specify the warehouses’s address:

1 Select **Edit**, **Warehouse Address**.

2 Specify this information:

Name – If different than your company name, specify the name of the warehouse.

Address – Specify the street address for this warehouse.

City – Specify the city where the warehouse is located.

State – Click the **State** arrow and select the abbreviation for the state where the warehouse is located.

Zip – Specify the postal code of the area where the warehouse is located.

Country – Specify the country where the warehouse is located.

VAT Registration – If you have a VAT registration number for this warehouse, specify it in the VAT Registration field.

3 Click **OK**.

Specifying Alternate Warehouse Addresses

Alternate addresses are particularly useful for Project/A&D users who may be required to specify different geographic locations for the same warehouse. If you set up alternate addresses, you can use interbranch transfer to record the time it takes to move parts within the same warehouse from one address to the other.

To specify alternate addresses for this warehouse:

1 Select **Edit**, **Alternate Warehouse Address**.

2 Click **Insert**.

3 Specify this information:

Ship to ID – Specify the Ship to ID to use for this warehouse address.

Name – Specify the alternate company name

Address – Specify the alternate street address for this warehouse.

City – Specify the city where the warehouse is located.

State – Click the **State** arrow and select the abbreviation for the state where the warehouse is located.

Zipcode – Specify the postal code of the area where the warehouse is located.

Country – Specify the country where the warehouse is located.

4 Click **Save**.

Specifying WIP/VAS Parts

If you selected the WIP/VAS Supported check box in the warehouse header, specify the WIP/VAS parts. To specify parts:

1 Click the **Warehouse WIP/VAS** browse button.

2 If a warehouse is currently selected in Warehouse Maintenance, the warehouse ID is inserted in the Warehouse ID field. To define WIP/VAS information for another warehouse, click the browse button and select the warehouse ID.

3 Click **Insert**.

4 Double-click the **Part ID** browse button and select the part you are making eligible for value added service.

5 Double-click the **WIP/VAS** browse button and select the WIP/VAS ID to associate with the part you selected. The price for the WIP/VAS you selected is in the Price column. You can change the price if necessary.

Specify WIP/VAS IDs in Accounting Entity Maintenance.

Editing Warehouse Information

Edit warehouse information using Warehouse Maintenance.

To edit warehouse and location information:

1. Click the **Site ID** arrow and select the site to use.
2. **In the Warehouse ID field, click the Warehouse ID** browse button and select the warehouse containing the information in which to edit.
3. Make changes to the basic warehouse information.
4. To edit a location, select the location to make the necessary changes.

   Note: You can change any field in the Warehouse Maintenance window except the Site, Warehouse and Location IDs. Changing the Site or Warehouse ID creates a new warehouse.
5. Click **Save**.

Deleting Warehouses

Caution: Deleting a warehouse permanently removes the information from your database. You CANNOT recover deleted warehouse information.

Deleting Locations

Before you can delete a warehouse, you must delete all the locations within that warehouse. You are not allowed to delete locations with assigned parts: you must reassign the parts to other locations.

To delete locations:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you created the warehouse. If you are licensed to use a single site, this field is unavailable.
2. **In the Warehouse ID field, click the Warehouse ID** browse button and select the warehouse containing the location to delete.
3. Click the row header for the location to delete.
4. Click **Delete Row**.

   An X is displayed to the left of the row, indicating you have marked it for deletion.

   Note: If you are deleting the warehouse, you must delete all the locations.
5. Click **Save**.

   The locations are deleted from the warehouse. If you have parts using the location, a dialog box is displayed notifying you that you cannot delete the location.

Deleting Warehouses

You cannot delete Warehouses if they are used in Part Maintenance or Inventory Transactions.

To delete warehouses:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you created the warehouse. If you are licensed to use a single site, this field is unavailable.
2. **In the Warehouse ID field, click the Warehouse ID** browse button and select the warehouse to delete.
3. Click **Delete**.
4. In the dialog box, click **Yes** to continue, or **No** to cancel the deletion.

   If you click **Yes**, the warehouse information is removed from the database, though the Warehouse Maintenance window still contains the warehouse information.
5. Click **New** to clear the warehouse information from the window.

   Note: If you click **Save** before clearing the Warehouse Maintenance window, the uncleared information is saved as a new warehouse record.

Adding Locations to Multiple Warehouses

If you have locations common to all your warehouse, you can add those locations using the Add Locations to Warehouses option.

If you are licensed to use multiple sites, the warehouse location is added to all warehouses within the site you select in Warehouse Maintenance.

If you are licensed to use a single site, the warehouse location is added to all warehouses in your database.

To add locations to multiple warehouses:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to which to add a warehouse location. If you are licensed to use a single site, this field is unavailable.
2. Select **Edit**, **Add Location to Warehouses**.
3. To add this location to an **Independently** or **Universally** planned warehouse only, select one of the options. To add the location to All warehouses, select **All**.
4. In the Location ID field, specify an identifier for this location. When you move to another field, the existence of the location in any of your warehouses is checked. If the location exists, you are notified and prompted to verify the addition of this location only to the warehouses where the location does not exist.

   To add the location, click **Yes**; if not, click **No**.
5. In the Description field, specify a description for this location.
6. Click the **Type** arrow and select the location type. You can select:

Floor Stock – If you use this location for materials you consider floor stock, select **Floor Stock**. You might want to use this option for things you require to stock but do not show on work orders: for example, welding supplies.

Regular – If this location is part of your normal stock, select **Regular**.

Transit – To designate this location as a transit location, select **Transit**.

7 Click **Save**.

Searching for Locations

If you have a large number of locations within a warehouse, you can use the Find function to search for the location in which you are interested.

To search for locations:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the warehouse. If you are licensed to use a single site, this field is unavailable.

2 **In the Warehouse ID field, click the Warehouse ID** browse button and select the warehouse containing the location in which you are interested.

3 Click **Find**.

4 Specify the name of the location to search in the Search For field.

5 Click **Search**.

The search string you specify remains in effect until you replace it or exit Warehouse Maintenance. You can repeat the search by pressing the **F3** key. This finds the location entered in the search string or finds the next location that matches the search string.

If the location is found, you return to the Warehouse Maintenance window with the location highlighted.

6 If a location is not found, a message box is displayed indicating that the search string could not be found.

Setting Up Location/Part Associations

You can set up associations between warehouse locations and specific Part IDs using Warehouse Maintenance. The association indicates that the part can be stored in, received to, or issued from that location. Each part must have at least one assigned location, if shipping, receiving, or inventory transactions are to be performed for that part.

Note: You can also make this assignment in Part Maintenance.

Assigning parts to locations allows you to:

- review and modify all the locations for one part
- see if the status of the parts in location/parts is available, unavailable, or on hold
- lock the part for that particular warehouse location
- place particular parts on hold. This status prevents these parts from being issued or transferred.

Adding Parts to Locations

To add parts to locations:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the warehouse. If you are licensed to use a single site, this field is unavailable.
2. **In the Warehouse ID field, click the Warehouse ID** browse button and select a warehouse.
3. In the locations table, select the location to which to add parts.
4. Select **Edit**, **Locations/Parts**.
5. Click **Insert**.
6. Double-click the **Part ID** browse button and select the part to assign to this location. If you are licensed to use multiple site, the part ID browse lists the parts that belong to the site ID you selected. You cannot add a part to a site using this dialog. To add a part to a site, you must use Site Maintenance or Part Maintenance.
7. To change the status of this part in this location from the default setting of Available, click in the Status column and click the arrow to select the Status.
8. Click in the DC Class column and click the arrow to select the DC Class.

   If you are working with Distribution Center, DC Classes (Distribution Center) allow you to assign a status to parts in this location.
9. To prevent this warehouse location from being used in transactions, select the Locked check box. If this warehouse location can be used in transactions, clear the Locked check box.
10. Specify a description for this part/location combination in the Part/Location Description column.
11. Select the following settings for this part in this warehouse location:

    Primary – To set this location as the primary location for this part, select the **Primary** check box.

    Auto Issue – To allow the part to be auto-issued from this location, click the **Auto Issue** check box.

Default Warehouse Auto Issue – To set this location as the default location for warehouse auto-issues, click the **Default Whs Auto Issue** check box.

Part Auto Issue – To set this location as the default location for part auto issues, click the **Default Part Auto Issue** check box.

Part Inspection – To require parts in this location to be inspected, click the **Part Inspect** check box.

Warehouse Inspection – To set this location as this part's inspection location, click the **Whs Inspect** check box.

12 If you selected On Hold in the Status column, double-click the **Hold Reason ID** browse button and select the reason this part is on hold.

13 Click **Save**.

Deleting a Part from a Location

You can delete a part from a location only if the quantity in the location is zero.

To delete a part from a location:

1 In the **Parts that can stored in location…** dialog box, select the part to delete.

2 Click **Delete**.

An X is displayed in the row header indicating you have marked the row for deletion.

3 Click **Save**.

The Part/Location association is deleted from your database.

Adding Parts to Locations Using the Part Location Creator

You can add parts to locations in existing warehouses using the Propagate Part Warehouse Locations utility. You can add parts or ranges of parts to existing locations or create new locations to existing warehouses.

If you are licensed to use multiple site, you can add parts to warehouses on a site-by-site basis. The part you add to locations must exist in the site. If you select a part that does not exist in the site, it is not added to the site warehouse locations.

Note: The Propagate Part Warehouse Locations utility is not available from the main window.

To add parts to locations:

1 Using Windows Explorer or My Computer, navigate to the folder where your VISUAL are stored, and double-click **VMPRTLOC.EXE**.

2 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

3 Specify the following information for the part you are adding:

Note: You can use valid QBE (Query by Example) expressions to specify information into any of the following fields. See "Searching Advanced Browse Tables" on page 3–11 in the Concepts and Common Features guide.

Part ID – Specify the ID for the part to add to the location. The Part ID must be a valid Part ID: you cannot specify a new part using this technique.

If you are licensed to use multiple sites, you must specify a part that exists in the site. You cannot add parts to site using this technique.

Part Description – To specify a description instead of Part ID, specify it in the Part Description field.

If you are licensed to use multiple sites, you must specify a description for a part that exists in the site. You cannot add parts to site using this technique.

Product Code – To filter the parts to be added to the location by Product Code, click the **Product Code** arrow and select the Product Code. By selecting a Product Code and not entering a Part ID or Description, ALL parts you have assigned to that Product Code are added. If you are licensed to use multiple sites, all parts with the product code that exist in the site are added.

Commodity Code – To filter the parts to be added to the location by Commodity Code, click the **Commodity Code** arrow and select the Commodity Code. By selecting a Commodity Code and not entering a Part ID or Description, ALL parts you have assigned to that Commodity Code are added. If you are licensed to use multiple sites, all parts with the commodity code that exist in the site are added.

Warehouse ID – Click the **Warehouse ID** browse button and select the warehouse to which to add the parts.

Location – To add parts to an existing location, click the **Location** browse button and select the location.

To add a new location to the warehouse you selected, specify the name for the new location.

4 In the Location Attributes section, specify these settings:

Status – Click the Status arrow and select the status for this part in this location. You can select: **Available**, **Unavailable**, or **On Hold**.

DC Class – If you are running Distribution Center, click the arrow and select the DC Class. You can select:

- Available
- On Hold
- In QA
- In Process
- Returned
- Damaged
- Scrap
- Committed

Locked – To lock this warehouse location to transactions, select the **Locked** check box.

Transit – To designate this location as a transit location for the part, select the **Transit** check box. Transit locations are locations within warehouses from which you can ship parts on an order or an IBT.

Inspect – To mark this location as an inspection location for the part, select the **Inspect** check box.

Primary – To set this location as the primary location for this part, select the **Primary** check box.

Auto Issue – To set this location as the default location for auto-issues, select the **Auto Issue** check box.

5 Click **Run**.

Viewing Audit History

If you are auditing information in database tables related to warehouse, you can view a history of the changes made to a warehouse in the Audit History dialog.

A system administrator must grant you permission to view this dialog.

Use Audit Maintenance to set up the audit. See "Audit Maintenance" on page 5–1 in the System Administration guide.

Information is written to this dialog if you are auditing these database tables:

- WAREHOUSE
- WAREHOUSE_ADDRESS
- WAREHOUSE_WIP_VAS

To view audit history information:

1. Select **Inventory**, **Warehouse Maintenance**.
2. Open a warehouse record.
3. Select **Info**, **Audit History**.
4. This information is displayed:

   ID – The primary key of the database record that was changed.

   User ID – The ID of the user who made the change.

   Date – The date that the change was made.

   Field – The database table and column that was changed.

   Old Value – The original value.

   New Value – The new value.

   Action – The action that occurred to update the date. These actions are used:

   Insert – A new value was created.

   Update – An existing value was changed.

   Delete – A value was deleted.

Exporting Audit Information

You can export Audit Information to Microsoft Excel or to an XML file.

Exporting Audit Information to Microsoft Excel

To export the information to Microsoft Excel:

1 Select **Inventory**, **Warehouse Maintenance**.
2 Open a warehouse record.
3 Select **Info**, **Audit History**.
4 In the table, select the rows to export.
5 Right-click the table and select **Send to Microsoft Excel**. Microsoft Excel is opened, and the rows you selected are inserted in the spreadsheet.

Exporting Audit Information to XML

To export audit information to XML:

1 Select **Inventory**, **Warehouse Maintenance**.
2 Open a warehouse record.
3 Select **Info**, **Audit History**.
4 In the table, select the rows to export.
5 Right-click the table and select **Send to XML**.
6 Specify this information:

   File Name – Specify the name to use for the XML file.

   XML to Write – Specify the content to include in the file. Click one of these options:

      Schema – Click this option to export the schema only. The XML structure is exported, but no information from the table is exported.

      Document – Click this option to export the rows that you selected in the Audit History table in XML format.

      Both – Click this option to export both a schema file and a document file.

   Tags – Specify the information to use for the XML tags. Click one of these options:

      Use column name – Click this option to use the database column names for the tags.

      Use item name – Click this option to use the column names as displayed in the Audit History table for the tags.

7 Click **Export**.

Setting Transit Times Between Warehouses

Use the Transit Times feature to set the number of days it takes to move parts from one warehouse to another. These times are used as default values in the Interbranch Transfer Entry window as you specify From Whse and To Whse warehouse combinations.

If you are licensed to use multiple sites, you can specify transit times between warehouses in the same site or in different sites. You can use interbranch transfer to move inventory from one site to another, provided that the sites belong to the same accounting entity. For more information, refer to the “Inter Branch Transfer” on page 8-1 in this guide.

To set transit times between warehouses:

1 In the Warehouse Maintenance window, select **Edit**, **Transit Times**.

The upper table contains the From warehouse list and the lower table contains the To warehouse list: both tables contain the same warehouses.

2 In the upper table, select the warehouse from which the part transfer originates: the From warehouse.

The Warehouse ID is in the From field.

3 In the lower table, select the warehouse in which the part transfer concludes: the To warehouse.

The Warehouse ID is in the To field.

4 Specify the number of days it takes to convey parts from the From Warehouse ID to the To Warehouse ID in the Transit days field.

The value can be a decimal value. For example, 1.75 is an acceptable value.

5 Click **Save**.

Note: You can change your saved transit times by selecting the From/To combination and changing the Transit Days field.

Specifying User Dimensions

If you use dimensional reporting, you can attach user dimensions for warehouses to these transactions:

- Receivable Invoice
- Shipment
- Payable Invoice
- Purchase Receipts
- Inventory Adjustments
- Work Order Issues
- Work Order Labor
- Work Order Service
- Work Order Finished Goods

You can set up different user dimensions for each warehouse. Use the User Dimensions for Warehouse ID dialog box to specify which user dimensions to associate with a particular warehouse. Use the User Dimensions Priorities dialog box available in the Accounting Window to determine when the warehouse user dimension IDs should be used. See "Cost Centers" on page 2-1 in the General Ledger guide.

To associate user dimensions with warehouses:

1. Select **Edit**, **User Dimensions...**.
2. In the left pane, each user dimension group is listed. Expand the list under the user dimension group to view the transactions in which warehouse user dimensions can be used.

   To assign the same dimensions to all transaction types, click the name of the dimension group in the left pane. All Subledgers is inserted in the Subledger field.

   To assign dimensions to a particular transaction type, select the appropriate transaction type. The transaction type is inserted in the Subledger field.
3. Click **Insert**.
4. Specify this information:

   Valid From – Specify the date the dimension assignment becomes effective.

   Debit Dimension – Double-click the browse button and select the dimension to use for account debits.

   Credit Dimension – Double-click the browse button and select the dimension to use for account credits.
5. Click **Save**.

Printing Warehouse Information

If you are licensed to use multiple sites, you can print warehouse information on a site-by-site basis only.

To print a list of your warehouses and their locations:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use for the report. If you are licensed to use a single site, this field is not available.
2. Click **Print**.

   The Print dialog box is displayed. If you selected a warehouse before accessing this dialog box, the warehouse ID is inserted in the starting and ending Warehouse ID fields.
3. Click the **Starting Warehouse ID** browse button to select the warehouse with which to begin the report.

   Click the **Ending Warehouse ID** browse button to select the warehouse with which to end the report.

   To print a list of the locations in one warehouse, specify the same Warehouse ID as the starting and ending warehouse.

   If you are licensed to use multiple site, the warehouse ID browse tables list only the warehouses that belong to the site.
4. Select an output for the report. You can select:

   Print – Select **Print** to send your reports to a printer.

   View – Select **View** to send your report to a report view application so you can see the report on screen.

   File – Select **File** to send the report to a text file and save it to your computer.

   E-Mail – Select **E-Mail** to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

   If you selected E-Mail, when you generate the report a Microsoft Outlook message opens with the report attached. If you are sending a PDF, the distiller is started, and the document is converted to PDF, and then is attached to the e-mail message.
5. To print barcodes in your report, select the **Print Barcodes** check box and select the type of barcode.

   Code39 – This barcode type, also known as Code 3 of 9, contains variable length, discrete symbology. You must have a Code 39 barcode font installed to view the barcode. If you do not have the Code 39 font installed, then the alphanumeric ID is displayed instead with a prefix and suffix. This pattern is used: *%ID%*.

   QR Code – This is a two-dimensional or matrix barcode. QR stands for quick response.
6. Click **Ok**.

Printing Warehouse Thermal Labels

Warehouse Maintenance allows you to print thermal labels for warehouses and locations, both individually and as a part of a group.

To print thermal labels:

1. From the Print dialog box, click **Thermal Labels**.

   If you have selected warehouses in the Print dialog box, the Starting and Ending Warehouse ID fields are populated.

2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

3. Select the label to print:

   - To print single labels, click the **Label ID** browse button and select the label to print.
   - If you have set up groups of labels and want to print a group, click the **Label Group ID** browse button and select the Label Group to print. If you are printing only one label, do not select a group. You can select either a Label ID or a Label Group ID.

     When you select a group, the members of the group are shown in the table.

   The Label Type field is shown depending on the type of label you select.

4. If you are printing a group and want to temporarily add more labels, click **Insert** and add any new labels.

5. To limit your print run, click the browse buttons and select the Starting and Ending IDs to use. You can limit print runs by selecting:

   - Warehouse ID
   - Location ID

6. For each label in the print table, specify the quantity of labels to print in the Print Qty column.

7. If you are printing labels for containers or pallets and want to print multiple labels, select the **Multiplier** check box—the Print Qty figure you specify becomes a multiplication factor. For example, you have 2 Pallets and each pallet has 16 cases totalling 32 labels; one for each case. Select the **Multiplier** check box and specify 16 for the Print Qty: 16 labels are printed for every pallet you ship.

8. Click **Print Labels**.

Chapter 5: Part Traceability

This chapter includes:

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What is Part Trace Profile Maintenance?	5–3
What is Part Trace Maintenance?	5–10
Using Traceability in Applications	5–19
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What is Part Traceability?

Part Traceability is an optional module you can use to track purchased or fabricated materials by lot, serial number, or other identifier. This applies to all points in the material cycle: receipt of raw materials, return to vendors, issue of raw materials to work orders, reporting of completed parts, receipt of work orders to inventory, shipment of finished goods, and inventory adjustments.

If you are licensed to use multiple sites, set up part traceability on a site-by-site basis.

Two applications are used to set up and apply part traceability:

- Use **Part Trace Profile Maintenance** to define the traceability for a part.
- Use **Part Trace Maintenance** to manage assignment of lot numbers, and to report, maintain, and print traceability records.

Note: All applications involved in material transactions have a Part Traceability button and dialog box.

This chapter describes:

- Using Part Trace Profile Maintenance
- Using Part Trace Maintenance
- Using Traceability in Applications
- Viewing Material Trace History

Before you begin setting up profiles and tracking parts, you should understand what part traceability does and what the ramifications are for the selections you make in the part's profile.

Consider these two main topics before continuing:

How closely do you want to enforce traceability?

For your traced parts, you can select to have your users specify traceability when receiving and issuing parts. This effectively disallows the issuing of parts if they have not been received. For example, if you know you over-ship some of your purchase orders, you may want to use trace only during the issue process because if you trace that part during receipt, you cannot ship more traced parts than you have Trace IDs.

When do you want to start the tracing of your parts and materials?

If you are manufacturing a part that has several components and does not become a real part until the work order is complete; perhaps the last operation on the work order is an inspection and the assignment of a serial number, you may want to start tracing the part when you receive it from the work order into stock. Or, if you are building to satisfy the demand of a customer order, you may want to opt to start tracing during the shipping process.

What is Part Trace Profile Maintenance?

Use Part Trace Profile Maintenance to define the traceability aspects for a part. Part Trace Maintenance is used to report, maintain, and print traceability records. This chapter describes how to configure traceability for parts. The Part Trace Maintenance section describes how traceability functions throughout your database.

Setting up Traceable Parts

The first step in defining traceable parts is to set up Traceability Profiles for the parts to trace. If parts have valid trace profiles, all relevant applications in your database recognize this part as traceable. You must use the Part Traceability dialog box to specify or verify traceability information before you complete the related transaction.

Note: When no traceability profiles are defined, buttons and other traceability controls are hidden. The first time you set up a profile, the trace related buttons and columns are displayed. Trace buttons are unavailable when a non-traceable part is the focus in a window.

To set up part traceability profiles:

1 From the main menu, select **Inventory**, **Part Trace Profile Maintenance**.

2 Specify this information in the header:

Site ID – If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you want to trace parts. If you are licensed to use a single site, this field is unavailable.

Part ID – Click the **Part ID** browse button to specify the part to use to set up a profile. If you are licensed to use multiple sites, the Part ID browse table lists only those parts assigned to the site you selected. If you are licensed to use a single site, all parts in your database are listed.

Label – Specify a label for this profile in the Label field. The Label field sets the terminology used to refer to groups of the traceable part. The two most commonly used labels are Lot or Lot Number, and Serial Number. This label is used in table column titles and report labels for the Trace ID for this part. The defined label sets the title of table columns throughout the traceability user interface.

Comments – Specify any description or comments about the traceability profile for this part in the Comments field.

3 In the When to Apply section, specify when to apply this profile for this part:

When traceability is enabled, it affects many applications. You can specify the individual points in your material movement cycle when part trace information is provided or verified. There are four categories.

Receiving/Adjust In – Traceability information is required when the part is received into inventory.

For purchased parts, this happens during Purchase Receipt Entry.

For fabricated parts, this happens when using Inventory Transaction Entry. In both cases, the received quantity and lot number are specified for each group being received.

For returns of purchased materials, and for receipt returns of finished goods, the quantity returned must be specified in terms of specific lot numbers or serial numbers being returned.

In general, you should select this option for purchased materials, as you usually begin traceability with initial receipt. For a fabricated part, you may receive it to inventory in an un-traced form, and begin traceability when it is shipped to fill an order.

Issue/Ship/Adjust Out – You must specify traceability information if you are issuing the part in a work order, or shipping it to a customer.

For purchased parts, this happens when using Inventory Transaction Entry to issue a part to a work order.

For fabricated parts, this happens when using Shipping Entry. In both cases, you are required to indicate which lot numbers or serial number the issued material comes from, and in what quantities.

For returns of raw materials issued to a work order, and for returns of shipped goods, the lot numbers are recalled from which they were initially issued. You are required to specify the return from those lot numbers only.

Service Dispatch – Traceability information is required when you use Outside Service Dispatch Entry.

Service Receipt – Traceability information is required when you use Outside Service Receipt Entry.

Labor Tickets – Traceability information is required when you create labor tickets with completed quantities for fabricated traceable parts, at the operation marked Begin Traceability. You are required to specify the lot numbers and quantities being completed. This option does not apply to purchased materials.

4 In the Numbering section, set up a Numbering Scheme:

Automatic – The lot or serial number is automatically assigned, based on a Numbering Profile that you set up.

Automatic Numbering may be preferable for fabricated parts. For example, use automatic numbering to automatically generate serial numbers for parts that you ship.

If you select Automatic Numbering, click the **Numbering Profile ID** arrow and specify the numbering profile to use.

User – The user always specifies the number manually. No numbering profile is set up.

User numbering is useful for purchased materials that come with a vendor Lot ID or serial number. To use that number for your internal lot number or serial number, you can manually specify it when receiving. You can also use this type of numbering whenever you require assigning numbers in a way that cannot be manually generated.

For example, you may assign serial numbers to finished goods based on the customer, Work Order ID, date, configuration or other parameters.

Automatic or User – Both modes of numbering are allowed. If you leave the number blank, auto numbering is used. Click the **Numbering Profile ID** arrow and specify the numbering profile to use.

5 In the Quantity Fill section, specify whether to automatically or manually specify the quantity in the Traceability for Part dialog box.

For example, if you are in Labor Ticket Entry and specify a quantity of 12 for the parts completed, 12 shows as a quantity for the transaction when you click the Part Traceability button from the toolbar.

Note: You can also select the Quantity Fill type by selecting Auto-fill from the Options menu.

6 Select which options to use for this profile:

Numbers Must Be Pre-assigned – Pre assigned numbers allow strict control of lot numbers by assigning them ahead of time, rather than assigning them upon receipt or issue. The assignment uses the Pre-Assign Numbers function in Part Trace Maintenance.

Note: If a purchase order for a traceable part is linked to a work order, traceability information for the combined receipt and issue will be specified in Purchase Receipt Entry.

If you select this option, you must ensure that numbers are preassigned on time, or that a supervisor or other authorized person has access to the preassign function. No transactions for the part are possible if a number is not available to use.

Allow Editing of Expiration Dates – To allow the user to edit the Expiration Date for this profile, select the **Allow Editing of Expiration Date** check box.

Cycle Count Trace Detail – If you are working with DCMS, specify the Cycle Count Trace Detail for this profile. Cycle Count Trace Detail allows you to perform aggregate lookups for user processing. If you select this check box, you must manually perform these transactions. Manual definition of these properties provides additional details and you are required to confirm trace.

7 Specify the shelf life in days for the part in the Shelf Life (Days) field. Shelf life is for perishable parts. Using the information from this field, an expiration date is calculated by adding shelf life to receipt date, and you are warned when this expiration date arrives.

8 Specify the Maximum Lot Size. This number specifies the maximum number of parts that can be grouped together under one lot number. This helps assign numbers, and detect errors in your assignments.

For material purchased in standard lots, you can set this number to the standard lot size, or the largest one if there are several sizes available.

For any serialized parts, it is important that you set this number to one. This specifies that one part gets one unique serial number. Any other value here allows multiple parts to be assigned the same serial number.

Note: If you are editing a profile and try to change the Maximum Lot Size to anything less than the largest lot size you have traced to date, you are prompted with a dialog box to set the lot size equal to the largest existing trace lot.

9 Click the **Alpha** and **Numeric Properties tabs** to define the alpha and numeric properties for this profile.

Properties allow you to gather extra information users can specify when new lots, serial numbers, or other trace numbers are created.

There are two types of properties, Alpha and Numeric. The only difference between the two is the data type. Alpha properties allow alphanumeric input (letters and numbers), and should be used for non-numeric information. Numeric properties allow input of numbers only, and should be used for information to apply to mathematical and statistical functions. You can define up to five of each type of property.

One use of properties is to record variable characteristics of materials. A material with a single Part ID might have a variable strength, grade, tolerance, color, or other characteristic that does not make it a separate part, but must be recorded and may affect production. Use properties to record this information upon receipt.

For each alpha or numeric property specified, specify a label to identify the property. These labels are titles for traceability table columns.

To store multiple variations of trace properties in the same location, select the **Colocate** check box. For example, if you trace material based on color and choose to colocate material, you can have red, yellow, and green parts reside in the same storage (warehouse) location.

Additionally, you can specify the following:

Required – To require the user to specify information into the property column, select the **Required** check box.

Editable – To allow the user to edit information in the column after you have saved it, select the **Editable** check box.

Visible – To make the column visible, select the **Visible** check box.

Known – To have the user defined information show at the transaction point and allow colocation if you are working with DCMS, select the **Known** check box.

If you clear the **Known** check box, inventory is kept separate. When you synchronize DCMS with your database, “known” information synchronizes to the VISIBLE column in DCMS.

If you select **Print Traceability Info**, the properties are printed on Work Order Travellers along with other trace information.

10 Click the **Distribution Properties** tab and select the following options:

- Lot
- Production Date
- Receive By Date
- Available Date
- Ship By Date
- Ownership
- Serial
- Expired Date
- Accept Expired Receipts

11 If you are working with DCMS, click the **Trace Dates** tab.

12 Click **Insert**, and specify this information:

Trace Date Name – Click the arrow in the column and specify the Trace Date Name. You can specify:

- Production Date
- Receive By Date
- Available Date
- Ship By Date
- Expiration Date

Days – Click in the Days column and specify the date range to use for this Trace Date.

From Trace Date Name – Click the arrow in the column and specify the From Trace Date Name. You can specify the same names as Trace Date Name.

Classification – Click the arrow in the column and specify the Classification. You can specify:

- Available
- Damaged
- In Process
- In QA
- On Hold
- Returned
- Scrap

For example, presume you specified the following values:

Trace Date Name – Receive By Date

Days +/- – 10

From Trace Date Name – Production Date

Classification – Available

The Receive By Date would occur 10 days after the Production Date, at which time the part becomes Available.

13 Click **Save**.

The profile takes effect on the next transaction for the part.

See the Distribution Center Management System user guide.

Editing Traceability Profiles

Changing profiles after you have started using them does not negatively affect your data, but can change the way your users perform their tasks. Generally, it is a better practice to simultaneously set up profiles for the parts to track and set up those parts into your database.

When you modify profiles, these changes take place:

Labels – Changing label names changes the column title in traceability screens.

When to Apply – You should carefully consider changing When To Apply information, especially when clearing check boxes. Although all changes are supported, When To Apply changes will require your users to change how they use the applications that include traceability.

For example, if you clear the Receiving check box, the users of Shipping Entry may suddenly find that they must create new trace records, where they were already created in the past.

Numbering – Because you cannot reuse numbers, you can only specify numbers greater than the current numbering scheme possibly causing gaps in your numbers.

Properties – You can add new properties at any time, by specifying new labels. Changing existing labels changes the column titles for the properties. The existing property column is not displayed if you remove a label; the information is still in the database, and if another property is later added in its place, the information for the old property is displayed with the new label.

Copying Traceability Profiles

You can copy a traceability profile to a large number of parts using the Copy Profile to Other Parts command.

If you are licensed to use multiple sites, you can copy a profile to any other part assigned to the site selected in the profile. You cannot copy a profile from a part in one site to a part in another site.

To copy traceability parts:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the profile. If you are licensed to use a single site, this field is unavailable.
2. Click the **Profile ID** browse button and select the profile to copy.
3. Click **Edit**, **Copy Profile to Other Parts**.

   If you are licensed to use multiple sites, parts assigned to the site selected in Part Profile Maintenance are displayed. If you are licensed to use a single site, all parts in your database are displayed.

   You can filter which parts are displayed in the dialog box by selecting the **Fabricated**, **Purchased**, or **All** options. Use the search feature to limit the number of parts to which to copy the profile.
4. To replace profiles that might already be defined for parts, select the **Replace Existing Profiles** check box.
5. To copy the profile to all the parts in the list, click **Copy to Listed Parts**.

   To copy the profile only to the selected parts in the list, select the parts to which to copy the profile and click **Copy To Selected Parts**. Use the CTRL and SHIFT keys to help you make your selections.

   The current trace profile is copied to the parts.
6. If you selected the **Replace Existing Profiles** check box, the profiles you have already defined are overwritten; if not, only parts without profiles receive the new profile.

Deleting Traceability Profiles

You can only delete a Part Trace Profile if no traceability records exist for the Part ID using the profile.

To delete traceability profiles:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the profile. If you are licensed to use a single site, this field is unavailable.

2 Click the **Profile ID** browse button and specify the profile to delete.

3 Click **Delete**.

If no traceability records exist for the part, the profile is deleted. Because the Part Trace Profile Maintenance window does not clear, you can resolve the record by clicking the **Save** button.

Setting Traceability Preferences

You can specify how Trace IDs are displayed in labor reporting and how packlists are generated for traced parts in Shipping Entry. After you set this information, it becomes the default.

To set traceability preferences:

1 From the Part Trace Profile window, select **Options**, **Preferences**.

2 Click the **Default Tab** arrow to specify the tab in which to open in the Part Trace Profile Maintenance window.

3 In the Packlist Generation of Traced Parts in Shipping Entry section, select the option to use in Shipping Entry. If you are licensed to use multiple sites, this selection applies to all of your sites. Click one option:

One Shipper Line per Packlist for a Traced Part – Click this option to create one shipper line per packlist for a traced part: Three packlists are created for three lines of traced parts. This is the standard method for the distribution of traced parts for shipment.

Multiple Shipper Lines for the same Traced Part – Click this option to create multiple shipper lines on a packlist for the same traced part: one packlist is created for three lines of traced parts.

4 Click **Ok**.

What is Part Trace Maintenance?

Use the Part Trace Maintenance window to view information and print reports about the material traces in your database. You can also access additional information about your traces from within the Part Trace Maintenance window without having to open the application and navigate to the information in which to view.

The Part Trace Maintenance window is available from the Inventory menu.

These fields are displayed in the Part Trace Maintenance window header:

Site ID – If you are licensed to use multiple sites, click the Site ID arrow to select the site that owns the part. If you are license to use a single site, this field is unavailable.

Part ID – Click the Part ID browse button to select the part to trace.

Trace ID – Click the Trace ID browse button to select a Trace ID.

Traceable – For traceable parts, the **Traceable** check box is selected. For non traceable parts, the check box is cleared.

Obsolete – If the Part ID you select is obsolete, the **Obsolete** check box is selected.

Profile Comments – Any comments you specified for the Trace Profile is displayed.

Show Qty Remaining > 0 – To exclude the lines in the table that have zero quantities, select the **Show Qty Remaining > 0** check box.

The table is similar to the Traceability tables used throughout other modules. All trace records in existence for the part are displayed, with all quantity and property information for each.

These fields are displayed in the table:

Trace ID – The identifier for the grouping of parts. This column is titled with the label defined in the part's part trace profile, for example, Lot Number or Serial Number.

Part ID – If you are viewing traces by part, the Part ID is displayed.

Quantity Received – Total quantity for this lot number that you received into inventory through Purchase Receipt Entry or Inventory Receipt transaction.

Quantity Issued – Total quantity for this lot number that you issued to a work order through an inventory Issue transaction or to a customer order using Shipping Entry.

Quantity Remaining – The difference between the Quantity Received and the Quantity Issued.

Quantity Reported – Total quantity for this lot number that you reported as completed using Labor Ticket Entry.

Dispatch In Quantity – The quantity of the part you have sent to an outside service using Outside Service Dispatch Entry.

Dispatch Out Quantity – The quantity of the part you have received from an outside service using Purchase Receipt Entry.

Quantity Assigned – Quantity that you originally assigned using the Pre-Assign Numbers function.

Properties – One column is displayed for each alpha and numeric property you have defined in the part's traceability profile. You must make these columns visible. See "Configuring the Trace Record Table".

Comments – Any comments specified for the lot number throughout the traceability cycle are displayed.

Expiration Date – Expiration date for parts with a finite shelf life.

Note: To alphabetically sort the rows in the table based on a particular column, double-click the column header.

Searching for Part Trace Profiles

You can search for a part trace profile by profile ID, by part ID, and by trace ID. By clicking the browse buttons, you can use the standard search tools in the search dialog box.

To search for Part Trace Profiles:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the part trace profile. If you are licensed to use a single site, this field is unavailable.
2. Click the browse button to use:
   - Profile ID
   - Part ID
   - Trace ID
3. Specify the Profile ID, Part ID, or Trace ID to view. You can use the standard browse functionality to find the item.

   After you have specified what to view, you can use the **Next** button to move to the next ID. If you have filtered the items showing in the Part or Trace browse dialogs, you can use the **Next** and **Previous in Set** arrows to navigate through the IDs you filtered.

Editing Traces

From within the Part Trace Maintenance window, you can edit the following fields:

- Trace ID
- Quantity Assigned
- Comment
- Expiration Date

Note: You can only edit Trace IDs if they are pre-assigned numbers: after you have reported transactions against Trace IDs, edits are prohibited.

To edit a Trace ID:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the profile. If you are licensed to use a single site, this field is unavailable.
2. Click the Profile ID browse button and select the profile that contains the trace to edit.

   The individual Trace IDs for the profile you specified are displayed in the table.

3 In the row, specify new information as needed.

4 Click the **Save** button.

5 Specify any comments regarding this trace edit.

6 Click **OK**.

The changes you have made are tracked in the Trace History table.

Viewing and Printing Trace Histories

When you make a change to a trace record, those changes are tracked so you will have a permanent record. Unlike Material Trace History, this trace history is the record of the changes you make to a trace.

To view trace history:

1 If you are licensed to use multiple sites, click the **Site ID** browse button and select the site where you traced the part. If you are licensed to use a single site, this field is unavailable.

2 Click the **Trace ID** browse button and select the trace ID to view.

3 Click the row header for the trace ID.

4 Click **Show Trace History**.

The Trace History window populates with the trace history for the trace you specified.

5 To print this trace history report, click **Print**. The Print dialog box shows the current Profile ID.

6 To change the profile you are printing, click the **Profile ID** browse button and specify the profile to print.

7 To limit the number of traces in the report, click the **Beginning** and **Ending Trace ID** browse buttons and specify the traces with which to start and stop the report.

8 In the Report Type section select the detail type for the report. You can select **Summary** or **Detail**.

9 In the Sequence section select how to sort the information in the report. You can select, **Profile ID** or **Trace ID**.

10 Click the output arrow and specify the output of the report:

Print – To send the report to your printer, specify **Print**.

View – To view the report using the report viewer, specify **View**.

File – To send the report to text file, specify **File**. Your report is prepared as a CSV file and you are prompted to specify the location and file name for the file to be saved in the dialog box.

E-mail – To prepare the report and attach it to an e-mail, specify **E-mail**. The report is prepared as a CSV file, a Microsoft Outlook e-mail message is opened, and the file is attached allowing you to address the communique and specify any comments. Click **Send** when you are ready to send the message.

11 To attach a PDF (Portable Document Format) file to your e-mail instead of a CSV file, specify the **PDF Format** check box in the Type section.

12 Click **Ok**.

Pre-Assigning Numbers

Preassigning numbers allows you to create trace records for the selected part ahead of time. This is useful to control the size of lots for fabricated materials.

If you have set the requirement for **Numbers Must Be Pre-Assigned** in the part's traceability profile, this is the only method you can use to create new lot numbers. If you try to specify more parts than there are pre-assigned numbers, you are limited to specifying a quantity of parts equal to the quantity of numbers remaining and halts further trace entry until you assign more numbers.

If you are working with parts having profiles not requiring pre-assigned numbers, you are allowed to make a choice between the pre-assigned numbers and manually specifying Trace IDs.

To pre-assign numbers:

1 In the Part Trace Maintenance window, select the part in which you are interested.

2 Select **Maintain**, **Pre-Assign Numbers**.

The Pre-Assign Numbers dialog box shows the Part ID and Description of the current part.

3 Specify the quantity of numbers to allow for this Part ID and this Trace ID in the **Pre-Assign Quantity** field.

4 Click **Ok**.

The Traceability for Part… dialog box is displayed.

The Trace ID column title is displayed according to how you configured this part's profile. For example, if you specified a label of LOT, the column title will be LOT.

Any maximum lot size specified in the part's traceability profile is used to create one or more new lines for the quantity you specify. Total Quantity shows the quantity you specified to assign, and Numbered Quantity shows how much has currently been assigned to new lot numbers.

5 Specify this information in the dialog box:

Fill Property Columns Automatically If Blank – To fill blank property columns, select this check box.

Scroll to Expiration Date – To have the Part Trace Maintenance window scroll to the Expiration date column when one of these trace numbers is displayed, select this check box.

For each line showing in the Traceability for Part… dialog box, specify Lot Numbers, Comments, and Expiration Dates.

If you are working with pre-assigned numbers for profiles that do not have the requirement for pre-assigned numbers or maximum lot sizes, you can click **Insert** to add lines, specifying the quantity of Trace IDs, Comments, and Expiration Dates.

Note: If you are working with a profile that uses Auto assigned numbers, you can create pre-assigned number with Comments and Expiration Dates only.

6 Click **Save**.

The Traceability window closes and the new numbers are created and they are listed in the Part Trace Maintenance window.

Note: At this point you can edit the Trace ID in the Part Maintenance window because you have not used the pre-assigned numbers.

Re-summarizing Trace Quantities

If quantities in the trace table need to be recalculated for issues with historical trace information, use the Re-summarize Trace Qty option.

Only the SYSADM user can perform this function.

The option is only active when one user is logged into the VISUAL database.

For assistance with this administrative task contact Infor Xtreme Support at the support portal www.infor.com/inforxtreme.

To re-summarize trace quantities:

1. Select **Inventory**, **Part Trace Maintenance**.
2. Select a trace profile or a specific trace ID.
3. Select **Maintain**, **Re-summarize Trace Qty**.
4. The current part or trace ID is displayed. To re-summarize only the selected part, click **Ok**. To re-summarize all parts, clear the information in the dialog and then click **Ok**.

Viewing Additional Information for Trace Records

For each trace in the Part Trace Maintenance table, you can view additional information for the following by clicking the toolbar button:

- Part Inventory Transactions
- Trace Inventory Transactions
- Trace Labor Transactions
- Trace Service Transactions

Note: You cannot make changes to information in the Trace Record dialog boxes.

Showing Part Inventory Transactions

Use the Show Part Inventory Transactions function to view all inventory transactions for a part.

To show part inventory transactions:

1. Select **Info**, **Show Part Inventory Transactions**.

The lines displayed are the union of all inventory transaction quantities for traced and non-traced transactions. In the Part Inventory Transactions dialog box, the Quantity (not Quantity Traced) is the total transaction quantity and the Quantity Traced is the sum of all lot number quantities associated with this transaction.

The primary function of this dialog box is to allow identification and adjustment of existing inventory quantities for the parts you have not assigned to lot numbers. This may have happened if you implemented traceability after on-hand levels existed, or if traceability is not applied to inventory adjustments.

You can identify any such quantities by comparing Quantity to Quantity Traced—normally, they would be equal.

Showing Trace Inventory Transactions

Use the Show Trace Inventory Transactions function to view all traced inventory transactions for a part.

To show trace inventory transactions:

1 Select **Info**, **Show Trace Inventory Transactions**.

With the exception of Labor Ticket Entry, Part Traces are associated with Inventory Transactions. While you use Inventory Transaction Entry to transfer inventory, part traces are automatic in Purchase Receipt Entry, Shipping Entry, and Outside Service Entry. When you are using one of these applications, the focus is on the transaction you are performing, for example shipping. When you perform the transaction, you provide some auxiliary traceability information, for example, the associated inventory transactions in shipping.

With a trace record selected in the Part Trace Maintenance window, you can view all the inventory transactions that are associated with that record. You can select a line in the Trace Inventory Transactions dialog box and click **Detail** to view the traceable transactions for that line. For example, if you have used a traceable material in production of another traceable part, you can view the details of the traceable material and traceable part.

When you specify a line in the table, the trace record information for that line is in summarized form in the Selected Entry section. Issued Quantity, Received Quantity, Reported Quantity, Assigned Quantity, Expiration Date, and Properties are displayed for the lot number.

Because of the many relationships between inventory transactions and lot numbers, the data in the dialog box can be derived from a complex set of transactions: one inventory transaction can have more than one lot number involved and one lot number can be associated with more than one inventory transaction, and the mapping is not one-to-one.

The Total Quantity Issued shown in the table is the total quantity that was issued to the work order requirement, and may have been issued by many inventory transactions. The Iss Qty. shown in the selected entry section is the total quantity that was issued from the lot number, and may have been issued to many other work orders in addition to the current one. Remember, the issue transactions displayed are only for the specified work order.

You can continue to click **Detail** through levels of traceable fabricated parts in this way, until all inventory transactions shown are for issues of purchased materials.

Showing Trace Labor Transactions

Use the Show Trace Labor Transactions function to view all traced labor related transactions for a part.

To show trace labor transactions:

Select **Info**, **Show Trace Labor Transactions**.

All labor tickets you specified against the specified part are in the dialog box.

Showing Trace Service Transactions

Use the Show Service Inventory Transactions function to view all service related inventory transactions for a part.

To show trace service transactions:

Select **Info**, **Show Trace Service Transactions**.

All service related transactions you specified are in the dialog box.

Printing Transaction Reports

You can use the Print Transaction report to print trace records and their associated transactions. It is essentially a printed version of the Part Trace Maintenance table, with options to print Show Inventory Transactions and Show Labor Transactions.

If you are licensed to use multiple sites, you must print Transaction Reports on a site-by-site basis.

To print a transaction report:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use for the report. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Print Transaction Report**.

   The current Part ID is populated in the Starting and Ending Part ID fields.
3. To print a range of parts, click the browse buttons and specify the Starting and Ending Part IDs for the range.

   Specify the part data to include in the report:

   Single Parts – Specify the same part for the Starting and Ending Part IDs.

   Range of Parts – Specify parts in the Starting and Ending Part IDs fields. If you specify only a Starting Part ID, that part and all parts following it will be printed. If you specify only an Ending Part ID, that part and up to that part is printed.

   All Parts – Leave the Starting and Ending Part ID fields blank.
4. To view only transactions within a range of dates, click the calendar buttons and specify Starting and Ending Dates for your report.

5 In the Options section, select the display options for this report:

Page Break on Part ID – To have the information for each Part ID print on its own page or group of pages, select the **Page Break on Part ID** check box.

Suppress Property Info – Normally, alpha and numeric properties are on your reports. To not show these properties, select the **Suppress Property Info** check box.

Suppress Comment Info – Normally your comments are displayed in your reports. To not show comments in your reports, select the **Suppress Comment Info** check box.

6 In the Detail Type section, select the information to show in the report. You can select:

- Inventory
- Labor
- Service
- Dispatch

7 Click the output arrow and specify the output of the report:

Print – To send the report to your printer, select **Print**.

View – To view the report using the report viewer, select **View**.

File – To send the report to text file, select **File**. Your report is prepared as a CSV file and you are prompted to specify the location and file name for the file to be saved in the dialog box.

E-mail – To prepare the report and attach it to an e-mail, select **E-mail**. The report is prepared as a CSV file, a Microsoft Outlook e-mail message is opened, and the file is attached, allowing you to address the communique and to specify any comments. Click **Send** when you are ready to send the message.

8 To attach a PDF (Portable Document Format) file to your e-mail instead of a CSV file, select the **PDF Format** check box in the Type section.

9 Click **Ok**.

If you are printing the report, a standard Windows print dialog box is displayed.

For each trace record of each part, the Lot Number, Received Quantity, Issued Quantity, Reported Quantity, and Assigned Quantity print, along with the Expiration Date.

If you selected Inventory transaction printing, Transaction Number, Type, Quantity, Work Order ID, Purchase Order ID, Customer Order ID, and Warehouse Location print for each transaction that falls within the specified date range.

If you selected Labor transaction printing, the Transaction Date, Type, Quantity, Work Order ID, Employee ID, and Resource ID are displayed for each labor transaction that falls within the date range.

Printing Location Reports

The Location Report summarizes traceable part information by warehouse and location.

If you are licensed to use multiple sites, you must print location reports on a site-by-site basis.

To print location reports:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use for the report. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Print Location Report**.

   The current Part ID is populated in the Starting and Ending Part ID fields.
3. To print a range of parts, click the browse buttons and specify the Starting and Ending Part IDs for the range.

   You can print the report for the following:

   Single Parts – Specify the same part for the Starting and Ending Part IDs.

   Range of Parts – Specify different parts for the Starting and Ending Part IDs. If you specify only a Starting Part ID, that part and all parts after it are printed. If you specify only an Ending Part ID, parts up to and including that part are printed.

   All Parts – Leave the Starting and Ending Part ID fields blank.
4. In the Options section, select the display options for this report:

   Page Break on Part ID – To have the information for each Part ID to print on its own page or group of pages, select the **Page Break on Part ID** check box.

   Suppress Property Info – Normally, alpha and numeric properties are on your reports. To not show properties, select the **Suppress Property Info** check box.

   Suppress Comment Info – Normally your comments are displayed in your reports. To exclude comments from your reports, select the **Suppress Comment Info** check box.
5. Click the output arrow and specify the output the report:

   Print – To send the report to your printer, select **Print**.

   View – To view the report using report viewer, select **View**.

   File – To send the report to text file, select **File**. Your report is prepared as a CSV file and a dialog box is displayed prompting you to specify the location and file name for the file to be saved.

   E-mail – To prepare the report and attach it to an e-mail, select **E-mail**. The report is prepared as a CSV file, a Microsoft Outlook e-mail message opens, and the file attaches, allowing you to address the communique and specify any comments. Click **Send** when you are ready to send the message.
6. To attach a PDF (Portable Document Format) file to your e-mail instead of a CSV file, select the **PDF Format** check box in the Type section.
7. Click **Ok**.

   If you are printing the report, a standard Windows dialog box is displayed.
8. Make your selections, then click **Ok** to print the report.

   For each traceable Part ID, trace record information is grouped by Warehouse and Location. For each lot number there is one line, showing the Part Description, Quantity in the Location, Expiration Date, and Creation Date of the lot number.

Using Traceability in Applications

Part Traceability creates a trace record for each lot number, serial number, or other grouping of the part depending on how you set up that part's trace profile.

You can trace parts as they move through the following applications:

Purchase Receipt Entry – Trace your material receipts using the Purchase Order Entry window. Traceable parts are indicated by a check mark in the Trc column of the line item table.

Inventory Transaction Entry – You can trace parts during the following functions of the Inventory Transaction Entry window:

Issue of Inventory to Work Orders – To assign serial numbers to the parts you are issuing to work orders, you can select only the **Issue/Ship/Adjust Out** check box in the When to Apply section of the parts profile.

Material Return from Work Orders – You can only trace material you have not received and traced.

Receipt of Finished Goods – This applies only when you have the **Issue/Ship/Adjust Out** check box selected in the When to Apply section of the parts profile.

Receipt Return of Finished Goods – When you are receiving finished good back to WIP (Work In Process) only the unissued traces is displayed because you cannot return parts to WIP you have already shipped.

Adjust In/Out of Inventory – Because Adjust In/Out is usually used to "adjust" inventory quantities, You are not required to use the unissued trace quantities in the Part Traceability dialog box.

Inventory Transfer Between Locations – An adjust out is performed to the From warehouse and an adjust in to the To warehouse. Use the Part Traceability button to specify trace information for your traceable parts. Because you are transferring parts between locations and not between trace lots, you can only transfer parts and materials that are in your inventory.

Note: The lines in the table depend on the part's profile settings and whether you have previously traced the part in another program. Depending on the requirement for pre-assigned numbers and the numbering scheme, you may find that you cannot transact some or all of the parts you require. You may find that you cannot specify trace numbers for your part at all.

Labor Ticket Entry – You can trace parts to which you apply labor. Remember, you are tracing the part, not the labor. Labor trace applies to upper level parts only and not the trace related parts you use on the work order. If you do not trace during issues, tracing during labor transactions shifts the start of traceability to the point where pieces are completed, rather than when they are received into finished goods inventory.

Each Work Order for a traceable fabricated part has one operation with the **Begin Traceability At This Operation** check box selected. When you report completed pieces against this operation, traceability information is required before you can save the labor transaction.

The following conditions trigger traceability in Labor Ticket Entry:

- Reporting against a work order for a fabricated part that is traceable.
- Reporting labor for the work order operation that is marked Begin Traceability At This Operation.
- Reporting Run labor (not set up).

- Reporting a Quantity Completed.

Outside Service Dispatch Entry – Outside Service Receipt Entry is covered when you receive a service using Purchase Receipt Entry.

Shipping Entry – Shipping is usually the last act you perform on your parts and therefore is the end of the trace line.

When you create returns from your customer, the trace numbers may not be for the actual lot numbers being returned. Adjust the quantities by zeroing out the quantities for those lot numbers that aren't being returned, and filling in the correct quantities of those lot numbers that are being returned. You are accessing lot numbers from the trace labels that were attached earlier, or from other paperwork containing the lot numbers that you shipped.

Inter Branch Transfer – Because Inter Branch Transfer transactions take parts and material from your direct control, a shipping company may be employed to transport your parts from one branch to another across many miles, you can use Part Traceability in IBT Shipping and Receipt.

Physical Inventory – When a traceable part is encountered, a sub-tag is printed for each lot number or serial number in the part location. Use each unique sub-tag number for the lot or serial number numbers of your traceable parts.

Access Part Traceability the same way in all of your applications except for Physical Inventory:

If you are working with a traced part, a Part Traceability toolbar button is displayed.

If no traceable parts are involved in the transaction you are creating, the Part Traceability button is disabled.

For Purchase Receipt Entry, the Part Traceability button is always enabled, but only applies to line items for traceable parts. If there are no line items for traceable parts, the button cannot be used, and the transaction is again processed in the normal way.

In return dialog boxes for purchase receipts and shipments and in the Inventory Transfer between Locations dialog box, a Part Traceability button is displayed.

In all cases except Physical Inventory, the part traceability procedure is:

1 If the transaction or line on which you are working refers to traceable parts, finish specifying the information for the transaction but do NOT click the **Save** button.

2 Click the **Part Traceability** toolbar button.

If the transaction has line items (for example, Shipping Entry) select the line item with the traceable part before clicking the **Part Traceability** toolbar button.

If you are performing a return, click the **Part Traceability** button.

The Traceability dialog box table contains one line for each lot, serial number, or other Trace ID of the part involved in this transaction; so if there is a quantity of five on the line, five lines will be in the Traceability table. If you have already traced this part in another program, the lines depend on the part's profile settings and where you have previously traced the part.

Assuming you have not set the requirement for pre-assigned numbers and this is the first trace for the part, the number of lines and the quantities they contain depend on the Maximum Lot Size field in the part's profile.

For example, if you are transacting a quantity of five:

Maximum Lot Size Setting	Number of lines and quantity
Blank	One line with the quantity of the transaction. | # | Trace Available Qty | Quantity | | 1 | | 5.00 |
1	Five lines, totaling the transacted quantity. | # | Trace Available Qty | Quantity | | 1 | | 1.00 | | 2 | | 1.00 | | 3 | | 1.00 | | 4 | | 1.00 | | 5 | | 1.00 |
2	Three lines, totaling the transacted quantity. | # | Trace Available Qty | Quantity | | 1 | | 2.00 | | 2 | | 2.00 | | 3 | | 1.00 |
10	One line with the transacted quantity. | # | Trace Available Qty | Quantity | | 1 | | 5.00 |

The trace identifier for the part is the label you set in the part's profile.

3 If you specified auto-numbering in this part's profile, <Auto> is displayed in the ID column indicating that the number will be assigned when you complete the transaction. You cannot override auto-numbers.

If you specified User numbering in this part's profile, specify a Trace ID for each line/unit in the Traceability dialog box.

If you specified Automatic or User, <Auto> is displayed in the ID column but you can edit the numbers. To use the auto-numbering feature do not change the <Auto> entry.

To manually specify numbers, specify the numbers in place of the <Auto> entry.

You can also specify a comment for each trace.

If you are performing a return, all traces of the part that have unissued quantities is displayed. You can distribute the return over the unissued quantities and or your new lines.

4 Click **Close**.

If you specify trace lines totaling more that the quantity you specified for the transaction, you are prompted with a dialog box to accept the difference or return to the Traceability dialog box and edit the quantity.

To return to the Traceability dialog box and fix the trace quantity, click **Cancel**.

Click **OK** to accept the quantity you specified in the Traceability dialog box.

The traceability dialog box closes.

5 Click **Save**.

Traceability in Physical Inventory Count

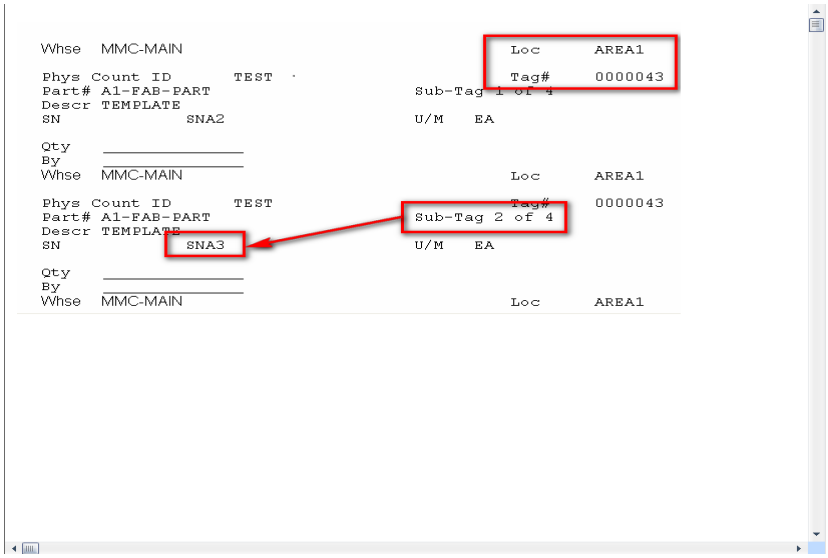
Physical Inventory Count manages the counting of inventory parts and subsequent reporting and adjusting of on-hand balances.

Inventory Sub-Tags

Physical inventory creates one inventory tag for each part/location combination. When a part is traceable, a sub-tag is created for each lot number or serial number in the part location. Each sub-tag belongs to the same Tag Number, but has a different sub-tag number that is for one lot or serial number.

One tag is printed for each lot number of the part for each location, which you can use to count and mark individual lots of traceable parts.

When printing the Tag List, each lot number or serial number is shown indented under the main Part ID/Location entry, and a separate line for you to specify a count for each lot or serial.



Specifying Counts and Recounts

When you specify a Tag # for a part that is traceable, Sub-Tag and Trace ID fields are displayed in the Enter Counts dialog box.

The Sub-Tag field contains the sub-tag number; its label indicates the total number of sub-tags. The trace number field shows the lot number for this sub-tag, and its label as set up in the part's profile.

If you are specifying a different sub-tag number, you can change the sub-tag field to the number—you cannot modify the lot number field; it displays the lot number connected with the sub-tag. Specify quantities in the normal way.

If a traceability profile is set up for a part, but no lots or serial numbers exist, sub-tags for that part are not created; only a normal tag. This could occur if:

- You set up a profile for the part during implementation, and adjusted in its quantity but never used the part or set up lots for it.
- If you set a traceability profile for an existing part with on-hand quantities, but didn't assign the existing balance to lots or serial numbers.

When this situation happens, the lot number or serial number field alone is displayed when the you specify the tag number. To complete this count, you must use Part Trace Maintenance to preassign a number, and then specify that count under the pre-assigned number. This assigns the total quantity to the new lot, and creates a sub-tag number.

Note: You cannot use the Enter Counts dialog box to assign a previously un-traced quantity. Instead, you must start the trace process in another program and rerun the inventory count.

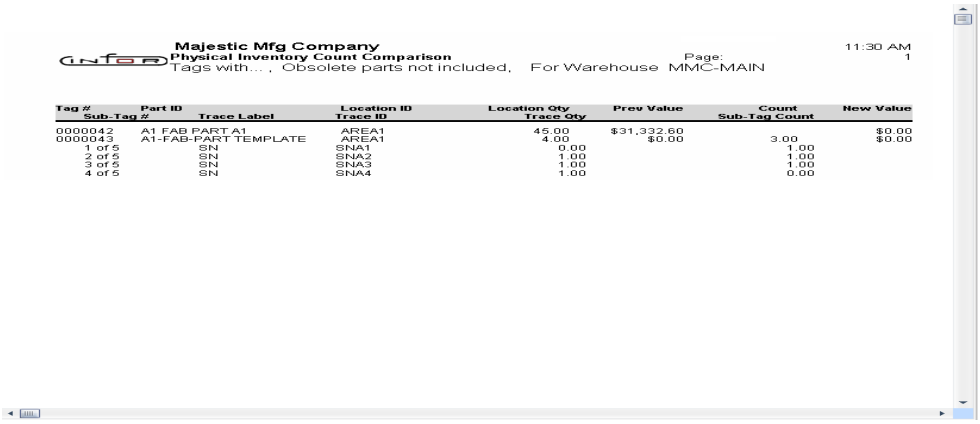
Review All Counts

When using Review Counts, the number of sub-tags is displayed for each tag. This indicates the number of lots or serial numbers of this part in this location.

You CANNOT modify counts for sub-tags using Review All Counts: you must use the Enter Recounts function.

Comparison Reports

In the Tag Comparison and Part Comparison reports, line items for traceable parts are broken down by Trace Quantity and Sub-Tag numbers.



Majestic Mfg Company
Physical Inventory Count Comparison
Tags with... , Obsolete parts not included, For Warehouse MMC-MAIN
Page: 1
11:30 AM

Tag # / Sub-Tag #	Part ID / Trace Label	Location ID / Trace ID	Location Qty / Trace Qty	Prev Value	Count / Sub-Tag Count	New Value
0000042	A1 FAB PART A1	AREA1	45.00	$31,332.60		$0.00
0000043	A1-FAB-PART TEMPLATE	AREA1	4.00	$0.00	3.00	$0.00
1 of 5	SN	SNA1	0.00		1.00	
2 of 5	SN	SNA2	1.00		1.00	
3 of 5	SN	SNA3	1.00		1.00	
4 of 5	SN	SNA4	1.00		0.00	

Viewing Trace Information

You can view, but not edit trace information in the Outside Service Planning window and Material Planning Windows

To access the Trace Details dialog box, click the Trace Details toolbar button.

The Trace Details dialog box is populated with the traces for the current part.

Using Material Traceability History

After you have shipped an upper-level traced part, you can use the Material Traceability History window to view where the part came from and where it is going within the confines of the shipped work order. You can run additional trace histories to view additional information about the individual trace parts within the upper-level work order providing you with additional forward and backward trace information.

Note: The Material Traceability History window only shows the history of shipped trace parts within the confines of the current work order.

To run trace histories:

1. Select **Inventory**, **Material Traceability History**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
3. Click the **Part ID** browse button to specify the part to view.
4. Click the **Trace ID** browse button and specify the trace to view. Only the Trace IDs belonging to the Part ID you specified are shown in the browse table.

   If you know the Trace ID, you can specify it first.
5. Select these settings for your trace history run:

   Filter by Part ID/Trace ID – If you select this check box, then the table shows only the Part ID and Trace ID that you specified, plus any other traced parts that are part of the traceability chain. Clear this check box to view all trace information for the transactions that match your search criteria. For example, presume you shipped a quantity of 10 TRACED_PART_A. You used trace ID ABC123 for five of the traced parts, and trace ID XYZ789 for the other five parts. In Material Traceability History, you specify TRACED_PART_A as the Part ID and ABC123 as the Trace ID, and run a forward trace. If you select the check box, then only the row for TRACED_PART_A and trace ID ABC123 is displayed, along with any subordinate traced parts that are included in TRACED_PART_A. If you clear the check box, then a row for TRACED_PART_A/ABC123 and a row for TRACED_PART_A/XYZ789 are displayed, along with the subordinate traced parts.

   Show Co-products – To show co-products in the history table connected to the trace if you build co-products on the work order, select the **Show Co-products** check box.

   Trace History For – Select the number of levels of history to display in the table. You can select either **One Level** or **All**.

   Trace Direction – Select the direction to run the trace:

   Backward – For the Part ID and Trace ID, select the **Backward** option to view from where the trace came.

   Forward – For the Part ID and Trace ID, select the **Forward** option to view where the trace is going.

   Part Type – Select the type of parts to show in the table. You can select **All Parts**, **Fabricated Parts Only**, or **Purchased Parts Only**.
6. Click the **Search** button.

   If a trace history exists for the Trace ID, the table is populated with trace history lines.

If no trace history exists, a dialog box is displayed notifying you of that fact.

The table contains the following columns:

Made by – If you are viewing the traces in a backward direction, this column is populated with the Part ID associated with the Trace ID. If you are viewing this trace forward, this column is empty.

Used In – If you are viewing the traces in a forward direction, this column is populated with the Part ID associated with the Trace ID. If you are viewing this trace backward, this column is empty.

Level – The level at which this history exists. If the material trace record is from a work order, linked to a customer order, it is a level 1.

Trace ID – The Trace ID associated with the material.

Description – A description of the Part ID associated with the Trace ID.

Work Order – The work order to which the Part ID and Trace ID is linked. Work Order IDs are displayed only if you are viewing a trace history in a backward direction.

Cust Order ID – The customer order to which the Part ID and Trace ID is linked. To view a material trace history for a part, it must be linked from a customer order to a work order. Upon shipping, the finished goods are received and a trace history for the part is created—from customer order, to work order.

Receipt Date – The date on which the part was received, or shipped to the customer.

Issue Date – The date on which the part was issued.

Qty – The quantity of parts received or issued on the Trace ID.

Alpha 1-5 – Any associated alpha properties labels. Specify alpha properties labels in Part Trace Profile Maintenance.

Num 1-5 – Any associated numeric properties labels. Specify numeric properties labels in Part Trace Profile Maintenance.

7 Click **Exit**.

Printing History Reports

To print a Material traceability history table report, click the **Print Trace History** toolbar button.

A standard report is printed containing the same information as the table.

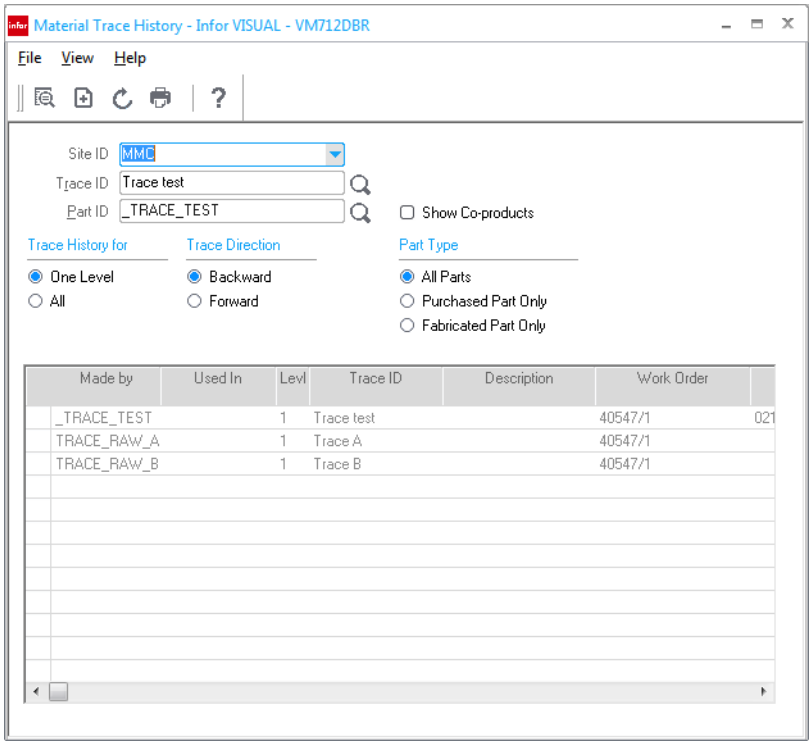
Understanding the Material Traceability History Window

Tracing several parts, with different trace profiles, through several work orders can become complicated. Understanding the basics of how to use the Material Traceability History window and interpreting the information at each level is an important step in using the Material Traceability History to its fullest advantage.

Consider the following example scenario:

You have a work order 40547/1 on which you build ten of the upper level part _TRACE_TEST that you shipped to your customer and now run a trace history.

The Material Traceability History window populates with the following information for the shown settings:

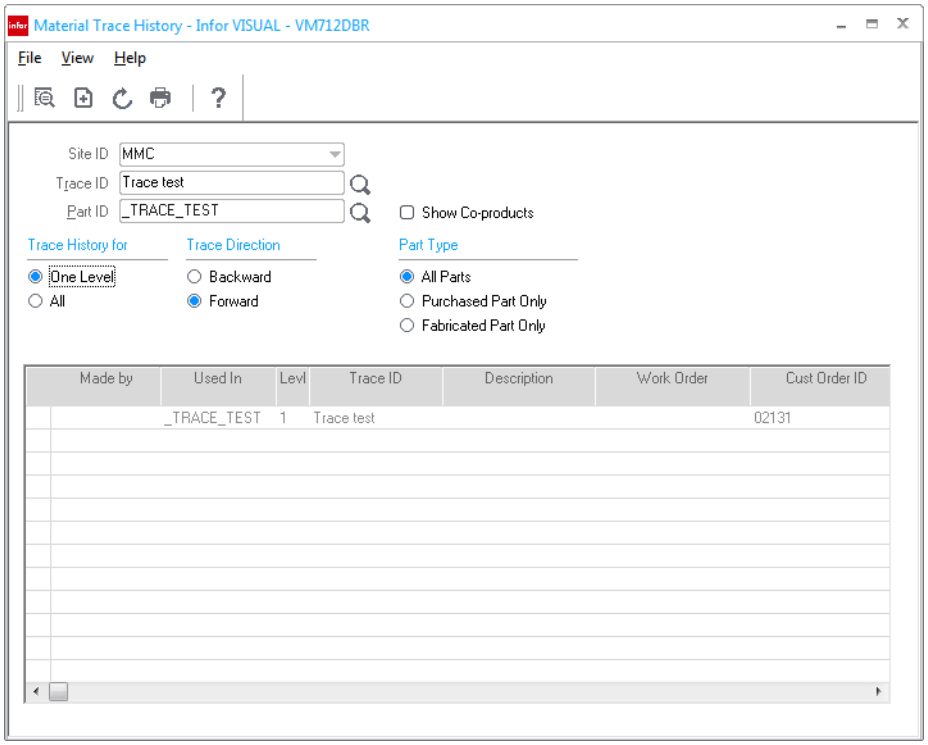


Notice that the Backward trace for _TRACE_TEST shows where it came from “Made By” two parts:

TRACE_RAW_A – Traced with one user-defined serial number.

TRACE_RAW_B – Traced with one user-defined serial number.

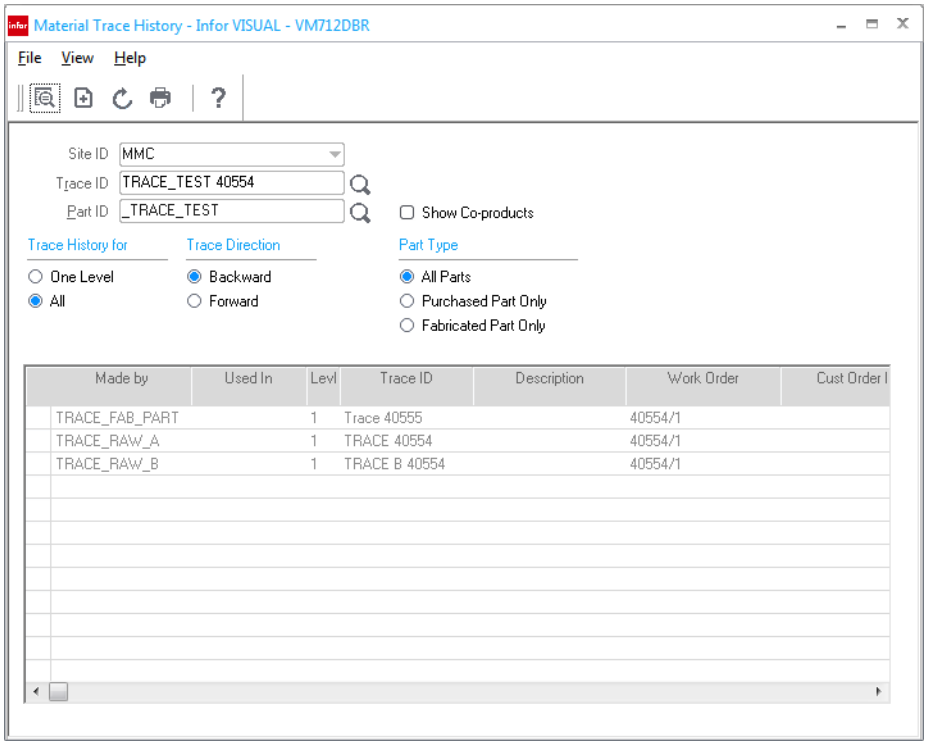
If you were to run a Forward trace on _TRACE_TEST, you would see the following:



Notice _TRACE_TEST is “Used In” itself and because this is a Forward trace the table shows ONLY where _TRACE_TEST is going: this part is being used for Customer Order number 02131 issued on 8/10/2013.

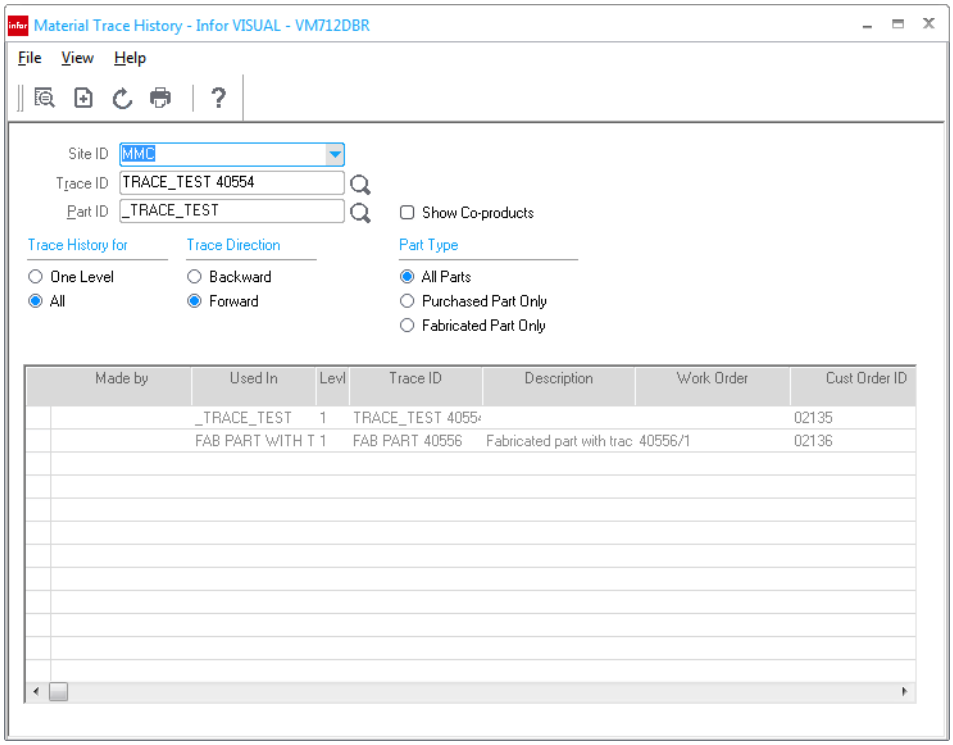
If you specifically want to view the individual parts on work order 40547/1, you can view that part’s history by selecting the part in which you are interested and clicking the **Search** toolbar button. If you do a Forward search, you would see that the part is used by _TRACE_TEST. If you do a Backward search, the information in the table would not change because, for this example, there is only one level of traceability within work order 40547/1. We know that all of the parts used on this work order were traced—because there are trace numbers—so you can run a Trace History on each of the parts. Click the **Part ID** browse button and select the part in which you are interested.

Click the Trace ID for the part and run the search:



Notice the traced parts used to manufacture _TRACE_TEST.

If you Forward traced _TRACE_TEST, you would see that _TRACE_TEST was used as a material in a work order FAB PART WITH TRACE FAB PART, which was subsequently sold in customer order 02136. The same trace ID for _TRACE_TEST was also used in customer order 02135.



If you had used _TRACE_TEST to build another part on a work order, which you used to build another part on another work order, another level would show in the table.

Chapter 6: Dimensional Inventory

This chapter includes:

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Setting Up Piece Tracked Parts	6–3
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What is Dimensional Inventory?

Dimensional Inventory provides you with a way to track your inventory by piece dimension. For example, if you purchase 1/4” barstock from a vendor in 12’ lengths but only use it in 1 foot lengths, you can use dimensional inventory to stock and issue the different lengths you encounter.

You can also perform Physical Inventory Counts using dimensional inventory, entering the number of pieces and dimensions of those pieces.

Because the user cannot assign the lengths from the stock unit of measure, it is always necessary to reference the part in terms of its available pieces. This means you must conduct all inventory transactions in terms of the piece size and the quantity of that piece.

You can specify between one and three dimensions to track and if you stock that material in a different unit of measure, you can specify a conversion factor so that dimensional figures can convert to stocking figures as you enter inventory information.

Because VISUAL is aware of each individual dimension you set up, you can use different units for your dimensions: feet for one and inches for another.

Consider the following scenario: you purchase 1/4” steel barstock from your vendor by the pound and you have set up a conversion factor so that when you receive it into stock, it is converted into length. To take better advantage of the length you stock, you use Dimensional Tracking for this material. You know the smallest length of this material that you use is 1’ (foot) and therefore track it by feet Length. Every time you encounter this material in Inventory Transaction Entry, you are required to enter the specific lengths of the part rather than the number of parts. If you only have 10’ pieces in stock and you are issuing this material to a work order requiring six, one foot pieces, you are forced to issue a single 10’ piece (typically you would have a cut off operation to handle the sizing of the material). In this case you would return one 4’ piece to stock after the sizing operation. The next time you issue this material, you would have the option to issue the 4’ piece depending on how much is required and what your current stock pieces are.

Note: Dimensional Inventory for Consigned Inventory is not supported.

Setting Up Piece Tracked Parts

Use Part Maintenance to set up new piece tracked parts.

If you are licensed to use multiple sites, piece tracking information is defined at the tenant level.

1. Select **Inventory**, **Part Maintenance**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select **Tenant**. If you are licensed to use a single site, this field is unavailable.
3. Click the **Part ID** browse button and select the part to set up.
4. Click the **Piece Trk** tab.
5. Select the **Part is Inventoried Using Piece Tracking** check box.

   The other check boxes become active.
6. Select the dimensions check boxes according to the combination of length, width, and height to use to track this part.
7. Click the **Dimensions U/M** browse button and select the tracking unit of measure to use for this part.

   Because you would typically stock a material in the same unit of measure as you track the material, the Stock U/M is displayed if you do not enter a Dimensional U/M. The Dimensional U/M is the unit of measure to use to view your inventory pieces. Inventory transactions are posted in the Stock U/M.
8. Click the **Save** button.

Placing Purchase Orders for Piece Tracked Parts

Unlike non-dimensionally tracked parts, which you order by quantity, you must order piece tracked parts by number of pieces. For piece tracked parts, the number of pieces multiplied by the dimensions equals the quantity. The quantity is calculated for you based on the Purchase U/M.

Note: Use the Configure Line Item Table option of the Options menu to make the Length, Width, Height, and Dim UM columns appear in the table.

1. From the main menu, select **Purchasing**, **Purchase Order Entry**.
2. Complete the upper part of the purchase order as you normally would.
3. Click the **Insert Row** toolbar button.
4. Double-click the **Part ID** browse button and select the dimensional part you are ordering.
5. Enter the number of pieces you are ordering in the .# Pieces column.
6. According to the dimensional requirements for this material (set up on the Piece Trk tab of the Part Maintenance window), enter the required dimensions for the Length, Width, and Height for this part.

   When you move the cursor to a different location, the Quantity is calculated based on requirements for this part.
7. Click the **Save** button.

   The quantity is computed for the order based on the stock unit of measure for the part, the required dimensions, and the required number of pieces.

   For example, Length and Width are required for the material. The Stock U/M is LBS and the Dim U/M is SQIN. The conversion factor multiplied by the Length, Width, and # Pieces is used to calculate the Quantity.

Receiving Piece Tracked Parts

Note: Use the Configure Line Item Table option of the Options menu to make the Length, Width, and Height columns appear in the table.

To receive piece tracked parts using Purchase Receipt Entry.

1. From the main menu, select **Purchasing**, **Purchase Receipt Entry**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site making the purchase. If you are licensed to use a single site, this field is unavailable.
3. Click the **Order ID** browse button and select the order containing the piece tracked part to receive.
4. Enter the quantity of the part you are receiving in the Quantity Received column.
5. Enter the dimensions of the pieces you are receiving.
6. Click the **Save** button.

Piece Tracked Parts as Material Requirements

If you use piece tracked parts as material requirements in work orders, engineering masters, or quote masters, you can choose how to determine the quantity in the Calculated Value field on the Material card. The Calculated Value field is used to determine the actual quantity of the material requirement and the cost of the material. Specify your choice in Preferences Maintenance. Your choice is particularly important if you specify a scrap percentage or fixed quantity for materials.

To make your decision, it is important to understand how material quantities are calculated for piece tracked parts. These calculations are made:

1. The size of the material requirement piece is calculated. To calculate the size of each piece, the dimension specified on the Material Requirements card are multiplied. If the usage unit of measure is different from the stock unit of measure, the dimensions are multiplied by the conversion factor:

   Length * Width * Height * Conversion Factor

2. After the size of the piece is determined, the total quantity required for the work order is calculated:

   Work Order or Leg Header Quantity * ((1 + Scrap %) * Qty Per) + Fixed Quantity) * Dimensions * the conversion factor between the usage unit of measure and the stock unit of measure

   This is the quantity of material actually used for the work order.

3. To determine the number of pieces needed to meet the requirement, the total quantity required for the work order is divided by the size of the material requirement and then rounded up to the next whole number:

   Total quantity required/piece size, rounded the next whole number

The result of these calculations is inserted in the Calculated # of Pcs field on the Planning tab. To determine the value in the Calculated Piece Qty field, the Calculated # of Pcs is multiplied by the piece size.

The value used for the Calculated Qty field is determined by the CalcQtyByPieces preference setting in Preferences Maintenance:

CalcQtyByPieces=Y – If you choose this option, then the Calculated Value field is equal to the Calculated Piece Quantity. If you choose this option, then the whole number of pieces is the total requirement. This is the default option.

CalcQtyByPieces=N – If you choose this option, then the Calculated Value field is equal to the actual amount used for the work order.

Example

Presume you have a work order with these parameters:

Work Order Header Qty: 5

Material Card Qty Per: 1

Scrap Percentage: 25%

Dimensions: 100 length * 45 width

Usage U/M: Square Inches

Stock U/M: Square Feet

1. Calculate the size of the material requirement piece by multiplying the dimensions and the conversion factor between the usage u/m and stock u/m:

   100 *45 * 0.006944 = 31.25

   The size of the material requirement piece is 31.25 square feet. When you purchase quantities for this work order, the piece is purchased in multiples of 31.25.

2. Calculate the total required for the work order by multiplying the quantity on the work order header by the total amount required on the material requirement card. The value is converted to the stock unit of measure:

   5 * ((1 + 0.25) * 1) + 0) * (100 * 45) * .006944 = 5 * 1.25 *4500 * .006944 = 195.30

   This is the quantity you actually use in the work order.

3. Calculate the number of pieces required by dividing the total required for the work order by the size of the piece and rounding up to the next whole number:

   195.30/31.25 = 6.25, rounded up to 7

On the Planning tab of the material requirement card, these values are used:

Calculated # of Pieces – 7

Calculated Piece Qty – This value is equal to the Calculated # of Pieces multiplied by the piece size:

7 * 31.25 = 218.75

Calculated Qty – The value used in this field is determined by the CalcQtyByPieces preference in Preference Maintenance. If the preference is set to Y, then this value in equal to the Calculated Piece Qty. In this example, the value is 218.75. If the preference is set to N, then this value is equal to the total required for the work order. In this example, the value is 195.30.

Specifying the CalcQtyByPieces Preference Setting

To specify the CalcQtyByPieces preference setting:

1. Select **Admin**, **Preferences Maintenance**.
2. Click the **Insert** button.
3. Specify this information:

   Section – Specify **Visual Mfg.**

   Entry – Specify **CalcQtyByPieces.**

   Value – To use the calculated piece quantity as the calculated quantity, specify **Y**. To use the total quantity actually used in the work order, specify **N**.

4 Click **Save**.

Note: If you change your CalcQtyByPieces preferences settings, you must recalculate quantities on work orders, engineering masters, and quote masters that use piece-tracked parts. When you recalculate quantities, posting candidate flags are set to Yes. When you run costing, the work orders will be processed.

Adding Piece-tracked Parts as Material Requirements

To add a piece-tracked part as a material requirement:

1 In the Manufacturing Window, follow the standard procedure for adding a material card. In the Part ID field, specify the ID for a piece tracked part.

2 On the Quantities tab, specify this information:

Qty Per – Specify the quantity required to make one unit of finished product. Use the **Q**ty Per (Start Qty) button to specify Quantity Per based on the amount needed per incoming material. Use the Quantity Per (End Qty) button to specify Quantity Per based on the amount needed per unit of outgoing master (the End Quantity).

Fixed Qty – Specify the fixed material requirement quantity. A fixed material quantity is a quantity of material required one time, regardless of work order quantity. This could be fixed scrap caused by setup or test, or could be any material required to produce the parent part.

Scrap % – Specify the percentage of material lost to scrap. This percentage is added to the base quantity required to make up for the loss.

Length, Width, and Height – Specify the dimensions of one piece of this material requirement. If a particular dimension is not required, the field is not available. Specify the dimensions in the unit of measure displayed in the Usage U/M field.

3 On the Planning tab, review this information:

Required Date – The required date is the date on which the Concurrent Scheduler determines the material requirement is required. Before you run the scheduler, the field is filled with the work order's Release Date.

Several factors influence how the date is determined. If you specify that the Concurrent Scheduler forward schedule the work order from release date or that the release date is hard, you may receive a different date than if you permit the normal backwards scheduling scenarios to run. See earlier in this chapter for more information on scheduling work orders.

Calculated Quantity – The quantity of the material required according to the work order is displayed. You must change the status of the work order to Released before quantities are recalculated and this value is displayed.

If the material requirement is for a piece tracked part, then the calculation made for this field depends upon the CalcQtyByPieces setting in Preferences Maintenance. If this setting is set to Y, then the calculated quantity is equal to the Calculated Piece Qty. If this setting is set to N, then the calculated quantity is equal to the actual quantity used in the work order.

Issued Quantity – The quantity of the material you have issued thus far to satisfy the requirement. When the Issued Quantity matches the Calculated Quantity, you have fully met the material requirement.

Allocated Quantity – The quantity you have issued to the material requirement from any one or multiple sources of supply. Types of supply include (CP) Coproducts, (I) Inventory, (PD) Purchase Order Delivery Schedules, (PO) Purchase Orders, (WH) Interbranch Transfers, and (WO) Work Orders.

Fulfilled Quantity – After you have allocated a quantity to a material requirement, you must, depending on which supply type you specified, issue/receive the quantity from the source of supply to the material requirement. Before supply arrives and is available for use on the work order, it is considered allocated; upon reception/issue, it becomes a fulfilled quantity.

After a requirement receives the allocated quantity, the Fulfilled Quantity field is populated with the appropriate amount. For example, if you allocate an unreceived purchase order line with a quantity of 200 to a work order material requirement, the Planning tab would display an Allocated Quantity of 200, but a Fulfilled Quantity of 0. After you receive the purchase order into the appropriate warehouse using Purchase Receipt Entry, the Fulfilled Quantity on the Planning tab would then display 200, as the allocated quantity—the conditional source of supply until now—is real, in the warehouse and fulfilling its purpose of supplying the requirement.

Calculated # of Pcs – A value is displayed in this field only if this requirement is a piece tracked part. To determine the value in this field, the total amount of part needed to meet this requirement is divided by the size of one material piece. The value is rounded up to the next whole number and inserted in this field. If you place a purchase order for this requirement, the value in this field is inserted in the # Pieces column on the purchase order line.

Calculated Piece Qty – A value is displayed in this field only if this requirement is a piece tracked part. To determine the value in this field, the Calculated # of Pcs is multiplied by the size of one material piece. If you place a purchase order for this requirement, this value is inserted in the Quantity field on the purchase order line.

4 Complete the information on the Material card. See For more information, refer to the “Adding Material Requirements” chapter in the Manufacturing guide.

Purchasing Piece Tracked Parts for Work Orders

When you purchase a piece tracked part, the number of pieces you order must be a whole number. When you use the Purchase this Material/Service function to purchase a piece tracked part in the Manufacturing Window, the number of pieces on the purchase order line is equal to the Calculated # of Pcs field on the Planning tab of the Material card. The quantity is equal to the Calculated Piece Qty on the Planning tab of the Material card. If you use the CalcQtyByPieces = N setting in Preferences Maintenance, the amount you purchase might exceed the amount needed to fulfill the material requirement. You can return any unused pieces to your inventory.

Issuing Piece Tracked Parts

Use Inventory Transaction Entry to issue piece tracked parts.

1. From the main menu, select **Inventory**, **Inventory Transaction Entry**.
2. Select the **Issue** option button.
3. If you are licensed to use multiples sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
4. Click the **Work Order ID** browse button and select the work order to which to issue material.
5. Click the **Piece No** browse button and select the material to issue. The piece dimensions that are specified on the Material card are inserted in the Transaction details section.
6. Click the **Inventory Pieces** button and select the line that contains the piece you want to issue. The piece you select does not need to have the dimensions that are specified on the material card.
7. Click **Ok**.
8. In the Pcs field, enter the number of pieces you need to issue to satisfy the demand and their Length, Width, and Heights as needed.

   Note: You can use any combination of pieces you find in stock to fulfill the work order but if you use different sized pieces you must enter an issue for each size you use.
9. Click the **Save** button.

   If you specified a dimension you do not have in stock, a dialog box is displayed notifying you that VISUAL did not find what you specified to issue in inventory: VISUAL is unable so save the transaction.

   If you had to specify a Pieces and dimension combination that caused a Quantity greater than the Required amount, a dialog box is displayed notifying you to verify the over issue.

   If you over issue a dimensionally tracked part, you can return the remaining quantity to your inventory after the work order is complete.

Issue-Returning Piece Tracked Parts to Inventory

If the dimensional requirements for a work order are less than the dimensional quantity you have issued, you need to return the excess back into inventory.

For example, if the work order requires 10 pieces at 2 feet each and you only had 12 feet pieces in stock and had to issue 2 pieces at 12 feet to the work order. The work order would render 1 piece at 8 feet when complete.

To return dimensional inventory to stock:

1. In the Inventory Transaction Entry window, select the **Issue/Rtn** option button.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

3 Select the work order, operation, and material to return.

4 In the Pcs and dimensional fields, enter the number of pieces and their sizes you are returning to inventory.

5 Click the **Save** button.

If the quantity you are returning closes the material requirement for this work order, a dialog box is displayed notifying you of this.

After you have returned the remaining pieces from the work order, you can use the Inventory Pieces dialog box to view the different size pieces you now have in stock.

Selling Piece Tracked Parts

You can sell piece tracked parts to your customers. Each document in the sales cycle supports the use of piece tracked parts.

When you create an estimate, order, shipper, or RMA, you specify the number of pieces for each part instead of the quantity. The quantity of part is calculated for you based on the dimensions you enter and the conversion factors you set up for the part.

Creating Estimates

To create an estimate for a piece tracked part:

1. Select **Sales**, **Estimating Window**.
2. Specify information in the estimate header as you would for a standard part.
3. To add a line item, click **Insert**.
4. Specify the piece tracked part you are quoting.
5. Specify the required dimensions of the pieces in the Length, Width, and Height fields.
6. Click in the Quantities Quoted field. In the Quote Quantities dialog box, specify the pieces you are quoting only. Leave the Quantity column blank; the quantities are calculated based on the conversion factor you set up for the part. Click **Ok**.
7. Complete the quote line as you would for a standard part.
8. Click **Save**.

Creating Customer Orders

To place a customer order for a piece tracked part:

1. From the main menu, select **Sales**, **Customer Order Entry**.
2. Specify information in the header as you would for a standard part.
3. To add a row, click the **Insert Row** button.
4. Double-click the **Part ID** browse button and select the piece tracked part your customer is ordering.
5. Specify this information:

   # Pieces – Specify the number of pieces you are selling to the customer.
6. **Length**, **Width**, and **Height** – Specify the required dimensions for this part.

   After you specify the dimensions, the Quantity is calculated based on the conversion factor for this part.
7. Click the **Save** button.

Editing the Delivery Schedule

You can create delivery schedules for orders with piece tracked parts. Instead of specifying a quantity to ship in the Delivery Schedule dialog box, specify the number of pieces to ship. The ship quantity is calculated using the dimensional length/width/height/dimension UM from the customer order line and inserted in the Qty field.

Shipping Customer Orders

When you ship a customer order with piece tracked parts, specify the number of pieces to ship. The dimensions you specified on the customer order are inserted, but you can specify a different number of pieces and dimensions.

To ship piece tracked parts:

1. Select **Sales**, **Shipping Entry**.
2. Complete the header as you would for a standard part.
3. The original number of pieces, the dimensions, and the calculated quantity from the customer order are inserted in the C.O. Pieces, C.O. Length, C.O. Height, C.O. Width, and Qty Ordered columns. Specify the actual pieces you are shipping to the customer by editing these fields:

   Ship Pieces – Specify the number of pieces you are shipping to the customer. You must specify the number of pieces manually. You cannot use the Ship All feature with dimensional parts.

   Length, **Width**, and **Height** – Specify the dimensions of the pieces you are shipping.

   After you specify the number of pieces and the dimensions, the Ship Qty is calculated based on the conversion factor for this part.

   You can ship the pieces provided you have pieces in the dimensions you specified in your inventory.
4. Complete the information on the Shipping window
5. Click **Save**.

Creating Customer Order Returns

Customers can return piece tracked parts using different dimensions than the dimensions specified on the shipper. If a customer uses a portion of the piece tracked part before noticing a defect, the customer can return only the defective portion to you.

When you process a customer return, you must specify a packlist ID. The Shipment Return button is unavailable until you specify a packlist ID.

To process the return of a piece tracked part:

1. Click the Packlist ID browse button and select the packlist related to the customer order.
2. Click the Shipment Return button.

3 The number of pieces and the dimensions of the shipped part are displayed in the Pieces Shipped, Length Pieces Shipped, Width Pieces Shipped, and Height Pieces Shift fields. Specify this information:

   Returned Pieces – Specify the number of returned pieces.

   Returned Length, Returned Width, and Returned Height – Specify the dimensions of the pieces that the customer is returning to you.

   After you specify the number of pieces and the dimensions, the Qty Returned is calculated based on the conversion factor for this part.

4 Complete the return information as you would for a standard part.

5 Click **Save**.

Creating Return Material Authorizations

When you set up an RMA for a dimensional part, you have the option of changing the dimensions of the part that the customer is returning to you. The dimensions specified on the shipper are displayed on the RMA for reference.

To create an RMA for a piece tracked part:

1 Select **Sales**, **Return Material Authorization**.

2 Complete the header as you would for a standard part.

3 In the lines, the number of pieces and the dimensions from the customer order are displayed in the C.O. Pieces, C.O Length, C.O Width, and C.O Height fields. Specify this information:

   Rtn Pieces Authorized – Specify the number of returned pieces.

   Length, Width, and Height – Specify the dimensions of the pieces that the customer is returning to you.

   After you specify the number of pieces and the dimensions, the Rtn Qty Authorized is calculated based on the conversion factor for this part.

4 Complete the RMA line as you would for a standard part.

5 Click **Save**.

Using Piece Tracked Parts in Inter Branch Transfers

You can transfer dimensional inventory from one warehouse to another. The dimensions you specify in Inter Branch Transfer Entry are used throughout the inter branch transfer process. You cannot change the dimensions when you ship or receive the part.

Creating Inter Branch Transfer Entries

To create an inter branch transfer entry:

1. Select **Inventory**, **Inter Branch Transfer Entry**.
2. Complete the header information as you would for a standard part.
3. To add a line, click **Insert**.
4. Double-click the Part ID browse button and select the piece tracked part you are transferring to another warehouse.
5. Specify this information:

   # Pieces – Specify the number of pieces you are transferring to another warehouse.

   Length, Width, Height – Specify the required dimensions for the part.

   After you specify the number of pieces and the dimensions, the Qty is calculated based on the conversion factor for this part.
6. Complete the line as you would for a standard part.
7. Click **Save**.

Shipping Inter Branch Transfers

To ship an inter branch transfer:

1. Select **Inventory**, **Inter Branch Transfer Shipping Entry**.
2. Complete the header as you would for a standard part.
3. In the lines, specify the number of pieces you are shipping in the # Pieces to Ship field. The Qty Shipped is calculated based on the conversion factor set up for the part.
4. Complete the line as you would for a standard part.
5. Click **Save**.

Receiving Inter Branch Transfers

To receive an inter branch transfer:

1. Select **Inventory**, **Inter Branch Transfer Receiving Entry**.
2. Complete the header as you would for a standard part.
3. In the lines, specify the number of pieces you are receiving in the # Pieces Received field. The Qty Received is calculated based on the conversion factor set up for the part.
4. Complete the line as you would for a standard part.
5. Click **Save**.

Chapter 7: Inventory Transaction Entry

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What is Inventory Transaction Entry?

Use Inventory Transaction Entry for the following inventory related functions:

- Issuing and returning inventory materials to work orders.

  Materials purchased directly to work orders are issued by Purchase Receipt Entry, and cannot be issued from here.

- Receiving and returning finished goods from work in process.

  Work orders fully linked to customer orders are received to inventory and issued to the customer order automatically by Shipping Entry, and cannot be received from here.

- Adjusting inventory on-hand quantities to reconcile with actual physical quantities.

  You can also do this using Physical Inventory Count.

- Viewing of inventory transactions created automatically by Purchase Receipt Entry, Shipping Entry, Physical Inventory Count, and Labor Ticket Entry auto-issues.
- Transferring inventory between part locations.
- Allocating and assigning demand to work orders, supply to materials, receipt quantities to demand links, receipt return demand quantities to demand links, and issue quantities to supply links.
- Adjusting quantities you are stocking on consignment.

If you are licensed to use multiple sites, make inventory transactions on a site-by-site basis.

Starting Inventory Transaction Entry

Select **Inventory**, **Inventory Transaction Entry**.

Because the Inventory Transaction window is capable of processing different kinds of inventory transactions, different fields are available or unavailable depending on what transaction you are performing. This means that the required fields are changed, ensuring that you create only invalid inventory transactions.

Using Inventory Transaction Entry

Use Inventory Transaction Entry for six basic operations:

- Receipt of a fabricated material from a Work Order into inventory
- Issue Material to a work order
- Adjust material into inventory
- Receipt return from inventory to a work order.
- Return material issued to a work order back to inventory
- Adjust material out of inventory

The execution all of these operations requires you to use the same general procedure with only slight variations.

If you are licensed to use multiple sites, enter inventory transactions on a site-by-site basis.

You can also view consignment inventory transactions. You cannot create consignment inventory transaction in the Inventory Transaction Window. You must use the Consignment features to create consignment inventory transactions.

Receiving Finished Goods by Work Order

Use Inventory Transaction Entry to receive material from a work order into inventory. Use this function to receive finished goods that are not linked to a customer orders.

For work orders linked to customer orders, use Shipping Entry to create inventory transactions. When you ship a linked customer order, two inventory transactions are created. A receipt transaction is created to receive the shipped quantity into inventory. An issue transaction to the customer order is then created.

When you receive finished goods through a manual receipt transaction or through a shipment, the work order completion percentage is updated in the Manufacturing Window. If you receive the total quantity of the order, the work order is closed.

To receive finished goods into your inventory:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that is receiving materials. If you are licensed to use a single site, this field is unavailable.
2. In the Transaction Date field, specify the date that you are receiving the materials. By default the current date is inserted.
3. Click **Receipt by WO**.
4. Click the **Work Order ID** browse button and select the work order from which to receive parts. The browse table shows only released work orders. If you are licensed to use multiple sites, the browse table shows only released work orders created in the site you selected.

   After you select a work order, the Part ID is displayed. In the Quantities section, the total quantity desired specified on the work order, the quantity previously received, and the remaining quantity due to be received are displayed. In addition, the current quantity of the part on hand and the current quantity available are displayed.
5. Specify the quantity of finished goods you are receiving and the location in which to receive them. Specify this information:

   Quantity – Specify the quantity to receive.

   Warehouse – Specify the ID of the warehouse receiving the finished goods. If a warehouse is specified on the work order header, than that warehouse ID is inserted. If no warehouse is specified on the work order header, then the default warehouse specified for the part is inserted.

   Location – Specify the ID of the location receiving the finished goods. To view a list of locations that can store the part, click the Location browse button. Depending on your Part Location on the Fly settings in Site Maintenance, you may be able to specify a new location for the part. See “Specifying General Site Information” on page 4-4 in the System-wide guide..

   Description – Specify a description of the transaction.

   Employee ID – This field is displayed only if you selected the Autogen Labor During Receipt check box in Site Maintenance. If you autogenerate labor tickets, specify the ID of the employee who complete the labor for this finished good. See "Specifying Defaults" on page 4–13 in the System-wide guide.
6. Click **Save**. The quantity you specified is received into the location you specified. A transaction ID is generated.

Allocating Work Order Supply to Demand

When you receive inventory by work order, you can assign the work order supply to a demand transaction. You must allocate the supply before you complete the receipt.

You can allocate work order supply to these demand sources:

- Customer Orders (either at the line level or the delivery schedule level)
- Material Requirements
- Inventory locations
- Interbranch Transfers

To allocate work order supply quantities to demand:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that owns the work order. If you are licensed to use a single site, this field is not available.
2. Click **Receipt by WO**.
3. Click the **Work Order ID** browse button and select the work order to allocate to demand.
4. If necessary, click the **Location** browse button and change the warehouse and location into which to receive the parts.
5. Select **Edit**, **Allocate Demand to this Work Order**. This information is displayed in the Assign to Demand dialog box header:

   Work Order ID – The ID of the work order you selected.

   Desired Qty – The quantity of the work order.

   Received Qty – The quantity of the work order (Desired Quantity) that you have received into inventory to date.

   Allocated Qty – The portion of the **Desired Quantity** that you have allocated to the demand to date.

   Fulfilled Qty – The quantity that has been fulfilled from an allocation. When you issue this quantity to the demand source, the demand allocation is then fulfilled.

   Available Qty – The portion of the work order Desired Quantity that you have yet to allocate to demand sources and is therefore still available for allocation. Before you begin to establish demand links, this value is equal to the Desired Quantity.

   Part ID – The Part ID of the work order, or the part produced by the work order.

   Part Description – A description of the part on the work order.

   Stock U/M – The stock unit of measure of the part.

   Warehouse ID – The warehouse into which you are receiving this work order. The object of any demand link you establish must also have this Warehouse ID. If you attempt to establish a link to a potential demand source that does not have this same Warehouse ID, VISUAL warns you and does not let you continue.

Sched Finish Date – The date on which the work order is scheduled to finish. If you have not scheduled the work order using the Schedule Work Order feature of the Manufacturing Window or run the Global Scheduler since adding this work order to your database, nothing is displayed here. If you have scheduled the work order, the finish date and time of the work order is displayed here.

Desired Want Date – The date by which the work order should be completed.

6 Click **Insert**.

7 Click the arrow in the Type column and select the type of demand to assign to supply. Select one of these options:

CD – Customer Order Delivery Schedule Lines

CO – Customer Orders

I – Inventory

RQ – Work Order Material Requirements

WH – Interbranch Transfers

8 Specify the demand to link to the supply. Perform one of these steps:

- If you selected CD, double-click the Piece # browse button. A list of delivery schedules for the part is displayed. You can filter the list by date and elect to view only delivery schedules with unallocated demand. You can also sort the table by customer order ID, desired receive date, or part ID. Select the delivery schedule to assign to supply and click **Ok**.
- If you selected CO, double-click the Seq #/Line # browse button. A list of customer order lines for the part is displayed. You can filter the list by date and elect to view only customer order lines with unallocated demand. You can also show customer order lines for all parts. You can sort the table by customer order ID and line number, by desired ship date, and by part ID. Select the customer order line to assign to supply and click **Ok**.
- If you selected I, double-click the Demand Base ID browse button. A list of warehouse locations is displayed. Select the location to supply and click **Ok**.
- If you select RQ, double-click the Piece # browse button. A list of material requirements is displayed. You can filter the list by date and elect to view only material requirements with unallocated demand. You can also show all material requirements. You can sort the requirements by ID, required date, or part ID. Select the requirement to assign to supply and click **Ok**.
- If you select WH, double-click the Demand Base ID browse button. A list of interbranch transfers is displayed. You can filter the list by date and elect to view only IBTs with unallocated demand. You can also show only IBTs for the part you are receiving or all IBTs. You can sort the IBTs by IBT and line number, desired ship date, or Part ID. Select the transfer to assign to supply and click **Ok**.

9 In the Allocate Quantity column, specify the quantity of the supply to allocate to the demand. The quantity you specify cannot be greater than the available demand quantity.

10 Click **Save**.

Assigning Released Work Order Receipt Quantities to Demand Links

If a source of demand is linked to a work order, you can specify how much of the receipt quantity to assign to the demand when you receive the work order in Inventory Transaction Entry.

You can use the Assign Released Work Order Receipt Quantities to Demand Links function to assign receipts to existing demand only. You cannot create a new demand link in this dialog. To create a new demand link, see Allocating Released Work Order Quantities to Demand.

To specify the quantity to assign to demand:

1. Click **Receipt by WO**.
2. Click the Work Order ID button to select the work order to receive.
3. In the Quantity field, specify the receipt quantity.
4. Select **Edit**, **Assign Receipt Quantity to Demand Links**. A list of the demand transactions linked to the work order is displayed. These fields are displayed:

   Order Quantity – The order quantity of the current work order.

   Total Received Quantity – The quantity of the work order that you have received into inventory.

   Allocated Quantity – The portion of the work order Order Quantity that you have allocated to demand.

   Fulfilled Quantity – The quantity that you have allocated to demand successfully used in order fulfillment.

   Fulfill Overage Quantity – The quantity successfully allocated to demand in excess of the allocated quantity.

   Demand Overage Quantity – The quantity, if the receive quantity that you assign to a link plus the link issued quantity exceeds the link allocated quantity.

   Receive Quantity – The quantity of the work order that you are receiving.

   Remaining Quantity to Assign – The portion of the received quantity that you still can allocate to demand. When this value equals zero, you cannot make any further allocations to demand. This value is arrived at by subtracting the work order's Allocated Quantity from the Received Quantity.
5. The table lists the sources of demand linked to the transaction. In the Assign Quantity column, specify the quantity to assign to demand. The quantity you assign cannot exceed the quantity you are receiving.
6. Click **Ok**.

Receiving Finished Goods by Part

If you work in a repetitive manufacturing industry and issue several work orders for the same part, you may find it more appropriate to receive by part ID instead of by the individual work orders used to manufacture the parts.

When you click Receipt by Part, a list of release work orders for the part is displayed. When you specify a quantity to receive, the quantity is automatically distributed to the open orders starting with the work order with the earliest Desired Want Date. If the Receipt Qty plus Work order Received Qty plus any Allocated Qty (for linked customer orders) is greater than the first work order's Desired Qty, the remaining quantity is distributed to the next oldest work order. You can override the calculated quantities.

If you specify a quantity greater than the quantity due for released work orders, you can apply the excess inventory to firmed work orders or closed work orders.

To receive inventory by part:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that is receiving parts. If you are licensed to use a single site, this field is unavailable.
2. Click **Receipt by Part**.
3. In the Part ID field, specify the part to receive. The total quantity desired, received, and due for all released jobs are inserted into the appropriate fields. A list of released work orders for the manufacture of the Part ID is displayed in the Job ID table. The work orders are listed in order of the most recent Desired Want Date. To view all of the work orders for this part regardless of their status, select **Options**, **View All Work Orders**.
4. Specify the quantity of finished goods you are receiving and the location in which to receive them. Specify this information:

   Quantity – Specify the quantity to receive. If you specify a value greater than the total quantity due, you are prompted to apply the remainder to firmed work orders. To apply the remainder to firmed work orders, click Yes. If received quantities remain after applying quantities to firmed work orders, you can apply the remainder to closed work orders.

   To adjust the quantity received to equal the quantity due, click No in the dialogs.

   Warehouse – Specify the ID of the warehouse receiving the finished goods. If a warehouse is specified on the work order header, than that warehouse ID is inserted. If no warehouse is specified on the work order header, then the default warehouse specified for the part is inserted.

   Location – Specify the ID of the location receiving the finished goods. To view a list of locations that can store the part, click the Location browse button. Depending on your Part Location on the Fly settings in Site Maintenance, you may be able to specify a new location for the part. See "Specifying General Site Information" on page 4–4 in the System-wide guide.

   Description – Specify a description of the transaction.

   Employee ID – This field is displayed only if you selected the Autogen Labor During Receipt check box in Site Maintenance. If you autogenerate labor tickets, specify the ID of the employee who complete the labor for this finished good. See "Specifying Defaults" on page 4–13 in the System-wide guide.

5 In the work order table, the quantity you specified is assigned to open orders. To adjust the quantity received to an order, specify a new value in the ReceiptQty field. The total amount remaining to be applied to an order is displayed above the table.

6 Click **Save**.

Issuing Materials to Work Orders

Use Inventory Transaction Entry to issue materials your inventory to a work order material requirement. Use this function to issue materials to requirements that are not linked to purchase orders.

For requirements linked to purchase orders, use Purchase Receipt Entry to create inventory transactions. When you receive a linked purchase order, two inventory transactions are created. A receipt transaction is created to receive the quantity into inventory. An issue transaction to the requirement is then created.

When you issue materials through a manual issue transaction or through a purchase receipt, the material requirement completion percentage is updated in the Manufacturing Window. If you receive the total required quantity, the material requirement is closed.

Use the Issue function in the main Inventory Transaction window to issue a particular part to a single requirement. To issue parts to all requirements, use the Issue and Return By Exception feature. See "Issue and Return by Exception" on page 7–23 in this guide.

To issue parts to a material requirement:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that contains the work order. If you are licensed to use a single site, this field is unavailable.
2. Click **Issue**.
3. Click the **Work Order ID** browse button and select the Work Order to which to issue materials.
4. Click the **Piece No** browse button and select the material requirement. After you select a piece number, the Part ID is displayed. In the Quantities section, the total quantity required, the quantity previously issued to the requirement, and the remaining quantity due to be issued are displayed. In addition, the current quantity of the part on hand and the current quantity available are displayed.

   Note: If you are the SYSADM user, you can add a requirement directly in Inventory Transaction. You must have the NewMaterialMode entry in the InventoryEntry section of Preferences Maintenance set to On to add new material requirements in the Inventory Transaction Entry window. To add a requirement, specify a piece number that does not exist as a material requirement on the work order. Select the **New Material Req'd** check box and use the **Part ID** browse button to select the part to add.
5. Specify the quantity of materials you are issuing and the location from where you are issuing them. Specify this information:

   Quantity – Specify the quantity to issue. If you specify a value greater than the total quantity due, you are asked if you want to over-issue the requirement. Click **Yes** to continue. To adjust the quantity received to equal the quantity due, click **No** in the dialogs.

   Warehouse – Specify the ID of the warehouse issuing the materials.

   Location – Specify the ID of the location issuing the materials. To view a list of locations that can store the part, click the Location browse button.

   Issue Reason – Specify the code that indicates the reason you are issuing the materials. Depending on the settings in Site Maintenance, this field may be required. See "Specifying Defaults" on page 4–13 in the System-wide guide.

Description – Specify a description of the transaction.

6 Click **Save**. The quantity you specified is issued. A transaction ID is generated.

Issuing Alternate Parts to Work Orders

If the material requirement allows for the use of alternate parts, you can issue the alternate part to the work order instead of the part on the material requirement card. The alternate part you issue must have the same unit of measure as the part it replaces.

When you select a material requirement that supports the use of alternate parts, the Part ID button becomes available. Click the Part ID button to select the alternate part to issue to the work order. Make sure you choose a part that has the same unit of measure as the part it replaces. The system displays only the alternate parts you specified on the material card, but it does not filter the information for the correct unit of measure.

You can use the Alternate Part Information dialog box to decide which alternate part to use.

To use the alternate part information dialog box:

Select **View**, **Alternate Part Information**.

When you issue an alternate part to a work order, a new material card is created for the alternate part. The new material card is identified as an alternate part and references the original material card. On the original material card, the system inserts the quantity of alternate part issued for the requirement on the Alternate Parts tab.

Allocating Supply to Work Order Material Requirements

You can allocate these sources of supply to work order material requirements:

- Existing stock in inventory
- Purchase order lines
- Purchase order delivery schedule lines
- Coproduct supply
- Interbranch transfers
- Other work orders

To allocate supply to work order demand:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that contains the work order. If you are licensed to use a single site, this field is not available.

2 Click the **Issue** option.

3 Click the **Work Order ID** browse button and select the work order to assign to supply.

4 Click the **Piece No** browse button and select the material requirement to assign to supply.

5 If necessary, click the **Location** browse button and change the warehouse and location from which to assign supply.

6 Select **Edit**, **Allocate Supply to this Material**.

This information is displayed in the Supply Links dialog box header:

Quantity Required – The quantity of the material required by the demand.

Quantity Issued – The quantity of the material requirement that you have issued to the work order from inventory. If this quantity is equal to the Quantity Required, further supply is unnecessary: you have met all of the demand's requirements.

Quantity Allocated – The quantity that you have allocated from the supplying sources towards meeting this material requirement. If this quantity is equal to the Quantity Required, further supply is unnecessary.

Quantity Fulfilled – The quantity of the material requirement that has been fulfilled by supply.

Quantity Unallocated – The quantity of this material requirement to which you have yet to allocate supply.

Part ID – The Part ID of this material requirement.

Part Description – The description of the material requirement Part ID.

Stock U/M – The stock unit of measure of the part.

Warehouse ID – The Warehouse ID of the material requirement; also the point from which you are issuing it.

Required Date – The date by which you require this material requirement.

7 Click **Insert**.

8 Click the arrow in the Type column and select the source of supply. You can select:

CP – Coproducts

I – Inventory

PD – Purchase Delivery Schedule Lines

PO – Purchase Orders

WH – Interbranch Transfers

WO – Work Orders

9 Perform one of these steps:

- If you selected CP, double-click the Supply Base ID browse button to view a list of work orders that generate the part ID as a co-product. You can view work orders with unallocated supply only or view all work orders that produce the part ID as a co product. Use the date fields to filter the work orders based on want date. Use the Sort by options to sort the table by work order ID, desired want date, or part ID. Select the work order to use as the supply, and then click **Ok**.
- If you selected I, double-click the Supply Base ID browse button to view a list of warehouse locations that store the part. Select the location, and then click **Ok**.

- If you selected PD, double-click the Piece # browse button to view a list of purchase order delivery schedules that supply the part. You can view purchase order delivery schedule lines with unallocated supply only or view all purchase order delivery schedule lines that supply the part ID. Use the date fields to filter the purchase order delivery schedule lines based on desired receive date. Use the Sort by options to sort the table by purchase order ID, desired receive date, or part ID. Select the purchase order delivery schedule to use as the supply, and then click **Ok**.
- If you selected PO, double-click the Seq #/Line # browse button to view a list of purchase orders that supply the part ID. You can view purchase order lines with unallocated supply only or view all purchase order lines that supply the part ID. Use the date fields to filter the purchase order lines based on desired receive date. Use the Sort by options to sort the table by purchase order ID and line number, desired receive date, or part ID. Select the purchase order line to use as the supply, and then click **Ok**.
- If you selected WH, double-click the Seq #/Line # browse button to view a list of interbranch transfers that supply the part ID. You can interbranch transfers with unallocated supply only or view all purchase order lines that supply the part ID. Use the date fields to filter the interbranch transfers based on desired receive date. Use the Sort by options to sort the table by IBT ID and line number, desired receive date, or part ID. Select the interbranch transfer line to use as the supply, and then click **Ok**.
- If you select WO, double-click the Supply Base ID browse button to view a list of work order. Select the work order to use as the supply, and then click **Ok**.

10 In the Allocate Quantity column, enter the quantity of the supply to allocate to the demand. The quantity you enter cannot be greater than the available demand quantity.

11 Click **Save**.

If you linked a purchase order to demand, you can view the purchase order. Select the line containing the purchase order, and then click **Purchase Order**.

Assigning Issue Quantities to Supply Links

When you create work orders, you can link material requirements demand to inventory supply. When you issue materials to the requirement in Inventory Transaction Entry, you can specify how much of the issue quantity to apply to the demand-supply link.

You cannot create a new demand-supply link in the Assign Issue Quantities to Supply Links dialog box. To create a new link to the material card, use the Manufacturing Window.

To assign issue quantities to supply links:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site for the transaction. If you are licensed to use a single site, this field is unavailable.

2 Click **Issue**.

3 Click the **Work Order ID** browse button and select the Work Order to which to issue materials.

4 Click the Piece No browse button and select the material requirement.

5 In the Quantity field, specify the quantity of part to issue.

6 Select **Edit**, **Assign Issue Quantity to Supply Links**. A list of inventory supply linked to the material requirement is displayed.

7 In the Assign Quantity column, specify the quantity to assign to the supply link.

8 Click **Ok**.

Adjusting Inventory

Use the Adjust/In or Adjust/Out options to synchronize VISUAL inventory quantities with your physical inventory.

To adjust inventory:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site whose inventory you are adjusting.
2. To add items to the inventory, select the **Adjust In** option.

   To remove items from inventory, select the **Adjust Out** option.
3. In the Part ID field, specify the part to adjust in or out.
4. Specify the quantity of materials you are adjusting and the location where you are adjusting them. Specify this information:

   Quantity – Specify the quantity to adjust in or out. To add one item to the inventory, enter one in the quantity field. DO NOT enter the total inventory count. For example, VISUAL inventory shows 15 in stock but you actually have 16 for the location count: Adjust/In a quantity of 1.

   Warehouse – Specify the ID of the warehouse receiving the material adjustment.

   Location – Specify the ID of the location receiving the adjustment. To view a list of locations that can store the part, click the Location browse button.
5. For Adjust/In transactions, specify the costs of the materials you are adjusting in. To use the costs defined on the part record, leave these fields blank. To override the costs, specify the Material, Labor, Burden, and Service costs for the new inventory. Take care not to specify zero. If you specify zero, then when this material is applied to the cost of a later work order or customer order the zero cost is passed on to cost of goods sold.
6. For Adjust/In transactions, specify whether to include the purchase burden amount specified on the Part Maintenance record. To include purchase burdens, select **Options**, **Apply Purchase Burdens** until a check box is placed next to the menu option. To exclude purchase burdens, select **Options**, **Apply Purchase Burdens** until the check box is removed from the menu option.
7. In the Adjustments section, specify this information:

   Reason – Specify the reason for the adjustment. Depending on your settings in Site Maintenance, this field may be required. See "Specifying Defaults" on page 4–13 in the System-wide guide.

   Account ID – Specify the account to use to record the costs of this adjustment. To use the default account specified in the site's general ledger interface, leave this field blank. See "Specifying the G/L Account Interface" on page 3-5 in the General Ledger guide.
8. If you use dimensional reporting, the default dimension IDs for the debit transaction are inserted into the Dimension 1 and Dimension 2 fields. The priorities you established for debit transactions for Adjustments are used to determine which IDs are inserted into the fields. Click the browse button to override the default dimension ID used for the debit transaction. See "Dimensional Reporting" on page 2-1 in the General Ledger guide.

9 If you use dimensional reporting and track costs by customer order ID, specify the ID of the order to associated with this transaction. See "Tracking Costs by Customer Order ID and Product Code" on page 2-3 in the General Ledger guide.

10 Click **Save**. A transaction ID is generated.

Viewing Inventory Pieces for a Piece-Tracked Part

When adjusting in or adjusting out part quantities, you can view piece tracked inventory information. You can view this information in the main Inventory Transaction window. You can also view this information when you transfer inventory between warehouse locations.

For example, if you need to adjust in 200 pieces of Part 5/8” stock, but are unsure of how many parts you currently have in the location to which you are adding the parts, you can click the **Inventory Pieces** toolbar button to view a table of the current status of the part in that location.

Note: Only your piece Tracked Parts are shown in the table.

The line item table contains columns for Part ID, Warehouse ID, Location ID, Number of Pieces, Length, Width, Height, and Dimension of Unit Measure.

You can also sort the order in which parts appear by selecting the appropriate option button in the Dimension Sort sections: Length, Width, or Height.

To close the Inventory Pieces dialog box, click the **Cancel** button.

Returning Received Materials

The Receipt/Return option reverses the action of a receipt. Use the Receipt/Return procedure if you have received a material from a Work Order but need to return it to the shop floor.

If a customer returns items to you, a Receipt/Return transaction is generated when you receive the materials in Shipping Entry or Receiving. You cannot use Inventory Transaction Entry to process a customer return.

To return materials from stock:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that contains the work order. If you are licensed to use a single site, this field is unavailable.
2. Click **Receipt/Rtn**.
3. Click the **Work Order ID** browse button and select the work order to which to return the item.
4. In the Quantity field, specify the number of items you are returning.
5. If necessary, click the **Location** browse button and change the warehouse and location that is returning the materials.
6. Click **Save**. A Transaction ID is generated.

Assigning Work Order Receipt Return Quantities to Demand Links

When you return a work order receipt, you can assign the returned quantity to demand. Use the Assign Released Work Order Receipt Quantities to Demand Links function to assign receipts to existing demand only. You cannot create a new demand link in this dialog.

To specify the quantity to assign to demand:

1. Click **Receipt/Rtn**.
2. Click the Work Order ID button to select the work order to receive.
3. In the Quantity field, specify the receipt quantity.
4. Select **Edit**, **Assign Receipt Return Quantity to Demand Links**. A list of the demand transactions linked to the work order is displayed. These fields are displayed:

   Work Order ID – The ID of the work order being returned.

   Received Quantity – The quantity of the work order that has been received into inventory.

   Return Quantity – The quantity being returned.

   Remaining Quantity to Assign – The portion of the received quantity that you still can allocate to demand. When this value equals zero, you cannot make any further allocations to demand.

   Part ID – The ID of the part being returned.

Warehouse ID – The ID of the warehouse returning the part.The table lists the sources of demand linked to the transaction. In the Assign Quantity column, specify the quantity to assign to demand. The quantity you assign cannot exceed the quantity you are receiving.

5 Click **Ok**.

Returning Issued Materials

Returning issued materials reverses the action of an issue operation. Use this procedure if a material is issued to a Work Order and is returned unused to the stockroom.

Use the Issue Return function in the main Inventory Transaction window to return a particular part from a single requirement. To return all material requirements, use the Issue and Return By Exception feature. See "Issue and Return by Exception" on page 7–23 in this guide.

If you linked a purchase order line to a material requirement, a Receipt Return transaction is generated if you return any portion of the linked purchase order line to the vendor. You cannot use Inventory Transaction Entry to process a purchase return.

To return manual material issues:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that contains the work order. If you are licensed to use a single site, this field is unavailable.
2. Click **Issue Rtn**.
3. Click the **Work Order ID** browse button and select the work order from which you are returning materials.
4. Click the **Piece No** browse button and select where to issue the material within the work order.
5. In the Quantity field, specify the number of items you are returning.
6. If necessary, click the **Location** browse button and change the warehouse and location that is receiving the returned material issues.
7. Click **Save**. A transaction ID is generated.

Backdating Inventory Transactions

You can backdate inventory transactions. When you backdate a transaction that causes materials to be removed from your inventory, your ability to complete the transaction depends upon the Prevent Negative Backdating setting specified for the site in Site Maintenance.

If the check box is selected, then the quantity you had on hand on each date from the date of the transaction to the current date is used to determine inventory levels. If you did not have sufficient quantity on any one of the days between the date of the transaction and the current the date, then the transaction cannot be completed. For example, say you enter an adjust out inventory transaction on January 5 for 10 units, but you specify January 3 as the transaction date. If you only had 8 units in your warehouse location on January 4, then you are prevented from completing the backdated transaction.

If the check box is cleared, then the quantity you have on hand on the date you enter the transaction is used to determine inventory levels. For example, say you enter an adjust out inventory transaction on January 5 for 10 units, but you specify January 3 as the transaction date. If you have 10 units on hand in the warehouse location on January 5, then you can complete the transaction, even if you did not have 10 units on hand on January 3 or January 4. When you clear the Prevent Negative Backdating check box, you can generate negative inventory balances for past dates, even though you do not allow negative inventory balances for current dates.

See “Specifying General Site Information” on page 4-4 in the System-wide guide.

Viewing, Modifying, and Deleting Transaction Information

To view an inventory transaction, specify the ID in the transaction ID field. To browse for a transaction, click the Transaction ID browse button. You can filter the list of transaction by date.

You can view any inventory transaction, including transactions generated in Purchase Receipt Entry, Shipping Entry, Physical Inventory Count, and Labor Ticket Entry auto-issues.

After you save an inventory transaction, you cannot modify it.

Depending on your settings in Preference Maintenance, you may be able to delete an inventory transaction. If the DeletePermission entry in the InventoryEntry section is set to Y, then the Delete button becomes available in Inventory Transaction Entry. You can delete an inventory transaction only if it has not been posted.

Use caution when deleting inventory transactions. Deleting transactions could result in unexpected inventory levels. A safer alternative is to use the opposite type of transaction to make corrections. For example, if you issue a material incorrectly, use the Issue Return procedure.

Tracing Part Traceable Parts

If you have designated the part in the transaction as a traceable part, the Part Traceability toolbar button is available.

To trace a part:

1. Prior to completing the inventory transaction, click the **Part Traceability** toolbar button.

   The quantity you entered in the Inventory Transaction Entry window is inserted.

   In the Traceability dialog box, you can view a part's traceability history. The quantity reported, the lot number, comments, and the part's expiration date are displayed.

2. To override the trace quantity from the Inventory Transaction Entry window, enter the new quantity in the Quantity column. If you enter a new quantity in the part traceability dialog, you will be prompted to adjust the quantity in Inventory Transaction Entry. The quantity you specify in part traceability must match the quantity specified in Inventory Transaction Entry.

3. If the profile for the trace requires you to assign trace serial or lot numbers at the time of trace entry, click **Insert Row**.

4. Depending on the trace profile for the part, enter the lot number or allow it to be auto-assigned.

5. Enter a quantity in the quantity column.

6. Enter comments in the Comments column.

7. Click **Close**. The Traceability for Part dialog box closes.

8. In the Inventory Transaction Entry window, click **Save**.

   Note: VISUAL does not save the inventory transaction or trace until you click the Save toolbar button.

Issue and Return by Exception

Use the Issue and Return by Exception function to view all material requirements for a work order and make inventory transactions for the work order. You can use this function to issue or return materials to multiple requirements without entering transactions one-by-one using the main Inventory Transaction Entry window.

You can use the Work Order Material Issues table to issue materials to or return material from a work order, or you can use Auto mode. When you use Auto mode, you can manually select the warehouse locations to use in the inventory transactions, or you can automatically issue or return materials based on rules that you select.

This table shows the differences among using the table for issues and returns, using Auto mode with warehouse prompts, and using Auto mode without warehouse prompts:

	Table	Auto Issue and Return with Warehouse Prompts	Auto Issue and Return without Warehouse Prompts
Can I select the quantities to issue or return?	Yes	Yes	No
Can I select the warehouse locations for issues or returns?	**Yes.** You can select one warehouse for each requirement.	**Yes.** You can select more than one warehouse for each requirement.	No
Can I issue piece-tracked parts?	No	No	No
Can I return piece-tracked parts?	No	Yes	Yes
Can I issue traced parts?	Yes	No	No
Can I return traced parts?	Yes	Yes	Yes

Issuing Materials with the Work Order Material Issues Table

Use the Work Order Material Issues table to select the quantities that you want to issue.

You cannot issue piece-tracked parts using the Work Order Material Issues table. To issue piece-tracked parts to work orders, you must use the main Inventory Transaction window. If the work order contains a combination of piece-tracked and non-piece tracked material requirements, you can still use the table to issue materials to non-piece tracked material requirements.

1. If you are licensed to use multiple sites, in the Inventory Transaction Entry window click the **Site ID** arrow and select the site associated with the work order. If you are licensed to use a single site, this field is unavailable.
2. Select **Edit**, **Issue or Return by Exception**.

3 Click the Work Order ID browse button and select the work order to which to issue materials.

4 Filter and sort the material requirements. Specify this information:

Sub ID – If your work order has legs, click the **Sub ID** arrow and select the ID of the leg whose requirements you want to view. To view requirements for all legs, select **All**.

Resource ID – To view material requirements for a particular resource, click the arrow and select the resource. To view material requirements for all resources, select **All**.

Order by Part ID – To sort the table by part, select the **Order by Part ID** check box.

5 To issue materials to a requirement, specify this information:'

Warehouse ID – Specify the ID of the warehouse that issues the materials. If a warehouse is specified on the material requirement card, then that ID is displayed. You can specify a different warehouse.

Location ID – Specify the location in the warehouse that issues the materials. The default material requirement location for the warehouse is displayed. You can specify a different location.

Issue Quantity – Specify the quantity to issue to the requirement.

You can also automatically issue materials to requirements based on rules that you select. See Using Auto Issue Mode.

6 Click **Save**.

Using Auto Issue Mode

You can issue material requirement quantities from warehouse locations to released work orders using auto issue mode. Depending on the Issue Negative settings specified in Site Maintenance, you can issue materials even though the specified warehouse location might not contain sufficient quantities. The ability to issue materials beyond the current on hand level allows you to immediately issue materials that may have just arrived to the appropriate work order. You can continue production and formally enter the receipt transactions later.

If the work order requires piece-tracked parts or traced parts, then you cannot use Auto Issue mode. You can use the Work Order Materials Issue table or the Inventory Transaction window to issue traced parts. You must use the Inventory Transaction window to issue piece-tracked parts.

1 If you are licensed to use multiple sites, in the Inventory Transaction Entry window click the **Site ID** arrow and select the site associated with the work order. If you are licensed to use a single site, this field is unavailable.

2 Select **Edit**, **Issue or Return by Exception**.

3 Click the Work Order ID browse button and select the work order to which to issue materials.

4 If the work order has legs, you can issue material requirements to a particular leg. Click the **Sub ID** arrow and select the ID of the leg. To issue materials to all legs, select **All**.

5 To issue materials to a particular resource, click the Resource ID arrow and select the ID of the resource.

6 Click **Issue All**.

7 To review the transactions before performing them, select the **Preview transactions before Saving** check box. If you clear this check box, the transactions are saved when you click **Ok**.

8 Select one of these options:

Issue up to inventory balance of part – To issue materials up to the quantity on hand, click this option. The warehouses used in the transaction depend upon the information defined for the material requirement and on the part master.

If a warehouse and location is defined on the material requirement card, then that location is used first when issuing materials to the requirement. If the warehouse location cannot fully supply the requirement, then your other warehouses are examined for inventory beginning with the first warehouse alphanumerically.

If no warehouse is defined on the material requirement card, but the part has a primary warehouse and location, then the primary warehouse location is used first when issuing materials to the requirement. If the warehouse location cannot fully supply the requirement, then your other warehouses are examined for inventory beginning with the first warehouse alphanumerically.

If warehouse information is not defined on the material requirement card and the part has no primary warehouse and location, then your warehouses are examined for inventory beginning with the first warehouse alphanumerically.

When you click this option, you can issue up to the quantity of part you have on hand. You cannot create negative inventory transactions.

Ignore inventory balance of part – This option is available only if the Warehouse check box is selected in the Issue Negative section of Site Maintenance.

To issue materials regardless of the quantity on hand, click this option. Clicking this option could result in negative inventory balances.

If a warehouse and location is defined on the material requirement card, then that location is used first when issuing materials to the requirement. If the warehouse location cannot fully supply the requirement, then your other warehouses are examined for inventory beginning with the first warehouse alphanumerically.

If no warehouse is defined on the material requirement card, but the part has a primary warehouse and location, then the primary warehouse location is used first when issuing materials to the requirement. If the warehouse location cannot fully supply the requirement, then your other warehouses are examined for inventory beginning with the first warehouse alphanumerically.

If warehouse information is not defined on the material requirement card and the part has no primary warehouse and location, then your warehouses are examined for inventory beginning with the first warehouse alphanumerically.

If you have insufficient quantities on hand, then inventory in warehouse locations is driven negative. If a location is specified on a material requirement, then that location is driven negative. If a location is not specified on a material requirement, then the primary location is driven negative. If a location is not defined on the material requirement and no primary location has been specified for the part, then the first alphanumeric location is driven negative.

Prompt with inventory locations – To specify from which locations you are issuing quantities, click this option. When you click **Ok**, a dialog is displayed. The ID of the part you are issuing is displayed in the dialog title bar. A list of the warehouse locations that store the part is displayed. Specify the quantity to issue from each location, then click **Ok**. If you are issuing more than one part ID, then the dialog box is displayed again for the next part.

Issue up to primary location quantity – To issue up to the quantity of part stored in the primary warehouse location, click this option.

Issue from primary location - ignore quantity – This option is available only if the Warehouse check box is selected in the Issue Negative section of Site Maintenance.

To issue all required quantities from the primary warehouse location, click this option. This may result in a negative inventory balance in the primary location.

9 After clicking the appropriate option, click **Ok**.

If you selected the **Preview transactions before Saving** check box, a list of the quantities to be issued from each warehouse is displayed. Click **Save** to issue the quantities. Click **Cancel** if you do not want to issue the quantities.

If you cleared the **Preview transactions before Saving** check box, then the inventory transactions are generated when you click **Ok**.

Returning Materials with the Work Order Material Issues Table

Use the Work Order Material Issues table to select the quantities that you want to return.

You cannot return piece-tracked parts using the Work Order Material Issues table. To return piece-tracked parts, you can use either the Auto Return Mode or the main Inventory Transaction window.

1 If you are licensed to use multiple sites, in the Inventory Transaction Entry window click the **Site ID** arrow and select the site associated with the work order. If you are licensed to use a single site, this field is unavailable.

2 Select **Edit**, **Issue or Return by Exception**.

3 Select the **Return Issued Material** check box.

4 Click the Work Order ID browse button and select the work order from which to return materials.

5 Filter and sort the material requirements. Specify this information:

Sub ID – If your work order has legs, click the **Sub ID** arrow and select the ID of the leg whose requirements you want to view. To view requirements for all legs, select **All**.

Resource ID – To view material requirements for a particular resource, click the arrow and select the resource. To view material requirements for all resources, select **All**.

Order by Part ID – To sort the table by part, select the **Order by Part ID** check box.

6 To return materials, specify this information:

Warehouse ID – Specify the ID of the warehouse to which you are returning materials. If a warehouse is specified on the material requirement card, then that ID is displayed. You can specify a different warehouse.

Location ID – Specify the location in the warehouse to which you are returning the part.

Return Quantity – Specify the quantity to return.

7 If any of the material requirements is closed, a message is displayed. Click **Yes** to continue.

8 Click **Save**.

Using Auto Return Mode

Use the Auto Return mode to automatically return all parts issued to a work order. If you select the Prompt with inventory locations option, you can specify the warehouse locations to which to return parts and the quantities to return. You can use this function to return piece-tracked and traced parts.

1 If you are licensed to use multiple sites, in the Inventory Transaction Entry window click the **Site ID** arrow and select the site associated with the work order. If you are licensed to use a single site, this field is unavailable.

2 Select **Edit**, **Issue or Return by Exception**.

3 Select the **Return Issued Materials** check box.

4 Click the Work Order ID browse button and select the work order to which to return materials.

5 If the work order has legs, you can return material requirements from a particular leg. Click the **Sub ID** arrow and select the ID of the leg. To issue materials to all legs, select **All**.

6 To return materials from a particular resource, click the **Resource ID** arrow and select the ID of the resource.

7 Click **Return All**.

8 If the material requirement is closed, a message is displayed. Click **Yes** to reopen the material requirement. Click **No** to keep the material requirement closed. The material requirement does not need to be open for you to return parts.

9 To review the transactions before performing them, select the **Preview transactions before Saving** check box. If you clear this check box, the transactions are saved when you click **Ok**.

10 Select one of these options:

Return to original locations – To return materials to the locations from which they were issued, select this option.

If you are returning piece-tracked parts, the same dimensions and number of pieces are used for the return. If you are returning traced parts, the trace information that was specified during the material issue is used for the return.

Prompt with inventory locations – To specify the locations to which to return parts, click this option. When you click **Ok**, a dialog is displayed. The ID of the part that you are returning is displayed in the dialog title bar. A list of the warehouse locations that store the part are displayed. Specify the quantity to return to each location, then click **Ok**. If you are returning more than one part ID, then the dialog box is displayed again for the next part.

If you are returning piece-tracked parts, an additional table that shows the pieces and dimensions that were issued to the requirement is displayed. Select the table row that contains the warehouse location to which you are returning the part, then specify the number of pieces and dimensions to return. The return quantity is calculated. The first time that you select a table row, the number of pieces and dimensions that were issued to the requirement are displayed.

If the part is traced, click the Part Traceability button to specify trace details. If the part is both piece-tracked and traced, you must select the part in the piece-tracked part table to activate the Part Traceability button.

11 Click **Ok**.

If you selected the **Preview transactions before Saving** check box, a list of the quantities to be returned to each warehouse is displayed. Click **Save** to issue the quantities. Click **Cancel** if you do not want to issue the quantities.

If you cleared the **Preview transactions before Saving** check box, then the inventory transactions are generated when you click **Ok**.

Transferring Inventory Between Locations

In some instances, it may be necessary to transfer inventory from one warehouse location to another. For example, you may receive parts into a holding location for inspection before making the parts available to the plant. After you inspect a number of these parts, you can transfer them to an available inventory location. Or, when parts fail inspection, you might quarantine them by transferring them to a different location that is named and coded as unavailable inventory.

If you are licensed to use multiple sites, you can transfer inventory between warehouses in the same site only.

To transfer inventory between locations:

1. Select **Edit**, **Transfer Inventory Between Locations**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select a site to use. If you are licensed to use a single site, this field is unavailable.
3. Click the **Part ID** browse button and select the part to transfer.

   The description for the part you select is displayed. You can also select a part using the **Part Description** browse button.
4. Enter the quantity to transfer in the Quantity field. Depending on your preferences settings, the quantity on hand in the part's default warehouse location may be inserted by default. You can specify a different value. See "Using the Primary Warehouse and Location as the Default From Location" on page 7–30 in this guide.

   If you are transferring a piece-tracked part, specify the number of pieces and the required dimensions. To view the dimensions of pieces in your inventory, click **Inventory Pieces**. See "Viewing Inventory Pieces for a Piece-Tracked Part" on page 7–16 in this guide.
5. Click the **Reason** arrow or browse button to specify the reason you are transferring the material. When you transfer materials between warehouses, adjustment transactions are made. The Site Maintenance settings that apply to inventory adjustments also apply to transfers. See "Specifying Defaults" on page 4–13 in the System-wide guide.
6. Click the **From** browse button and select the warehouse location from which you are transferring the part. Depending on your preferences settings, the part's primary warehouse and location may be inserted by default. You can specify a different value. See "Using the Primary Warehouse and Location as the Default From Location" on page 7–30 in this guide.
7. If you use dimensional reporting, the default dimension IDs for the debit transaction are inserted into the Dimension 1 and Dimension 2 fields. The priorities you established for debit transactions for Adjustments are used to determine which IDs are inserted into the fields. Click the browse button to override the default dimension ID used for the debit transaction. See "Dimensional Reporting" on page 2-1 in the General Ledger guide. If you track costs by customer order ID, specify the ID of the order to associated with this transaction. See "Tracking Costs by Customer Order ID and Product Code" on page 2-3 in the General Ledger guide.
8. Click the **To** browse button and select the warehouse location to which you are transferring the part. The system inserts the From and To warehouse and location information in the Description fields. You can add text to these fields if necessary.
9. Click the **Save** button.

VISUAL creates an Adjust Out transaction for the From location, and a matching Adjust In transaction for the To location, effectively transferring the parts to the new location.

Using the Primary Warehouse and Location as the Default From Location

You can set up a preference in Preferences Maintenance to always use a part's primary warehouse and location as the default location when transferring parts between warehouses. When you set up this preference, the primary warehouse and primary location specified for the part in the selected site are inserted into the From fields in the Inventory Transfers dialog. If you specified only a primary warehouse on the Part record, then the first location found for the warehouse is used as the default location. In addition, the quantity on-hand in the part location is inserted into the Quantity field in the Inventory Transfers dialog. You can override all default information.

To set up the preference:

1. Select **Admin**, **Preferences Maintenance**.
2. Click **Insert**.
3. Specify this information:

   Section – InventoryEntry

   Entry – AutoFillLocation

   Value – Y
4. Click **Save**.

You may need to exit and relaunch VISUAL for the preference to take effect.

Editing Warehouse Locations

Use the Warehouse Location function to add, delete, and edit warehouse information or set the primary and auto-issue location for a part.

To edit warehouse locations:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you ar licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part whose warehouse location you want to edit.
3. Select **Edit**, **Warehouse Locations**.

   If you are licensed to used multiple sites, the dialog box shows the current locations for the part in the site you selected. If you are licensed to use a single site, the dialog box shows all current locations for the selected part.
4. For the current part, you can perform the following edits:

   Adding new locations – To add new locations, click the **Insert** button and enter the new information. If you are licensed to use multiple sites, you can add locations from warehouses in the selected site only. If you are licensed to use a single site, you can add locations from any warehouse.

   Setting Primary locations – To set the location as the primary location for this part, click the Set Primary Location button. A check mark is displayed in the appropriate column in the table.

   Setting Auto Issue Locations – To set a location as the location from which VISUAL issues parts when you designate the part as Auto issue, select the **Set Auto-issue** location button. VISUAL performs automatic issues during Labor Ticket Entry for any part designated as Auto Issue in Part Maintenance. A check mark is displayed in the appropriate column in the table.

   Setting Inspection Location – To set a location as the inspection location, select the row for the location and click the **Set Inspection Location** button.

   Setting Transit Location – To set a warehouse location as a transit location, locate the appropriate warehouse location in the line item table and select the **Transit** check box. You can also do this in Part Maintenance.
5. Click the **Save** button.

Entering New Locations

Depending on the settings in Site Maintenance, you can create new locations in your warehouses and associate them with the current part. You can create new locations and associate them with a part if you have clicked the Create New Location and Assign to Part option in the Part Location on the Fly section in Site Maintenance. You can assign existing locations to parts if you have clicked the Assign Existing Location to Part option in Site Maintenance. See “Site Maintenance” on page 4-1 in the System-wide guide.

You cannot create new warehouses using this procedure. Use Warehouse Maintenance to set up new warehouses.

To add existing locations to parts:

1. In the Location ID field, specify the location, then press TAB.

   If the location exists but is not associated with the current part, a dialog box is displayed notifying you that the location exists but has not been assigned to the current part.

   If the location does not exist, a dialog is displayed prompting you to add the new location.

2. To add the location to the part or add the new location, click **Yes**.

3. In the Status section, select a Status for the Location ID. You can select:

   Available – The part is currently available in the Location ID and you can perform any inventory transaction in the location.

   Unavailable – The part is currently unavailable in the Location ID.

   On Hold – The part is currently on-hold in the Location ID.

4. If you are using hold reasons and selected the On Hold status, click the **Hold Reason ID** browse button and select a Hold Reason ID for the part/location association.

5. To include a description for this location, specify it in the Description field.

6. Click **Ok**.

   The Part/Location association is saved. You can verify that it exists by selecting the Warehouse Locations option from the Maintain menu in Part Maintenance.

Setting Inventory Transaction Options

You can specify these options in Inventory Transaction Entry:

Auto Clear After Save – To clear the Inventory Transaction Entry window after each save, select **Auto Clear After Save** on the Options menu. Clearing the Inventory Transaction Entry window before proceeding to the next transaction eliminates mistakes caused by accidentally mixing manually entered transaction information.

Auto Clear After Class Change – To clear the Inventory Transaction Entry window when you change the type of receipt you are performing, select **Auto Clear After Class Change** on the Options menu. For example, changing from Issue to Receipt/Rtn clears the window.

Auto Process Label Before Clear – If you are working with a traceable part requiring a label and want to print the label prior to clearing the Inventory Transaction Entry window, select **Auto Process Label Before Clear** on the Options menu.

View All Work Orders – If you performing a Receipt by Part and want to view all work orders for this part regardless of their status, select **View All Work Orders** from the Options menu.

Apply Purchase Burdens to Adjust/In – If you are adjusting inventory into a warehouse location, select this option to apply the purchase burden amount specified for the part in Part Maintenance. If you clear this selection, then only the unit costs are applied.

A check mark is displayed next to the options you select. To remove this preference, select the option again.

Printing in the Inventory Transaction Entry Window

From the Inventory Transaction Entry window, you can print this information:

- Inventory Transactions
- Trace Labels

Printing Inventory Transactions

You can print inventory transaction reports for your transactions. You can limit the information in the report by date and transaction range.

Total value change is calculated for the entire reporting period, as well as for each sequence group. For example, if sequencing by Work Order ID, the total change for each work order is shown.

To print transaction reports:

1. Select **File**, **Print**.
2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to use in the report. If you are licensed to use a single site, this field is unavailable.
3. To view transaction information for certain dates, click the calendar buttons and select the Starting and Ending Dates to specify the date range.
4. In the Sequence section, select the sort order for the report. Click one of these options:
   - Transaction ID
   - Part ID
   - Customer Order ID
   - Purchase Order ID
   - Work Order ID
   - Warehouse/Location
   - Warehouse/Location/Part
5. After you select a Sequence, you can choose a range of IDs to view in the report. For example, if you click Part ID, you can specify a range of Part IDs to view in the report. Specify the range in the Starting and Ending ID fields. To view the report for all IDs, leave the Starting and Ending ID fields blank. To view only one ID in the report, select the same ID in both the Starting and Ending ID fields.
6. In the Type section, select the type of transactions to include in the report. The types available change depending on the Sequence you click. For example, if you click a sequence of Purchase Order ID, you can select only Receipts and Consignment types.
7. To print only transactions that have a zero value associated with them, select the **Zero Costs Only** check box.

   This is useful when using actual costing to track down transactions that were not properly costed. For example, you can pinpoint Adjust/In transactions where the cost was not specified.
8. To include obsolete parts in the report, select the **Include Obsolete Parts** check box.

9 Click the arrow and select the output the report. Select one of these options:

Print – To send the report to your printer, select the **Print** option.

View – To view the report, select the **View** option.

File – To send the report to text file, select the **File** option. The report is prepared as a Rich Text Format (RTF) file and a dialog box is displayed prompting you to enter the location and file name for the file to be saved.

E-mail – To prepare the report as an RTF and attach it to an e-mail, select the **E-mail** option. The report is attached to a Microsoft Outlook e-mail. To attach a PDF (Portable Document Format) file to your e-mail, select the **PDF Format** check box in the Type section.

10 Click **Ok**.

Printing Trace Labels

If you are not relying on preassigned vendor lot or serial numbers that are marked on the materials or their containers, you may want to print trace labels for your traceable parts.

Note: Because VISUAL does not assign auto-numbers until you save the transaction, you can only print trace labels for completed transactions.

To print trace labels:

1 Click the **Transaction ID** browse button and select the transaction to use to print part trace labels.

2 Select **File**, **Print Labels**.

The Part ID, Description, Transaction ID, and Type are inserted.

3 If you have set up user defined reports, select the print format to use for this report.

You can choose from the standard label format, or one of three user-defined formats.

4 Click **Ok**

One label for each lot number for each part prints. The standard label shows these lines:

- Lot Number
- Part ID
- Quantity
- Barcode for the Lot Number

Note: The Code-39 barcode font must be installed on your computer to print Code 39 barcodes.

You can customize labels to show one or all of the properties, comments, transaction dates, shelf lives, and maximum lot sizes. You should immediately affix these labels to the materials or containers.

Printing Part Trace Thermal Labels

You can print thermal labels for your traceable parts. Before you can print a label, though, you must create the appropriate label types to use in the window.

Note: If you have not set up the ability to print thermal labels, the Thermal Label button is not displayed on the Print Part Trace Labels dialog box.

To print thermal labels:

1. From the Print Part Trace Labels dialog boxes, click the **Thermal Labels** button.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
3. Click the **Label ID** browse button and select the label to print for this customer order/ acknowledgment. The browse table is limited to Label IDs with TRACEABLE label types.

   If you are licensed to use multiple sites, the browse table is limited to the labels associated with the Site ID you specified.
4. To print a group of labels, click the **Label Group ID** browse button to select the Label Group to print. You can choose either a Label ID or a Label Group ID.
5. If you are printing a group and want to insert temporary labels into the group, click the **Insert** button and add the labels to print.
6. In the Label parameters section, select the limitations to use when printing your labels. You can select:

   Part ID – To restrict the labels by Part ID, click the Part ID browse buttons and select the starting and Ending Part IDs to use.

   Transaction ID – To restrict the labels by Transaction ID, click the Transaction ID browse buttons and select the starting and Ending Transaction IDs to use.

   Trace ID – To restrict the labels by Trace ID, click the Trace ID browse buttons and select the starting and Ending Trace IDs to use.
7. Specify a print quantity for each label in the group in the Print Qty. column.
8. To filter the orders appearing in your labels, select these options:

   Order ID – To filter the report by order, click the browse buttons and select the Starting and Ending Order IDs for the report.

   Line No – To filter the report by line, click the browse buttons and select the Starting and Ending Line Nos for the report.
9. Click **Print Labels**.

Chapter 8: Inter Branch Transfer

This chapter includes:

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What is Inter Branch Transfer?

Inter branch transfer is the transfer of goods typically from one branch location to another but within the same company.

If you are licensed to use multiple sites, you can use inter branch transfer to transfer materials from one site to another site, provided that both sites have the same parent accounting entity. If you are licensed to use a single site, you can transfer materials between any two warehouses.

The process of inter branch transfer has three basic steps:

1 Create the demand or the need to transfer and assign it an IBT ID.

2 Ship the IBT ID.

3 Receive the IBT ID.

Inter Branch Transfer or IBT consists of three programs:

Inter Branch Transfer Entry – Use Inter Branch Transfer Entry to create the order to transfer parts and materials between your branch warehouses. This is the master transfer document or the “demand” for the parts or material.

Inter Branch Transfer Shipping Entry – Use Inter Branch Transfer Shipping Entry to ship goods from one branch warehouse to another.

Inter Branch Transfer Receipt Entry – Use Inter Branch Transfer Receipt Entry to receive goods into your branch warehouse.

All IBT programs are available from the Inventory menu of VISUAL’s main window.

What is Inter Branch Transfer Entry?

Use Inter Branch Transfer to move inventory from one warehouse transit location to another warehouse location. If you are licensed to use multiple sites, the warehouses must be in the same entity. If you are licensed to use a single site, you can transfer materials between any two warehouse locations.

Use Inter Branch Transfer Entry to produce thorough shipping documentation.

Inter Branch Transfer entry provides the following functions:

- The entry of inter branch transfers documenting the movement of parts between warehouse locations.
- The assigning of supply to outgoing IBTs and demand from incoming IBT lines.

Before you can save an inter branch transfer, you must set up these locations:

- In both the warehouse from which you are shipping the materials and the warehouse you are receiving the materials into, you must create a location that has the same ID as the warehouse ID. For example, warehouse MMC-MAIN must have a location MMC-MAIN.
- In the warehouse that is shipping the materials, you must have a transit location.

Generating Inter Branch Transfers

Before you can ship or receive inventory using Inter Branch Transfer, you must set up the transfer using Inter Branch Transfer Entry.

To create Inter Branch transfers:

1. Select **Inventory**, **Inter Branch Transfer Entry**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that is managing this transaction. Any sites that share the same parent accounting entity as the site you specify can be used in the transaction. The site you specify is not necessarily involved in the transactions. The sites associated with the warehouse IDs you specify are used in the inventory transactions. If you are licensed to use a single site, this field is unavailable.
3. To manually enter an IBT ID, click in the IBT ID filed and specify a unique identifier for this transfer. If you are using the auto-number feature, leave this field empty.
4. Specify this information:

   Order Date – Click the **Order Date** calendar button and specify the date on which you want the transfer to occur.

   From Warehouse ID – Click the **From Whse ID** browse button and select the warehouse from which to transfer the goods. If you are licensed to use multiple sites, the browse table displays warehouses belonging to sites in the same parent entity as the site in the Site ID field. If you are licensed to use one site, the browse table displays all warehouses.

To Warehouse ID – Click the **To Whse ID** browse button and select the warehouse to which to transfer the goods. If you are licensed to use multiple sites, the browse table displays warehouses belonging to sites that share the same parent entity as the site you specified in the Site ID field. If you are licensed to use a single site, this browse table displays all warehouses.

If you are moving parts into a consignment warehouse, the Consignment Transfer check box is selected and the name of the customer or vendor you assigned to the consignment warehouse is displayed.

Desired Ship Date – Click the **Desired Ship Date** calendar button and select the date you would like to ship the parts.

Desired Receive Date – Click the **Desired Recv Date** calendar button and select the date on which you would like the warehouse ID specified in the To Warehouse ID field to receive the parts.

Transit Days – In the Transit Days field, specify the number of days the parts are in transit. Establish warehouse to warehouse transit times in Warehouse Maintenance.

5 Click the **Ship From/To** tab and specify this information:

Status – The default status you specified in the Preferences dialog box. For more information, refer to “Setting a Default IBT Status” on page 8-8 in this guide. To override the default setting, click the Status arrow and select a status for the transfer. You can select:

- Firmed
- Released
- Closed
- Cancelled/Void
- Shipped

Carrier ID – Click the **Carrier ID** arrow and select a carrier for the transfer.

Ship Via – Click the **Ship Via** arrow and select a means of conveyance for the transfer.

6 Click the **Contact** tab and specify the contact for the Inter Branch Transfer Entry. You can select a contact with an ID or enter a standalone contact for this transaction only.

- To select a contact with a registered Contact ID, use one of these methods:

  Select an alternate contact - Click the **Contact** browse button and select a contact from the browse contact table. Select the **Use Selected Contact** toolbar button.

  Specify a new contact in the Contacts for Customer dialog - Click the **Contact** browse button. Click the **Add New Contact** button and specify contact information through the Contact Maintenance window.

- To specify a standalone contact, specify the contact information in the fields on the Contact tab. If contact information is already displayed in the tab, you can edit the existing information to create a standalone contact. When you edit the information, the Contact ID field is cleared. The edits that you make in the Contact tab do not update contact information in your Contact table. Standalone contact information is saved with the transaction only and is not added to your Contacts table. If you anticipate using this standalone contact again, Infor recommends creating a contact with a Contact ID.

Specify this information:

Contact ID/Name – Enter the contact's full name and review the ID number. A contact without an ID number does not display in Contact Maintenance.

Position – Enter the contact's position. For example, CEO.

Salutation – Enter the salutation to use for this vendor contact. This field has a drop-down menu populated with some of the most popular salutations.

Phone/Ext – Enter the telephone number, with area code and extension, for the contact. This may be a direct line to the contact, or a generic company line.

Fax – Enter the area code and Fax number.

Mobile – Enter the contact's area code and mobile phone number.

E-Mail – Enter the appropriate vendor E-mail address.

Standalone contacts are not added to the Email Documents list for the vendor. Only contacts with IDs can be added to the Email Documents list.

If you do not want to assign a contact to this order, click the **Use No contact** toolbar button.

7 Click the **Insert Row** button and specify this information.

Part ID – Click the **Part ID** browse button and select the part to transfer. When you select a Part ID, the default unit of measure is inserted.

Quantity – If you are transferring a standard part, specify the quantity of the part to transfer. If you are transferring a piece tracked part, leave this field blank.

 # Pieces – If you are transferring a piece tracked part, specify the number of pieces to transfer. If you are transferring a standard part, leave this field blank.

Length, Width, Height – If you are transferring a piece tracked part, specify the required dimensions of the pieces. The required dimensions are determined by the part record. After you specify the number of pieces and the dimensions, the quantity is calculated and inserted in the Quantity field.

If you are transferring a standard part, leave the Length, Width, and Height fields blank.

Transit Location ID – If the part you selected for the line has multiple transit locations, click the arrow and select the Transit Location to use.

If the part does not have a Transit Location ID in the From Whse ID, you can enter a unique Transit Location ID. When you leave the Transit Location ID column, you are prompted to add the new location to the appropriate part and warehouse records. Click the **Yes** button.

If you do not enter or select a transit location, you are prompted to add one when you save the IBT.

Click the **Yes** button. The location you entered is added to the appropriate part and warehouse records.

Specs – If you add specifications to this line, this check box is selected.

Stock Order Qty – The stock order quantity of the part. Stock Order Quantity is the same as the order quantity.

Cartons – The number of cartons you use in the shipment.

Shipping Weight – The weight of the shipment.

Weight U/M – The unit of measure used to weigh the part that you are transferring.

Package Type – The type of package in which you are shipping the IBT. Enter packaging types in Application Global Maintenance.

From User Dimensions – If you set up user dimensions for inventory adjustments, the default dimensions based on the priorities you established for inventory adjustments are inserted. You can override the defaults The dimensions specified are used for the adjust out transaction generated for this IBT.

From Customer Order ID – To associate the adjust out portion of the inventory transfer with a particular customer order ID, click the browse button and select the order ID. The customer order ID you select is used for reporting purposes only.

To User Dimensions – If you set up user dimensions for inventory adjustments, the default dimensions based on the priorities you established for inventory adjustments are inserted. You can override the defaults. The dimensions specified are used on the adjust in transaction generated for this IBT.

To Customer Order ID – To associate the adjust in portion of the inventory transfer with a particular customer order ID, click the browse button and select the order ID. The customer order ID you select is used for reporting purposes only.

8 Click the **Save** button.

When you are viewing an IBT, the following additional information is displayed:

Quantity Shipped – The current order's quantity of parts that you have successfully shipped to another warehouse.

Quantity Received – The current order's quantity of parts that you have successfully receive in the **To** warehouse.

Unit Price – The price per unit of the part.

Demand Quantity Allocated – The quantity of the IBT that you have allocated to demand.

Demand Quantity Fulfilled – The demand quantity that has been fulfilled from by the supplying source.

Supply Quantity Allocated – The quantity that you have allocated as supply to the IBT line

Supply Quantity Fulfilled – The supply quantity that has been fulfilled by the supplying source.

Generating Inter Branch Transfers Within the Same Warehouse

If you are a Projects/A&D user, you can use inter branch transfer to record the transit time between different addresses within the same project warehouse.

The process for setting up an inter branch transfer within the same warehouse is similar to the process for setting up transfers between warehouses, with the following exceptions:

1 Enter the same Warehouse ID in the From Whse ID and To Whse ID fields.

2 Select **Edit**, **Ship From Address**.

3 Select the address you would like to use for the ship from address, then click **Use Selected Address**. The Use check box is selected. To choose a different address than the one selected, click the **Clear Selected Address** button, highlight the address you would like to use instead, then click the **Use Selected Address** button.

4 Click **Save**, then click **Close** to exit the window.

5 To choose the ship to address, select **Edit**, **Ship To Address**.

6 Select the address you would like to use for the ship to address, then click **Use Selected Address**. The Use check box is selected. To choose a different address than the one selected, click the **Clear Selected Address** button, highlight the address you would like to use instead, then click the **Use Selected Address** button.

7 Click **Save**, then click **Close** to exit the window.

After you select a ship from and a ship to address, the address information is displayed in the Ship From/To tab.

8 In the Transit Days field, enter the number of days it takes to send parts from the ship from location to the ship to location. For inter branch transfers within the same warehouse, you must enter this information manually.

9 To complete your IBT, perform the steps listed in Generating Inter Branch Transfers to complete the entry.

Adding Shipping Addresses

If the address you would like to use is not shown in the table, you can add it. To add a shipping address:

1 In the Alternate Warehouse Address dialog, click **Insert**.

2 Specify this information:

Ship to ID – Specify the Ship to ID you would like to use for this warehouse address.

Name – Specify the name of the alternate address in the Name field.

Address – Specify the alternate street address for this warehouse.

City – Specify the city in which the warehouse is located in the City field.

State – Click the **State** arrow and select the abbreviation for the state in which the warehouse is located.

Zip – Specify the postal code of the area in which the warehouse is located in the Zip field.

Country – Select the Country ID from the drop-down list, or click the browse button to search for the Country ID in which the warehouse is located.

VAT Registration – If you have a VAT registration number for this warehouse, specify it here.

3 Click **Save**.

4 After you finish entering addresses, click **Close**.

Adding Part Transit Locations

Note: VISUAL allows the creation of transit locations on the fly based on your “Part Location on the Fly” setting in Site Maintenance.

Transit locations are designated locations within warehouses from which you ship inventory. You must supply a Transit Location ID for each line of an IBT before you can save an IBT. If you have not already set a location within your warehouse as a transit location for a part, you can specify only **one** Transit Location ID “on the fly” during IBT Entry. After you have established this first location, it is used as the default for the current session. You can specify other transit locations in Warehouse Maintenance.

When you establish a warehouse location as a transit location during the generation of an IBT, it is for the part in the IBT line in the warehouse of origin (From Whse ID) only.

If you leave the Transit Location ID field blank for a part or entering a non-existent transit location ID, you are prompted to create a new Transit Location ID for the part.

If you click Yes, these actions occur:

For blank Location ID fields	A transit location in the From warehouse named “TRANSIT” is created. The new “TRANSIT” location is added to the Part’s Warehouse Locations list. If the From or To warehouses from the IBT do no exist in the Part’s Warehouse Location list, they are added.
For non-existent locations you enter manually.	A transit location with the name you specified is created. The new transit location is added to the Part’s Warehouse Locations list. If the From or To warehouses from the IBT do no exist in the Part’s Warehouse Location list, they are added.

Setting a Default IBT Status

You can set the default status of new IBTs to either Firmed or Released.

1. Select **Options**, **Preferences**.
2. Click one of these options:

   Firm – Firmed IBTs exist for planning purposes; they are not ready for shipment. You cannot ship a Firmed IBT until you change its status to **Released**.

   Released – Released IBTs are ready to ship.
3. Click **Ok**.

   New IBTs you create use the default status you specify. You can override the default status in the Inter Branch Transfer window.

Using IBT Transit Location Inquiry

Use the transit location query feature to monitor the location of parts while in transit. Base your query on a range of IBTs, parts, or a date range.

1 Select **Info**, **Transit Inquiry**.

2 To view all IBTs, click the **Search** button.

To view IBTs based on a search criteria, specify this information:

Site ID(s) – If you are licensed to use multiple sites, select the Sites to include in the search. The inter branch transfers you entered in the sites you select are displayed in the report. If you are licensed to use a single site, this field is unavailable.

Begin IBT ID and End IBT ID – To view the transit status of a range of IBTs, click the begin and end IBT ID browse buttons to specify the range of IBTs to include.

Begin Part ID and End Part ID – To view the transit status of a range of parts, click the begin and end Part ID browse buttons to specify the range of parts to include.

Begin Ship Date and End Ship Date – To view the transit status of a ship date range, click the calendar buttons and select the begin and end dates for the range to include.

Note: To view a single record, enter the same starting and ending ID. To view all records, leave the starting and ending IDs blank.

3 To view only your consignment related IBTs, select the **Consignment Transfers Only** check box.

4 To view your Exceptions only, select the **Exceptions Only** check box.

5 Click the **Search** button.

The IBTs matching your search criteria are shown in the upper IBT table. The table includes these columns:

IBT ID – The unique identifier of the IBT.

Line No – The line number within the IBT.

Part ID – The part on the IBT line.

Shipped Quantity – The quantity of the IBT part that has been shipped to date.

Received Quantity – The quantity of the IBT part that has been received to date.

If a the full quantity of a line has not been shipped or received, the transactions are displayed in red. If the full quantity of a line has been shipped and received, the transactions are displayed in black.

6 To view the inventory transactions generated for an IBT line, select the line in the upper table. The Adjust In and Adjust Out inventory transactions for the line you selected are shown in the lower table.

7 To exit the dialog box, select **File**, **Exit**.

Assigning Supply to Outgoing Inter Branch Transfer Lines

When you create an inter branch transfer, supply from the “From” warehouse is allocated to the inter branch transfer automatically. If the “From” warehouse does not have sufficient supply, you can manually allocate supply from other sources or borrow against future quantity you expect to receive. This manual allocations is referred to as “soft allocation.” When you soft allocate to demand, you assign unreceived but entered and confirmed quantities to outgoing IBT lines to meet the IBT’s requirements from the following sources:

- Work Order supply
- Purchase Order supply
- Purchase Order Delivery Schedule supply
- Inventory (Warehouse) supply
- Coproduct supply
- Inter Branch Transfer supply

If you are licensed to use multiple sites, you can allocate supply from sources within the site associated with the From warehouse only.

To allocate supply to inter branch transfer demand:

1 With the inter branch transfer line to which to assign supply highlighted, select **Edit**, **Assign Supply to IBT Line**.

The following read-only information is displayed in the header section:

IBT ID/Line# – The ID of the current IBT; the line of the IBT to which you are attempting to assign supply.

IBT Qty – The order quantity of the IBT line.

Stock Qty – The amount of stock you currently have.

Shipped Qty – The quantity of the IBT line that you have shipped. Unless you have partially shipped this line and chosen to keep it open with a balance pending possible future shipments, the value is zero for new IBTs.

Allocated Qty – The portion of the **IBT Qty** to which you have allocated supply. Before you establish any links of supply, this value is zero.

Fulfilled Qty – The allocated quantity that has been fulfilled by the supplying source.

Remaining Qty – The quantity to which you have yet to assign supply. Before you establish any links of supply, this quantity is equal to the **IBT Quantity**.

Part ID – The ID of the part on the IBT line.

Part Description – A description of the part. This defaults from Part Maintenance.

IBT U/M – The selling unit of measure of the part. This defaults from Part Maintenance.

Stock U/M – The stock unit of measure of the part. This defaults from Part Maintenance.

Warehouse ID – The From Warehouse ID of the IBT line.

Desired Ship Date – The IBT’s desired ship date, or the date on which shipment to the To Warehouse is most ideal. Provide a Desired Ship Date during IBT entry.

2 Click the **Insert** button.

3 In the Type column, click the arrow and select one of the following:

WO – To assign supply from a work order, select the **WO** option.

PO – To assign supply from a purchase order, select the **PO** option.

PD – To assign supply from a purchase order delivery schedule, select the **PD** option.

I – To assign supply from inventory, select the **I** option.

CP – To assign supply from a coproduct, select the **CP** option.

WH – To assign supply from a Inter Branch Transfer, select the **WH** option.

4 Double-click the **Supply Base ID** browse button.

The appropriate dialog box is displayed depending on the type of supply you selected. For example, if you are specifying supply from a purchase order, the Purchase Order search dialog box is displayed.

5 If you are allocating supply from a work order, double-click the supplying work order or select the work order line and click the **Select and Close** toolbar button.

If you are allocating supply from a purchase order, double-click the supplying purchase order or select the purchase order line and click the **Select and Close** toolbar button.

If you are allocating supply from a purchase order delivery schedule, select the upcoming order to use and click the **Ok** button.

If you are allocating supply from inventory, select the transit location from which to supply parts and click the **Ok** button.

If you are allocating supply from a coproduct, select the work order containing the coproduct and click the **Ok** button.

If you are allocating supply from an inter branch transfer, select the IBT from which you want the supply to come and click the **Ok** button.

When the dialog box closes, VISUAL populates the supply information in the table.

6 In the Allocate Qty column, enter the quantity of parts to allocate from the supply you selected to the current IBT line.

You cannot specify an Allocate Quantity greater than the quantity of the IBT line itself. If you specify a quantity less than the IBT Qty, the remaining available quantity from the supply is displayed in the Supply Unallocated Quantity column.

7 Click the **Save** button.

These columns are updated with your allocation information:

Demand Quantity Allocated – The quantity of parts that you have allocated to the line from supplying sources.

Demand Quantity Fulfilled – The quantity of parts that the supplying sources have satisfied.

Searching for Supply

For the following supply types, the dialog boxes have a search function to help you locate the appropriate supply:

- Purchase order delivery schedules
- IBT
- Coproducts

To search for supply:

1. In the supply source dialog box, select the starting and ending Dates on which to filter the supply appearing in the table.
2. For purchase order delivery schedules, to view only unallocated supply, select the **P/O delivery schedules with unallocated supply only** check box.
3. In the Sort By section, select the how to sort the information in the table. You can select:
   - Purchase Order ID
   - Desired Receive Date
   - Part ID
4. Click **Apply**.

Assigning Inter Branch Quantities to Demand

If you have a demand, you can assign supply to that demand from an incoming IBT.

You can assign IBT quantities to the following demands:

- Work Order Material Requirement supply
- Customer Order supply
- Customer Order Delivery Schedule supply
- Inter Branch Transfer supply

You can assign quantities to demand only if the quantity has not been received by the “From” warehouse.

If you are licensed to use multiple sites, you can assign a quantity to demand for transactions entered in the To Warehouse ID’s site. For example, if the warehouse you specified in the to warehouse site belongs to site MMC-SITE B, then only transactions created in MMC-SITE B are eligible for selection in the Assign to Demand dialog box.

To assign demand:

1. With the inter branch transfer line to which you are assigning supply highlighted, select **Edit**, **Assign Demand to IBT Line**.

   The following read-only information is displayed in the header section:

   IBT ID/Line# – The ID of the current IBT; the line of the IBT from which you are assigning part quantities to demand.

IBT Qty – The order quantity of the IBT line.

Stock Qty – The amount of this part you have in stock.

Received Qty – The quantity of the IBT line that you have received. Unless you have partially received this line and chosen to keep it open with a balance pending possible future shipments, the value is zero for new IBTs.

Allocated Qty – The portion of the **IBT Qty** you have allocated to demand. Before you establish any demand links, this value is zero.

Fulfilled Qty – The allocated quantity that has been fulfilled by the supplying source.

Available Qty – The quantity available to assign to demand. Before you establish any demand links, this quantity is equal to the **IBT Quantity**.

Part ID – The ID of the part on the IBT line.

IBT U/M – The selling unit of measure of the part. This defaults from Part Maintenance.

Warehouse ID – The **To**, or destination, Warehouse ID of the IBT line.

Desired Recv Date – The IBT's desired receive date, or the date on which reception of the line at the **To** Warehouse is most ideal. Provide a Desired Recv Date during IBT entry.

2 Click **Insert**.

3 In the Type column, click the arrow and select one of the following:

CD – To assign the IBT line to a customer order delivery schedule, select the **CD** option.

CO – To assign the IBT line to a customer order, select the **CO** option.

RQ – To assign the IBT line to a work order requirement, select the **RQ** option.

WH – To assign the IBT line to a Inter Branch Transfer, select the **WH** option.

4 Double-click the **Demand Base ID** browse button.

The appropriate dialog box is displayed depending on the type of demand you selected. For example, if you are specifying the demand as a work order, the Work Orders search dialog box is displayed.

5 If you are allocating demand to a customer order delivery schedule, select the upcoming order to use and click the **Ok** button.

If you are allocating demand to a customer order, double-click the customer order or select the order and click the **Select and Close** toolbar button.

If you are allocating demand to a work order, double-click the work order or select the work order and click the **Select and Close** toolbar button.

If you are allocating demand to an inter branch transfer, select the IBT to which you want the supply to go and click the **Ok** button.

When the dialog box closes, VISUAL populates the supply information in the table.

6 Click the **Seq #/Line #** browse button and select the line to which to assign the demand.

7 In the Allocate Quantity column, enter the quantity of parts to allocate to the demand you selected.

You cannot specify an Allocate Quantity greater than the quantity of the IBT line itself.

8 Click the **Save** button.

These columns show your allocation information:

Supply Quantity Allocated – The quantity of parts that you have allocated to the demand.

Supply Quantity Fulfilled – The quantity of the demand you have satisfied.

Printing Inter Branch Transfer Reports

You can print either the current IBT or all open IBTs from the Inter Branch Transfer Entry window.

Printing IBTs

You can print the currently selected IBT or Firmed IBTs. You can release IBTs during the printing process.

To print a specific IBT, select the IBT to print first before accessing the Print dialog box.

To print IBTs:

1 Select **File**, **Print**

2 Specify the information to print:

To print the currently selected record, click one of these options:

Print Current IBT – To print only the current IBT, select the **Print Current IBT** option.

Print Current IBT and Release – To print only the current IBT and change its status to Released, select the **Print Current IBT and Release** option.

If you did not select an IBT before accessing the Print dialog box, the Print Current IBT and Print Current IBT and Release options are unavailable.

To print multiple IBTs, specify this information:

Site ID – If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to use in the report. If you are licensed to use a single site, this field is unavailable.

Print All Firmed IBTs Through –To print all of your IBTs with a Firmed status through a specified date, click the **Print All Firmed IBTs Through** option. Click the calendar button and select the end date for the report.

Print All Firmed IBTs and Release Through – To print all of your IBTs with a Firmed status through a specified date and change their status to Released, click the **Print All Firmed IBTs and Release Through** option. Click the calendar button and select the end date for the report.

3 To print this report as a draft report, select the **Draft Mode** check box. By printing draft reports you can avoid printing the actual IBT report. After you print a standard IBT report, the IBTs are closed.

4 Select the report format to use. You can select:

Standard – To use the built-in report format, select the **Standard** option.

Print Form – If you defined a format for a pre-printed form, select the **Print Form** option.

User Defined – If you have defined custom formats, select the format to use.

5 Select an output. You can select:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

If you selected E-Mail, when you generate the report the system opens a Microsoft Outlook e-mail message. Refer to your Microsoft Outlook documentation for information on addressing and sending e-mail.

6 Click **Ok** to print the report.

Printing Open IBTs

To print a list of open IBTs:

1 Select **File**, **Print Open IBTs**.

2 Click the Dated Through calendar button and select the date through which to print open IBTs.

3 If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view in the report. You can view multiple sites in the report if you select the Print All Warehouses check box. If you select the Print Current From Whse ID or Print Current To Whse ID check boxes only, only the site currently selected in the Inter Branch Transfer entry window is included in the report.

If you are licensed to use a single site, this field is unavailable.

4 Select the IBT information to print:

Print Current From Whse ID – If you selected an IBT record before accessing the print dialog, select this check box to print open IBTs with the same warehouse ID as the From Warehouse in the IBT record.

Print Current To Whse ID – If you selected an IBT record before accessing the print dialog, select this check box to print open IBTs with the same warehouse ID as the To Warehouse in the IBT record.

Print All Warehouses – To print open IBTs from all warehouses, select this check box. If you are licensed to use multiple sites, you can print open IBTs from multiple sites by clicking the **Site ID** arrow and selecting the sites.

5 Select the sort order for the report. You can select:

- By IBT ID
- By Supplying Whse ID

- By Receiving Whse ID
- By Part ID

6 Select an output. You can select:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

If you selected E-Mail, when you generate the report the system opens a Microsoft Outlook message and attaches the file. For more information on addressing and sending an e-mail, refer to your Microsoft Outlook user documentation.

7 Click **Ok**.

Printing Transportation Documents

Transportation documents are status reports detailing the location and value of inventory and why you have shipped or are shipping them. They are only available if you have shipped the IBT and if you have enabled Shipment Tracking in Site Maintenance. See “Specifying Shipment Tracking Information” on page 4-10 in the System-wide guide.

To print transportation documents for shipped IBTs:

1 In the Inter Branch Transfer Entry window, select the IBT whose transportation document to print. The IBT must have a status of Shipped or Closed.

2 Select **File**, **Print Transportation**.

3 Click the Ship Reason arrow and select the reason for this shipment.

Only the ship reasons applying to Inter Branch Transfers are displayed in this list box. Specify ship reasons in Application Global Maintenance. See “Entering Information Into Reason Tables” on page 2-14 in the System-wide guide.

4 Click the **Carrier ID** arrow and select a Carrier ID for this shipment. Enter carriers in Application Global Maintenance. See “Entering Carriers” on page 2-24 in the System-wide guide.

5 In the Freight Terms section, select the freight term to use for this shipment. Select one of these terms:

- Prepaid
- Billed
- Collect

6 Select the report format. You can select:

Standard – To use the built-in report format, select the **Standard** option.

User Defined – If you have defined custom formats, select the format to use.

7 Select an output method. You can select:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Use the E-mail option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

If you selected E-Mail, when you generate the report the system opens a Microsoft Outlook message and attaches the file. For more information on addressing and sending an e-mail, refer to your Microsoft Outlook user documentation.

8 Click **Ok**.

What is Inter Branch Transfer Shipping Entry?

After you have entered an IBT, you must ship and receive it. Use Inter Branch Transfer Shipping Entry window to ship the IBT. This window closely resembles the Shipping Entry window you use to ship customer orders. IBT Shipping Entry does not support:

- Editable Packlists
- Print Trace Labels
- Pallet Details and Bills of Lading
- Copy Estimated Freight
- RMAs

The window consists of two main sections: a header section in which you enter general warehouse and shipment information, and a line item table in which you enter information specific to individual transfers of parts.

The line item table contains these columns:

IBT Line Number – The line number of the IBT line.

Supply Type – If the supply for this IBT Order Quantity is from anything but inventory, the appropriate abbreviation is shown here. CP (Coproduct) PO (Purchase Order), PD (Purchaser Order Delivery Schedule), WH (Inter Branch Transfer), or WO (Work Order).

Reference – Any referential text regarding the material you are transferring.

Trc – This check box is selected if the part is traced.

Quantity Ordered – The quantity of the material you are transferring.

Quantity Shipped – The quantity of the material that you successfully shipped to another warehouse.

Ship Quantity – If you are shipping a standard part, specify the quantity to ship to the other location. This cannot be greater than the Quantity Ordered.

Length, Width, Height – If you are transferring piece tracked parts, the dimensions of the part are inserted. You cannot edit this field.

Dimensions UM – If you are transferring piece tracked parts, the dimension unit of measure is inserted. You cannot edit this field.

Piece Count – If you are transferring piece tracked parts, the number of pieces specified in Inter Branch Transfer Entry is inserted. You cannot edit this field.

Total Pieces Shipped – If you are transferring piece tracked parts, the number of pieces previously shipped is inserted. You cannot edit this field.

 # Pieces to Ship – Specify the number of pieces to ship. After you specify the number of pieces, the quantity of the shipment is calculated and inserted in the Ship Quantity field.

Quantity Allocated – The portion of the Quantity Ordered that you have allocated from other supplying sources.

Link Quantity Allocated – The quantity allocated from the supplying source.

Link Quantity Fulfilled – The quantity fulfilled by the supplying source.

Link Quantity Issued – The quantity issued from the supplying source.

Stock U/M – The stock unit of measure of the part.

Unit of Measure – The part's unit of measure.

Actual Freight – The amount you pay for freight charges to convey the materials.

From Transit Location ID – The ID of the transit location in the From Warehouse from which you are shipping the parts. You can change the Location ID to a valid Transit Location ID.

From Whse Location ID – The location in the From Warehouse from which you are obtaining the IBT quantity. After you ship an IBT, the inventory transaction trail shows an adjustment out of this location in the From Warehouse and an adjustment into the Transit Location ID in the From Warehouse. After you receive the IBT into the destination warehouse, in addition to the two previously mentioned adjustments, the inventory transaction trail shows an adjustment out of the Transit Location ID of the From Warehouse and a final adjustment into the To Location ID of the To Warehouse.

A transfer produces the following inventory transaction trail:

- Adjustment out of From Whse Location ID (Occurs when you ship)
- Adjustment into From Warehouse Transit Location ID (Occurs when you ship)
- Adjustment out of From Warehouse Transit Location ID (Occurs when you receive)
- Adjustment into To Warehouse Location ID (Occurs when you receive)

Warehouse ID – The ID of the warehouse from which the IBT originates.

Cartons – The number of cartons you use in the shipment.

Per Unit Shipping Weight – The weight of the shipment.

Weight U/M – The unit of measure that you use to weigh the part that you are transferring.

NMFC ID – If any, the National Motor Freight Code ID associated with the IBT line.

Package Type – The type of package to use to ship the IBT. Enter packaging types in Application Global Maintenance.

In Trans ID – The ID of the Adjustment In after you have shipped the parts in the From warehouse. Transaction IDs appear in Inventory Transaction Entry.

Out Trans ID – The ID of the Adjustment Out as you ship the parts from the From Warehouse. Transaction IDs appear in Inventory Transaction Entry.

Unit Price – The price per unit of the part.

Discount % – Any discount percent associated with the part on the IBT line.

Packlist Long Description – A description of the IBT packlist.

Shipping Dimensions – Any dimension information associated with the material for shipping purposes.

Shipping Inter Branch Transfers

After you have entered and saved an IBT using Inter Branch Transfer Entry, you can ship the transfer.

To ship inter branch transfers:

1 Select **Inventory**, **Inter Branch Transfer Shipping Entry**.

2 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site is managing this transaction. If you are licensed to use a single site, this field is unavailable.

3 Click the **IBT ID** browse button and select the IBT to ship.

The IBT Shipping Entry window populates with information from the IBT you selected. The current system date is inserted in the Actual Ship Date field.

4 In the Shipper ID field, specify a unique shipper ID. If you have set up auto-numbering for IBT Shippers, you can leave this field blank.

5 To change the Actual Ship Date, click the calendar button and select the date to use.

You cannot edit the Desired Ship Date. This date is used for planning purposes only.

6 Click the **Contact** tab and specify the contact for this IBT Entry. You can specify a different contact for the To Whse ID receiving the shipment. You can select a contact with an ID or enter a standalone contact for this transaction only.

- To select a contact with a registered Contact ID, click the **Contact** browse button and select a contact from the browse table. Click the **Use Selected Contact** toolbar button.
- To specify a standalone contact, specify the contact information in the fields on the Contact tab. If contact information is already displayed in the tab, you can edit the existing information to create a standalone contact. When you edit the information, the Contact ID field is cleared. The edits that you make in the Contact tab do not update contact information in your Contact table. Standalone contact information is saved with the transaction only and is not added to your Contacts table. If you anticipate using this standalone contact again, Infor recommends creating a contact with a Contact ID.

  Specify this information:

  Contact ID/Name - Enter the contact's full name and review the ID number. A contact without an ID number does not display in Contact Maintenance.

  Position - Enter the contact's position. For example, CEO.

  Salutation - Enter the salutation to use for this vendor contact. This field has a drop-down menu populated with some of the most popular salutations.

  Phone/Ext - Enter the telephone number, with area code and extension, for the contact. This may be a direct line to the contact, or a generic company line.

  Fax - Enter the area code and Fax number.

  Mobile - Enter the contact's area code and mobile phone number.

  E-Mail - Enter the appropriate vendor E-mail address.

Note: Standalone contacts are not added to the Email Documents list for the vendor. Only contacts with IDs can be added to the Email Documents list.

If you do not want to assign a contact to this transaction, click the **Use No contact** toolbar button in the Contacts dialog.

7 Click the **Other** tab.

8 Click the **Ship Via** arrow and select a shipping method for this shipment. This is an optional entry.

Note: When using Inter Branch Transfer Shipping Entry to ship transfers to consignment warehouses, the Consignment Transfer check box is selected, identifying the type of transfer, and the name of the customer or vendor you assigned to the consignment warehouse is populated.

9 Specify the quantity to ship. If you are shipping a standard part, specify the quantity to ship In the Ship Quantity column. The default Ship Quantity is the Quantity Ordered.

If you are shipping a piece tracked part, specify the number of pieces to ship in the # pieces to ship field. After you specify the number of pieces, the quantity of the shipment is calculated and inserted in the Ship Quantity field.

You can ship more than the quantity ordered for both standard and piece tracked parts. If you enter a value that will result in an overshipment, a dialog box is displayed when you move the cursor to another field.

You can also ship less than the quantity ordered. If you choose not to ship the entire Quantity Ordered, you are presented with two options upon saving—to leave the order open or close the order.

10 In the From Whse Location ID column, specify the Location ID in the From Warehouse from which to draw supply for the parts. Upon shipping, the quantity shipped is adjusted out of this location and into the Transit Location ID you specified in IBT Entry.

11 If applicable, you can override the information for the following fields:

- Actual Freight
- From Transit Location ID
- From Warehouse Location ID
- Cartons
- Per Unit Shipping Weight
- Weight U/M
- NMFC

For more information on these fields, refer to the beginning of this section.

12 Click the **Save** toolbar button.

If you are shipping a partial quantity, a dialog box is displayed informing you that the line will have a balance after shipment.

Select one of these options, then click **Ok**:

- **Leave order open (partial receipt, backorder balance)** – This leaves the IBT open awaiting the remainder of the shipment. The status of the IBT is not changed.
- **Close order (partial receipt, no backorder)** – This is useful when the original IBT quantity has been changed, or is not received for some reason. For example, consider a case where the From warehouse ships you a partial shipment on an IBT order. The backordered quantity may not be available in a time to suit your needs, and you may request that quantity from another warehouse.

  This option allows you to arrange with the To Warehouse to cancel the remainder of the shipment and close the order short.

If you are shipping the entire Order Quantity, the IBT lines are shipped.

If you are shipping a quantity that is greater than the Ordered Quantity, the system displays a dialog box asking you to confirm this overshipment. To confirm the overshipment, click the **Ok** button.

If this IBT involves Intrastat, you are prompted with the option to view and adjust that Intrastat information. For more information, refer to “Shipping Intrastat IBT Orders” on page 8-23 in this guide.

Backdating IBT Shipments

When you backdate an IBT shipment, your ability to complete the transaction depends upon the Prevent Negative Backdating setting specified for the site in Site Maintenance.

If the check box is selected, then the quantity you had on hand on each date from the date of the transaction to the current date is used to determine inventory levels. If you did not have sufficient quantity on any one of the days between the date of the transaction and the current the date, then the transaction cannot be completed. For example, say you enter an IBT shipment on January 5 for 10 units, but you specify January 3 as the transaction date. If you only had 8 units in your warehouse location on January 4, then you are prevented from completing the shipment.

If the check box is cleared, then the quantity you have on hand on the date you enter the transaction is used to determine inventory levels. For example, say you enter an IBT shipment on January 5 for 10 units, but you specify January 3 as the transaction date. If you have 10 units on hand in the warehouse location on January 5, then you can complete the transaction, even if you did not have 10 units on hand on January 3 or January 4. When you clear the Prevent Negative Backdating check box, you can generate negative inventory balances for past dates, even though you do not allow negative inventory balances for current dates.

"Specifying General Site Information" on page 4–4 in the System-wide guide.

Viewing Supply Links

If you have assigned any supply links to an IBT, you can view those links in the IBT Shipping Entry window and change the assigned quantity before you ship your IBT.

Note: You cannot assign links in the IBT Shipping Entry window, you must do so in the IBT Entry window.

To view and change supply links:

1. With the IBT shipping line to which you are assigning supply highlighted, select **Edit**, **Assign Ship Quantity to Supply Links**.

   The links you set up in the IBT Entry window are shown in the table. For more information, refer to “Assigning Supply to Outgoing Inter Branch Transfer Lines” on page 8-10 in this guide.

   The header section contains the following fields:

   Order Quantity – The order quantity of the current IBT that you are shipping.

   Stock Order Quantity – The current quantity of stock you have for the part on this line

Total Shipped Quantity – The quantity of the Order Quantity that you are shipping. This can be a greater value (See overshipments) or a partial value (See partial shipments).

Allocated Quantity – The quantity of supply that you have allocated to the current IBT. This value cannot be greater than the Order Quantity.

Fulfilled Quantity – The quantity fulfilled by the supplying source.

Shipped Quantity – The quantity that you have actually shipped. This should be zero during this process.

Remaining Quantity to Assign – The remaining quantity of the Order Quantity that you still may assign to supply links.

The line item table contains the following columns:

Supply ID – The ID of the supply link. Enter supply links in the Inter Branch Transfer Entry window.

Assign Quantity – The portion of the Remaining Quantity to Assign Quantity to assign to the supply link.

Link Unreceived Quantity – The supply “Link” quantity that you have yet to receive.

Desired Receive Date – The date that you want to receive the supply link line. For example, if the supply link is a P/O, then the desired received date is the day you want to receive the P/O.

Supply Unfulfilled Quantity – The quantity of the supply link line that you have yet to fulfill.

Supply Quantity – The order quantity of the supply link line.

Supply Received Quantity – The quantity of the supply link line that you have received.

Link Allocated Quantity – The quantity of the supply link line that you have allocated to the customer order line at hand.

Link Received Quantity – The quantity of parts you have received for this line in this IBT.

Link Issued Quantity – The quantity of parts you have issued to this IBT line.

Supply Part ID – The ID of the part for the supply link line. This is usually the same as the Part ID of the C/O line.

Vendor ID – The ID of the vendor if the supply link is a P/O or P/O delivery schedule line.

Vendor Part ID – The vendor’s ID of the part.

2 In the Assign Quantity column, enter the ship quantity to assign to the supply link.

3 Click the **Ok** button.

Shipping Intrastat IBT Orders

When you ship IBTs with Intrastat-related line items, you can view and edit Intrastat data for the shipment.

To edit Intrastat data:

1. When you ship an Intrastat related IBT, a dialog box is displayed, giving you the option to view and edit the IBTs Intrastat data.
2. To accept the IBTs Intrastat information, click the **Cancel** button.

   To view and edit the IBTs Intrastat information, click the **Yes** button.

   The dialog box displays the details for the packlist.

   Note: If you are over shipping the IBT, a dialog box is displayed asking you to confirm overshipment of this IBT.

   In the Options section, select these options for viewing your Intrastat information:

   Show Current IBT Packlist – To view the packlist for the current IBT only, select the **Show Current IBT Packlist** option.

   Print Orders Shipped Between – To view line items by shipping dates, select the **Show Orders Shipped Between** option. Click the Starting and Ending Date calendar buttons and select the dates between which to view IBT packlists.

   Incorrect Lines Only – To view only those lines with missing Intrastat data required for reporting, select the **Incorrect Lines Only** check box.
3. Make the changes to the information in the line item table.
4. Click the **Save** button.

Using Part Traceability in Inter Branch Transfer Shipping Entry

VISUAL selects the check box in the Trc column in the IBT Shipping Entry line item table if the part requires traceability.

If the IBT transaction has line items with traceable Part IDs, you should do the following:

1. Enter all data to complete the transaction or transaction line items in the normal way.
2. Click the row header to select the line for which you are entering traceability information.
3. Click the **Part Traceability** button.

   The quantity of the traceable part on the IBT line is broken down into the maximum number of lots you specified in Part Trace Profile Maintenance. You can either accept these default quantity breakdowns or adjust them at this point by moving your cursor to the Quantity field and modifying the value accordingly.

   If the Trace Profile for the part requires you to enter a quantity, click in the Quantity column and enter the amount. For more information, refer to “Part Traceability” on page 5-1 in this guide.
4. Click the **Close** button.

Printing IBT Shippers

You can use a Shipper as:

- A document that accompanies the product you are shipping to the To Warehouse. It contains shipping information about the IBT.
- A list that shows what is left to be shipped.

Note: To print a "Pick List" report to help you prepare the shipment, you may want to print the IBT and use that as your picklist.

To output a packlist:

1 Click the **Print** toolbar button.

2 If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view in the report. The site selection applies only if you select the Print All IBTs Shipped Between option. If you select either of the Print Current IBT options, then only the site associated with the IBT is included in the report.

If you are licensed to use a single site, this field is unavailable.

3 Select the information to print. You can select:

Print Current IBT Shipper – If you selected a shipper ID in the IBT Shipping Entry window before accessing the Print IBT shipper dialog box, select this option to print the IBT shipper. If you did not select a shipper ID in the IBT Shipping Entry window before accessing the Print IBT Shipper dialog box, this option is unavailable.

Print Current IBT – If you selected an IBT ID in the IBT Shipping Entry window before accessing the Print IBT shipper dialog box, select this option to print the IBT. If you did not select a shipper ID in the IBT Shipping Entry window before accessing the Print IBT Shipper dialog box, this option is unavailable.

Print All IBTs Shipped Between – To print IBT packlists for all IBT orders with a Ship Date within a range, select the **Print All IBTs Shipped Between** option and us the calendar buttons to select from and through dates for your range.

4 To include IBTs that are due in the future, select the **Print Lines Due Through** check box and use the calendar button to select the date through which to include IBTs.

This option is useful when using Print Current Order to focus on lines due before a certain date.

5 If you are working with traceable parts and want to display the properties of your trace parts on the shipper, select the **Print Traceable Part Properties** check box.

6 Select the report format to use. You can select:

Standard – To use the built-in report format, select the **Standard** option.

Print Form – To use pre-printed laser forms, select the **Print Form** option.

User Defined – To use custom defined reports that you have set up, select the format to use.

7 Select an output for the report. You can select:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Use the E-mail option to attach the report to an email. When you select E-mail, these check boxes become available:

PDF Format – Select this check box to attach the report as a PDF. Clear this check box to send the report as a RTF.

Send to Document Contacts – If you are generating this report for a consignment shipment, select this check box to automatically email the report to the vendor and customer contacts specified for IBT Shipments for the vendor. When you select this check box, the email is sent without further action from you. To preview the email before it is sent and to manually specify the recipients of the email, clear this check box.

8 Click **Ok**.

Printing IBT Shipper Thermal Labels

To print thermal labels, you must first define thermal label formats. See “Barcode Labor Transactions” on page 9-1 in the Manufacturing guide.

You can print thermal labels for barcoding purposes in Inter Branch Transfer Receipt Entry.

To print thermal labels for the parts:

1 From the Print IBT Shipper dialog box, click **Thermal Labels**.

2 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

3 Select the label to print:

- To print single labels, click the **Label ID** browse button and select the Label to use.
- If you have set up groups of labels and want to print a group, click the Label Group ID browse button and select the label group to print. if you are printing only one label, do not select a group. When you select a group, the members of that group are shown in the table.

4 If you are printing a group of labels and want to temporarily add more labels, click the **Insert** button.

5 Double-click the Label Format browse button in the column header and select the a label to add.

6 Enter the number of labels to print in the Print Qty. column.

7 If you are printing labels for containers or pallets and want to print multiple labels, select the Multiplier check box—the Print Qty figure you enter becomes a multiplication factor. For example, if you have 2 Pallets and each pallet has 16 cases totalling 32 labels; one for each case. Select the Multiplier check box and enter 16 for the Print Qty: 16 labels are printed for every pallet you ship.

8 To print one label for each part, select the **Print One Label For Each Part** check box.

9 Click **Print Labels**.

10 When you have finished printing labels, click **Close**.

Printing IBT Shipper Transportation Documents

Transportation documents are status reports detailing the location and value of inventory and why you have shipped or are shipping them. They are only available if you have shipped the IBT and if you have enabled Shipment Tracking in Site Maintenance. See “Application Global Maintenance” on page 2-1 in the System-wide guide.

To print transportation documents for shipped IBTs:

1 In the Inter Branch Transfer Shipping Entry window, select the IBT whose transportation document you want to print. The IBT must have a status of Shipped or Closed.

2 Select **File**, **Print Transportation Document**.

3 Click the Ship Reason arrow and select the reason for this shipment.

Only the ship reasons applying to Inter Branch Transfers appear are listed. See “Entering Information Into Reason Tables” on page 2-14 in the System-wide guide.

4 Click the **Carrier ID** arrow and select a Carrier ID for this shipment. Specify Carrier IDs in Application Global Maintenance. See “Entering Carriers” on page 2-24 in the System-wide guide.

5 In the Freight Terms section, select the freight term to use for this shipment. Select one of these terms:

- Prepaid
- Billed
- Collect

6 Select the report format. You can select:

Standard – To use the built-in report format, select the **Standard** option.

User Defined – If you have defined custom formats, select the format to use.

7 Select an output method. You can select:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Use the E-mail option to send the report in a Rich Text Format through electronic mail.To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

If you selected E-Mail, when you generate the report the system opens a Microsoft Outlook message and attaches the file. For more information on addressing and sending an e-mail, refer to your Microsoft Outlook user documentation.

8 Click **Ok**.

Printing IBT Receipt Acknowledgement Reports

This allows you to create an IBT receiver so that you can move the material into the appropriate warehouse.

To print IBT Receipt Acknowledgement reports:

1. In the Inter Branch Transfer Shipping Entry window, click the **Shipper ID** browse button and select the shipper for the Receipt Acknowledgement Report.
2. Select **File**, **Print Receipt Acknowledgement**.
3. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view in the report. The site selection applies only if you select the Print All Shipped IBTs Through option. If you are licensed to use a single site, this field is unavailable.
4. Select the information for the report:

   Print Current IBT Shipper – To print the current inter branch transfer information, select the **Print Current IBT Shipper** option.

   Print All Shipped IBTs Through – To print information for a range of inter branch transfers, select the **Print All Shipped IBTs Through** option.

   Click the calendar buttons and select From and Through dates for your range.

   Print Traceable Part Properties – Select this option to display the properties for your traceable parts on the report.

   Do Not Print Previously Printed Acknowledgements – Select this option if you do not want acknowledgements you have previously printed to appear on the report.

   Consignment Transfers Only – Because the primary use of this report is to print acknowledgements you can send to consignment customers or vendors, the Consignment Transfers Only check box is selected. To print reports containing all of your IBT shipments regardless of whether they are consignments, clear the **Consignment Transfers Only** check box.
5. Select the output for the report. Select one of these options:

   Print – Select this option to output the file to a printer.

   View – To see what the printed output will look like before you print it, select View. When the information is displayed on the screen, you can scroll through and print it.

   File – To save the information to a text file, select File.

   E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

   If you selected E-Mail, when you generate the report the system opens a Microsoft Outlook message and attaches the file. For more information on addressing and sending an e-mail, refer to your Microsoft Outlook user documentation.
6. In the Format section, select the output format to use for the report.

You can select the **Standard**, **Print Form**, or any of three user defined formats. The User-Defined option buttons are active only if you have created user defined report formats.

Select the Print Form option button to print the report with a preprinted form using a laser printer. The resulting report is of better quality than the report you can print using the Standard print format option.

7 Click **Ok**.

Printing IBT Labels

You can print an address label to affix to the shipment.

1 Select **File**, **Print Labels**.

2 In the Number of labels (each line), specify the number of labels to print.

3 In the Format section, select the label format to use.

There is one standard format and up to three user-defined ones. The user defined options are only available if you have previously created the form layouts.

4 Click the **OK** button.

What is Inter Branch Transfer Receipts Entry?

After you have entered and shipped an inter branch transfer, use Inter Branch Transfer Receipts Entry to receive the shipped IBT quantities.

To start the Inter Branch Transfer Receipt Entry window, select **Inventory**, **Inter Branch Transfer Receipt Entry**.

The window consists of two main sections: a header section in which general shipment receipts information appears, and a line item table in which specific information to the individual receipt of transfers appears.

The line item table contains the following columns:

IBT Line Number – The line number of the IBT line from the original IBT order.

Reference – Any referential text regarding the material you are transferring.

To Location Quantity – The location within the warehouse into which to receive the IBT quantity appears. To receive the part into a different location, double-click the browse button and select the location into which to receive the part.

Quantity Ordered – The quantity of the material you are transferring.

Total Quantity Received – The portion of the IBT line that you have received. Before reception at the destination warehouse, this value should be zero. If you partially received this IBT line and opted to keep the line open and are now accepting the balance, the amount you previously received appears here.

Quantity Received – The quantity ordered appears. If you are not receiving that quantity, enter the quantity you are receiving in the **Quantity Received** column.

If the Quantity Received is not equal to the Quantity Ordered, VISUAL prompts you to verify the amount over or short when you save the receipt.

Length, Width, Height – If you are transferring piece tracked parts, the dimensions of the part are inserted. You cannot edit this field.

Dimensions UM – If you are transferring piece tracked parts, the dimension unit of measure is inserted. You cannot edit this field.

Piece Count – If you are transferring piece tracked parts, the number of pieces specified in Inter Branch Transfer Entry is inserted. You cannot edit this field.

Total Pieces Shipped – If you are transferring piece tracked parts, the number of pieces previously shipped is inserted. You cannot edit this field.

 # Pieces to Receive – Specify the number of pieces to receive. After you specify the number of pieces, the quantity of the shipment is calculated and inserted in the Quantity Received field.

Total Pieces Received – If you are transferring piece tracked parts, the number of pieces previously received is inserted. You cannot edit this field.

Stock Order Quantity – The amount of this line item you will place in stock.

Total Stock Quantity Received – The total amount of this part you have received and now hold in stock.

Before reception at the destination warehouse, this value should be zero. If you partially received this IBT line and opted to keep the line open and are now accepting the balance, the amount you previously received appears here. This value is the same as Total Quantity Received.

Stock Quantity Received – The amount of this line item that you have received to stock.

Total Quantity Allocated – The amount of this line item that you have allocated to a supply appears.

Total Quantity Fulfilled – The quantity fulfilled by the IBT lines supplying source.

U/M – The unit of measure of the part.

Last Receive Date – The date on which you last received a IBT shipment quantity into this warehouse location.

Warehouse ID – The ID of the warehouse into which you are currently receiving the IBT shipment.

Receive On – The date on which you receive this IBT Shipment.

Close Short – If you are receiving this line short and want to close the IBT, select the **Close Short** check box.

Receiving Inter Branch Transfers

After you have entered and shipped an IBT, you can receive the transfer.

To receive Inter Branch Transfers:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site is managing this transaction.

   If you are licensed to use a single site, this field is unavailable.

2. Click the **IBT ID** browse button and select the IBT to receive. The shipper ID is inserted in the shipper ID field.

   Note: When using Inter Branch Transfer Receipt Entry to receive transfers to consignment warehouses, VISUAL selects the Consignment Transfer check box on the Other tab, identifying the type of transfer, and populates the name of the customer or vendor you assigned to the consignment warehouse.

3. In the Receiver ID field, specify a unique ID. If you use the auto-numbering feature, you can leave this field blank.

4. The current date is inserted in the Actual Recv Date field with the current date. To change this date, click the calendar button and select the date to use.

5. In the Location ID field, click the arrow and select the location to use for the line.

6. Specify the quantity to receive. If you are receiving a standard part, specify the quantity to receive In the Quantity Received field. If you enter a quantity greater than the remaining quantity (Ordered – Received) for the line, a dialog box is displayed asking you to confirm the over-receipt. You can also click the Receive All button to receive the entire order.

If you are receiving a piece tracked part, specify the number of pieces to ship in the # pieces to ship field. You must specify a quantity equal or less than the number of shipped pieces. You also must specify a number of pieces manually. You cannot use the Receive All button. After you specify the number of pieces, the quantity of the shipment is calculated and inserted in the Ship Quantity field.

For both standard and piece tracked parts, you can receive less than the quantity shipped. If you choose not to receive the entire order, you are presented with two options upon saving—to leave the order open or close the order.

7 Click **Save**.

If you have previously received parts for the line, the system displays a dialog box informing you that a receiver exists and requesting you to create a new Receiver ID.

If you are receiving a partial quantity, specify what to do with the remaining quantity. Select one of the following options and click **Ok**.

- **Leave order open (partial receipt, backorder balance)** – To receive the IBT lines and leave the IBT open, select the **Leave order open (partial receipt, backorder balance) option**.
- **Close order (partial receipt, no backorder)** – To receive the IBT lines short and close the IBT, select the **Close order (partial receipt, no backorder)** option.

This is useful when you have changed the original IBT quantity, or when you know you will not be receiving further shipments on the current IBT. For example, the From warehouse ships you a partial shipment on an IBT. You request that the remaining quantity be sent from another warehouse. You could then close the order short knowing you will receive the remaining quantity on another IBT.

If you are working with traceable parts, you must click the **Part Trace** button and enter traceability information for the parts on the line. If you do not do this, a dialog is displayed requesting that you traceability information before saving the IBT receipt.

Using Part Traceability in Inter Branch Transfer Receipt Entry

If a part requires trace information, the Trc column is selected. To specify trace information for the part:

1 Select the row that contains the traced part.

2 Click the **Part Traceability** button.

The quantity of the traceable part on the IBT line is broken down into the maximum number of lots you specified in Part Trace Profile Maintenance. You can either accept these default quantity breakdowns or adjust them at this point by moving your cursor to the Quantity field and modifying the value accordingly.

If the Trace Profile for the part requires you to enter a quantity, click in the Quantity column and enter the amount you want. For more information, refer to “Part Traceability” on page 5-1 in this guide.

3 Click **Close**.

Viewing IBT Demand Links

At the time of receipt, you can view the demand links you established for the IBT line in IBT Entry.

Use this feature as a reference to view and verify demand link information.

With an IBT in the IBT Receipt Entry window, click the **Show Links** button.

The Linked Demand dialog box contains the following columns:

Order – The ID of the Customer Order, Customer Order Delivery Schedule, Work Order Material Requirement, or IBT to which you linked this IBT.

Receive Quantity – The quantity of the link, you have previously received.

Stock Receive Quantity – The quantity you have received into stock.

Quantity Allocated – The quantity of the IBT line that you have allocated to demand.

Quantity Received – The quantity of the IBT line that you have received.

Quantity Required – The quantity of the linked demand regardless of whether the IBT line completely fulfills the demand.

Quantity Issued – If the source of demand is a work order material requirement, the portion of the allocated quantity that you have issued to the released work order.

Date Required – The date by which or on which you need to fulfill the linked order.

Resource ID – If the source of demand is a work order, the Resource ID of the operation.

Assigning IBT Receipt Quantities to Demand

As you receive IBT lines into the appropriate receiving warehouse location, you can assign all or a portion of the received quantity to sources of demand.

Sources of demand include:

- Customer Order Delivery Schedules (CD)
- Customer Orders (CO)
- Inventory (I)
- Work Order Material Operations (OP)
- Work Order Material Requirements (RQ)
- Inter Branch Transfers (WH)

To assign demand to your manufacturing line from inter branch transfer supplies:

1. With the inter branch transfer line to which you are assigning supply highlighted, select **Assign Receipt Quantity to Demand Links** from the Edit menu or right-click the line and select the **Assign Receipt Quantity to Demand Links** option.

   The following read-only information appears in the header section:

   Order ID/Line# – The ID of the current IBT; the line of the IBT from which you are assigning part quantities to demand.

IBT Order Qty – The order quantity of the IBT line.

Stock Order Qty – The amount of this part you plan on sending to stock.

Total Received Quantity – The quantity of the current IBT that you have received into inventory. Unless this IBT has remained open due to a prior receipt of partial quantities, this value should be zero.

Allocated Quantity – The quantity of supply that you allocated to the IBT during the creation of the IBT from a source of supply using the **Assign Supply to IBT Line** option in the IBT Entry window. For example, if you allocated full supply to this IBT from a purchase order, this value is equal to the IBT Order Quantity.

Fulfilled Quantity – The portion of the quantity that you have allocated to demand successfully used in order fulfillment.

Fulfill Overage Quantity – The quantity if the receive quantity that you assigned to a link results in the link received quantity being greater than the link allocated quantity.

Demand Overage Quantity – The quantity if the receive quantity that you assign to a link plus the link issued quantity exceeds the link allocated quantity.

IBT Receive Quantity – The quantity of the IBT line that you are receiving. The quantity you entered in Step 3 appears here.

Stock Receive Quantity – The quantity of the IBT line that you are receiving. The quantity you entered in Step 3 appears here.

Remaining Quantity to Assign – The portion of the received quantity that you can allocate to demand. When this value equals zero, you cannot use this IBT to make any further allocations to demand without editing the original Receipt Quantity.

2 Click the **Insert** button.

3 In the Type column, click the arrow and select one of the following:

CD – To assign the IBT line to a customer order delivery schedule, select the **CD** option.

CO – To assign the IBT line to a customer order, select the **CO** option.

I – To assign the IBT line to an inventory demand, select the **I** option.

OP – To assign the IBT line to a Work Order Operation, select the **OP** option.

RQ – To assign the IBT line to a work order requirement, select the **RQ** option.

WH – To assign the IBT line to a Inter Branch Transfer, select the **WH** option.

4 Double-click the **Demand Base ID** browse button.

The appropriate dialog box is displayed depending on the type of demand you selected. For example, if you are specifying the demand as a work order, the Work Orders search dialog box is displayed.

5 If you are allocating demand to a customer order delivery schedule, select the upcoming order to use and click the **Ok** button.

If you are allocating demand to a customer order, double-click the customer order or select the order and click the **Select and Close** toolbar button.

If you are allocating demand to inventory, select the warehouse to use and click the **Ok** button.

If you are allocating demand to an operation on a work order, select the work order on which the operation is located and click the **Ok** button.

If you are allocating demand to a work order, double-click the work order or select the work order and click the **Select and Close** toolbar button.

If you are allocating demand to an inter branch transfer, select the IBT to which you want the supply to go and click the **Ok** button.

When the dialog box closes, VISUAL populates the supply information in the table.

6 If you are working with work orders, enter the appropriate Lot, Split, and Sub IDs to use for the demand.

7 Click the **Seq #/Line #** browse button and select the line to which to assign the demand.

8 Where appropriate, click the **Piece #** browse button and select what to use for demand.

9 In the Assign Quantity column, enter the quantity of parts to allocate to the demand you selected.

You cannot specify an Allocate Quantity greater than the quantity of the IBT line itself.

10 Click the **Save** button.

VISUAL populates the following two columns with your allocation information:

Supply Quantity Allocated – The quantity of parts that you have allocated to the demand.

Supply Quantity Fulfilled – The quantity of the demand you have satisfied.

Working with Existing IBT Receivers

You cannot modify IBT Receivers: each time you click the **Save** or **Receive All** toolbar buttons, VISUAL creates a new receiver. If you modify header information on an existing receiver and save the IBT, VISUAL displays a dialog box informing you that there are no new quantities received to save.

If you have already received parts on an IBT (a Receiver ID exists for that IBT), and attempt to receive more parts for the same IBT, VISUAL prompts you to create a new Receiver ID for the new receipt.

To receive the parts and create a new receiver, click the **Yes** button.

If you enter a new quantity (or a quantity in excess or the Quantity Ordered) in the Quantity Received column a dialog box is displayed notifying you that you are trying to receive an excess quantity. Click the **Yes** button to continue.

Deleting Receivers

When you delete a receiver, VISUAL removes the receipt from your database removing all the effects of the original receipt. VISUAL resets total quantities received, and all inventory transactions that were created are deleted (not reversed), and on-hand inventory balances are adjusted accordingly.

Deletion of a receiver is only recommended to correct a data entry error. You can delete and reenter a bad receiver. Deleting a receiver when you have received materials results in incorrect inventory balances.

To delete a receiver:

1. In the IBT Receipt Entry window, open the receiver to delete.
2. Click the **Delete** toolbar button.

   A dialog box is displayed, prompting you to confirm the deletion.
3. To confirm the deletion of the receiver, click the **Yes** button

   VISUAL deletes the receiver.

Printing IBT Receiver Reports

Inter Branch Transfer Receipt Entry allows you to print or view receipt transactions for a certain date or print the Current Receiver.

If received IBTs are linked to work orders, the linked work orders also appear. This facilitates routing received materials to the appropriate place.

To print IBT Receiver reports:

1. Select **File**, **Print Receiver**.
2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view in the report. The site selection applies only if you select the Print IBTs received on option. If you select the Print Current IBT Receiver option, then only the site associated with the IBT is included in the report.
3. Select the information to print:

   If you have a receiver open in the IBT Receipt Entry window and you only want to print that receiver, select the **Print Current IBT Receiver** option button. if you do not have a current receiver open in the IBT Receipt Entry window, the Print Current IBT Receiver option is unavailable.

   To print a group of receivers for a specific date, select the **Print Orders Received On** option button. Click the calendar button and select the date of the receivers to print. VISUAL prints all receivers with an Actual Recv Date or Return Date matching the date you select.

   If you printing all receivers for a date, VISUAL groups receivers by IBT Order ID and inserts a page break after each IBT group giving each group its own page.
4. To print barcodes for the parts appearing on your receiver, select the **Print Barcodes** check box and select a barcode type.

   Code39 – This type of barcode, also known as Code 3 of 9, contains variable length, discrete symbology. You must have a Code 39 barcode font installed to view the barcode. If you do not have the Code 39 font installed, then the alphanumeric ID is displayed instead with a prefix and suffix. This pattern is used: *%ID%*.

   QR Code – This is a two-dimensional or matrix barcode. QR stands for quick response.

5 Select an output for the report. You can select:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Use the E-mail option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

If you selected E-Mail, when you generate the report the system opens a Microsoft Outlook message and attaches the file. For more information on addressing and sending an e-mail, refer to your Microsoft Outlook user documentation.

6 Click **Ok**.

Printing IBT Receipt Thermal Labels

To print thermal labels, you must first define thermal label formats. See “Barcode Labor Transactions” on page 9-1 in the Manufacturing guide.

You can print thermal labels for barcoding purposes in Inter Branch Transfer Receipt Entry.

To print thermal labels for the parts on your receiver:

1 From the Print Receiver dialog box, click the **Thermal Labels** button.

2 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

3 Select the label to print:

- To print single labels, click the **Label ID** browse button and select the Label to use.
- If you have set up groups of labels and want to print a group, click the Label Group ID browse button and select the label group to print. if you are printing only one label, do not select a group. VISUAL limits your choice to either a Label ID or Group ID.

  When you select a group, the members of that group appear in the table.

4 If you are printing a group of labels and want to temporarily add more labels, click the **Insert** button.

5 Double-click the Label Format browse button in the column header and select the a label to add.

6 Enter the number of labels to print in the Print Qty. column.

7 If you are printing labels for containers or pallets and want VISUAL to print multiple labels, select the Multiplier check box—the Print Qty figure you enter becomes a multiplication factor. For example, if you have 2 Pallets and each pallet has 16 cases totalling 32 labels; one for each case. Select the Multiplier check box and enter 16 for the Print Qty: VISUAL prints 16 labels for every pallet you ship.

8 To print one label for each part, select the **Print One Label For Each Part** check box.

9 Click the **Print Labels** button.

10 When you have finished printing labels, click the **Close** button.

Returning Interbranch Transfer Quantities to the Warehouse of Origin

Note: You must enable Shipment Tracking in Site Maintenance before you can return Interbranch Transfers. See “Specifying Shipment Tracking Information” on page 4-10 in the System-wide guide..

After you have generated, shipped, and received an interbranch transfer, you can return all or part of the shipment.

1 Select **Inventory**, **Interbranch Transfer Entry.**

2 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site in which you created the IBT. This is the site that shipped the parts. If you are licensed to use a single site, this field is unavailable.

3 Click the **IBT ID** button and select the IBT that you are returning. The IBT must have a status of Closed and be completely shipped and received.

4 Click the **Return All** button on the toolbar.

The system verifies that the Transit Location ID exists for the warehouse returning the shipment, then generates a new IBT. The system does the following for the new IBT:

- assigns an IBT ID based on the current Auto-Numbering profile
- inserts the ID of the warehouse making the return into the From Whse ID
- inserts the ID of the warehouse that originally made the shipment into the To Whse ID

On the IBT record for the original shipment, the system inserts the date you returned the shipment in the Returned field on the Other tab.

5 When you click the Return All button, the system inserts the full shipment quantity in the Quantity field. If you would like to return only part of the shipment, enter the amount you would like to return in the Quantity field.

6 Click **Save**.

7 To complete the return, process the new IBT just as you would any other IBT by using Interbranch Transfer Shipping Entry to ship the return quantities back to the original warehouse and Interbranch Transfer Receipt Entry to receive the shipment back into the original warehouse.

If you are licensed to use multiple sites, select the Site ID to which you are returning the parts in both IBT Receiving Entry and IBT Shipping Entry.

Chapter 9: Material Planning Window

This chapter includes:

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What is the Material Planning Window?

Material Planning Window is a single source for all your material planning needs. It is capable of the following:

- Material Netting by Date or Using MRP Rules
- Comprehensive Viewing of Material Demand and Supply Information
- Direct Generation of Purchase Orders and Work Orders to Meet Demand
- Maintenance of Forecasts and Master Production Schedules
- MRP Generation of Planned Material Requirements and Work Orders
- Material Planning and Dimensional Inventory
- The Material Planning Window has two viewing modes Standard and Advanced.

The optional Dimensional Inventory module affects the Material Planning Window in these ways:

If you are purchasing a specific line from the table window and that line is linked to a work order, the purchase order that VISUAL creates automatically includes the number of pieces and the dimensions from the requirement record.

If you are purchasing to stock for a part and do not select a line item, a dialog box is displayed, asking you to enter the number of pieces and the dimensions. When you click **OK**, VISUAL places the quantity into the purchase window automatically and then into the purchase order.

Use the Material Planning Window to net your on-hand materials and plan orders to meet demands. Material Netting is the process of comparing demand and supply at given points and projecting a net balance and possible exceptions. An exception is a condition that may require an action by you, such as a stock out, and may also be phrased as a suggestion of action to take.

You can view these four classes of information in the window:

Part Information – The Material Planning Window works with one part at a time. The top section shows all of the basic material planning and availability information for the selected part. You cannot modify this information.

Demand Information – The left-hand columns of the table show information on demand orders. A demand order is either a work order or a customer order that causes a requirement for the current part. Note that when a demand order is a work order, the demand is actually caused by a specific operation of the work order. If multiple operations require the same material, each one is a separate requirement.

Supply Information – The right hand columns of the table show information on supply orders. A supply order is a purchase order or work order that produces a supply of the part.

Netting Information – VISUAL displays and aligns supply and demand orders based on the netting options you select. The Projected Quantity, Exception, and Suggested Release columns then display the net quantity on-hand, any exception message, and a suggested release date for a new supply order.

Standard Mode and Advanced Mode

If you are licensed to use repetitive manufacturing, you have access to the Advanced Mode of the Material Planning Window. Otherwise, you can use the Standard Mode of the Material Planning Window.

The primary difference between Advanced Mode and the Standard mode is the way demand and supply information is displayed. In the Standard Mode, each order that generates demand or supply is displayed on a line in the table. In the Advanced Mode, the orders are grouped into time “buckets” that you specify. You can open these buckets to view individual orders.

The Standard Mode also offers more ways to procure materials directly from the planning window. In addition to creating planned orders, you can also place standard work orders, purchase orders and interbranch transfers directly from the Standard Material Planning Window.

The Advanced Material Planning Window offers additional forecasting features. You can view forecasted requirements directly in the Advanced Material Planning Window.

In this chapter, features of the Standard Mode are described first.

Starting the Material Planning Window

To access the Material Planning Window, select **Inventory**, **Material Planning Window**.

Setting Up the Material Planning Window

Use the options in the View menu and the Options menu to customize the appearance of the Material Planning Window and to specify which information is shown.

The options described in this section apply to both the Standard Material Planning Window and the Advanced Material Planning Window except where noted.

Using View Menu Options

Use the options in the View menu to determine which information is displayed in the table.

The options on the View menu are divided into groups separated by lines. In some of these groups, you can select multiple options. In other groups, you can select only one option.

Selecting Status Options

Use the Status selections to specify the status of the documents displayed in the table. You can select more than one status. The Show Released Status option is selected by default. You cannot clear this selection.

To select statuses, select the View menu, then select the status to view. A check mark is placed next to your selection and indicates that documents with the selected status are displayed in the table. To clear the check mark, select the status again. The check mark is removed.

Selecting Detail Quantities

This option applies to the Standard Material Planning Window only.

Select this option to view additional demand and supply quantity information. When you select the Detail Quantities option, these quantity columns are displayed for demand orders:

Total Quantity Required – The total demand quantity from the order is displayed.

Total Quantity Issued – The total quantity previously issued to the order is displayed.

Qty Required – The remaining quantity to be issued is displayed.

These quantity columns are displayed for supply orders:

Qty Ordered – The total quantity from the order is displayed.

Qty Received – The quantity previously received for the order is displayed.

Net Qty Due – The remaining quantity due is displayed.

If you clear the Detail Quantities option, then only the Qty Required and Net Qty Due columns are displayed.

Selecting a Netting Method

Select the method to use to net supply and demand quantities. Select one of these options:

Net Using MRP Rules – Select **View**, **Net Using MRP Rules** to independently sequence demand and supply orders by date and align them whenever possible.

This produces a picture of the status of each demand order, and how you must adjust its aligned supply order to meet the demand. Exceptions indicate the number of days a supply order is early or late in satisfying its associated supply order.

You may find this method easier to work with for materials that you generally purchase or fabricate for specific jobs, because the focus is on each demand and what must be done to the corresponding supply order to meet it.

If you select this option, then the quantity displayed in the Projected Quantity column is the on-hand quantity after you have received a supply order and the demand order has consumed its requirement from the supply order and/or any existing on-hand balance.

Net by Date – Select **View**, **Net By Date** to sequence demand and supply orders together by Date Required and Due Date. They are only aligned if they fall on the same date.

Netting by date produces a picture of available quantity on each consecutive date. Exceptions indicate if there is a stockout or overstock condition on a given date and suggest dates to release new supply orders.

Because the focus is on each day's total projected on-hand quantity versus demand, you may find netting by date easier to work with for materials that you maintain as inventory and issue as needed.

If you select this option, then the quantity displayed in the Projected Quantity column is the on-hand quantity at the "end of the day," after you have received all supplies and met demands.

Selecting Quantities to Net

To determine the quantity to use as the starting inventory quantity, use these options:

Net Using Nettable Qty – Select **View**, **Net Using Nettable Qty** to use the nettable quantity of the part as the starting inventory value when netting is started. If you select this option, then the starting inventory values that are displayed in the Material Planning Window match the starting inventory values used by MRP. Nettable quantity is the sum of the quantity for all locations in the PART_LOCATION table for the part, warehouse, and Site ID selected in the Material Planning Window. Quantities in Unavailable and Transit locations are not considered in the calculation. If you select this option, then the Net Using Available Qty option is unavailable.

Clear the Net Using Nettable Qty setting to use the on-hand quantity of the part as the starting inventory value. If you use the on-hand quantity, then quantities in all warehouse location are considered regardless of the location's status.

Net Using Available Qty – Select **View**, **Net Using Availability Qty** to deduct On Hold quantities from the On Hand quantity as the starting inventory value.

Deduct Safety Stock – Select **View**, **Deduct Safety Stock** to deduct the Safety Stock for the part from the quantity used as the starting inventory value. Specify the safety stock quantity in Part Maintenance. For more information, refer to “Specifying Planning Information” on page 3-11 in this guide.

Selecting Exception Information

This option applies to the Standard Material Planning Window only.

Use the Show Exception Severity option on the View menu to choose the exception information to view.

If you select Show Exception Severity, then these columns are displayed:

Issue Late – The number of days that the issue of materials and services for the order is late is inserted.

Order Late – The number of days that the order is late is inserted.

Rls Late – If an order has not been released, the number of days after the date specified in the Rls Date column is inserted.

Sugg Rls Late – If an order has not been released, the number of days after the date specified in the Suggested Release column is inserted.

Order Proj Early – The number of days by which an order is completed early is inserted.

Order Proj Late – The number of days by which an order is completed late is inserted.

Stock Out – If you do not have enough quantity to meet demand, the quantity required to meet demand is inserted.

Over Stock – If your projected quantity exceeds the demand, the excess quantity is inserted.

Rel Near – If the release date for a supply order with no aligned demand order is three or fewer days away, a check mark is inserted in this column.

Sugg Rel Near – If the suggested release date for a supply order with no aligned demand order is three or fewer days away, a check mark is inserted in this column.

If you clear the Show Exception Severity check mark, then the Exceptions column is displayed. An exception message is inserted in the Exceptions column to describe the issue. These exception messages are used:

Overstock – There is a projected positive on-hand balance, and the Net Quantity Due for the supply order exceeds the Quantity Required for the aligned demand order. Or, there is no aligned demand order.

Stockout – There is not enough projected on-hand stock from previous supply orders to meet the Quantity Required of the demand order.

Order Late – The Due Date of the supply order is earlier than the current date, meaning the order is late. This exception is shown only for supply orders with no aligned demand orders. This overrides any other exception that might appear for the order.

n Early / n Late – The Due Date of the supply order is n days earlier or later than it needs to be to meet the aligned demand order. Note that this does not provide information on quantity. The quantity due may not be enough to satisfy the order. This exception message is used only if you select the Net by MRP Rules option in the View menu.

Expedite – This indicates that the requirement date for the demand order has already passed but the aligned supply order's due date is in the future. This exception message is used only if you select the Net by MRP Rules option in the View menu.

Due on Time – The Due Date of the supply order matches the requirement date of the demand order, but projected quantity is not enough to satisfy the demand. This exception message is used only if you select the Net by MRP Rules option in the View menu.

Rel. Upcoming / Rel. Now / Rel. Past Due – VISUAL suggests a release date for a new supply order due on this date, because the projected balance for the current date is not sufficient to meet the demand order for the date. This only occurs if there is not an aligned supply order; otherwise, an Early, Late, or Due On Time exception is displayed.

Rel. Past Due indicates that the suggested release date has already passed. Rel. Now indicates that the suggested release date is the current date. Rel. Upcoming indicates the suggested release date is within 3 days from the current date.

If suggested release date is more than 3 days away, the Stockout exception is displayed.

Selecting a View by Warehouse Option

To display the Warehouse ID field, select the View by Warehouse menu option. When you select this option, you can view the information in the table on a warehouse-by-warehouse basis. To hide the Warehouse ID field, clear the View by Warehouse menu option. When you clear this option, you cannot select an individual warehouse to view.

Viewing Planned Orders

If you generated orders using Material Requirements Planning, you can choose to view or hide the orders in the table. To view the orders, select the Show Planned Orders menu option. To hide the order, clear the Show Planned Orders menu option.

Viewing Allocations

View allocation links in a separate line item table within the Material Planning window.

To view allocations, select **Show Allocations** from the View menu or press the CTRL+A keys.

The line item table contains the following columns.

Demand Site ID – The site in which this demand allocation was created.

Demand Type – The type of demand source to which you have allocated supply. For example, CO stands for Customer Order.

Demand Order ID – The ID of the order to which you have allocated supply

Demand Sequence Number – The line number of the order.

Demand Number – If the demand link is to a work order material operation demand, the demand sequence number of the operation demand is displayed here.

Supply Site ID – The site in which this supply allocation was created.

Supply Type – The type of supply you allocated to the order line. For example, **I** stands for inventory; PO for purchase order.

Supply Order ID – The ID of the supplying order.

Supply Sequence Number – The line number of the supplying order. If you allocated from only one line, only the number one is displayed.

Supply Number – The number of the supply link.

Warehouse ID – The Warehouse ID of both the supplying and demanding order. Both must be the same in order for VISUAL to allow allocations to or from order lines.

Allocated Quantity – The quantity allocated to the order line from the supplying order.

Received Quantity – The quantity of the order line you have received.

Issued Quantity – The quantity of the order line you have issued.

Supply Mode – The mode of supply.

User ID – The ID of the user who entered the order and committed the allocations.

Using the Option Menu

Use the Option menu to set up color coding for the table and to specify how many days are in a week for lead time. You can also set up filters for the warehouse drop-down list. For more information, refer to “Selecting a Warehouse” on page 9-15 in this guide.

Setting Up Color Coding

You can color-code columns to more easily locate data related to Demand, Supply, Projected Quantity, and Exceptions. The system displays color coding on the Standard Material Planning Window only.

To assign colors:

1. Select **Options**, **Color Preference**.
2. In the Set Color dialog box, choose the category to which to assign a color.
3. In the Color dialog box, choose the color to represent the category.
4. Click **Ok** to select a color and return to the Set Color dialog box.

5 Repeat the process until you have set the colors for the categories you want.

6 To apply the colors to the Advanced Material Planning window, select the **Apply to Advanced Mode** check box. If you select this check box, the colors you select are applied to the Advanced Material Planning window grid, the Master Production Schedule dialog, and the Planning Period Details dialog. Rows that shows totals are presented in a slightly darker color than the color that you select.

7 Click **Ok**.

The colors you specified are displayed in the window.

Click the Restore Defaults button to remove your custom colors and return the Material Planning Window to its default color scheme. The default scheme is no color for each category.

Defining Lead Time Weeks

A part's lead time is considered when suggested release dates are formulated. To calculate suggested release dates, you must specify how many days are in week for lead time.

To specify this information:

Select **Options**, **Leadtime Expressed As**, then select the number of days in a lead time week. You can select a value from four days to seven days.

If you change the lead time setting, select **File**, **Refresh** to update the information in the table.

Selecting a Part

You can open multiple windows in the Material Planning Window. Within each window, you can select one part to view. You can view part information for a single warehouse or for multiple warehouses. For more information, refer to “Selecting a Warehouse” on page 9-15 in this guide.

To select a part:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to view. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part ID to view.

Using the Search Feature

Use the Search feature to build a list of Part IDs with which you can work based on a combination of criteria you specify.

To build a search list:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use in the search. You can conduct a search within a single site only. If you are licensed to use a single site, this field is unavailable.
2. Click the **Search** button.
3. Click the **Warehouse ID** arrow and select the warehouse to search.
4. To include non-stocked parts that have excess quantity, select the **Non-stocked parts with excess qty** check box.
5. Enter search information into the fields in the Part Qualifications section:

   Part ID – The Part ID for the part.

   Description – The description of the part.

   Planner User ID – The ID for the part planner.

   Buyer User ID – The ID for the person responsible for buying the part.

   Planning Leadtime – The number of days required to order and receive the part

   On Hand Quantity – The total quantity of the parts in all locations, including those on hold.

   Primary Warehouse ID – The primary Warehouse ID for the part.

   Preferred Vendor ID – The Preferred Vendor ID for the part.

   Manufacturer – The manufacturer of the part.

   Manufacturer Part ID – The manufacturer’s ID for the part.

   Product Code – User defined code used to group parts, usually used for parts that are sold as products.

Commodity Code – User defined code used to group parts, usually used for purchased materials. You can search and sort on this field.

Fabricated – Select whether the part must be fabricated or not. If it does not matter, select the **Don't Care** option.

Purchased – Select whether the part must be purchased or not. If it does not matter, select the **Don't Care** option.

MRP is Required – Select whether MRP is required or not. If it does not matter, select the **Don't Care** option. Select **Required** to examine the netting situation before running MRP.

Note: Like most VISUAL strings, queries are case-sensitive. You cannot combine wildcards with relational operators.

Planned orders rls – To use a different number of days than the standard three for Release Near and Suggested Release Near dates, select the **Release Near** and **Suggested Release Near** check boxes and enter the appropriate number of days in the **Planned orders rls w/in** field.

You can only use the **Release Near***,* **Suggested Release Near***, and* **Planned Orders Released Within** *functions if you have selected to use VISUAL's* **Net by Date** *option. For more information, refer to the "Using Material Netting Options" section in this chapter.*

6 Select from the following check boxes to filter your search:

Include parts with shortages only – Select this option to search for parts with a negative on-hand quantity.

Exclude obsolete parts – Select this option to omit obsolete parts.

Parts with material requirements dated between... – Select this option to view material requirements between dates that you specify. When you select this option, the Starting and Ending date fields become active. Enter the dates you would like to use, or click the Calendar buttons to select dates.

Parts with customer orders dates between... – Select this option to view parts listed on customer orders within dates that you specify. When you select this option, the Starting and Ending date fields become active. Enter the dates you would like to use, or click the Calendar buttons to select dates.

7 To include any of the attributes you have specified, click the **Part may have any of these attributes** option. To require that all of the attributes you have specified are met, click the **Part must have all of these attributes** option.

8 To include or exclude parts with MRP exceptions, click the **MRP Exceptions** check box.

When MRP is run, if any exception messages are generated for a part, it is marked as have MRP Exceptions: depending on your search criteria, VISUAL includes or excludes those qualifying parts.

9 In the Exception Qualifications (Last MRP Run) section, enter information into any of the following exception qualifications fields:

Issue is Late by – The number of days the issue of the part needed for the work order is late.

Order is Late by – The number of days the order that includes this part is late.

Release is Late by – The number of days that an unreleased order with this part is late. (This order should have been released X days ago.)

Sugg Release is Late by – The number of days that an unreleased order with this part is late, based on VISUAL's generated release date.

Order Projected Early by – The number of days that any order with this part will be early. (Find any part that has orders that will be early by X days.)

Order Projected Late by – The number of days that any order with this part will be late. (Find any part that has orders that will be late by X days.)

Stockout by – The number of pieces at which this part reaches stockout quantity.

Overstock by – The number of pieces at which this part reaches overstock quantity.

Release Near – To include orders with a release date within three days in the search results, select the **Release Near** check box.

Sugg Release Near – To include orders with suggested release dates within three days in the search results, select the **Sugg Release Near** check box.

10 To begin the search, click the **Search** button.

The results are displayed in a browse dialog box.

11 To select one of the parts so that the information is displayed in the Material Planning Window, double-click its line or click the **View Part** buttton.

12 To further browse the list of parts by entering a SQL statement, click the SQL menu.

For more information, refer to the "Browsing by SQL Statement" section in the "Concepts and Common Features" chapter.

Using Wildcards and Relational Operators

You can use wildcards in your searches.

There are two types of wild card you can specify: % and _

% – Use the % character to indicate "any quantity" of "any character" in the position in which you place it.

_ – Use the _ (underscore) character to indicate exactly one of any character in the position in which you place it. You must match any other characters exactly.

Consider the following examples for a Part ID, where the following actual Part IDs exist: B12, B1241, B1241-A, B1242, B2242, BC2241

Query	Matches Parts	Matches
B1241	Must exactly match "B1241"	B1241
B12%	Starting with "B12"	B12 B1241 B1241 B1242

Query	Matches Parts	Matches
%12_ _	Starting with any string, containing “12,” and ending with two more characters	B1242 BC1241
B_241	Starting with “B”, having any second character and ending in 242	B1242 B2242

You can also use relational operators in front of an entry.

> – Greater than

< – Less than

>= – Greater than or equal to

<= – Less than or equal to

The most common use of operators is to query on leadtime and quantity on hand. For instance, <10 would mean less than 10 days of leadtime if placed in the Leadtime field.

Saving Query by Example

All of the Part Qualifications entry fields in the Search dialog box support the Query by Example selection method, which allows you to use wildcards and relational operators.

If you frequently use the same search criteria, you can save time by saving your search entries.

Because some searches may contain multiple complex search criteria, click the **Save QBE** button to save your searches.

The next time to use the Search dialog box, your saved entries appear in their respective fields.

Navigating Through Parts

After you have called a part into the Material Planning Window, you can navigate among all parts in the search list by using the left-arrow and right-arrow buttons to the right of the Part ID button.

Click the right-arrow toolbar button to view the next part in the search list.

Click the left-arrow toolbar button view the previous part in the search list.

When you view the first part, VISUAL moves the part list behind the Material Planning Window, but it remains open. You can always return to this list window to select another part, or to print a report

Using Auto Seek to Find Parts

You can also use the Auto Browse function available in the Options menu to type in the first few letters of a part to get a list of parts with the same beginning.

For example, typing W in the Part ID field of the Material Planning Window and moving to another field causes VISUAL to populate the window with the first part beginning with W.

“Jumping Up” to the Parent Part ID

Material Planning allows you to view parent Part IDs for a material requirement in a separate Material Planning Window.

1 Select a line containing a demand order that is a work order.

You cannot select a customer order, because there is not a parent part associated with that type of demand.

2 Click the **Jump Up** button.

A separate Material Planning Window opens with the parent part information for the selected requirement. If you are licensed to use multiple sites, the engineering master is the master you specified for use in the site. The two Material Planning Windows are tiled in the main window with the original displaying above the new window.

You can “Jump Up” again in either window.

VISUAL continues to tile windows horizontally.

3 When finished with the new window, click the **Close** button in the top right corner of the child window.

Selecting a Warehouse

Use the Warehouse arrow to limit the information shown in the Material Planning Window to a single warehouse or to universally planned warehouses only. Use the Warehouse Filter dialog box to limit the warehouses that are shown in the drop-down list to a certain type.

To display the Warehouse ID field, select **View**, **View by Warehouse**.

To select an individual warehouse, click the **Warehouse ID** arrow and select the warehouse to view. To view all warehouses, select All Warehouses from the drop-down list. To select all universally planned warehouses, select Universal from the drop-down list.

If you are licensed to use multiple sites, the warehouse IDs displayed in the drop-down list are filtered by the site you selected. Only those warehouses belonging to the site ID you selected are shown.

To limit the warehouses that are shown in the Warehouse ID drop-down list, click the **Warehouse Filters** button.

Select these options:

Exclude MRP Exempt Warehouses – Select this check box to remove MRP exempt warehouses from the drop-down list. You can designate a warehouse as MRP Exempt in Warehouse Maintenance. For more information, refer to “Warehouse Maintenance” on page 4-1 in this guide.

Project Warehouses Only – This check box is active only if you have access to Project/A&D functions. Select this check box to view only project-related warehouses in the drop-down list. If you select this check box, the Program Manager drop-down list becomes available.

Program Manager – Click the **Program Manager** arrow to select the program manager whose project warehouses you would like to view. This drop-down list is available only if you have access to Project/A&D functions.

Active – Click the **Active** check box to apply the filter. Clear the check box to remove the filter and view all warehouses in the warehouse drop-down list.

Viewing the Standard Material Planning Window

After you have selected a Part ID, the header displays general information for the part. The table displays current demand and supply for the part.

Viewing General Information for a Part

The header displays this general part information:

Fabricated – The Fabricated check box is selected if the part is designated as a fabricated part in the part master.

Purchased – The Purchased check box is selected if the part is designated as a purchased part in the part master.

Stocked – The Stocked check box is selected if the part is designated as a purchased part in the part master.

Auto Issue – This check box is selected if you selected this setting in Part Maintenance. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Inspection Required – This check box is selected if you selected this setting in Part Maintenance. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Piece Tracked – This check box is selected if a part is inventoried using piece tracking.

Obsolete – The Obsolete check box is selected if the part is designated as an obsolete part in the part master. Obsolete parts are inactive inventory parts. Before you can declare a part obsolete, VISUAL checks to make sure the part has no outstanding transactions reported against it. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Drawing ID – The ID of the drawing number or file of the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Drawing Revision Number – The drawing revision number of the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Planner – The ID of the planner responsible for the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Buyer – The ID of the buyer responsible for the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Active ECN – If the part, either as subject of a work order or a engineering master, has an Active Engineering Change Notice associated to it. See “Manufacturing Window” on page 3-1 of the Manufacturing guide.

Engineer ID – The Engineer ID that you assigned to the part in Part Maintenance. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Unit of Measure – The part’s default unit of measure from Part Maintenance. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Product Code – The product code that you assigned to the part in Part Maintenance. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Commodity Code – The commodity code that you assigned to the part in Part Maintenance. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Order Policy – The order policy for the part that you set in Part Maintenance. One of these is displayed: Not Planned, Discreet, Period Supply – # of days, Fixed EOQ, Master Schedule. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Leadtime – The number of days that you need to replenish the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Safety – Extra amount of a part that you plan to keep in excess of real demand to cover fluctuations in demand caused by unplanned orders, scrap, or other events.

Warehouse on Hand – The quantity of the part in the warehouse that is available for use.

Warehouse on Hold – The quantity of the part in the warehouse you have placed on Hold.

Primary Warehouse – The default primary warehouse of the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Primary Location – The primary location of the part. The primary location must be a location in the Primary Warehouse. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Total On Hand – The total quantity that is stored in all locations in the selected warehouses.

Total On Hold – The total quantity that is stored in locations that are set to On Hold or Unavailable.

Netable – The total quantity that is stored in all locations in the selected warehouses, minus the quantity that is stored in Unavailable locations.

Total Unit Cost – The material cost of the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Preferred Vendor ID – The ID of the vendor that you prefer provide the part or a service on the part. For more information, refer to “Part Maintenance” on page 3-1 in this guide.

Min/Max/Mult – For MRP purposes, this is the multiple of the min/max order quantity to use for planned orders. Order quantities should be divisible by this number. If a part has an order policy of Master Schedule, VISUAL generates planned orders with this value as a guide. For a part with a Multiples of value of 500 and dependent demand for a period equaling 435, VISUAL produces an MRP quantity of 500 rather than a matching quantity of 435. Without a Multiples of value in a part master, MRP always equals 435, the same as Dependent Demand.

Minimum Order Qty – Minimum suggested quantity used by MRP when placing a planned order (when MRP is implemented). VISUAL uses this number as a material planning guide. An entry of zero means there is no minimum. This number does not restrict other types of orders and is only used by MRP when creating planned orders. You set this value in Part Maintenance.

Maximum Order Qty – Maximum quantity used when processing a planned order. This number does not restrict other types of orders and is only used by MRP. An entry of zero means there is no maximum. You set this value in Part Maintenance.

IBT Transit – This field is displayed only if you select a warehouse. If you have shipped quantities for interbranch transfers, the quantity is inserted in this field. This quantity is not available for netting.

Leadtime Buffer (in days) – For stocked materials that you purchase, the lead-time buffer is a generous allowance of time to comfortably obtain more materials (including time to place the purchase order).

Min Leadtime (in days) – For stocked materials that are purchased the minimum lead-time buffer is the shortest time in which you could obtain more.

Demand Horizon (in days) – The number of days from the current date to examine for demand.

Latest Buffer Status – The current status of the buffer for this part.

Emergency Stock % – The current setting for the emergency stock level for this part.

Replenishment Level – The current replenishment level for this part.

Understanding the Line Item Table

In Standard mode, these columns are displayed in the Material Planning Window line item table. After you have selected a part and the information for that part appears, refer to these definitions as a general reference as you carry out procedures.

Demand Information – The table displays this information about demand orders:

Demand Warehouse – The warehouse supplying the part for an order.

Date Required – The date by which you need to complete the order. If the order is late, the date is displayed in red.

Total Quantity Required – The total quantity required for the order.

Quantity Issued – The quantity that has been issued to an order.

Quantity Required – The remaining quantity required to fill the order.

Status – The status of the order.

Peg To – The ID of the demand transaction. If the transaction has multiple links, more than one ID is displayed. If one order ID is displayed, click in the cell and then click the drill-to button to open the order in the appropriate application.

Order IDs are preceded by these codes:

C – The order is a customer order.

WH – The order is an interbranch transfer.

If the order ID is not preceded by a code, then the order is a work order.

If there is an asterisk after the work order ID, then the work order is for a rate-based part. A rate-based part is a fabricated part that you produce in predictable daily quantities. See “Rate-based Parts” on page 5-1 of the Manufacturing guide.

Customer ID – For customer orders, the ID of the customer who placed the order.

Customer Name – Optionally, you can show the name of the customer who placed the order. To show this field, select **Options**, **Configure Table** and include the colCUSTOMER_NAME column.

Internal Demand – If the purchase order was placed by an internal customer, the ID and line number of the associated internal purchase order is displayed.

Internal Demand Stat – The status of the internal demand is displayed. The status of the internal purchase order is displayed in this field, except in these cases:

- If the purchase order line has a status of Closed and no quantity has been received on the line, then Closed is displayed in the Internal Demand Stat column
- If the purchase order has a status of Closed or Canceled and the quantity on the line is partially received, then Received is displayed in the Internal Demand Stat column. At least one unit must be received for this status to be used.
- If the purchase order line has a status of Closed and the quantity on the line is partially received, then Received is displayed in the Internal Demand Stat column. At least one unit must be received for this status to be used.
- If the purchase order has a status of Firmed or Released and the quantity on the line is partially received, then Partial is displayed in the Internal Demand Stat column. At least one unit must be received for this status to be used.

Demand Dimensional Info – If this is a piece tracked part, the number of whole pieces required to meet the demand and the dimensions of the part are displayed.

Demand Dimensional Info no Scrap – If the demand transaction is a work order, the number of whole pieces required without factoring in scrap percentages is displayed. The dimensions of the part are also displayed.

Demand User-defined Fields – Optionally, you can show the user-defined fields from the demand order. The user-defined information that is displayed depends upon the type of demand order. For work orders, the user-defined fields from the Header card are displayed. For sales orders with delivery schedules, the user-defined fields from the delivery schedule are displayed. For sales orders without delivery schedules, the user-defined fields from the sales order line are displayed. To show these fields, select **Options**, **Configure Table** and include the colREQD_USER_1 through colREQD_USER_10 columns.

Want Date – Optionally, you can show the want date for work orders that generate demand. If you display this column, the Want Date specified on the work order header is inserted in the column. The Want Date specified on the header card of the work order is used. If a date is not specified on the header card, then the standard infinity date is displayed. If the demand transaction is not a work order, then the Want Date column is blank. To show this column, select **Options**, **Configure Table** and include the colREQD_WANT_DATE column.

CO Promise Ship Date – Optionally, you can show the date that you promised to ship the order. This date is specified on the customer order. To show this column, select **Options**, **Configure Table** and include the colCO_PROM_SHIP_DATE column.

CO Promise Del Date – Optionally, you can show the date that you promised to deliver the order. This date is specified on the customer order. To show this column, select **Options**, **Configure Table** and include the colCO_PROM_DEL_DATE column.

Projected Quantity – The quantity remaining in your inventory after you fill the order. This number can be negative. Deficits are displayed in red.

Supply Information – The table displays this information about supply orders:

Moved Quantity – Information is displayed in this field only if you are licensed to use projects/ A&D functionality. If you transferred excess supply from a planned order, the quantity transferred is displayed.

Supply Warehouse – The warehouse expecting supply of the part.

Quantity Ordered – The total quantity of the part ordered.

Quantity Received – The quantity of part that has been received.

Net Quantity Due – The remainder of quantity to be received.

Due Date – The date on which the order is expected to be received.

Release Date – The date the order was released.

Order ID – The ID of the supply transaction. Transaction IDs are preceded by these codes:

P – The supply is a purchase order.

WH – The supply is an interbranch transfer.

PL – The supply is a planned order.

If the order ID is not preceded by a code, then the supply is a work order.

If there is an asterisk after the work order ID, then the work order is for a rate-based part. A rate-based part is a fabricated part that you produce in predictable daily quantities. See “Rate-based Parts” on page 5-1 of the Manufacturing guide.

You can open the transaction displayed in the Order ID field provided that only one order ID is displayed and that the order is not a planned order. To open the transaction, click in the cell and then click the drill-to button.

Vendor ID – The ID of the vendor on the purchase order is displayed.

Vendor Name – Optionally, you can show the name of the vendor on the purchase order. To show this field, select **Options**, **Configure Table** and include the colVEDNDOR_NAME column.

Internal Supply – If the sales order is an internal sales order, the ID and line number of the associated internal sales order is displayed.

Internal Supply Stat – The status of the internal supply is displayed. The status of the internal sales order is displayed in this field, except in these cases:

- If the sales order line has a status of Closed and no quantity has been shipped on the line, then Closed is displayed in the Internal Supply Stat column
- If the sales order has a status of Closed or Canceled and the quantity on the line is partially shipped, then Shipped is displayed in the Internal Supply Stat column. At least one unit must be shipped for this status to be used.
- If the sales order line has a status of Closed and the quantity on the line is partially shipped, then Shipped is displayed in the Internal Supply Stat column. At least one unit must be shipped for this status to be used.
- If the sales order has a status of Firmed, Released, or Hold and the quantity on the line is partially shipped, then Partial is displayed in the Internal Demand Stat column. At least one unit must be received for this status to be used.

Issue Late – The number of days that the issue of materials and services for the order is late. This field is displayed if you have selected the Exception Severity option available on the View menu.

Order Late – The number of days the order is overdue. This field is displayed if you have selected the Exception Severity option available on the View menu.

Release Late – The number of days the release of an order is overdue. The current date is compared to the date in the Due Date field to determine this value. This field is displayed if you have selected the Exception Severity option available on the View menu.

Confirmed Ship Date – The date that the vendor sent the items to you. This information is specified manually on the purchase order; it is not read from an electronic document, such as an advanced ship notice. If a confirmed ship date was specified on the purchase order line, then the date from the line is displayed. If a confirmed ship date was specified on the purchase order header only, then the date specified on the header is displayed. The date is informational only.

Suggested Release Late – The number of days the release is overdue when compared to the suggested release date. The current date is compared to the date in the Suggested Release Date field to determine this value. This field is displayed if you have selected the Exception Severity option available on the View menu.

Order Projected Early – The number of days before the due date an order will be completed. The suggested release date is compared to the due date to determine this value. This field is displayed if you have selected the Exception Severity option available on the View menu.

Order Projected Late – The number of days after the due date the order will be completed. The suggested release date is compared to the due date to determine this value. This field is displayed if you have selected the Exception Severity option available on the View menu.

Stock Out – The quantity of part needed to meet current demand. This field is displayed if you have selected the Exception Severity option available on the View menu.

Over Stock – The quantity of part in excess of the amount required to meet demand. This field is displayed if you have selected the Exception Severity option available on the View menu.

Supply Dimensions Info – If this part is supplied to you in larger pieces—for example, sheet metal—the dimensions as supplied to you appear.

Supply User-defined Fields – Optionally, you can show the user-defined fields from the supply order. The user-defined information that is displayed depends upon the type of supply order. For work orders, the user-defined fields from the Header card are displayed. For purchase orders with delivery schedules, the user-defined fields from the delivery schedule are displayed. For purchase orders without delivery schedules, the user-defined fields from the purchase order line are displayed. To show these fields, select **Options**, **Configure Table** and include the colDUE_USER_1 through colDUE_USER_10 columns.

Exception Information – This exception information is displayed:

Exception – The most important exception is displayed in this field. This field is displayed if you have cleared the Exception Severity option available on the View menu.

Suggested Release – The date on which VISUAL suggests that you release the order. This is done by subtracting the Lead Time for the part (purchased or fabricated) from the required date for the demand.

For a purchase order, this is the date you should place the order for the part. For a work order, this is the date you should release the order.

Suggested Release Date uses the part lead time to back off a release date for a work order. You should consider this when setting the lead time for a fabricated part. VISUAL does not examine the Concurrent Schedule to determine whether the lead time can be met with the currently planned shop load. If you choose to place a work order based on this date, you should then use Check Availability in the Manufacturing Window to assess whether this produces a finish date that meets the demand requirement date. You should then use Schedule Current Work Order, or run the Concurrent Scheduler, to add the new work order into the schedule

Schedule Start – If an order has been scheduled, the date that work on the order is schedule to start.

Schedule Finish – If an order has been scheduled, the date that work on the order is scheduled to be complete.

Rel Near – If the release date for a supply order with no aligned demand order is three or fewer days away, a check mark is inserted in this column. This field is displayed if you have selected the Exception Severity option available on the View menu.

Sugg Rel Near – If the suggested release date for a supply order with no aligned demand order is three or fewer days away, a check mark is inserted in this column. This field is displayed if you have selected the Exception Severity option available on the View menu.

Generating Supply and Demand Orders

Supply and demand orders are generated when you enter certain transactions. Demand orders are generated when you enter these transactions:

- Customer Orders
- Interbranch Transfers
- Work Orders (generate a demand order for their component material requirements)

Supply orders are generated when you enter these transactions:

- Purchase Orders
- Interbranch Transfers
- Work Orders (generate a supply order for the finished good)

In addition, you can generate demand orders using the Master Production Schedule. If a part is master scheduled, you can set up the schedule to determine when a part should be purchased or made. If you are licensed to use multiple sites, you create master production schedules on a site-by-site basis. If you are licensed to use a single site, you create master production schedules on an enterprise-wide basis.

You can generate both supply and demand orders using Material Resource Planning (MRP). When you run MRP, work orders are generated to supply outstanding demand. These work orders generate their own demand orders for the material requirements that make up the bill of materials. MRP also generates supply orders for parts for which you have defined a master production schedule. Any order generated with MRP is prefixed by PL in the Material Planning Window.

If you are licensed to use multiple sites, you run MRP on a site-by-site basis. If you are licensed to use a single site, you run MRP on an enterprise-wide basis.

Using Master Production Schedules in Standard Mode

Master Production Schedules have two main uses:

- Setting and maintaining a forecast of demand for the current part.
- Setting and maintaining the part's master production schedule for MRP to use when generating planned orders.

To perform both of these functions, use the Master Production Schedule dialog box.

If you are licensed to use multiple sites, set up master production schedules on a site-by-site basis. If you are licensed to use a single site, set up master schedules on an enterprise-wide basis.

If the Order Policy for this Part ID is not "Master Schedule," you are warned before you can continue. You can set up a forecast and master production schedule for any part, but planned orders are generated only if the part's order policy is "Master Schedule." Set order policies for parts in Part Maintenance. For more information, refer to "Specifying Planning Information" on page 3-11 in this guide.

You can define master schedules for individual parts and for individual customers.

The process for defining master production schedules in Standard Mode is different than the process for defining master production schedules in Advanced Mode.

Defining Master Production Schedules for Parts

A forecast consists of a list of periods and predictions of quantity demanded for each period. You have complete flexibility in choosing the sizes of your forecast periods. The Forecast Quantity specified on a line applies to the period starting with the Forecast Date for the line, and ending with the Forecast Date on the next line. You can define and maintain the forecast manually or you can auto-fill the forecast based on parameters you select.

To define a master production schedule for a part:

1. If you are licensed to use multiple sites, in the Material Planning Window click the Site ID arrow and select the site ID to use. If you are licensed to use a single site, this field is unavailable.
2. Optionally, click the Part ID browse button and select the part for which to define a master production schedule. If you do not select a part ID that is defined as a master scheduled part, you are warned.

   You can also select a part directly in the Master Production Schedule dialog box.
3. Select **File**, **Master Production Schedule**.
4. If you selected a part in the Material Planning Window before accessing the Master Production Schedule dialog, the part ID is inserted in the Part ID field. To select a different part ID, click the **Part ID** browse button and select the part whose master production schedule you are maintaining. The Part ID browse is filtered to display only part IDs that are master scheduled. If you are licensed to use multiple sites, the part ID browse is also filtered to display parts that belong to the selected site.

   You can also manually enter a part that is not master scheduled. You are warned that the selected part is not master scheduled, but you are allowed to continue.
5. In the Warehouse ID field, click the arrow and select the warehouse for the plan. You can select a single independently planned warehouses, or select **Universal** to plan for all universally planned warehouses.

   If you select Universal, a Warehouse ID is not saved with the Master Schedule and forecast. If you select an independently-planned warehouse, the Warehouse ID is saved with the Master Schedule and forecast. This holds true in the standard Material Planning Window.
6. Click **Insert**.
7. Specify this information in the table:

   Forecast Date – Specify the forecasted date of demand.

   Forecast Qty – Specify the quantity to forecast.

   Schedule Date – Specify the schedule date. The day of the week is inserted in the Day of Week column.

   Schedule Quantity – Specify a schedule quantity. The quantity is inserted in the ATP column. The Cumulative ATP column is calculated by adding the ATP quantity and the On-hand quantity.

8 Click **Save**.

The forecast is saved and the table is sorted by Forecast Date.

Auto Filling the Master Production Schedule

Use the **Fill Selected or All** command to generate forecast entries for a specified number of periods of fixed size.

To use Auto Fill to generate a forecast:

1 In the Auto Fill section, specify this information:

Schedule/Forecast – To auto-fill forecast information, click the **Forecast** option. To auto-fill schedule information, click the **Schedule** option.

Fill Quantity – Specify the fill quantity in the Fill Quantity field. The fill quantity is inserted in the Forecast Quantity column if you are generating forecast information or into the Schedule Quantity column if you are generating schedule information. The quantity is inserted for all forecast periods you are generating.

Week Begin – Click the arrow and select the week day on which the forecast begins.

Use the Week Begin day to determine the first date to generate. The next occurrence of that day after the current date is used for the first Forecast Date. For example, if today is 01/31/12, which is a Tuesday, and you specify a week begin of Monday, the first Forecast Date is 02/06/12.

Horizon (periods) – Specify the horizon or select the number of lines to fill.

There are two ways to control the number of periods generated:

- By specifying the horizon, you can control how many periods are generated.
- By selecting a number of existing lines to fill. If you select lines, the Horizon value is ignored.

Period Size (days) – Specify the period size in number of days. entries are created based on a number of equally sized periods. If you leave this field blank, a default period size of 7 days is used.

2 To generate the forecast entries, click the **Fill Selected or All** button.

If you did not select any lines:

If the table was empty, then Horizon + 1 new lines are shown in the table. For example, if you specified 5 as the Horizon, 6 lines are created. The forecast date of the first line is the next occurrence of the Week Begin after the current date. The other forecast dates are determined by adding the Period Size to each successive date.

If the table contained more lines than specified in the horizon, the Horizon value is ignored and new dates and quantities are calculated for all existing lines.

If you selected existing lines:

The Horizon value is ignored and new dates and quantities are calculated for all selected lines.

If the first entry in the table is one of the selected rows, then the Forecast Date of the first entry is determined as described above. Otherwise, the Period Size is added to the Forecast Date of the previous row to determine the Forecast Date of the first row. The other forecast dates will be determined by adding the Period Size to each successive date, and the Fill Quantity will be used for all Forecast Quantities.

3 Click **Save**.

After you save the forecast, the total Required Quantity for all unreleased, firm, and released demand orders in the period appears. Note that unreleased orders are included, and any quantity already issued to the requirement is not subtracted from the total. This quantity will be recalculated when the Master Production Schedule window is refreshed.

Specifying Customer Forecasts

Use the Customer Forecasts dialog box to define customer forecasts. Existing customer part forecasts may have been entered using VISUAL VMDI.

If you are licensed to use multiple sites, define customer forecasts on a site-by-site basis. If you are licensed to use a single site, define customer forecasts on an enterprise-wide basis.

To define customer forecasts:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

2 Select **Edit**, **Customer Forecast**.

3 In the header, specify this information:

Forecast ID – Specify the forecast ID.

Customer ID – Click the browse button and select the customer for whom you are creating the forecast.

Part ID – Click the part ID browse button and select the part you are forecasting.

Warehouse ID – Click the arrow and select the warehouse to use for this forecast. To use all universally planned warehouses, select **Universal**.

4 Either manually specify the forecast or use the auto-fill feature to create the forecast.

To manually specify the forecast, click Insert and specify this information:

Required Date – Specify the date the customer requires the part.

Quantity – Specify the quantity required by the customer.

Ref # – Specify a reference number for the transaction.

Forecast Date – Specify the forecasted date of demand.

To use auto-fill to create the forecast, specify this information, then click **Auto Fill**:

Fill Quantity – Specify the quantity required by the customer. This quantity is used in each line created in the table.

Week Begin – Click the arrow and select the week day on which the forecast begins.

Use the Week Begin day to determine the first date to generate. The next occurrence of that day after the current date is used for the first Forecast Date. For example, if today is 01/31/12, which is a Tuesday, and you specify a week begin of Monday, the first Forecast Date is 02/06/12.

Horizon (Periods) – Specify the horizon or select the number of lines to fill.

Period Size (Days) – Specify the number of days in each horizon.

Ref # – Specify a reference number for the transaction.

Forecast Date – Specify the forecasted date of demand.

5 Click **Save**.

Transferring Customer Forecasts to Part Forecasts

If a certain group of customers requires the same part, you can transfer individual customer production schedule forecasts to an overall part forecast. By doing this, your production staff need only concern itself with producing quantities of the part according to one forecast.

If you are licensed to use multiples sites, you can transfer customer forecasts to part forecasts within a single site only.

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is not available.

2 Select **File**, **Master Production Schedule**.

3 Click **Customer Forecasts**.

4 Specify this information:

Forecast ID – To specify a specific forecast to copy, click the arrow and select the forecast to use. When you select a forecast ID, the Part ID fields are not available.

From Part ID – To specify customer forecasts for particular parts, click the **From Part ID** button and select the part to use.

To Part ID – To select the last part for the transfer, click the **To Part ID** button and select the part to use.

Customer ID – To select the customer from whom you are transferring the forecast, click the **Customer ID** button.

Product Code – To copy forecasts for parts with a particular product code, click the **Product Code** arrow and select a Product Code from the list.

Start and End Dates – To specify a time period, click the Start and End calendar buttons and specify the date range to use. The default date range is a year.

Override Customers Default Warehouse – To override the default warehouse for the customer, select this check box.

5 In the Action section, specify the actions to take during the transfer:

Select the table into which to import the forecast:

Import to Forecast Table – To import the customer forecast to the Forecast (DEMAND_FORECAST) table, select the **Import to Forecast Table** option.

Import to Master Schedule Table – To import the customer forecast to the Master Schedule table, select the **Import to Master Schedule Table** option.

Import to Both – To import the forecast to both tables, select the **Import to Both** option.

Purge Prior Data – To delete existing forecast data entirely before importing new data, select the **Purge Prior Date** check box. This is only for the parts you selected for processing. If you clear this check box, VISUAL appends or replaces existing forecast entries.

Bucketless Import – To store forecast data using a bucketless method in which the quantity and date are explicitly stored, select the **"Bucketless" Import** check box. When the forecast appears it must be "reoriented" causing the date-quantities to be loaded into buckets—a virtual series of numbers. The bucket that a given date-quantity is loaded into is determined by comparing the date of the forecast to the date of the bucket.

Period Size Days – Enter the size, in calendar days, of the planning period to use. Enter a number between 4 and 365.

6 To begin the forecast transfer, click **Begin**.

7 Click **Close**.

8 In the Master Production Schedule dialog box, click **Refresh**. The information from the customer forecasts you selected is displayed.

Importing and Exporting Forecasts

Use the Excel Export/Import Forecast or the Import/Export functions in the Master Product Schedule dialog to import a forecast or to export information to use to build a forecast. You can import or export forecasts for as single part or for multiple parts. You can also import forecasts for a particular independently planned warehouse.

Use the Excel Export/Import Forecast function to import or export forecasts using Microsoft Excel. Use the Import/Export function to import or export forecasts using Forecast Pro®. Forecast Pro uses the MLT file extension.

When you import a forecast in the Standard mode of the Material Planning window, you can choose where to import the forecast information. You can import the information into the forecast portion of the Master Production Schedule dialog only, or you can import the information into the schedule portion of the Master Production Schedule dialog only. You can also import the forecast into both portions of the dialog.

When you export information, you can choose the types of actual usage to include in the exported file.

Importing and Exporting with the MLT Format

VISUAL supports the ASCII (MLT) format. The MLT format is record oriented. Each record contains this information:

- Part ID
- Part description.
- Starting year
- Starting period number
- Periods per year: Use 12 for monthly, use 52 for weekly; Default to 12 when zero.
- Periods per cycle (for seasonality; usually the same as periods per year)
- Data series (this is the actual forecast value for each period.)
- A terminating semicolon

While the first two items in the MLT file can be any identifying key and description, we recommend using Part ID and Part Description to avoid confusion.

These limitations apply to the MLT file:

1. The Part ID is limited to 24 characters. VISUAL supports 30. You can export data for part number lengths between 25 and 30 characters, but Forecast Pro will truncate them to 24. This means that the resulting data cannot be put back into VISUAL reliably.
2. Part IDs may only contain certain characters. They are: ! # $ % & 0-9 ? @ A-Z _ a-z |

   Forecast Pro assigns a special meaning to any entry that starts with an underscore character. The record is tagged as a helper variable and is not part of a forecast.
3. MLT format files handle up to 12,000 points of data; i.e., the data series can have up to 12,000 entries.
4. Forecast Pro does not export confidence information in the MLT file format. For this information, you need to read the ITM file format.

Exporting Forecasts Using the MLT Format

To export a forecast in the MLT format:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable. Perform this step in the Material Planning Window, before you access the Import/Export part forecast dialog box.
2. Open the Import/Export Forecast dialog box. Perform one of these steps:
   - Select **File**, **Import/Export Forecast**.
   - From the Master Production Schedule dialog box, click the **Import/Export Forecast** button.
3. In the Action section, click **Export**.
4. In the Path field, specify the location and name of the file to use for the export. If the file already exists, it will be overwritten. If the file does not exist, it will be created.
5. In the Export section, specify the information to include in the export file. Specify this information:

From Part ID/To Part ID – To select a single part or range of parts, use the From Part ID and To Part ID fields. Click the browse buttons and select the parts with which to begin and end the export. To export information for a single part, specify the same part ID in both the From Part ID and to Part ID fields. To export all parts, leave both fields blank.

Product Code – To export information for parts with a particular product code, specify the product code in this field.

Starting and Ending Dates – Click the **Start** and **End Dates** calendar buttons and select the dates to use for the forecast export. Usage over the time period you specify is included in the report.

Periods per Cycle – Specify the Periods per Cycle to use for the forecast export.

Export Options – Specify the types of transactions to use to calculate usage. Select these options:

- Shipments
- Issues
- Adjustments out

Adjustment Options – Specify the types of transactions to use to adjust the usage totals. Select these options:

- Shipments Rtns
- Issue Rtns
- Adjustments in

6 Click the **Begin** button. The information you selected is exported to an MLT file.

Importing Forecasts Using the MLT Format

To import a forecast using the MLT format:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use for importing or exporting forecasts. If you are licensed to use a single site, this field is unavailable. Perform this step in the Material Planning Window, before you access the Import/Export part forecast dialog box.

2 Open the Import/Export Forecast dialog box. Perform one of these steps:

- Select **File**, **Import/Export Forecast**.
- From the Master Production Schedule dialog box, click the **Import/Export Forecast** button.

3 In the Action section, click **Import**.

4 Click the **Path** button and select the file to import.

5 Specify this information:

Forecast ID – Specify a name for the forecast. You cannot import a forecast without specifying a name. In the Standard mode, the forecast name is not used.

Warehouse ID – If the forecast applies to a particular independently planned warehouse, specify the warehouse ID. If the forecast applies to all universally planned warehouses, specify Universal.

Import Destination – Select where to add the imported information. Click one of these options:

Import to forecast table – Click this option to import the information into the Forecast portion of the table in the Master Production Schedule dialog box. The information is imported into the DEMAND_FORECAST table in your database.

Import to master schedule table – Click this option to import the information into the Schedule portion the table in the Master Production Schedule dialog box. The information is imported into the MASTER_SCHEDULE table in your database.

Import to both – Click this option to import the forecast into both the forecast table and master schedule table.

Purge Prior Data – To remove all existing data from the tables you selected, select this check box. To retain existing information, clear this check box. If you clear this check box, existing forecast information will be overwritten if the imported forecast uses the same dates as the existing forecast. For example, if the Master Production Schedule contains data for October 15 for a particular part, and the data you import also contains data for October 15, then the data you import overwrites the existing data.

6 Click the appropriate period option:

Beginning of Period – If you are importing a forecast in the middle of a period, click this option to roll back to the beginning of the period. For example, for monthly imports, if you are importing a file on the 5th of the month, click this option to use the 1st of the month as the beginning of the period.

End of Period – If you are importing a forecast in the middle of a period, click this option to use the end of the period when importing dates. For example, for monthly imports, if you are importing a file on the 15th of the month, click this option to use the 31st of the previous month as the end of the period.

7 Click the **Begin** button.

VISUAL imports the forecast information to the appropriate tables.

Importing and Exporting Forecasts Using Microsoft Excel

You can export forecasts to Microsoft Excel, use the Excel file to edit the forecast, and then import the forecast back into VISUAL. In the Microsoft Excel file, you can edit the forecast quantities and the required/want date for the quantities.

Exporting Forecasts to Excel

To export a forecast:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

2 Select **File**, **Master Production Schedule**.

3 Click the **Excel Export/Import forecast** button.

4 Click the **Export** tab.

5 Specify the information to export to an Excel file. Specify this information:

From Part ID/To Part ID – To select a single part or range of parts, use the From Part ID and To Part ID fields. Click the browse buttons and select the parts with which to begin and end the export. To export information for a single part, specify the same part ID in both the From Part ID and to Part ID fields. To export all parts, leave both fields blank.

Product Code – To export information for parts with a particular product code, specify the product code in this field.

Starting and Ending Dates – Click the **Start Date** and **End Date** calendar buttons and select the dates to use for the forecast export. Usage over the time period you specify is included in the report.

Use active calendar – If you are not licensed to use the Advanced mode of the Material Planning window, then this check box is unavailable. You must specify your own planning size. If you are licensed to use the Advanced mode of the Material Planning window and you have set up a planning calendar, select this check box to use the currently active calendar to determine the size of the planning periods. For more information, refer to “Creating a Planning Calendar” on page 9-66 in this guide.

Planning size – If you did not select the Use active calendar check box, specify the size of each planning period for the date range you specified. Specify a value from 1 to 31. If you selected the Use active calendar check box, then the planning size specified on the current planning calendar is inserted.

The value in this field is used to calculate the Required/Want date column. It also determines how many rows are inserted into the table. A row is added to the table for each whole planning period within the date range you specified in the Start Date and End Date fields. A row is added only if a whole planning period can be inserted. For example, if you specified January 1 as the start date and February 15 as the end date, and your planning size is 15, then three lines would be added to the table. The first line would have a Required/Want date of January 15. The second line would have a Required/Want date of January 30. The third line would have a Required/Want date of February 14. A fourth line would not be added because only one day remains in the time range you specified.

If you specified your own value in the planning size field, or your planning calendar does not use monthly periods, then the value in this field is added to the start date to determine the first planning period. For example, if you specified January 1 as the start date, and your planning size is 15, then the first planning period ends on January 15. The second planning period ends on January 30.

If you did select the Use active calendar check box and your planning calendar uses monthly periods, then monthly planning periods are used. If your start date is the 28th day of the month or later, then the following month is considered to be the first planning period. For example, if you specified January 29 as the start date, then the first planning period would be February 1 through February 28th. If your start date is the 27th day of the month or earlier, then the start date of the planning period is the 27th, and the end date of the period is the 26th of the following month. For example, if you specified January 15 as your start date, then the first planning period begins on January 15 and ends on February 14.

Calendar # – If you selected the Use active calendar check box, the ID of the current planning calendar is inserted.

Export – Specify the types of transactions to use to calculate the forecasted quantity. Select these options:

- Shipments
- Issues
- Adjustments out

Adjustment by – Specify the types of transactions to use to adjust the quantity. Select these options:

- Shipments Rtns
- Issue Rtns
- Adjustments in

6 Click the **Begin** button. The information you selected is inserted into the table.

7 To edit the information in the table, clear the **Transpose** check box. Then, edit the Required/Want Date and Quantity as necessary.

8 Use the Transposed check box to select the layout for the Excel file. If you select the Transposed check box, then one row is exported for each part and one column is exported for each planning period. For example, if you are exporting planning information for 12 planning periods for a single part, then the Excel spreadsheet would contain one row for the part. The spreadsheet would also contain one column for the part ID, one column for the part description, and 12 columns for the planning periods. If you clear the Transposed check box, then one row is exported for each part/planning period combination. For example, if you are exporting planning information for 12 planning periods for a single part, then the Excel spreadsheet would contain 12 rows: one row for each part/planning period combination. The spreadsheet would also include columns for Part ID, Description, Required/Want Date and Quantity.

9 To export all rows in the table, click the **Send to Excel** button. To export specific rows, select the rows and then click the Send to Excel button. After you click **Send to Excel**, an Excel file is opened, populated with the information that you selected.

10 To exit the dialog, click the **Close** button.

Saving Export Information to the Master Production Schedule Dialog Box

After you build the export information, you can insert the information to the Master Production Schedule dialog box. To insert the information:

1 Build the export information.

2 Click the **Import** tab.

3 Specify this information:

Warehouse ID – To import the information as a forecast for a particular independently planned warehouse, specify the warehouse ID. To import the information to your universally planned warehouses, specify Universal.

Import To – Specify where to import the information. Click one of these options:

Import to forecast table – Click this option to import the information into the Forecast portion of the table in the Master Production Schedule dialog box. The information is imported into the DEMAND_FORECAST table in your database.

Import to master schedule table – Click this option to import the information into the Schedule portion the table in the Master Production Schedule dialog box. The information is imported into the MASTER_SCHEDULE table in your database.

Import to both – Click this option to import the forecast into both the forecast table and master schedule table.

Purge Prior Data – To remove all existing data from the tables you selected, select this check box. To retain existing information, clear this check box. If you clear this check box, existing forecast information will be overwritten if the imported forecast uses the same dates as the existing forecast. For example, if the Master Production Schedule contains data for October 15 for a particular part, and the data you import also contains data for October 15, then the data you import overwrites the existing data.

4 To edit the forecast, clear the **Transposed** check box. Then, edit the Required/Want Date and Quantity fields. You can edit this information on either the Export or the Import tab.

5 Click the **Save** button. The information is imported into the Master Production Schedule dialog box.

Importing Forecasts from Excel

Use the Export/Import Forecasts dialog box to import part forecasts from Excel.

To successfully import information from an Excel file, you must first determine the layout of your Excel file. If your Excel file contains one row for each part ID, then your Excel file is in the Transposed layout. You must select the Transposed check box before importing the file. If your Excel file contains one row for each part ID/planning period combination, then your Excel file is in the Standard layout. You must clear the Transposed check box before importing the file.

If your Excel file uses the Transposed layout, then the file must meet this criteria before it can be imported:

- The file must contain the correct headings in the correct order. The first heading must be Part ID. The second heading must be Part Description. The remaining headings must be planning period dates. In Excel, the planning period headings must use the Date number format category and the *3/14/2001 number type. To see the correct format, you can export a forecast using the Transposed layout to Excel first.
- The file must use correct Part IDs. The part ID in the spreadsheet must match the part ID in your database. If the part ID in the spreadsheet does not match a part ID in your database, the information is not imported.
- The file must contain no duplicate dates for the same part ID. This causes an error when saving to the database.

In an Excel spreadsheet created in the Transposed layout, you can edit the forecast quantity and the Required/Want Date column headers. You can also edit the Part Description in the spreadsheet, but the edited description will not be imported into your database.

If your Excel file uses the Standard layout, then the file must meet this criteria before it can be imported:

- The file must contain the correct headings in the correct order and format. Use these headings in this order: Part ID, Description, Required/Want Date (m/dd/yyyy format), and Quantity. To see the correct format, you can export a forecast to Excel first.
- The file must use correct Part IDs. The part ID in the spreadsheet must match the part ID in your database. If the part ID in the spreadsheet does not match a part ID in your database, the information is not imported.
- The file must contain no duplicate dates for the same part ID. This causes an error when saving to the database.

In an Excel spreadsheet created in the Standard layout, you can edit the Required/Want Date and Quantity. You can also edit the Description in the spreadsheet, but the edited description will not be imported into your database.

To import a forecast:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use for importing or exporting forecasts. If you are licensed to use a single site, this field is unavailable.

2 Select **File**, **Master Production Schedule**.

3 Click the **Excel Export/Import forecast** button.

4 Select the **Import** tab.

5 Specify the information to import. Specify this information:

Warehouse ID – If the forecast applies to a particular independently planned warehouse, specify the warehouse ID. If the forecast applies to all universally planned warehouses, specify Universal.

Import Destination – Select where to add the imported information. Click one of these options:

Import to forecast table – Click this option to import the information into the Forecast portion of the table in the Master Production Schedule dialog box. The information is imported into the DEMAND_FORECAST table in your database.

Import to master schedule table – Click this option to import the information into the Schedule portion the table in the Master Production Schedule dialog box. The information is imported into the MASTER_SCHEDULE table in your database.

Import to both – Click this option to import the forecast into both the forecast table and master schedule table.

Purge Prior Data – To remove all existing data from the tables you selected, select this check box. To retain existing information, clear this check box. If you clear this check box, existing forecast information will be overwritten if the imported forecast uses the same dates as the existing forecast. For example, if the Master Production Schedule contains data for October 15 for a particular part, and the data you import also contains data for October 15, then the data you import overwrites the existing data.

6 Specify the layout of your Excel file. If your Excel file uses one row for each part ID and one column for each planning period, then the file uses the Transposed layout. Select the **Transposed** check box before importing the file. If your Excel file uses one row for each part ID/ planning period combination, then the file uses the standard layout. Clear the **Transposed** check box before importing the file.

7 Click the **Import from Excel** button.

8 Select the Excel file containing the forecast, and then click **Open**. The information is inserted in the forecast table in the dialog box.

9 To edit the forecast information, clear the Transposed check box. Then, modify the Required/ Want Date and Quantity line in the forecast table.

10 Click the **Save** button to save the information to your database. The information is inserted into the tables you specified in the dialog box header.

11 Click the **Close** button.

Using Material Requirements Planning

Material Requirements Planning is an optional module that generates planned supply orders for a part based on the part's Order Policy, demand, and master production schedule (for a master scheduled part). These orders appear in material netting in the same way as actual orders. You can then firm and release the planned orders into real supply orders.

You can run MRP manually or use a service to run MRP.

MRP essentially uses its own exceptions and suggested release dates to generate planned supply orders.

MRP is only run for parts with the following order policies:

Discrete or EOQ – MRP creates a planned order to fill the exact required quantity for each demand.

Fixed – MRP only creates planned orders in the Order Quantity specified. MRP generates an integer number of planned supply orders as needed.

For example, if demand is 50 and fixed Order Quantity is 100, MRP generates one order for 100. If fixed Order Quantity is 25, then MRP creates two orders for 25. This order may, of course, end up meeting multiple demands.

Period Supply – When a supply order must be generated, its Quantity is enough to supply the specified Days of Supply for the part.

Master Scheduled – Planned Supply Orders are created to meet each Schedule Date and Schedule Quantity in the Master Production Schedule. These orders are not planned by MRP based on netting, but generated from the production schedule.

Note: Material requirements planning will not process any orders assigned to warehouses that are MRP-exempt. For more information, refer to "Part Maintenance" on page 3-1 in this guide.

If you do not change the status of planned orders to either firmed or released before the next MRP run, VISUAL deletes them and creates new planned orders based on the demand numbers in effect during the next MRP run.

MRP also generates planned requirements for every material requirement of every planned work order it generated. If you do not select the **Single Pass** option, VISUAL considers these requirements in the next pass of MRP. Planned requirements are generated regardless of the required parts order policy.

If you are licensed to use multiple sites, use Material Requirements Planning on a site-by-site basis. If you are licensed to use a single site, use Material Requirements Planning on an enterprise-wide basis.

Nettable Quantity and MRP

When MRP evaluates inventory to create planned orders, the nettable inventory for parts is used. These quantities are included in the nettable quantity:

- Quantities in Regular locations whose status is Available or On Hold
- Quantities in Floor Stock locations whose status is Available or On Hold

Quantities in Transit locations are not included in the nettable quantity regardless of the status. Quantities in locations with the status Unavailable are also not included in the nettable quantity.

MRP and Discrete, Fixed, and Period Supply Parts

For parts with an order policy of discrete, fixed, or period supply, VISUAL always runs MRP with these netting options:

- Net Using On-Hand Quantity
- Deduct Safety Stock
- Net Using MRP Rules

When planned orders are generated, the Minimum Order Quantity and Maximum Order Quantity for the part are also respected. For example, if demand is 25, and the part has a Discrete policy with a minimum order quantity of 30, the order will be for 30 units.

MRP and Master Scheduled Parts

In order to accurately determine how many units to build for a period, most manufacturers use a series of calculations to determine their “net supply plan,” or build plan for a period.

In basic terms, the supply plan is what must be supplied (fabricated or purchased) in order to meet the demand (forecast).

In some cases, they determine the “net supply plan” by subtracting their current inventory from the current projected demand (forecast). By doing so, they are determining what they need to build or buy for the period. This calculation needs exercise at all levels of manufacture, starting at the finished goods level, and continuing all the way to the component piece part level. MRP performs this calculation for all materials with an order policy of master scheduled.

The supply plan is made up of three types of supply orders: **Released** orders, **Firmed** orders, and **Planned** orders. Because you control released and firmed orders, VISUAL does not reschedule them during an MRP run. VISUAL generates planned orders during an MRP run when it finds supply orders to be *less than demand*. Planned orders alert you that you should increase the orders to meet demand.

For master scheduled parts, you can decide whether to apply minimum, maximum, and multiple rules when you run MRP.

Running MRP Manually

To manually run MRP:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Material Requirements Planning**.
3. In the Warehouse section, click the Warehouse arrow and select the warehouses to include in the MRP run. You can select:

   Universal – When you select Universal, VISUAL nets all supply and demand in all of your universally planned warehouses. The information you specified on the Planning tab in Part Maintenance for universal warehouses is used to formulate orders. For more information, refer to “Specifying Planning Information” on page 3-11 in this guide.

   Independent – When you select the independent option, you can select individual, independently-planned warehouses from the list. Supply and demand is netted for each part that can be stored in each warehouse you select. The information you specified on the Planning tab for each independently planned warehouse is used to formulate orders. For more information, refer to “Specifying Planning Information” on page 3-11 in this guide. If you have not set planning parameters for a given part/independently planned warehouse combination, the planning parameters specified for the Universal warehouse is used.

   All Warehouses – When you select All Warehouses, VISUAL MRP nets and plans orders for the Universal warehouse and each independently-planned warehouse separately, using the rules described above. If there are 10 Independently-Planned warehouses along with a number of Universally-Planned warehouses for a given part, VISUAL MRP performs 11 separate nettings. This is the default option.

   If you are a Projects/A&D user, you can also select a Program Manager whose warehouses you would like to plan. Refer to your Projects user guide for more information.
4. Specify the scope of processing.

   As you perform transactions, parts requiring MRP are marked. Events that trigger this marking include creation and modification of purchase orders, customer orders, and work orders for the part, as well as inventory transactions involving the part. This is done so you can process only those parts that might require changes, rather than all parts. The number of parts marked in this way is shown as Parts Requiring MRP Processing.

   Specify the parts to process:

Process All Top Level Parts (Regeneration) – A top-level part is one that is not required in any material requirement for a work order. Demand orders for top-level parts are only customer orders.

If you select this option, all top level parts are processed on the first MRP pass whether they are marked for MRP or not. Non-top-level parts are processed only if they are marked for MRP.

Process Parts Changed Since Last Run – Only parts marked for MRP are processed.

5 Select Single or Multiple Level Processing.

When MRP processes a set of parts, it generates two kinds of orders. Planned supply orders are created to meet existing demand for each part. Planned demand orders are also created to account for the material requirements of the newly planned orders.

If you select the **Single Pass** check box, the process stops after the first pass. Otherwise, MRP makes a second pass, and considers the new demand orders caused by the newly planned supply orders. VISUAL continues running passes until it can no longer create new demand orders.

6 Set Exception Marking Limits.

During processing, MRP marks parts as having exceptions if a planned order is created, or if one of the normal netting exceptions (for example, Stockout) occurs for the part. You can use this marking as part of the query in the Search option. This allows you to focus on parts that may need your attention.

You have three options to control how this marking is done with regard to horizon:

No Horizon – Any exceptions appearing for the part mark the part as having MRP exceptions, regardless of how far out the exception is.

Fixed Horizon – Select the **Fixed Horizon** option and specify the number of days to look forward from the current date for exceptions. MRP only marks the part as having exceptions if any occur within this time frame. Specify Horizon in days.

Plus Part Leadtime – Select the **Plus Part Leadtime** option and specify the time frame to include for parts. This produces a horizon that varies for each part. For a given horizon, parts that take longer to acquire are more likely to appear as MRP exceptions.

7 Specify how to determine supply order quantities for master scheduled parts.

Net on-hand quantities for master scheduled parts – This check box is available only if you have not activated the Suggested MPS feature in the Advanced Material Planning window. See "Suggested MPS" on page 9–64 in this guide.

Select this check box to subtract nettable, on-hand balances from the total demand.

Apply Min/Max/Multiple to Master Scheduled Parts – Select this check box to adjust the quantities ordered to take into account the minimum, maximum, and multiple quantity ordering requirements for the part.

8 To exclude on-hold customer orders from the demand calculation, select the **Exclude On-hold Customer Orders** check box.

9 To exclude unreleased work orders from supply and demand calculations, select the **Exclude Unreleased Work Orders** check box.

10 To display a message when the processing of a part exceeds 10 seconds, select the **Enable netting message** check box. Clear this check box if you do not want to display the message. Clearing the **Enable netting message** check box can improve the performance of MRP.

11 To generate a log file for the MRP session, select the **Log MRP** check box. The log file is stored in your local VISUAL directory as a text file named VMPLNWIN.LOG.

12 To start processing, click **Ok**.

Note: Depending on the number of parts that require processing, the number of demand orders, the speed of your machine, and other factors, MRP may take a few minutes to run.

Running Material Requirements Planning with the MRP Service

You can use the MRP Service to run MRP automatically on the days and times you specify. If you have multiple sites and would like to run the service for all sites, then you must install the service once for each site.

To specify when to run the service, use the Material Requirements Planning Service Schedule dialog in the Material Planning Window. You can set up one schedule for each site. Any user with permission to access the Material Requirements Planning Service Schedule dialog box can edit the site's MRP schedule.

After the service is installed and the service schedule is set up, the database is examined based on the polling interval you specify to see if MRP needs to be run. When the service finds that MRP needs to be run, the service runs MRP based on the settings specified in the Material Requirements Planning Service Schedule dialog.

If you set up the MRP Service, you can still run MRP manually.

Installing the MRP Service

The computer where you install the service must have these components installed:

- **VSRVANY.EXE** – VSRVANY.EXE is a VISUAL tool that allows the service executables to be run as a service. VSRVANY.EXE must be installed in the same directory as the service executables. VSRVANY.EXE is installed with the VISUAL installer.
- **SC.EXE** – SC.EXE is a Microsoft Windows tool used to make modifications to services and to remove services. SC.EXE is commonly installed with Microsoft Windows. Run a Microsoft Windows search to verify that SC.EXE is installed. SC.EXE does not have to be in the same directory as the services executables; you can leave SC.EXE in the directory where Microsoft installed it.
- **Unify Runtimes** – You must also have the Unify runtimes for your version of VISUAL installed on the computer where you run the service.

The MRP Service is installed by site. If you have multiple sites, install the service for each site where you want to use the service to run MRP.

To install the service:

1. In your VISUAL executables directory, locate VMMRPSVC.EXE.
2. Perform one of these steps:
   - If you do not use single sign-on, right-click VMMRPSVC.EXE and select **Run as Administrator**. The Sign In dialog is displayed.
   - If you do use single sign-on, select Start, All Programs, Accessories. Right-click Command Prompt and select **Run as Administrator.** In the Command Prompt line, specify <service path>/VMMRPSVC.EXE -SYSADM. Replace <Service path> with the path where VMMRPSVC.EXE is installed.
3. Specify this information:

   User ID – Specify the user ID that the service uses to sign into the VISUAL database. This can be any valid VISUAL user ID who has access to the site for which you are setting up the service. This user must also have security permissions to access the Material Requirements Planning dialog in the Material Planning Window (VMPLNWIN.exe)

   Password – Specify the password associated with the user ID.

   Database – Specify the database on which to run the service.
4. Click **Sign In**. The name and description of the service is displayed.
5. Specify this information:

   Site ID – Specify the ID of the site where you want to run MRP with the service.

   Log File Directory – Specify where to store the log file for the service.

   Polling Interval – Specify how frequently the service should check to see if MRP should be run for the site. Specify the interval in seconds. The minimum value you can specify is 5. The maximum value is 900 seconds. If you specify a value greater than 900, your value is replaced with 900.

   Log Level – Specify the level of information to write to the log file. Click one of these options:

   None – To write the time the service started, click this option. This option is recommended for normal production environments.

   Error – To write the time the service started and any error messages, click this option.

   Info – To write to the time the service started, error messages, and additional information about the service, click this option. The use of this option is recommended only if you are troubleshooting issues with the service. When you use this option, the size of the log file grows quickly.
6. Click **Install Service**.
7. To start the service now, click **Yes**. To start the service later, click **No**. If you click No, you can start the service in the Windows control panel.
8. To install the service for another site, repeat steps 5 through 7. Repeat these steps for each site where you want to run MRP with the service.

Scheduling the MRP Service

After you install the MRP Service, specify when the MRP Service should be prompted to run MRP for a site.

You can set up separate schedules for processing all top level parts and for processing parts changed since the last MRP run. To edit the schedule for a site, a user must have permission to access the site and the Material Requirements Planning Service Schedule dialog.

To schedule the MRP Service:

1. Select **Inventory**, **Material Planning Window**.
2. In the site ID field, select the site where you will run MRP with the service. Make sure you select a site for which you have installed the MRP Service.
3. Select **File**, **Material Requirements Planning Service Schedule**. The ID of the site you selected is displayed in the title bar of the dialog.
4. Specify the settings to use when MRP is run. The settings you can specify are the same settings you can select if you run MRP manually. For more information, refer to the “Using Material Requirements Planning” chapter in the Inventory guide.
5. Specify when the service is active. Specify this information:

   Start Date – Specify the date that the service should start checking to see if MRP needs to be run. Leave this field blank or specify today’s date if you do not want to delay the start of the service.

   End Date – Specify the last date that the service should check to see if MRP needs to be run. Leave this field blank if you do not want to set up an expiration date for the service.

   Enabled – To use the service with the selected site, select this check box. To stop using the service, clear this check box.

   Delay for Scheduling – To prevent MRP from running while the concurrent scheduler is running, select this check box. To allow MRP to be run when the concurrent scheduler is running, clear this check box.
6. In the Process All Top Level Parts (Regeneration) section, specify when to prompt the service to run MRP for all parts. Specify this information:

   Days of Week – Specify on which days to run MRP using the service.

   Run At – Specify the times of day that the service should check to see if MRP needs to be run. The times you specify apply to all days that you run the service for journal preparation. You can run the service up to 6 times a day. If you select a day in the Days of Week section but leave all Run At fields blank, then the service is run at 12:00 AM on the days you selected.
7. In the Process Parts Changed Since Last Run (Net Change), specify when to prompt the service to run MRP for parts that have been changed since the last MRP run. Specify this information:

   Days of Week – Specify on which days to run MRP using the service.

   Run At – Specify the times of day that the service should check to see if MRP needs to be run. The times you specify apply to all days that you run the service for journal preparation. You can run the service up to 6 times a day. If you select a day in the Days of Week section but leave all Run At fields blank, then the service is run at 12:00 AM on the days you selected.

8 Click **Save**.

Depending on the polling interval that was specified when the service was installed, MRP might not be run exactly at the time you specify. At the times that you specified, MRP is flagged as needing to be run. MRP is started when the MRP service polls the database and finds that MRP needs to be run. When you specify a time, MRP could be run at any time between the time that you specify and the time that you specify plus the polling interval. For example, if you specify 7:00:00 as the start time and the polling interval is 600 seconds, then MRP is started sometime between 7:00:00 and 7:10:00.

Coordinating MRP and Scheduling Service Schedules

Since material requirements planning and scheduling can be dependent upon each other, you can set up the schedules for these services to ensure that each runs only when the other is not running. When you set up the MRP service schedule, select the Delay for Scheduling check box to ensure that MRP is not run while scheduling is being run. When you set up the Scheduling service schedule, select the Delay for MRP check box to ensure that Scheduling is not run while MRP is being run.

If you want to run the MRP service and Scheduling service in a particular order, you should consider the polling interval that you use for the services when you specify start times. When you set up a schedule for a service, the service may not start exactly at the run time you specify because of the polling interval. For example, if you specified that a service should start at 7:00:00 a.m. and your polling interval is 600 seconds, the service could start as late as 7:09:59. To run services in a particular order, the start time of the second service should be greater than the start time of the first service plus the largest polling interval used on the services. For example, if you set up services with these parameters, then the MRP service will be run before the Scheduling service:

MRP Service

Polling Interval – 300 seconds

Run At time – 7:00:00 a.m.

Delay for Scheduling check box – selected

Scheduling Service

Polling Interval – 600 seconds

Run At time – 7:11:00 a.m.

Delay for MRP check box – selected

To make the start of the Scheduling service more predictable, you can adjust the start time of the Scheduling service to account for the typical duration of the MRP run. For example, if MRP typically takes an hour to run, you could set the Scheduling service to start an 75 minutes after the MRP service. Since the MRP service would be complete before the scheduled start of the Scheduling service, the Scheduling service would more likely start nearer to the start time you specified.

Deactivating an MRP Service Schedule

You can deactivate your scheduled MRP run for a site. If you set up MRP schedules for more than one site, then you must deactivate each schedule separately.

To deactivate an MRP schedule:

1 Select **Inventory**, **Material Planning Window.**

2 In the site ID field, select the site whose schedule you want to deactivate.

3 Select **File**, **Material Requirements Planning Service Schedule**. The ID of the site you selected is displayed in the title bar of the dialog.

4 Clear the **Enabled** check box.

5 Click **Save**.

Deleting an MRP Service Schedule

You can delete the MRP service schedule for a site without removing the MRP Service.

To delete an MRP Service schedule:

1 Select **Inventory**, **Material Planning Window.**

2 In the site ID field, select the site whose schedule you want to deactivate.

3 Select **File**, **Material Requirements Planning Service Schedule**. The ID of the site you selected is displayed in the title bar of the dialog.

4 Click **Delete**.

5 Click **Close**. Do not click Save before you click Close. If you click Save before you click Close, the service schedule is recreated.

Removing the Service

To remove the service for a site:

1 In your VISUAL executables directory, locate VMMRPSVC.EXE.

2 Right-click VMMRPSVC.EXE and select **Run as Administrator**. The Sign In dialog is displayed.

3 Specify this information:

User ID – Specify the user ID that the service uses to sign into the VISUAL database. This can be any valid VISUAL user ID.

Password – Specify the password associated with the user ID.

Database – Specify the database on which to run the service.

4 Click **Sign In**.

5 In the Site ID field, specify the ID of the site where you no longer want to run the MRP Service.

6 Click **Remove Service**.

Firming and Releasing Planned Orders

Planned requirements and planned orders for a part are numbered sequentially as they are created. They appear in the Material Planning Window preceded by the letters PL, then the Part ID/Order Number. For example, if MRP generates 3 planned orders for part B1241, they appear as PL B1241/1, PL B1241/2, and PL B1241/3.

When you convert a planned order to a purchase order or work order, the auto-numbering scheme you set up for the order is used to identify the order.

If you are licensed to use multiple sites, firm or release planned orders on a site-by-site basis. If you are licensed to use a single site, firm or release planned orders on an enterprise-wide basis.

Firming and Releasing Planned Work Orders

To firm or release a planned work order:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use. If you are licensed to use as single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part that has planned orders.
3. Select a line containing the planned supply work order. Planned supply order IDs are prefixed with PL and have a status of P.
4. Select **Edit**, **Firm/Release Planned Order**.
5. In the Part is... section, select the **Fabricated** check box if the part is fabricated. Select the **Purchased** check box if the part is purchased. The Fabricated and Purchased settings from the header in the Material Planning Window is inserted.
6. In the Work Order section, specify this information:

   Copy Engineering ID – The default engineering ID for the part is inserted. If you have defined multiple engineering IDs for the part, click the arrow to select a different ID.

   New Base ID/New Lot/New Split ID – To specify your own work order ID, specify the Base ID, Lot ID, and Split ID. If you leave these fields blank, then the auto-numbering scheme you set up for work orders is used.

   Forward Schedule from Release Date – Select this check box to schedule the new order in this way.

   Copy All document References – To copy all of the document references from the engineering master, select this check box.

   Copy All Reference Designators – To copy the reference designators from the engineering master, select this check box. If you do not want to copy reference designators, clear this check box. Reference designators are used to specify the location where the material in the requirement should be placed. See “Specifying Reference Designators” on page 3-65 of the Manufacturing guide.

Copy All Alternate Parts – To copy the alternate parts from the engineering master, select this check box. If you do not want to copy reference designators, clear this check box. Alternate parts are parts that can be used in place of the part specified on the material card. See “Specifying Alternate Parts” on page 3-66 of the Manufacturing guide.

7 In the Status section, specify the status of the work order you are creating. Select **Unreleased**, **Firm**, or **Released**.

8 Specify this information:

Warehouse ID – Specify the ID of the warehouse where the part will be received. By default, the primary warehouse for the part is inserted.

Quantity – Specify the quantity to make in the work order. By default, the quantity generated for the planned order by MRP is inserted.

RIs Date – Specify the date to release the work order. This is the earliest date that work on the order can begin.

Want Date – Specify the date that the work order should be complete. This is the date that the parts produced in this work order should be available for use.

9 Click **Order**.

The planned supply order is converted to an actual order. Any material requirements for the planned order are replaced by the actual requirements associated with the new order.

Note: Remember that you must schedule any new work orders using the Concurrent Scheduler or the Schedule Current Work Order command in the Manufacturing Window.

Firming and Releasing a Planned Purchase Order

If you are licensed to use multiple sites, you can create an internal purchase order from the planned purchase order. You can also create a standard, external purchase order.

To firm or release a planned purchase order:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use. If you are licensed to use as single site, this field is unavailable.

2 Click the **Part ID** browse button and select the part that has planned orders.

3 Select a line containing the planned supply purchase order. Planned supply order IDs are prefixed with PL and have a status of P.

4 Select **Edit**, **Firm/Release Planned Order**.

5 In the Part is... section, select the **Fabricated** check box if the part is fabricated. Select the **Purchased** check box if the part is purchased. The Fabricated and Purchased settings from the header in the Material Planning Window is inserted.

6 In the Purchase Order section, specify this information:

Order ID – Specify the ID of the purchase order. To use your number generation scheme for purchase orders, leave this field blank.

Vendor ID – Specify the ID of the vendor from whom you are purchasing this material. To create an internal purchase order, specify the ID of an internal vendor. Use internal purchase orders if you are licensed to use multiple sites and you want one of your entities to supply another entity. Set up internal vendors in Vendor Maintenance. See “Setting up an Internal Vendor” on page 2-7 of the Purchasing guide.

Mfg Name – Specify the name of the manufacturer of the part you are ordering. This information is optional.

Mfg Part ID – Specify the ID that the manufacturer uses for this part. This information is optional.

Internal Order – If you specified an internal vendor, this check box is selected. Select this check box to create an internal purchase order. When you create an internal purchase order, a corresponding internal sales order is created automatically. Specify the ID of the internal customer in the Internal Customer field. If you want to use an internal vendor for this order, but you do not want to automatically create a corresponding sales order, clear the check box. See “Buying and Selling Between Accounting Entities” on page 8-35 of the Purchasing guide.

Internal Customer – If you selected the Internal Order check box, you must specify the ID of the internal customer that is purchasing the goods. If a default internal customer ID is defined for the site in Site Maintenance, then that customer ID is inserted. You can specify a different internal customer ID.

7 In the Status section, specify the status of the purchase order you are creating. Select **Firm** or **Released**.

8 Specify this information:

Warehouse ID – Specify the ID of the warehouse where the part will be received. By default, the primary warehouse for the part is inserted.

Quantity – Specify the quantity to order. By default, the quantity generated for the planned order by MRP is inserted.

Rls Date – Specify the date that the purchase order is released. The date you specify is inserted in the Order Date field when the purchase order is created.

Want Date – Specify the date that the purchase order should be received. This date is inserted in the Desired Recv Date when the purchase order is created.

9 Click **Order**. If the part that you are ordering is not a piece tracked part, then the Firm/Release Planned Order dialog is closed. If the part that you are ordering is a piece tracked part, then the Dimensional Pieces dialog is opened. This information is displayed:

Pieces – The number of whole pieces needed to fulfill the demand is displayed. This is the number of pieces that will be ordered.

Length, Width, and Height – The dimensions of the piece is displayed. You can change the dimensions. If you change the dimensions, the values in the Pieces and Piece Qty field are adjusted so that you order enough pieces to meet the demand.

Req’d Qty – The amount required to meet the demand.

Piece Qty – The quantity in the order is displayed. This quantity is the number of pieces multiplied by the dimensions and converted from the usage unit of measure to the stock unit of measure.

10 Click **Ok**.

If you create an internal purchase order, the corresponding sales order is also created.

Placing Supply Orders

You can generate supply orders directly in the Material Planning Window. You can place a supply order to meet a particular demand, or you can place a generic supply order for your inventory.

You can place these types of supply orders:

- Work Orders (for fabricated parts only)
- Purchase Orders
- Interbranch Transfers

If a part is a material requirement, you can issue the part to demand work orders.

These functions are available in the standard Material Planning Window only.

If you are licensed to use multiple sites, place supply orders on a site-by-site basis. If you are licensed to use a single site, place supply orders on an enterprise-wide basis.

Placing a Work Order

When the current part in the Material Planning Window is a fabricated part, you can create a new supply work order for it.

1 To place an order for a specific demand, select the demand line.You can select more than one line. Selecting lines does not create a direct link between the work order and demand lines. The demand lines are used to determine the quantity of the work order.

If you do not choose a line, the work order has an initial quantity of zero. You can change the quantity.

2 Select **Edit**, **Place Work Order**.

If you selected customer orders before accessing the Place Work Order dialog box, the orders you selected are displayed in the table. The quantity of the orders is inserted in the Order Qty field.

3 Specify this information:

Warehouse ID – Click the browse button and select the Warehouse ID for the work order. If you are licensed to use multiple sites, only the warehouse IDs that exist in the site you selected in the Material Planning Window are displayed in the browse table. If you are licensed to use a single site, all warehouses are displayed.

Copy Engineering ID – Click the drop-down or browse button and select the engineering ID to copy to create the work order.

Base ID and Lot ID – If you use autonumbering, you can leave these fields blank. To use a custom Base ID and Lot ID, specify your own the Base ID and Lot ID in the fields.

Release Date – Specify the date the work order should be released. This does not release the order.

Want Date – Specify the date the work order should be completed.

Quantity – If you selected one or more customer orders in the Material Planning Window, the total quantity is inserted. You can specify a different quantity. If you did not select customer orders before accessing this dialog box, specify the quantity of part to be produced.

4 Specify the initial status for the work order: **Unreleased**, **Firmed**, or **Released**. If you create a work order from a master that uses an obsolete resource, the system sets the status of the operation that uses the obsolete resource to Cancelled.

5 To schedule the work order from the release date of the work order, select the **Forward Schedule from Release Date** check box. This setting does not schedule the work order. Use the Global Scheduler or the Manufacturing Window to schedule the work order.

6 Select the items to copy from the engineering master to the work order:

Copy All Document References – Select this option to copy any document references associated with the engineering master to the work order.

Copy All Reference Designators – Select this option to copy all reference designators associated with the materials on the engineering master.

Copy All Alternate Parts – Select this option to copy the list of alternate parts associated with the materials on the engineering master.

7 To create the new work order, click the **Order** button.

After the order is created, the dialog box automatically closes and the Material Planning Window refreshes to show the effects of this new order.

Linking Work Orders to Customer Orders

Placing an order in the Material Planning Window does NOT link the work order to a customer order.

To link work orders to customer orders:

1 Place the new work order.

2 Select the **Display Demand (peg) Order** option from the Info menu.

The Customer Order Entry window opens populated with the current parts details.

3 Enter the new Job ID information on the customer order line item.

To create the link, save the customer order.

Viewing and Modifying New Work Orders

You can view and modify the new work order by selecting the appropriate line from the Material Planning Window and selecting **Info**, **Display Supply (Due) Order**. The new work order is displayed in the Manufacturing Window.

Placing a Purchase Order

When the current part is a purchased part, you can create a new purchase order for it. You can purchase materials to inventory or directly to jobs.

1. To purchase materials specifically for one or more jobs, select the lines containing the demand work order operations for the jobs and select **Edit**, **Purchase to Jobs**.

   To purchase materials to inventory, select Edit, **Purchase to Inventory**.

   If you selected demand lines before accessing the dialog box, the demand lines are displayed in the table.

   The total Required Quantity for any work order operations you selected is displayed in the Reqd Qty field.

   If you have allocated supply to the work order, the Net Qty Required value in the line item table at the top is different than the one shown in the Material Planning line item table. The Required Qty is the original material required value from the work order minus the quantity of the linked allocations.

   In the table, the quantity you have allocated to the work order material requirement is shown in the Allocated Qty column.

   Note: If you are ordering a piece tracked part, the number of whole pieces required to meet the demand is ordered. As a result, the total quantity ordered could exceed the required quantity.

2. To order a quantity in addition to the required quantity, specify the quantity in the Add'l Qty field.

   If you change the Order Quantity, VISUAL automatically adjusts the Additional Quantity. If you are linking this purchase to jobs, the Order Quantity cannot be less than the Required Quantity for the jobs you selected.

3. In the vendor ID field, the preferred vendor for the part is inserted. To select a different vendor, click the arrow to select from a list of vendors that supply the part. Click the browse button to select any vendor.

   If you specified an internal vendor in the Vendor ID field, then the Internal Order check box is selected. Select the check box to use the automated internal buy/sell process. Specify the ID of the internal customer in the Customer ID field. When you create the purchase order, the corresponding sales order is created.

4. To specify your own order ID, specify the ID in the Order ID field. Leave the field blank to use the auto-numbering scheme set up in Purchase Order Entry to generate an ID.

5. Click the **Warehouse ID** browse button and select a Warehouse ID for the purchase order.

6. Choose the purchase order status. You can select **Firm** or **Release**.

7. Specify requirement linking.

   If you are purchasing to jobs, you may want to link the purchases directly to the work order requirements. This earmarks the purchase for the job, and enables automatic issuing of the material when it is received.

   If you selected **Purchase to Jobs**, the Link to Each Requirement box is checked by default. If you do not want to link purchases to jobs, clear this box.

If you are unsure of which jobs may already have linked purchases, you can select each work order requirement from the table. VISUAL lists any existing linked POs for this requirement in the table at the bottom of the dialog box.

Additionally, the Total Quantity Required and Total Quantity Issued for the requirement is displayed. This allows you to assess what quantities have already been purchased to the job, and which are still needed.

If you selected Purchase to Inventory, the Link to Each Requirement option does not apply.

8 If you specified an internal vendor in the Vendor ID field, then the Internal Order check box is selected. Select the check box to use the automated internal buy/sell process. Specify the ID of the internal customer in the Customer ID field. When you create the purchase order, the corresponding sales order is created.

9 To place the order, click **Order**.

The new purchase order is created. The purchase order has a separate line item for each requirement purchased to, and an extra line for any additional quantity. If purchasing to inventory, the purchase order contains a single line item for the total Order Quantity.

You can view and modify the new purchase order by selecting the line with the purchase order and selecting **Info**, **Display Supply Order**.

Placing an Inter-branch Transfer

You can use inter-branch transfers to meet demand. For example, if one of your warehouses has supply of a part that another warehouse needs to meet work order demand, you can transfer it.

If you are licensed to use multiple sites, you can transfer materials between warehouses in different sites provided that both sites belong to the same accounting entity. If you are licensed to use a single site, you can transfer materials between any two warehouses.

Before you can transfer materials to a job or to inventory, you must set up these locations in the warehouses participating in the transfer:

- In the warehouse from which you are shipping the materials, you must create a location that has the same ID as the warehouse ID. For example, warehouse MMC-MAIN, must have a location MMC-MAIN.
- In the warehouse receiving the materials, you must have a transit location.

To place a transfer:

1 To transfer materials specifically for one or more jobs, select the lines containing the demand work order operations for the jobs and select **Edit**, **Transfer to Jobs**.

To transfer materials to inventory, select **Edit**, **Transfer to Inventory**.

If you selected demand lines before accessing the dialog box, the demand lines are displayed in the table.

The total Required Quantity for any work order operations you selected is displayed in the Reqd Qty field.

If you have allocated supply to the work order, the Net Qty Required value in the line item table at the top is different than the one shown in the Material Planning line item table. The Required Qty is the original material required value from the work order minus the quantity of the linked allocations.

In the table, the quantity you have allocated to the work order material requirement is shown in the Allocated Qty column.

2 Specify this information:

Add'l Quantity – To order a quantity in addition to the required quantity, specify the quantity in the Add'l Qty field.

If you change the Order Quantity, VISUAL automatically adjusts the Additional Quantity. If you are linking this IBT to jobs, the Order Quantity cannot be less than the Required Quantity for the jobs you selected.

IBT ID – To specify your own IBT ID, specify the ID in the IBT ID field. Leave the field blank to use the auto-numbering scheme set up in Inter Branch Transfer Entry to generate an ID.

From Whse ID – Click the browse button and select the warehouse is transferring supply to the order. If you are licensed to use multiple sites, the browse table shows only those warehouses that belong to the same entity as the To Whse ID.

To Whse ID – The warehouse ID specified on the demand line in the Material Planning Window is inserted.

Desired Ship Date – Specify the date that the warehouse in the From Whse ID field should ship the parts.

Desired Recv Date – Specify the date that the warehouse in the To Whse ID field should receive the parts. The current date is inserted by default.

Transit Days – Specify the number of days it takes for the shipment to travel from the warehouse in the From Whse ID field to the warehouse in the To Whse ID field.

Status – Specify the status of the new transfer. You can click Firm or Release.

3 Specify requirement linking.

If you are transferring to jobs, you can link the transfer directly to the work order requirements. This earmarks the transfer for the job, and enables automatic issuing of the material when it is received.

If you selected **Transfer to Jobs**, the Link to Each Requirement box is checked by default. If you do not want to link transfers to jobs, clear this box.

If you are unsure of which jobs may already have linked IBTs, you can select each work order requirement from the table. Any existing linked IBTs for this requirement is shown in the table at the bottom of the dialog box.

Additionally, the Total Quantity Required and Total Quantity Issued for the requirement is displayed. This allows you to assess what quantities have already been transferred to the job, and which are still needed.

If you selected Transfer to Inventory, the Link to Each Requirement option does not apply.

4 To place the transfer, click **Order**.

The new IBT is created. The IBT has a separate line item for each work order requirement and an extra line for any additional quantity. If transferring to inventory, the IBT contains a single line item for the total Order Quantity.

You can view and modify the new IBT by selecting the line with the IBT and selecting **Info**, **Display Supply Order**.

Modifying Supply Orders in the Line Item Table

You can modify these fields for purchase orders and work orders directly in the line item table:

Due Date – Specify a new date in this field to change the Desired Recv Date of the purchase order line item, or the Want Date of the Work Order.

Release Date – Specify a new date in this field to change the Order Date of the purchase order, or the Release Date of the Work Order.

Status – Specify a new status for the order. Select one of these statuses:

U – Unreleased (Work Orders Only)

F – Firm

R – Released

C – Closed

X – Canceled

After you click the **Save** button, the corresponding changes are made in Purchase Order Entry or the Manufacturing Window.

Before you can change the due date, release date, or status for a planned order, you must first release the order.

You cannot change the status of an IBT. You can change the Due Date or Release Date of an IBT only if its status is Released (R).

Issuing Materials to Work Orders

If you have a material requirement on hand, you can issue it to a work order.

1. In the Material Planning Window, select the line containing the material requirement.
2. Select **Edit**, **Issue Material**.

   The Inventory Transaction Entry window is opened with details of the work order inserted.
3. In the Quantity field, specify the quantity of part to issue to the work order requirement.
4. Click the **Save** button.

Replacing a Material Requirement with an Alternate Part

You can use the Alternate Parts dialog box to replace a material requirement specified on a work order with an alternate part.

Define alternate parts for specific work orders in the Manufacturing Window. Define alternate parts for a specific part in Part Maintenance.

If you are licensed to use multiple sites, the alternate part and the part it replaces must both exist in the selected site.

To replace a material requirement with an alternate part:

1. In the Material Planning Window, select the line that contains the part to replace.
2. Select **View**, **Alternate Parts**.
3. Click the alternate part and drag it to the Material Planning Window.
4. You are asked to confirm the part replacement. Click **Yes** to continue.

   If the part is a piece-tracked part, the system replaces the original part ID and usage UM on the material card with the part ID and usage UM of the alternate part.

Allocating Supply and Demand in the Standard Mode

You can perform the same allocations in the Material Planning Window that you can perform in the applications used to enter orders. For example, to allocate a portion of a purchase order line quantity to demand, you can use the Material Planning Window instead of opening the Purchase Order Entry window and searching for the order.

You can perform the following allocations in the Material Planning Window:

- Allocate Supply to Work Order Material Requirement Demand
- Allocate Supply to Customer Order Demand
- Allocate Supply to Interbranch Transfer Demand
- Allocate Work Order Supply to Demand
- Allocate Purchase Orders to Demand
- Allocate Interbranch Transfers to Demand

If you are licensed to use multiple sites, you can set up allocations on a site-by-site basis. You cannot allocate materials from one site to a second site.

Allocating Supply to a Material Requirement

With the work order line that contains the material requirement to which to allocate supply highlighted, select **Edit**, **Allocations**, **Allocate Supply to a Material**.

You can allocate supply to a work order material requirement from these sources:

- Coproduct supply
- Inventory
- Purchase Order Delivery Schedule supply
- Purchase Order supply
- Interbranch Transfer supply
- Work Order supply

See “Manufacturing Window” on page 3-1 of the Manufacturing guide.

Allocating Supply to Customer Orders

With the order line to which you are allocating supply highlighted, select **Edit**, **Allocations**, **Allocate Supply to Customer Order**.

You can allocate supply to a customer order from these sources:

- Coproduct supply
- Inventory
- Purchase Order Delivery Schedule supply

- Purchase Order supply
- Interbranch Transfer supply
- Work Order supply

See “Customer Order Entry” on page 7-1 of the Sales guide.

Allocating Supply to Interbranch Transfers

With the IBT line to which you are allocating supply highlighted, select **Edit**, **Allocations**, **Allocate Supply to Interbranch Transfer**.

You can allocate supply to interbranch transfers from these sources:

- Coproduct supply
- Inventory
- Purchase Order Delivery Schedule supply
- Purchase Order supply
- Interbranch Transfer supply
- Work Order supply

For more information, refer to “Inter Branch Transfer” on page 8-1 in this guide.

Allocating Work Orders to Demand

With the work order from which you are allocating supply to demand highlighted, select **Edit**, **Allocations**, **Allocate Work Order to Demand**.

You can allocate work order supply to these demand sources:

- Customer Order Delivery Schedule demand
- Customer Order demand
- Inventory demand
- Work Order demand
- Work Order Material Requirement demand
- Interbranch Transfer demand

See “Manufacturing Window” on page 3-1 of the Manufacturing guide.

Allocating Purchase Orders to Demand

With the purchase order from which you are allocating supply to demand highlighted, select **Edit**, **Allocations**, **Allocate Purchase Order to Demand**.

You can allocate purchase order supply to these demand sources:

- Customer Order Delivery Schedule demand
- Customer Order demand
- Inventory demand
- Work Order supply
- Work Order Material Requirement supply
- Interbranch Transfer supply

See “Purchase Order Entry” on page 8-1 of the Purchasing guide.

Allocating Interbranch Transfers to Demand

With the Interbranch from which you are allocating supply to demand highlighted, select **Edit**, **Allocations**, **Allocate Interbranch Transfers to Demand**.

You can allocate purchase interbranch transfer supply to these demand sources:

- Customer Order Delivery Schedule demand
- Customer Order demand
- Work Order Material Requirement supply
- Interbranch Transfer supply

For more information, refer to “Inter Branch Transfer” on page 8-1 in this guide.

Assigning Supply and/or Demand to an MRP-Exempt Warehouse

You can assign supply or demand orders to a warehouse that you have designated MRP-Exempt in Warehouse Maintenance. When you process orders through the Material Requirements Planning window, these orders will not be considered.

What is Advanced Material Planning?

Advanced Material Planning is an optional module that eases the material planning efforts of build-to-stock manufacturers by providing detailed time bucket and forecasting capabilities.

Advanced Material Planning provides you with enhanced material planning capabilities, expedites the process of recording and analyzing forecasts, and creates a Material Schedule that accommodates anticipated demand. With Advanced Material Planning driving the manufacturing process, you can avoid shortages, costly expediting, last minute rescheduling, and inefficient allocation of resources.

Note: To use the Advanced Material Planning mode, select ***Show Advanced at Startup*** from the view menu. With the advanced option selected, the Material Planning window is displayed in the advanced mode the next time you start it.

Advanced Material Planning does not change how you run MRP. You can use Advanced Material Planning to view supply, demand, planned orders and master schedules in a summarized horizontal view. You can also use the features of Advanced Material Planning to help you build the master product schedule.

Demand Fences and Demand Periods

A demand fence is the time period boundary before a specified calculation applies to the determination of demand. A demand period is a time duration, bounded by the fence, during which the calculation method applies.

The demand fence section shows demand fence 1, demand fence 2 and the source of the demand fence—Part, Product Code, or Site Maintenance. The part's planning information is checked first for a demand fence. If the part record does not have a demand fence, then the product code is checked. If the product code does not have a demand fence, then the system default for all parts, set in Site Maintenance, is displayed.

There are two demand fences that affect how gross demand is calculated. Real demand is considered up to the first demand fence. Real Demand is the combination of customer order demand (independent demand) and work order requirement demand (dependent demand).

Between the first and second demand fences, the greater of real demand and forecast demand is used as the gross demand. After the second fence, only forecast demand is used as the gross demand.

Real demand period – Begins on the current date and ends at the first demand fence. During this period the forecast is ignored and only dependent and independent demand, for example, real, are shown as demand. This demand is displayed in green in the AMP.

Mixed demand period – Begins immediately following the first demand fence at ends at the second demand fence. During this period, demand is defined as the greater of the forecast or the dependent and independent demand. This demand is displayed in blue in the AMP.

Forecast demand period – Begins immediately following the second demand fence and ends with the forecast or master schedule. This demand is displayed in black in the AMP.

Suggested MPS

You can prompt VISUAL to suggest quantities for your master product schedule. To activate this feature, select **Options**, **Calculate Suggested MPS**.

These calculations are used to determine suggested MPS:

- If Gross Demand > (Proposed Inventory from Previous Period + Current Firmed Orders), then Suggested MPS = Gross Demand - (Proposed Inventory from Previous Period + Current Firmed Orders)
- If Gross Demand <= (Proposed Inventory from Previous Period + Current Firmed Orders), then Suggested MPS = 0

These exceptions apply to the calculation:

- For the first period in your schedule, the proposed inventory from the previous period is equal to the inventory balance of the part based on your netting method.
- If the planning period contains the current date, then suggested MPS is adjusted for safety stock. Safety stock is subtracted from the total quantity of Proposed Inventory from Previous Period and Current Firmed Orders.
- If the Use min, max, mult for MPS order qtys check box in the Material Requirements Planning dialog is selected, then the suggested MPS value is adjusted for the minimum, maximum, and multiple order values for the part.

If you use Suggested MPS, then these two rows are added to the Advanced Material Planning table and to the Master Production Schedule table:

Suggested MPS – This row shows the suggested quantity to add to the master production schedule for the period.

Proposed Inventory – This row shows the quantity that is projected to be available in inventory if you update your master production schedule with the values from the Suggested MPS row and then run MRP.

Planning Calendars

Use planning calendars to show supply and demand for a specific Part ID in different sized buckets. You can only set one calendar as “Current” at a given time, but you can define multiple calendars. Planning calendars feature:

- An Origin Date used to calculate the three ranges.
- User definable ranges – the number of days and number of periods in each.

The size and number of periods in each range effect how VISUAL summarizes supply and demand. For example, you may want to see 10 periods of single, day-sized buckets, followed by 8 buckets of a weeks worth of data, followed by 10, month-sized buckets. You can build many different sized ranges and save each as a different calendar. Though it is important to remember that calendars are NOT part specific, you can display the same part using different calendars.

Demand fences and planning calendars work together and separately. Changing a planning calendar does not change the demand fence (the colored ranges and hence gross demand calculations). Changing the planning calendars does affect the demand fence by adding or subtracting buckets to a range. VISUAL evaluates each bucket to see which bucket it is in. This is apparent for time buckets between the first and second fence. For example, if the buckets are only a single day, and for each day of a week there is a real demand quantity of 100, but Friday has a forecast quantity of 800, the gross demand for Monday, Tuesday, Wednesday, and Thursday is 100. On Friday, gross demand is 800. If you change the bucket size to 7 days (one week), gross demand is only 800—as it is greater than the 500 of real demand—for the entire week.

Forecasts

You can also use Advanced Material Planning to build multiple forecasts and display each forecast separately in the main window. Build forecasts separately from the Master Production Schedule (MPS).

You can build the MPS using a single forecast or multiple forecasts, customer demand, independent demand and gross demand.

When building a forecast or MPS, VISUAL uses the current planning calendar in the child window. This can make some values seem as if they are unavailable. For example, set the current calendar to week-sized buckets, build a forecast or MPS, save it, change the calendar to month sized buckets, edit the forecast or MPS. The weeks are summarized, but it is more difficult to figure out where they came from.

Viewing Forecast Details for a Part

After you select a part, you can click anywhere on the following lines that appear in the Advanced Material Planning Window line item table to view information regarding the current part.

- Customer Demand
- Dependent Demand
- Current MPS
- Current MRP Plan
- Current Firmed Orders

Setting Up the Advanced Material Planning Window

Most of the settings used in the Standard Material Planning Window are also used in the Advanced Material Planning Window. For example, you can use the options on the View menu to choose which order statuses to include in the window, which netting rules to use, whether to view allocations and planned orders, and whether to display the Warehouse ID field.

In addition, you must set up a Calendar to view in the planning window. You can also choose whether to display zero values in the window.

Creating a Planning Calendar

Use the Planning Calendar dialog box to create planning calendars and to specify which calendar is displayed in the AMP.

Planning Calendars are defined on an enterprise-wide basis.

1. Select **Options**, **Planning Calendar** or **View**, **Set Current Calendar**.
2. Click **Insert**.
3. Specify this information:

   Calendar # – Specify the ID of the calendar.

   Description – Specify a description of the calendar ID.

   Planning Origin – Specify the start date for the calendar. The start date you choose is the date of the first bucket in the AMP. All other dates are calculated using this date as a basis.

   Current – If the calendar is the current MRP calendar, the check box is selected. For new calendars, this check box is cleared.
4. Specify the number and size of the planning periods to display. You can set up periods of equal size, or you can use the Range fields to set up periods of unequal size. For example, if you use ranges you can view near-term planning information on a daily basis, and long-term planning information on a weekly or monthly basis.

   To set up periods of equal size:

   Days in Period – If all planning periods have the same number of days, specify the number in this field. If you intend to set up period ranges, leave this field blank or specify 0.

   Total Periods – Specify the number of periods in your calendar.

   For example, if you specified 7 in the Days in Period field and 10 in the Total Periods field, ten columns that each represent seven days are generated in the AMP.

   To set up periods of unequal size:

   Total Periods – Specify the number of periods in your calendar.

   (Range 1) Days/Period – Specify the number of days per period for the first range.

   (Range 1) # of Periods – Specify the number of periods in the first range.

(Range 2) Days/Period – Specify the number of days per period for the second range.

(Range 2) # of Periods – Specify the number of periods in the second range.

(Range 3) Days/Period – Specify the number of days per period for the third range.

(Range 3) # of Periods – Specify the number of periods in the third range.

The number of periods you specify in the # of Periods fields must equal the number of periods you specified in the Total Periods field. If you exceed the total number of periods, a warning message is displayed.

5 If you specified 30 or 31 in any Days field, select the **Use calendar month for periods of 30 and 31 days** check box to create one period per calendar month.

6 Click **Save**.

Setting the Current Calendar

To set the current calendar:

1 In the Planning Calendar dialog box, select the schedule to use.

2 Click **Set Current**.

3 Click **Save**.

4 Click **Close**.

5 Click **Refresh** to display planning information in the current calendar.

Deleting a Planning Calendar

To delete a Planning Calendar, select the Planning Calendar and click **Delete** in the Planning Calendar table. Click **Save** to save any changes to the Planning Calendar dialog box.

Choosing Period Labels

Use the Show First Day of Period option in the View menu to specify how to label planning periods. To use the first day of the period is as the label, select **View**, **Show First Day of Period** until a check mark is displayed next to the option. To use the last day of the planning period, select **View**, **Show First Day of Period** until the check mark is cleared.

Planning period labels are used as column headers in these areas:

- The Advanced Material Planning window grid
- The Master Production Schedule dialog grid
- The Planning Forecast dialog grid
- The Material Planning Report, when run from the Advanced Material Planning window

Suppressing Zero

You can display empty cells instead of zeroes in the planning window table. Select **View**, **Suppress Zero**. A check mark is placed next to the option. Refresh the AMP window to remove zeroes from the table.

Generating Supply and Demand Orders in Advanced Material Planning

Supply and demand orders are generated when you enter certain transactions. Demand orders are generated when you enter these transactions:

- Customer Orders
- Interbranch Transfers
- Work Orders (generate a demand order for their component material requirements)

Supply orders are generated when you enter these transactions:

- Purchase Orders
- Interbranch Transfers
- Work Orders (generate a supply order for the finished good)

In addition, you can generate demand orders using the Master Production Schedule. In the Advanced Material Planning window, you can also create part forecasts to use in your master production schedules. If a part is master scheduled, you can set up the schedule to determine when a part should be purchased or made. If you are licensed to use multiple sites, you create master production schedules on a site-by-site basis. If you are licensed to use a single site, you create master production schedules on an enterprise-wide basis.

You can generate both supply and demand orders using Material Resource Planning (MRP). When you run MRP, work orders are generated to supply outstanding demand. These work orders generate their own demand orders for the material requirements that make up the bill of materials. MRP also generates supply orders for parts for which you have defined a master production schedule. Any order generated with MRP is prefixed by PL in the Material Planning Window.

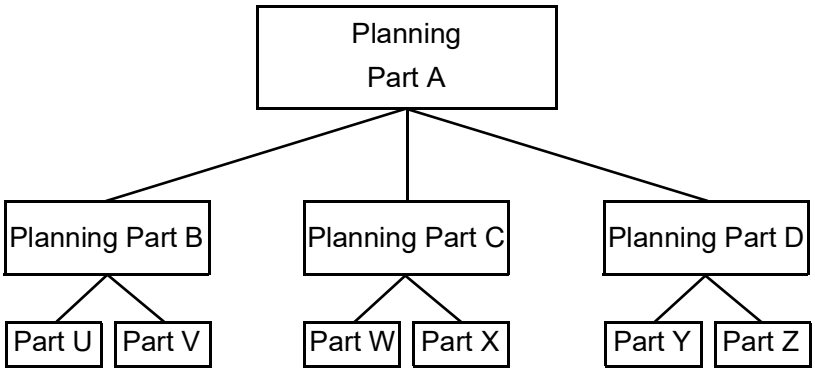
If you are licensed to use multiple sites, you run MRP on a site-by-site basis. If you are licensed to use a single site, you run MRP on an enterprise-wide basis.

Adding a Planning Bill of Material

A planning bill of material indirectly forecasts or plans several parts by allowing you to manipulate the relationship between the parent and subordinate parts and by providing a single forecast or plan for the parent part. If a planning bill of materials has multiple levels, changing the forecast for the parent part changes the forecast result for all subordinate levels.

Planning parts are not real parts. Planning parts are not stored in a separate table called PLANNING_PART. This permits any number of levels to exist in the planning part table through the planning bill of material table, PLANNING_BOM. At the lowest level, the planning bill of material refers to the actual part table. This level can have no further planned parts below it.

For example:



In this example, there are two levels of planning parts and an additional level of real parts. There is no requirement that all real parts occur at the same level, only that they be the bottom most level.

The real parts you use in a planning bill of material must be master scheduled.

Each relationship contains a percentage that dictates the quantity of subordinate parts for each parent part. This allows the system to determine the quantity of each subordinate part as a function of the parent part forecast or plan.

For planning purposes, you specify:

Part ID	Percentage
Planning Part A	
Planning Part B	10%
Planning Part C	25%
Planning Part D	65%

Given the following 7 week forecast, VISUAL calculates these subordinate forecasts:

ID	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
A	1000	1000	1400	950	3500	4500	2500
B	100	100	140	95	350	450	250
C	250	250	350	238	875	1125	625
D	650	650	910	617	2275	2925	1625

When calculating these values, VISUAL deals with rounding loss and gain. The last part receives the balance from the parent part. This means that percentages must total 100 at each set. This is evident in Week 4 above.

The scale of forecast values is determined by the unit of measure scale of the part in question. For instance, if a part is measured in EA, the scale is 0, therefore; the numbers will be integers. If a part is measured in LBS and the scale is 2, the numbers will be decimal numbers having 2 places after the decimal point.

You can use Planning Bills of Material to derive either lower level forecasts or lower level master schedules. Editing a planning part's forecast causes calculation of the lower level planning data immediately. There is no batch step, such as MRP, that needs to take place.

If you are licensed to use multiple sites, create Planning Bills of Material on a site-by-site basis.

To create a Planning Bill of Material:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Planning Bill of Material**.
3. Enter a unique identifier for this bill of material in the Planning Part ID column.
4. Enter a description for the Planning Part in the Description field.
5. Click **Insert** and specify this information:

   Part ID – To select a part ID, double-click the Part ID browse button. To select from a list of planned parts, select either the Planning Part ID or Planning Part Description option. To select from a list of actual parts, select either the Part ID or Part Description option. Select the part from the browse table.

   If you are selecting an actual part, you are warned if you do not select a master scheduled part.

   If you are licensed to use multiple sites, the part must be defined as a master schedule part at the Tenant level.

   % Per – Specify the percentage the part makes up of the Planning Part in the % Per column.

   All percentages in the Percentage columns must total 100.
6. Click the **Save** button.

Deleting a Planning Bill of Material

To delete an existing Planning Bill of Material, click the **Delete** button in the Planning Bill of Material Entry window and click the **Save** button.

Adding Planning Forecasts

You can add and delete Planning Forecasts for your master scheduled parts in Advanced Material Planning. You can add multiple forecasts for each part. You can use these forecasts as the basis for the master production schedule for the part, and then generate planned orders based on your forecast in Material Resource Planning.

If you are licensed to use multiple sites, then define forecasts on a site-by-site basis.

You can define forecasts for actual parts that are master scheduled and for planning parts you set up in Planning Bill of Materials.

To add a forecast:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Planning Forecast**.
3. In the Part Type section, click one of these options:

   Planned – Click Planned to define a forecast for a planned part.

   Real – Click Real to define a forecast for a real part.
4. Click the **Part ID** browse button and select the part to use in the forecast.
5. In the Warehouse ID field, click the arrow and select the independently planned warehouse for the forecast. To define the forecast for your universally planned warehouses, select Universal.
6. Click **Insert** and specify this information:

   Forecast ID – Specify a unique identifier for this forecast.

   Status – Specify the status of the forecast. Click the arrow and select one of these options:

   Active – Lists and Considers the forecast in the Advanced Material Planning window.

   Hidden – Considers the forecast, but is not shown in the Advanced Material Planning window.

   Inactive – Does not consider or show the forecast in the Advanced Material Planning window.

   Periods – The periods in your current calendar are inserted as the date columns. In each column, specify the forecasted quantity for the period.
7. Click **Save**.

Using Auto-Fill to Create Forecasts

You can use the auto-fill feature to insert demand in multiple forecast rows and columns. To use auto-fill, specify this information:

Fill Quantity – Specify the quantity to insert into the forecast.

Increase % – If demand for the part is forecasted to increase by a certain percentage in each period, specify the percentage in this field. For example, if you specified 10 in the Fill Quantity field and 10% in this field, the first period demand would be 11, an increase of 10% from the number you specified in the Fill Quantity field.

Increase Quantity – If demand for the part is forecasted to increase by a specific amount in each period, specify the quantity in this field. For example, if you specified 10 in the Fill Quantity field and 2 in this field, the first period demand would be 12, and the second period demand would be 14.

Use the buttons to specify how the forecast table should be filled. You can click these options:

Zero All – Click this button to reset quantities to zero. You must select a row before you can use this button.

Fill All – Click this button to insert the quantities you specified in the quantity fields into a row. You must select a row before you can use this button.

Zero Selected – Click this button to reset quantities to zero. You must select a row or column before you can use this button.

Fill Selected – Click this button to insert the quantities you specified in the quantity fields into the cells. You must select a row or column before you can use this button.

Select All Rows – Click this button to select all rows in the table.

Unselect All Rows – Click this button to unselect all rows in the table. If you selected columns, the columns remain selected when you click this button.

Unselect All – Click this button to unselect all cells in the table.

Deleting Planning Forecasts

To delete an existing Planning Forecast:

1. Click the **Part ID** browse button and select the part containing the forecast to delete.
2. Select the Forecast ID line to delete.
3. Click the **Delete** button.
4. When you have finished deleting forecast lines, click the **Save** button.

Importing and Exporting Forecasts

For more information, refer to “Importing and Exporting Forecasts and Master Production Schedules” on page 9-76 in this guide.

Customer Forecast

For more information, refer to “Transferring Customer Forecasts to Part Forecasts” on page 9-28 in this guide.

Setting Up Master Production Schedules

Master Production Schedules have two main uses:

- Setting and maintaining a forecast of demand for the current part.
- Setting and maintaining the part’s master production schedule for MRP to use when generating planned orders.

To perform both of these functions, use the Master Production Schedule dialog box.

If you are licensed to use multiple sites, set up master production schedules on a site-by-site basis. If you are licensed to use a single site, set up master schedules on an enterprise-wide basis.

If the Order Policy for this Part ID is not “Master Schedule,” you are warned before you can continue. You can set up a forecast and master production schedule for any part, but planned orders are generated only if the part’s order policy is “Master Schedule.” Set order policies for parts in Part Maintenance. For more information, refer to “Specifying Planning Information” on page 3-11 in this guide.

You can define master schedules for individual parts and for individual customers.

To set up a master production schedule:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use in the forecast. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Master Production Schedule**.
3. In the Part Type section, select which type of part to view. To view real parts, click the Real option. To view parts you set up in Planning Bill of Materials, click the Planned option.
4. In the Part ID field, click the browse button and select the part for which you are defining the master production schedule. If you selected Real in the Part Type section, the browse table displays the master scheduled parts in your database only. If you selected Planned, the browse table displays the parts you set up in Planning Bill of Materials. If you are licensed to use multiple sites, both browses are filtered to show only parts that belong to the selected site.
5. In the Warehouse ID field, click the arrow to select the warehouse to use in the plan. The drop-down list displays all independently planned warehouses. Select an independently planned warehouse, or select Universal to create the schedule for all universally planned warehouses.
6. In the Period Want Day field, specify the day in the period to use as the want date on planned orders. You cannot specify a value greater than the length of the planning period. If you use different period lengths for each range in your planning calendar, then the value you specify in this field cannot be greater than the shortest period.

   For example, presume your planning periods are each 14 days long and you specified 3 in the Period Want Day field. If the first planning period began on September 1, then the want date for planned orders during the period would be September 3. If the period began on September 29th, then the want date for planned orders during the period would be October 1, the third day in the planning period.
7. The table displays the current Master Production Schedule, any Part Forecasts you set up, and the current actual demand. To create the current MPS, click in a cell in the Current MPS line and specify the quantity of part to order. You can also edit the part forecasts by clicking in the cells in a part forecast line and changing the quantity.
8. Click **Save**.

Using Auto-Fill to Create Master Production Schedules

You can use the auto-fill feature to insert information in the MPS row and in the forecast rows. To use auto-fill, specify this information:

Fill Quantity – Specify the quantity to insert into the production schedule or forecast.

Increase % – If demand for the part increases by a certain percentage in each period, specify the percentage in this field. For example, if you specified 10 in the Fill Quantity field and 10% in this field, the first period demand would be 11, an increase of 10% from the number you specified in the Fill Quantity field.

Increase Quantity – If demand for the part increases by a specific amount in each period, specify the quantity in this field. For example, if you specified 10 in the Fill Quantity field and 2 in this field, the first period demand would be 12, and the second period demand would be 14.

Use the buttons to specify how the table should be filled. You can click these options:

Copy to MPS – Click this button to copy the selected row to the Current MPS row. You can select any of the other rows in the table.

Zero All – Click this button to reset quantities to zero. You must select a row before you can use this button.

Fill All – Click this button to insert the quantities you specified in the quantity fields into a row. You must select a row before you can use this button.

Zero Selected – Click this button to reset quantities to zero. You must select a row or column before you can use this button.

Fill Selected – Click this button to insert the quantities you specified in the quantity fields into the cells. You must select a row before you can use this button.

Select All Rows – Click this button to select all rows in the table.

Unselect All Rows – Click this button to unselect all rows in the table.

Unselect All – Click this button to unselect all cells in the table.

Copying Demand to the Master Production Schedule

Use the Copy Demand to MPS dialog to update the production schedule for all master scheduled parts with a particular source of demand. update the schedule for all master schedule parts.

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site whose part demand you want to copy. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Copy Demand to MPS**.
3. Specify this information:

   Demand Type – Click the arrow and select the type of demand to copy to the master production schedule. You can select one of these options:

   Customer Demand – Select this option to copy the quantity required to meet demand generated by customer orders.

   Dependent Demand – Select this option to copy the quantity required to meet work order and interbranch transfer demand.

   Gross Demand – Select this option to copy both customer and dependent demand.

Suggested MPS – This option is available only if you have activated the Suggested MPS feature. Select this option to copy the quantity that VISUAL suggests that you use in the master production schedule. See "Suggested MPS" on page 9–64 in this guide.

Warehouse ID – Click the arrow and select the warehouse to use to evaluate demand. You can select any independently planned warehouse, all universal warehouses, or all warehouses.

Product Code – To copy demand for parts with a certain product code, click the arrow and select the product code to use.

Planner – To copy demand for parts with a certain planner, click the arrow and select the planner to use.

Buyer – To copy demand for parts with a certain buyer, click the arrow and select the buyer to use.

Fabricated – Select this check box to copy demand for fabricated parts.

Purchased – Select this check box to copy demand for purchased parts.

Include Planned Orders – Select this check box to include planned orders in the demand calculation.

Close Upon Process Completion – Select this check box to close the dialog box after processing is complete.

Log Process – Select this check box to create a log file for the process. The log file lists the parts that have been updated.

4 In the Period Want Day field, specify the day in the period to use as the want date on planned orders. You cannot specify a value greater than the length of the planning period. If you use different period lengths for each range in your planning calendar, then the value you specify in this field cannot be greater than the shortest period.

5 For example, presume your planning periods are each 14 days long and you specified 3 in the Period Want Day field. If the first planning period began on September 1, then the want date for planned orders during the period would be September 3. If the period began on September 29th, then the want date for planned orders during the period would be October 1, the third day in the planning period.Click **Start**.

Importing and Exporting Forecasts and Master Production Schedules

Use the Excel Export/Import Forecast or the Import/Export functions to import a forecast or a master production schedule or to export information to use to build a forecast or master production schedule. You can import or export information for as single part or for multiple parts. You can also import information for a particular independently planned warehouse.

Use the Excel Export/Import Forecast function to import or export information using Microsoft Excel. Use the Import/Export function to import or export information using Forecast Pro®. Forecast Pro uses the MLT file extension.

When you import a forecast in the Advanced mode of the Material Planning window, you can choose where to import the forecast information. You can import the information into the Planning Forecast dialog box only, the Master Production Schedule dialog only, or you can import the information into both dialogs.

When you export information, you can choose the types of actual usage to include in the exported file.

Importing and Exporting with the MLT Format

VISUAL supports the ASCII (MLT) format. The MLT format is record oriented. Each record contains this information:

- Part ID.
- Part description.
- Starting year.
- Starting period number.
- Periods per year: Use 12 for monthly, use 52 for weekly; Default to 12 when zero.
- Periods per cycle (for seasonality; usually the same as periods per year).
- Data series (the actual forecast value for each period).
- A terminating semicolon.

While the first two items in the MLT file can be any identifying key and description, we recommend using Part ID and Part Description to avoid confusion.

These limitations apply to the MLT file:

1. The Part ID is limited to 24 characters. VISUAL supports 30. You can export data for part number lengths between 25 and 30 characters, but Forecast Pro will truncate them to 24. This means that the resulting data cannot be put back into VISUAL reliably.
2. Part IDs may only contain certain characters. They are: ! # $ % & 0-9 ? @ A-Z _ a-z |

   Forecast Pro assigns a special meaning to any entry that starts with an underscore character. The record is tagged as a helper variable and is not part of a forecast.
3. MLT format files handle up to 12,000 points of data; i.e., the data series can have up to 12,000 entries.
4. Forecast Pro does not export confidence information in the MLT file format. For this information, you need to read the ITM file format.

Exporting Forecasts Using the MLT Format

To export a forecast in the MLT format:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable. Perform this step in the Material Planning Window, before you access the Import/Export part forecast dialog box.
2. Open the Import/Export Forecast dialog box. Perform one of these steps:

- Select **File**, **Import/Export Forecast**.
- From the Master Production Schedule dialog box, click the **Import/Export Forecast** button.
- From the Planning Forecast dialog box, click the **Import/Export Forecast** button.

3 In the Action section, click **Export**.

4 In the Path field, specify the location and name of the file to use for the export. If the file already exists, it will be overwritten. If the file does not exist, it will be created.

5 In the Export section, specify the information to include in the export file. Specify this information:

From Part ID/To Part ID – To select a single part or range of parts, use the From Part ID and To Part ID fields. Click the browse buttons and select the parts with which to begin and end the export. To export information for a single part, specify the same part ID in both the From Part ID and to Part ID fields. To export all parts, leave both fields blank.

Product Code – To export information for parts with a particular product code, specify the product code in this field.

Starting and Ending Dates – Click the **Start** and **End Dates** calendar buttons and select the dates to use for the forecast export. Usage over the time period you specify is included in the report.

Periods per Cycle – Specify the Periods per Cycle to use for the forecast export.

Export Options – Specify the types of transactions to use to calculate usage. Select these options:

- Shipments
- Issues
- Adjustments out

Adjustment Options – Specify the types of transactions to use to adjust the usage totals. Select these options:

- Shipments Rtns
- Issue Rtns
- Adjustments in

6 Click the **Begin** button. The information you selected is exported to an MLT file.

Importing Forecasts Using the MLT Format

To import a forecast using the MLT format:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use for importing or exporting forecasts. If you are licensed to use a single site, this field is unavailable. Perform this step in the Material Planning Window, before you access the Import/Export part forecast dialog box.

2 Open the Import/Export Forecast dialog box. Perform one of these steps:

- Select **File**, **Import/Export Forecast**.
- From the Master Production Schedule dialog box, click the **Import/Export Forecast** button.

- From the Planning Forecast dialog box, click the **Import/Export Forecast** button.

3 In the Action section, click **Import**.

4 Click the **Path** button and select the file to import.

5 Specify this information:

Forecast ID – Specify a name for the forecast. You cannot import a forecast without specifying a name. If you specify an existing ID, the existing information is overwritten with the imported information.

Warehouse ID – If the forecast applies to a particular independently planned warehouse, specify the warehouse ID. If the forecast applies to all universally planned warehouses, specify Universal.

Import Destination – Select where to add the imported information. Click one of these options:

Import to forecast table – Click this option to import the information as a forecast into the Planning Forecast dialog box and the Master Production Schedule dialog box. If you specified a new forecast ID, the ID is inserted as a line in both dialog boxes. The information is imported into the PLANNING_FORECAST table in your database.

Import to master schedule table – Click this option to import the information into the master production schedule. When you select this option, the Current MPS line in the Master Production Schedule table is overwritten with the imported information. The information is imported into the MASTER_SCHEDULE table in your database.

Import to both – Click this option to import the information as a forecast and as the master production schedule.

Purge Prior Data – To remove all existing data from the tables you selected, select this check box. To retain existing information, clear this check box. If you clear this check box, existing information will be overwritten if the imported information uses the same dates as the existing information. For example, if you are importing data into the Master Production Schedule dialog box that includes information for October 15, and the Master Production Schedule dialog box already contains information for October 15, then the data you import overwrites the existing data.

6 Click the appropriate period option:

Beginning of Period – If you are importing a forecast in the middle of a period, click this option to roll back to the beginning of the period. For example, for monthly imports, if you are importing a file on the 5th of the month, click this option to use the 1st of the month as the beginning of the period.

End of Period – If you are importing a forecast in the middle of a period, click this option to use the end of the period when importing dates. For example, for monthly imports, if you are importing a file on the 15th of the month, click this option to use the 31st of the previous month as the end of the period.

7 Click the **Begin** button.

VISUAL imports the forecast information to the appropriate tables.

Importing and Exporting Forecasts Using Microsoft Excel

You can export forecasts to Microsoft Excel, use the Excel file to edit the forecast, and then import the forecast back into VISUAL. In the Microsoft Excel file, you can edit the forecast quantities and the required/want date for the quantities.

Exporting Forecasts to Excel

To export a forecast:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Master Production Schedule** or **File**, **Planning Forecast**.
3. Click the **Excel Export/Import forecast** button.
4. Click the **Export** tab.
5. Specify the information to export to an Excel file. Specify this information:

   From Part ID/To Part ID – To select a single part or range of parts, use the From Part ID and To Part ID fields. Click the browse buttons and select the parts with which to begin and end the export. To export information for a single part, specify the same part ID in both the From Part ID and to Part ID fields. To export all parts, leave both fields blank.

   Product Code – To export information for parts with a particular product code, specify the product code in this field.

   Starting and Ending Dates – Click the **Start Date** and **End Date** calendar buttons and select the dates to use for the forecast export. Usage over the time period you specify is included in the report.

   Use active calendar – If you have set up a planning calendar, select this check box to use the currently active calendar to determine the size of the planning periods. The Days in Period value specified for the current planning calendar is inserted in the Planning size field. The ID of the current calendar is inserted in the Calendar # field. For more information, refer to "Creating a Planning Calendar" on page 9-66 in this guide.

   To specify your own planning period size, clear this check box.

   Planning size – If you did not select the Use active calendar check box, specify the size of each planning period for the date range you specified. Specify a value from 1 to 31. If you selected the Use active calendar check box, then the planning size specified on the current planning calendar is inserted.

   The value in this field is used to calculate the Required/Want date column. It also determines how many rows are inserted into the table. A row is added to the table for each whole planning period within the date range you specified in the Start Date and End Date fields. A row is added only if a whole planning period can be inserted. For example, if you specified January 1 as the start date and February 15 as the end date, and your planning size is 15, then three lines would be added to the table. The first line would have a Required/Want date of January 15. The second line would

have a Required/Want date of January 30. The third line would have a Required/Want date of February 14. A fourth line would not be added because only one day remains in the time range you specified.

If you specified your own value in the planning size field, or your planning calendar does not use monthly periods, then the value in this field is added to the start date to determine the first planning period. For example, if you specified January 1 as the start date, and your planning size is 15, then the first planning period ends on January 15. The second planning period ends on January 30.

If you did select the Use active calendar check box and your planning calendar uses monthly periods, then monthly planning periods are used. If your start date is the 28th day of the month or later, then the following month is considered to be the first planning period. For example, if you specified January 29 as the start date, then the first planning period would be February 1 through February 28th. If your start date is the 27th day of the month or earlier, then the start date of the planning period is the 27th, and the end date of the period is the 26th of the following month. For example, if you specified January 15 as your start date, then the first planning period begins on January 15 and ends on February 14.

Calendar # - If you selected the Use active calendar check box, the ID of the current planning calendar is inserted.

Export – Specify the types of transactions to use to calculate the forecasted quantity. Select these options:

- Shipments
- Issues
- Adjustments out

Adjustment by – Specify the types of transactions to use to adjust the quantity. Select these options:

- Shipments Rtns
- Issue Rtns
- Adjustments in

6 Click the **Begin** button. The information you selected is inserted into the table.

7 To edit the information in the table, clear the **Transposed** check box. Then, edit the Required/Want Date and Quantity as necessary.

8 Use the Transposed check box to select the layout for the Excel file. If you select the Transposed check box, then one row is exported for each part and one column is exported for each planning period. For example, if you are exporting planning information for 12 planning periods for a single part, then the Excel spreadsheet would contain one row for the part. The spreadsheet would also contain one column for the part ID, one column for the part description, and 12 columns for the planning periods. If you clear the Transposed check box, then one row is exported for each part/planning period combination. For example, if you are exporting planning information for 12 planning periods for a single part, then the Excel spreadsheet would contain 12 rows: one row for each part/planning period combination. The spreadsheet would also include columns for Part ID, Description, Required/Want Date and Quantity.

9 To export all rows in the table, click the **Send to Excel** button. To export specific rows, select the rows and then click the Send to Excel button. After you click **Send to Excel**, an Excel file is opened, populated with the information that you selected.

10 To exit the dialog, click the **Close** button.

Saving Export Information as a Forecast or as the Master Production Schedule

After you build the export information, you can save the information as a forecast, as the master production schedule, or both. To save the information:

1 Build the export information.

2 Click the **Import** tab.

3 Specify this information:

Forecast ID – Specify an ID for this forecast. If you specify an ID that is already in use, the information you specify in the table overwrites the existing information.

Warehouse ID – To import the information as a forecast for a particular independently planned warehouse, specify the warehouse ID. To import the information to your universally planned warehouses, specify Universal.

Import To – Specify where to import the information. Click one of these options:

Import to forecast table – Click this option to import the information as a forecast into the Planning Forecast dialog box and the Master Production Schedule dialog box. If you specified a new forecast ID, the ID is inserted as a line in both dialog boxes. The information is imported into the PLANNING_FORECAST table in your database.

Import to master schedule table – Click this option to import the information into the master production schedule. When you select this option, the Current MPS line in the Master Production Schedule table is overwritten with the imported information. The information is imported into the MASTER_SCHEDULE table in your database.

Import to both – Click this option to import the information as a forecast and as the master production schedule.

Purge Prior Data – To remove all existing data from the tables you selected, select this check box. To retain existing information, clear this check box. If you clear this check box, existing forecast information will be overwritten if the imported information uses the same dates as the existing information. For example, if the Master Production Schedule contains data for October 15 for a particular part, and the data you import into the master schedule table also contains data for October 15, then the data you import overwrites the existing data.

4 To edit the forecast, clear the **Transposed** check box. Then, edit the Required/Want Date and Quantity fields. You can edit this information on either the Export or the Import tab.

5 Click the **Save** button. The information is imported into the locations you specified.

When you view imported information in either the Master Production Schedule or Planning Forecast dialog box, your current planning calendar is used for the planning periods. The quantities you import are combined if necessary and placed in the planning calendar periods.

Importing Information from Excel

Use the Export/Import Forecasts dialog box to import part forecasts from Excel.

To successfully import information from an Excel file, you must first determine the layout of your Excel file. If your Excel file contains one row for each part ID, then your Excel file is in the Transposed layout. You must select the Transposed check box before importing the file. If your Excel file contains one row for each part ID/planning period combination, then your Excel file is in the Standard layout. You must clear the Transposed check box before importing the file.

If your Excel file uses the Transposed layout, then the file must meet this criteria before it can be imported:

- The file must contain the correct headings in the correct order. The first heading must be Part ID. The second heading must be Part Description. The remaining headings must be planning period dates. In Excel, the planning period headings must use the Date number format category and the *3/14/2001 number type. To see the correct format, you can export a forecast using the Transposed layout to Excel first.
- The file must use correct Part IDs. The part ID in the spreadsheet must match the part ID in your database. If the part ID in the spreadsheet does not match a part ID in your database, the information is not imported.
- The file must contain no duplicate dates for the same part ID. This causes an error when saving to the database.

In an Excel spreadsheet created in the Transposed layout, you can edit the forecast quantity and the Required/Want Date column headers. You can also edit the Part Description in the spreadsheet, but the edited description will not be imported into your database.

If your Excel file uses the Standard layout, then the file must meet this criteria before it can be imported:

- The file must contain the correct headings in the correct order and format. Use these headings in this order: Part ID, Description, Required/Want Date (m/dd/yyyy format), and Quantity. To see the correct format, you can export a forecast to Excel first.
- The file must use correct Part IDs. The part ID in the spreadsheet must match the part ID in your database. If the part ID in the spreadsheet does not match a part ID in your database, the information is not imported.
- The file must contain no duplicate dates for the same part ID. This causes an error when saving to the database.

In an Excel spreadsheet created in the Standard layout, you can edit the Required/Want Date and Quantity. You can also edit the Description in the spreadsheet, but the edited description will not be imported into your database.

To import a forecast:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use for importing or exporting forecasts. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Planning Forecast** or **File**, **Master Production Schedule**.
3. Click the **Excel Export/Import forecast** button.
4. Select the **Import** tab.

5 Specify the information to import. Specify this information:

Forecast ID – Specify an ID for this forecast. If you specify an ID that is already in use, the information you specify in the table overwrites the existing information.

Warehouse ID – If the forecast applies to a particular independently planned warehouse, specify the warehouse ID. If the forecast applies to all universally planned warehouses, specify Universal.

Import To – Select where to add the imported information. Click one of these options:

Import to forecast table – Click this option to import the information as a forecast into the Planning Forecast dialog box and the Master Production Schedule dialog box. If you specified a new forecast ID, the ID is inserted as a line in both dialog boxes. The information is imported into the PLANNING_FORECAST table in your database.

Import to master schedule table – Click this option to import the information into the master production schedule. When you select this option, the Current MPS line in the Master Production Schedule table is overwritten with the imported information. The information is imported into the MASTER_SCHEDULE table in your database.

Import to both – Click this option to import the information as a forecast and as the master production schedule.

Purge Prior Data – To remove all existing data from the tables you selected, select this check box. To retain existing information, clear this check box. If you clear this check box, existing information will be overwritten if the imported information uses the same dates as the existing information. For example, if the Master Production Schedule contains data for October 15 for a particular part, and the data you import also contains data for October 15, then the data you import overwrites the existing data.

6 Specify the layout of your Excel file. If your Excel file uses one row for each part ID and one column for each planning period, then the file uses the Transposed layout. Select the **Transposed** check box before importing the file. If your Excel file uses one row for each part ID/ planning period combination, then the file uses the standard layout. Clear the **Transposed** check box before importing the file.

7 Click the **Import from Excel** button.

8 Select the Excel file containing the forecast, and then click **Open**. The information is inserted in the forecast table in the dialog box.

9 To edit the forecast, clear the **Transposed** check box. Then, modify the Required/Want Date and Quantity line in the forecast table.

10 Click the **Save** button to save the information to your database. The information is inserted into the tables you specified in the dialog box header.

11 Click the **Close** button.

When you view imported information in either the Master Production Schedule or Planning Forecast dialog box, your current planning calendar is used for the planning periods. The quantities you import are combined if necessary and placed in the planning calendar periods.

Running MRP

After you set up your master production schedules and forecasts, run MRP to generate planned orders. The procedure for running MRP is the same in both the standard mode and planned mode. For more information, refer to “Using Material Requirements Planning” on page 9-37 in this guide.

Suggested MPS and MRP

If you have activated the Suggested MPS feature, then these rules apply when you run MRP:

- Current firmed orders are not considered by MRP when processing master scheduled parts. Current firmed orders are considered in the Suggested MPS calculation.
- The **Net on-hand quantities for master scheduled parts** check box is not available.

If you select the Apply min/max/multiple to master scheduled parts, then quantities are adjusted to match the minimum, maximum, and multiple quantity policy.

Viewing Information in the Advanced Material Planning Window

To view information for a part:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. To view part information for a particular warehouse, click the **Warehouse ID** arrow and select the warehouse to view. If the Warehouse ID field is not displayed, select **View**, **View by Warehouse** to display the field.

The header of the Advanced Material Planning Window is the same as the header of the Standard Material Planning Window. For more information, refer to “Viewing General Information for a Part” on page 9-17 in this guide.

In the table, each period you defined in the Planning Calendar has its own column. These rows are displayed:

Current MPS – If the part is master scheduled, the current scheduled quantity for the period.

Beginning Inventory – The actual quantity in the selected warehouses at the beginning of the planning period.

MRP Planned Orders – If you generated planned orders for this part in MRP, the total quantity of the planned orders is displayed.

Suggested MRP release – If you generated planned orders for this part in MRP, the total quantity of planned orders that the system suggests you release in the period is inserted.

Current Firmed Orders – The quantity of part on order to meet the demand is inserted.

Gross Supply – The total supply available for the period.

Forecast Demand – If the part is a master scheduled part and you have set up a part forecast, the quantities required by the forecast are displayed. The ID of the forecast is used as the row label.

Customer Demand – The total quantity required to meet customer order demand is displayed.

Dependent Demand – The total quantity required to meet work order demand or inter branch transfer demand is displayed.

Gross Demand – The customer demand is added to the dependent demand, and the result is displayed in this field.

Projected Inventory – The quantity of part projected to be on hand at the end of the period.

Suggested MPS – This row is displayed only if you have selected Calculate Suggested MPS from the Options menu and the part you are viewing is master scheduled. This row shows the quantity that VISUAL suggests that you add to your master production schedule. See "Suggested MPS" on page 9–64 in this guide.

Proposed Inventory – This row is displayed only if you have selected Calculate Suggested MPS from the Options menu and the part you are viewing is master scheduled. This row shows the quantity that is projected to be in your inventory if you update your master production schedule with the suggested value and then run MRP.

Viewing Planning Period Details

To view a daily breakdown of supply and demand for a planning period, open the Planning Period Details dialog. You can open the dialog in these ways:

- Double-clicking a column header in the Advanced Material Planning table
- Select a planning period column, then select **Info**, **Show Planning Period Details**
- Select a planning period column, then click the **Planning Period Details** toolbar button

The header shows summary information for the planning period. If you have enabled the Calculate Suggested MPS feature, then the Suggested MPS and Proposed Inventory for the period are also displayed.

To navigate to a different planning period, use the arrows next to the Planning Period field. You can also select a different period in the main Advance Material Planning window.

The type of demand is displayed above the table. The type of demand determines how the gross demand is calculated. These types are used:

Real – The gross demand is calculated by adding customer and dependent demand.

Mixed – The gross demand is the greater of real demand and forecasted demand.

Forecast – The gross demand is the forecasted demand.

To add demand information from active forecasts for the part, select the **Show Active Forecasts** check box.

The daily table shows information about each day's supply, demand, and projected inventory. This information is displayed:

Beginning Inventory – The quantity on hand at the beginning of the day. For the first day in the planning period, the beginning inventory value is the same as the beginning inventory value in the header. For subsequent days, the beginning inventory equals the projected inventory from the previous day.

MRP Planned Orders – The quantity of all planned orders for the day.

Suggested MRP Release – The quantity of all planned orders whose suggested release date is equal to the date in the column header.

Current Firmed Orders – The quantity of all supply orders with a due date that is equal to the date in the column header.

Gross Supply – The total of the beginning inventory, MRP planned orders, and current firmed orders.

Active Forecasts – If you selected the Show Active Forecasts check box, then all currently active forecasts for the part are displayed. These forecasts are informational only. The quantities are not used to calculate demand.

Remaining Forecast – The quantity of all active forecasts that has not yet been consumed by demand is displayed. These calculations are used:

Real – If the period type is Real, then the Remaining Forecast is zero. Forecasts do not affect demand in Real planning periods.

Mixed – If the period type is Mixed, then a series of calculations are made to determine the Remaining Forecast figure.

First, the total real demand for the entire planning period and the total forecast demand for the entire planning period are determined. The total real demand is determined by adding each day's customer demand and dependent demand. The total forecast demand is determined by adding each day's demand for all active forecasts.

The total real demand and total forecast demand are then compared to determine the Remaining Forecast for each day. This table shows the calculations:

Condition	Remaining Forecast Calculation
Total real demand is greater than total forecast demand	Remaining Forecast for each day= 0
Total real demand = 0	Remaining Forecast for each day = Total daily quantity for all forecasts.
Total real demand does not equal zero and is less than total forecast demand	The Total real demand is subtracted from the forecast entry with the earliest date within the planning period. If the result is greater than zero, then the result is inserted into the Remaining Forecast column for that date. If the result is zero or less, then a zero is inserted into the Remaining Forecast column for that date, and the Total real demand is reduced by the forecast entry quantity to show that some of the demand has been applied to a forecast. Repeat these steps for all remaining forecast entries, or until all real demand has been applied.

Forecast – If the period type is Forecast, then the Remaining Forecast equals the total forecasted demand for the date. Real demand is not considered in the calculation.

Customer Demand – The total quantity of all customer orders for the part with a want date equal to the date in the column header.

Dependent Demand – The total quantity required by work orders or interbranch transfers with a want date equal to the date in the column header.

Gross Demand – The total demand quantity for the date. These calculations are used:

Real – If the period type is Real, then Gross Demand = Customer Demand + Dependent Demand.

Mixed – If the period type is Mixed, then Gross Demand = Remaining Forecast + Customer Demand + Dependent Demand.

Forecast – If the period type is Forecast, then Gross Demand = Remaining Forecast.

Projected Inventory – The quantity projected to remain in your inventory. This calculation is used: Gross Supply - Gross Demand.

Current MPS – For master scheduled parts, the scheduled production for the date.

Viewing Demand and Supply Orders in the Planning Period Details Dialog

When you first open the Planning Period Details dialog, all demand and supply orders for the period are displayed. To filter the information, select one or more columns Click a column to view the demand and supply orders for the day. Press CTRL and click two columns to select a date range. All orders that fall between the two dates that you select are displayed.

Working with Supply and Demand Information

You can click these rows to view a panel of information about the supply or demand:

- MRP Planned Orders
- Current Firmed Orders
- Customer Demand
- Dependent Demand
- Current MPS

You can set up allocation information directly from the Customer Demand.

Viewing Current MRP Planned Orders for a Part

To view the planned order details for the current part, click anywhere on the MRP Planned Orders line.

You cannot edit any of the values in these columns. The line item table contains these columns:

Order ID – The ID of the order.

Order Quantity – The order quantity.

Want Date – The date on which you want the order delivered.

Viewing Customer Demand for a Part

To view a customer's demand for the current part, click anywhere on the Customer Demand line.

The line item table contains the following columns:

Customer ID – The ID of the customer who placed the order.

Order ID – The ID of the customer order.

Status – The status of the order.

Order Quantity – The quantity of the order line.

Quantity Due – The quantity that you must produce to deliver to the customer.

Want Date – The date on which the customer wants the order.

Warehouse ID – The ID of the warehouse from which the order originates.

To open an order, double-click the line. Or, select a line and select **Info**, **Display Demand (peg) Order**.

Viewing Dependent Demand for a Part

To view the dependent demand for the current part, click anywhere on the Dependent Demand line.

You cannot edit any of the values in these columns.

The line item table contains the following columns:

Order ID – The Work Order ID of the order for which the part is a material or the IBT ID.

Sub ID – The Sub ID of the work order.

Operation # – The Operation # with which the material is associated.

Piece # – The place where the part occurs in the work order sequence.

Status – The status of the order.

Order Quantity – The quantity of the order line.

Quantity Due – The quantity that you must produce to deliver to the customer.

Want Date – The date on which the customer wants the order.

Warehouse ID – The ID of the warehouse from which the order originates.

Double-click anywhere on an order line and the application you used to enter the order is displayed with the appropriate order loaded in the window. Or, select a line and select **Info**, **Display Demand (peg) Order**.

Viewing Current MPS for a Master-Scheduled Part

To view the material planning schedule for the current part, click anywhere on the Current MPS line.

The line item table contains these columns:

Order Quantity – The order quantity.

Want Date – The date on which you want the order delivered.

Firmed – To firm the order, select the Firmed check box.

Warehouse ID – The warehouse ID associated with the order.

Viewing Current Firmed Orders for a Part

To view the firmed order details for the current part, click anywhere on the Current Firmed Orders line. While this dialog is named Firmed Order Details, the dialog displays orders with the statuses you have chosen to view in the window. For example, if you chose **View**, **Released** and **View**, **Firmed**, both Released and Firmed orders are displayed.

You cannot edit any of the values in these columns.

The line item table contains the following columns:

Vendor ID – The ID of the vendor through which you are placing the order. For inter branch transfers, this is the ID of the warehouse that is shipping the materials.

Order ID – The ID of the purchase order.

Status – The status of the order.

Order Quantity – The quantity of the order line.

Quantity Due – The quantity due on the purchase order line.

Want Date – The date on which you want the order delivered. If an order is late, the date is displayed in red.

Release Date – The date the order was released. If an order is late, the date is displayed in red.

Days – The difference between the want date and the release date. If the order is late, the value is displayed in red.

Warehouse ID – The ID of the warehouse into which you are to receive the order.

To view the order, double-click the order line. Or, select a line and select **Info**, **Display Supply (Due) Order**.

Viewing Gross Demand Information for Short Parts

You can view the gross demand for all short parts. Short parts are parts that you have insufficient quantities of to meet order demand during specific planning periods. When you select this option, information for all short parts is displayed.

To view short part gross demand information:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. To view short parts in a particular warehouse, click the **Warehouse ID** arrow and select the warehouse to view. To view short parts for all universally planned warehouses, select Universal. To view short parts for all warehouses, select All Warehouses.
3. Select the **Short Parts** check box.
4. To view all demand orders for a part, click the part's row.

Viewing All Exceptions

You can view a list of all exceptions, then click an exception to view the part in the table.

To view a list of exceptions:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use. If you are licensed to use a single site, this field is unavailable.
2. To view exceptions for a particular warehouse, click the **Warehouse ID** arrow and select the warehouse. To view exceptions for all universally planned warehouses, select Universal. To view exceptions for all warehouses, select All Warehouses.
3. Select the **All Exceptions** check box.
4. To view planning information for a part, select the line in the Exceptions area. The information for the part is inserted in the header and the table.

Firming and Releasing Planned Orders

After you run MRP, you can firm or release the planned orders the MRP process created. In the Advanced Material Planning Window, you can process planned orders for multiple parts at the same time. You can also process work orders and purchase orders at the simultaneously.

If you are licensed to use multiple sites, firm or release planned orders on a site-by-site basis. If you are licensed to use a single site, firm or release planned orders on an enterprise-wide basis.

To place an actual work order or purchase order for a planned order:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use. If you are licensed to use as single site, this field is unavailable.
2. To select the dates for the orders to process, click the appropriate column headers. Press **CTRL** then click to select multiple columns.
3. Select **Edit**, **Firm/Release Planned Order**.
4. In the Starting and Ending Part ID fields, specify the parts for which to firm or release orders. To view planned orders for all parts, leave the fields blank.
5. To filter the orders displayed in the table, select these options:

   Part Type – To limit the orders by part type, click one of these options:

   Fabricated – Click this option to display planned orders for fabricated parts only.

   Purchased – Click this option to display planned orders for purchased parts only.

   Both – Click this option to display planned orders for all parts selected in the Part ID fields.

   Product Code – To limit the orders displayed in the table to parts with a certain product code, click the arrow and select the product code. Click the arrow and select ***All*** to view parts with any product code.

   Commodity Code – To limit the orders displayed in the table to parts with a certain commodity code, click the arrow and select the commodity code. Click the arrow and select ***All*** to view parts with any commodity code.

   Warehouse ID – To limit the orders displayed in the table to parts stored in a certain independently warehouse, click the arrow and select the warehouses. Click the arrow and select **All Warehouses** to view parts stored in any warehouse. Click the arrow and select **Universal** to view parts stored in any universally planned warehouse.

   Planner – To limit the orders displayed in the table to parts with a certain planner, click the arrow and select the planner. Click the arrow and select ***All*** to view parts with any planner.

   Buyer – To limit the orders displayed in the table to parts with a certain buyer, click the arrow and select the buyer. Click the arrow and select ***All*** to view parts with any buyer.
6. To sort the table by Vendor ID or Order ID, use the buttons at the bottom of the window. To sort the table by Part ID, Release Date, Want Date, Status, Qty On Hand, Projected Availability, or Available Quantity, double-click the column header.
7. In the table, select the row that contains the part to order. You can select multiple rows.
8. If you selected work orders, select these options:

Work Order Number Generation – Specify how to generate the IDs for the new work orders:

Use the next number in sequence – Click this option to use the next number available based on your auto-numbering scheme.

Use the want date with the first operation resource ID – Click this option to build an ID with the first resource in a work order and the want date of the order. For example, 10TON – 01012012 is the Order ID for a work order with a first operation Resource ID of 10TON and a want date of January 1, 2012.

Use the want date with the part ID – Click this option to build an ID with the want date and the part ID. For example, 01012012 – FABPART is the Order ID for a work order for part FABPART with a want date of January 1, 2012.

Work Order Rules – Specify the rules to use to generate the new work orders:

Consolidate work order quantity and Make separate work orders – If you selected multiple planned orders for the same fabricated part, click one of these options. Click the Consolidate Work Order Quantity option to create a single work order for all planned orders with the same part. Click the Make Separate Work Orders option to create a separate work order for each planned order.

Forward Schedule From Release Date – To instruct the global scheduler to use the release date as the basis for the schedule, select this check box. The global scheduler uses the release date as the starting point for the schedule. To instruct the global scheduler to backward schedule from the want date, clear this check box. If you clear this check box, the work order is schedule so that all operations are complete by the want date.

Copy All Document References – To copy any documents attached to the engineering master used to generate the work orders, select this check box.

Copy All Reference Designators – To copy any reference designators established in the engineering master, select this check box.

Copy All Alternate Parts – To copy the list of acceptable alternate parts for the material requirements in the engineering master, select this check box.

9 If you selected purchased parts in the table, specify this information:

Purchase Order Number Generation – Specify how to generate the IDs for the new work orders:

Use the next number in sequence – Click this option to use the next number available based on your auto-numbering scheme.

Use the want date with the part ID – Click this option to build an ID with the want date and the part ID. For example, 01012012 – FABPART is the Order ID for a work order for part FABPART with a want date of January 1, 2012.

Select Purchase Order – To attach the order to an existing purchase order, click the browse button and select the purchase order to use. After you select a purchase order, the purchase order ID and vendor information is inserted in the lines you selected in the table.

Purchase Order Rules – If you are firming more than one order, specify the rules to use to generate new orders. Click one of these options:

Consolidate orders by vendor – Click this option to combine orders from the same vendor on the same purchase order. If you select this option and are ordering multiple parts, each part is a separate line on the same purchase order.

Single part per order – Click this option to create a separate purchase order for each part you are ordering.

Purchase Order Line Item Rules – If you are firming more than one order, specify the rules to use to generate purchase order lines. Click one of these options:

Make delivery schedules – Click this option to create one line per part in the purchase order. A delivery schedule is created for each planned order.

Make line items – Click this option to create a separate line for each planned order. No delivery schedules are created.

Vendor ID – In the table, specify the ID of the vendor from whom you are purchasing this material. To create an internal purchase order, specify the ID of an internal vendor. Use internal purchase orders if you are licensed to use multiple sites and you want one of your entities to supply another entity. Set up internal vendors in Vendor Maintenance. See “Setting up an Internal Vendor” on page 2-7 of the Purchasing guide.

Internal Order – If you specified an internal vendor, this check box is selected. Select this check box to create an internal purchase order. When you create an internal purchase order, a corresponding internal sales order is created automatically. Specify the ID of the internal customer in the Internal Customer field. If you want to use an internal vendor for this order, but you do not want to automatically create a corresponding sales order, clear the check box. See “Buying and Selling Between Accounting Entities” on page 8-35 of the Purchasing guide.

Internal Customer – If you selected the Internal Order check box, specify the ID of the internal customer that is purchasing the goods.

10 Click **Order**.

If a purchase order is created, the line remains in the line item table. If you create an internal purchase order, the corresponding sales order is also created.

If a work order is created, the line is removed. Any associated planned material requirements for the work order are replaced with actual requirements.

Converting a planned order into an actual work order does not schedule the order. You must schedule the work order using the Concurrent Scheduler or in the Manufacturing Window.

Allocating Quantities in the Advanced Material Planning Window

You can allocate quantities to supply and demand using the Advanced Material Planning Window's Order Details dialog boxes. The contents of these dialog boxes are described in the preceding section.

If you are licensed to use multiple sites, you can allocate supply and demand on a site-by-site basis. You cannot allocated supply or demand from one site to a second site.

You can perform these allocations:

- Allocate Supply to Customer Order Lines. Perform this allocation in the Customer Demand Details panel.
- Allocate Supply to Outgoing Interbranch Transfers. Perform this allocation in the Dependent Demand Details panel.
- Allocate Supply to Work Order Material Requirements. Perform this allocation in the Dependent Demand Details panel.
- Allocate Purchase Order Quantities to Demand. Perform this allocation in the Current Firmed Orders panel.
- Allocate Inventory Quantities to Demand. Perform this allocation in the Current Firmed Orders panel.
- Allocate Incoming Interbranch Transfer Quantities to Demand. Perform this allocation in the Current Firmed Orders panel.

Allocating Supply Quantities

You can allocate supply quantities in the Customer Order Demand Details panel and the Dependent Demand Details panel. You can allocate supply to customer orders, work orders, and interbranch transfers.

To allocate supply:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. In the Part ID field, click the browse button and select the part to use in allocations.
3. Click the demand line. To allocate supply to customer orders, click the Customer Demand line. To allocate supply to dependent work orders and interbranch transfers, click the Dependent Demand line.
4. Click the demand order to which to allocate supply.
5. Select **Edit**, **Allocations**.

   Details for the demand order you selected are displayed in the header. Any existing supply allocations are shown in the line item table.
6. Click **Insert**.

7 In the Type column, click the arrow and select the type of supply.

You can select:

CP – Co-product

I – Inventory

PD – Purchase Order Delivery

PO – Purchase Orders

WH – Incoming Interbranch Transfer

WO – Work Order

8 Double-click the **Supply Base ID** browse button and select the source of the supply allocation.

a If you select **CP**, the Work Order Coproduce dialog box is displayed.

Using the Options in the header section of the dialog box, configure a search for coproduce and click **Apply**.

If any lines appear that meet your search criteria, select the appropriate line and click the **Ok** button.

The Work Order Coproduce dialog box closes and the information you selected appears in the Supply Links table.

b If you selected **I**, the Warehouses for Part dialog box is displayed.

Select the warehouse from which to allocate supply and click **Ok**.

The Warehouses for Part dialog box closes and the information you selected appears in the Supply Links table.

c If you selected **PD**, the Purchase Order Delivery Schedule Supply dialog box is displayed.

Using the Options in the header section of the dialog box, configure a search for purchase orders and click **Apply**.

If any lines appear that meet your search criteria, select the appropriate line and click **Ok**.

The Purchase Order Delivery Schedule Supply dialog box dialog box closes and the information you selected appears in the Supply Links table.

d If you selected **PO**, the Purchase Orders dialog box is displayed.

Double-click the order to use. You can also select the line and click the **Select and Close** toolbar button.

The Purchase Orders dialog box closes and the information appears in the Supply Links table.

e If you selected **WH**, the Inter-branch Transfer Supply dialog box is displayed.

Any allocations of supply, or “supply links” you have made to the interbranch transfer or work order material requirement appear in the line item table.

Using the Options in the header section of the dialog box, configure a search for inter-branch transfers and click the **Apply** button.

If any lines appear that meet your search criteria, select the appropriate line and click the **Ok** button.

The Inter-branch Transfer Supply dialog box dialog box closes and the information you selected appears in the Supply Links table.

f If you selected **WO**, the Work Orders dialog box is displayed.

Double-click the order to use. You can also select the line and click the **Select and Close** toolbar button.

The Work Orders dialog box closes and the information appears in the Supply Links table.

9 Enter the quantity to allocate in the Allocate Quantities column.

10 Click **Save**.

Allocating Demand Quantities

You can allocate demand quantities in the Current Firmed Orders panel. You can allocate demand quantities from work orders, purchase orders, purchase order delivery lines, and interbranch transfers.

To allocate demand:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

2 In the Part ID field, click the browse button and select the part to use in allocations.

3 Click the Current Firmed Orders line.

4 Select the supply line to allocate to a demand.

5 Click **Edit**, **Allocations**.

The header displays information about the selected order. Any existing demand allocations are shown in the table.

6 Click **Insert**.

7 In the Type column, click the arrow and select the type of demand. You can select:

CD – Customer Delivery

CO – Customer Orders

I – Inventory

RQ – Requisition

WH – Warehouse

8 Double-click the **Demand Base ID** browse button and select the order to which to allocate supply.

a If you select **CD**, the Customer Order Delivery Schedule Demand dialog box is displayed.

Using the Options in the header section of the dialog box, configure a search for Customer Orders and click the **Apply** button.

If any lines appear that meet your search criteria, select the appropriate line and click the **Ok** button.

b If you select **CO**, the Customer Orders dialog box is displayed.

Double-click the order to use. You can also select the line and click the **Select and Close** toolbar button.

c If you select **I**, the Warehouses for Part dialog box is displayed.

Select the warehouse that is the source of the allocation demand and click the **Ok** button.

d If you select **RQ**, the Work Orders dialog box is displayed.

Double-click the work order to use as the source from which you want to assign demand. You can also select the line and click the **Select and Close** toolbar button.

e If you select **WH**, the Inter-branch Transfer Demand dialog box is displayed.

Using the Options in the header section of the dialog box, configure a search for and inter-branch transfer and click the **Apply** button.

If any lines appear that meet your search criteria, select the appropriate line and click the **Ok** button.

9 Enter the quantity to allocate in the Allocate Quantities column.

10 Click **Save**.

In-context View Panels

You can view the Vendor View Panel and Part View Panel in the Material Planning Window.

Using the Vendor View Panel

The Vendor View Panel contains three tabs: Summary, Chart, and Info. You can configure the Summary and Info tabs to show the information most important to you. See "Setting Up the Summary View" on page 9–6 in the Concepts and Common Features guide and "Setting Up the Info View" on page 9–7 in the Concepts and Common Features guide.

The panel is displayed for purchased parts only. Information for the default vendor for the selected part is displayed. Totals shown are for the parent entity of the site specified in the header.

The Vendor View Panel chart shows information about your outstanding transactions with the vendor. All values are shown in the accounting entity's functional currency.

The chart has four bars. The bars show totals for all sites in the selected accounting entity, including sites you are not allowed to access. When you click a bar, a grid is displayed showing transactions that contribute to the total value of the bar. The grid shows transactions created in your allowable sites only. As a result, the total of the transactions shown in the grid may not match the total shown by the bar.

This table shows the bars displayed in the chart:

Bar	This bar shows...	Click a bar to view
Orders	The total amount of open orders. If any lines on the order have been completely received, then those lines are not included in the calculation. An open order has the status of Firmed or Released. Sales tax and VAT are not included in the amount calculations.	**Order ID** – The ID of the purchase order is displayed. Click an ID to open the order in Purchase Order Entry. If you are viewing the Vendor View Panel in Purchase Order Entry, then the order you select replaces the order you were viewing in order entry. **Desired Recv Date** – The date that you want to receive the order is displayed. **Order Amt** – The monetary value of the order line. If the order is late, then the amount is displayed in red. An order is considered to be late if it has not been received the desired receive date. **Received Amt** – The monetary value of any receipts made against the order. Only partial receipts are considered. If a particular line on the purchase order is closed, the line is not considered in the calculation. **Currency ID** – The functional currency ID of the selected accounting entity is displayed. **Site ID** – The ID of the site where the transaction was created is displayed.

Bar	This bar shows...	Click a bar to view
Received	The total amount of uninvoiced receipts. Sales tax and VAT are not included in the amount calculations.	**Receiver ID** – The ID of the receiver and the receiver line are displayed. Click the ID to open the receipt in Purchase Receipt Entry. **Received Amount** – The monetary value of the receipt. Only uninvoiced values are shown. If the order was not received before the desired receive date, then the value is displayed in red. **Received Date** – The date that the order was received is displayed. **Purchase Order ID** – The ID of the purchase order that was received. Click the ID to open the order in Purchase Order Entry. **Ship Via** – The shipping method that the vendor used to ship the order is displayed. **Currency ID** – The functional currency ID of the selected accounting entity is displayed. **Site ID** – The ID of the site where the transaction was created is displayed.
Invoices	The total amount of unpaid invoices. Sales tax and VAT are included in the amount calculations.	**Voucher ID** – The ID of the voucher is displayed. Click the ID to open the voucher in Accounts Payable Invoice Entry. **Balance Amount** – The total outstanding balance is displayed. If the amount is overdue, then the amount is displayed in red. **Invoice Date** – The date of the invoice is displayed. **Invoice Amount** – The total amount of the invoice is displayed. If the amount is overdue, then the amount is displayed in red. **Paid Amount** – The amount paid to date is displayed. **Currency ID** – The functional currency ID of the selected accounting entity is displayed. **Site ID** – The ID of the site where the transaction was created is displayed.
Total	The total amount of open orders, uninvoiced receipts, and unpaid invoices.	Information about all transactions that contribute to your open balance with the vendor. The information shown in the table is a combination of the other three bars. The Type column shows whether the transaction is a purchase order, a receiver, or an invoice. Click an ID to open the transaction.

Using the Part View Panel

The Part View Panel contains three tabs: Summary, Chart, and Info. You can configure the Summary and Info tabs to show the information most important to you. See "Setting Up the Summary View" on page 9–6 in the Concepts and Common Features guide and "Setting Up the Info View" on page 9–7 in the Concepts and Common Features guide.

The panel shows part information for the site specified in the header.

The Part View Panel chart shows information about the current inventory levels for the selected part.

The chart contains one line and four bars.

The line shows the safety stock quantity. This table shows the bars displayed in the chart:

Bar	This bar shows...	Click a bar to view
On Hand	The current quantity on-hand.	**Warehouse ID** – The ID of the warehouse where the part is stored. All warehouses that can store the part are listed. **Qty** – The quantity currently stored in the warehouse. **Site ID** – The site associated with the warehouse ID is displayed. Click a warehouse ID to view the locations where the part can be stored. This information is displayed: **Location ID** – The ID of the location in the warehouse where the part can be stored is displayed. **Qty** – The quantity currently on hand in the warehouse location is displayed. **Status** – The status of the part in the warehouse location is displayed.

Bar	This bar shows...	Click a bar to view
Demand	The current demand for the part.	**Type** – The type of transaction generating the demand is displayed. These demand types are used: **CO** – Customer Order **RQ** – Material Requirement **WH** – Interbranch transfer **Warehouse ID** – The ID of the warehouse that supplies the demand is displayed. **Qty** – The quantity of the demand is displayed. **Site ID** – The site associated with the transaction is displayed. Click the type or the warehouse ID to view the demand transactions. This information is displayed: **ID** – The ID of the demand transaction is displayed. Click the ID to open the record. **Qty** – The quantity of the demand transaction is displayed. If **the** quantity has not been delivered by the date specified in the next column, then the value is displayed in red. **Desired Ship Date/Required Date** – If the demand is generated by a customer order or interbranch transfer, then the desired ship date of the transaction is displayed. If the demand is generated by a material requirement, then the Required Date specified on the Planning tab of the material requirement card is displayed.

Bar	This bar shows...	Click a bar to view
On Order	The current quantity on order. Quantities supplied as a work order co-product are included.	**Type** – The type of transaction generating the supply order is displayed. These supply types are used: **PO** – Purchase Order **WO** – Work Order **WH** – Interbranch transfer **Warehouse ID** – The ID of the warehouse where the supply order will be delivered is displayed. **Qty** – The quantity of the supply order is displayed. **Site ID** – The site associated with the transaction is displayed. Click the type or the warehouse ID to view the supply transactions. This information is displayed: **ID** – The ID of the supply transaction is displayed. Click the ID to open the record. **Qty** – The quantity of the supply transaction is displayed. If the quantity has not been delivered by the date specified in the next column, then the value is displayed in red. **Desired Recv Date/Want Date** – If the supply is generated by a purchase order or interbranch transfer, then the desired receive date of the transaction is displayed. If the supply is generated by a work order, then the Want Date specified on the work order header card is displayed.
Available	The quantity available to issue to transactions.	**Warehouse ID** – The ID of the warehouse where the part is available. **Qty** – The quantity stored in the warehouse that is available to issue. **Site ID** – The site associated with the warehouse is displayed. Click a warehouse ID to view this information: **Location ID** – The ID of the location that stores the quantity is stored is displayed. **Qty** – The quantity available at the location is displayed. **Status** – The status of the location is displayed.

Viewing Part Information

You can view a variety of information about your parts. You can view:

- Inventory Transactions
- Warehouse Locations
- Inventory Piece Information
- Trace Summary Information
- Trace Detail Information
- Purchase History
- Quoting History
- Selling History
- Part Requisition History
- Part Requisition Status
- Part RFQ Status
- Where Used
- Document Reference
- Subordinate Parts
- Internal Buy/Sell Information

You can view this information in both the Standard Material Planning Window and the Advanced Material Planning Window.

Showing Inventory Transactions

You can view all of the existing inventory transactions for the current part. If you are licensed to use multiple sites, you can view this information on a site-by-site basis only. To view inventory transactions:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. Select **Info**, **Inventory Transactions**.

   The transactions in the table are sorted from most recent to the oldest. To reverse this order, clear the **Descending** check box.

   To filter the transactions displayed in the table by a date range, specify the dates to use in the **From** and **Thru** date fields

   Click **Next Date** to advance the From date one day. Click **Prev Date** to advance the Thru Date backwards one day.

Viewing Warehouse Locations

Use the Inventory Locations dialog box to view all valid warehouse locations for a selected part. If you are licensed to use multiple sites, you can view warehouse locations on a site-by-site basis only. If you are licensed to use a single site, you can view all warehouse locations for the selected part.

To view warehouse locations:

1. If you are licensed to use multiple sites, click the **SIte ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** button and select the part to view.
3. Select **Info**, **Warehouse Locations**.

Viewing Inventory Pieces

If a part is piece-tracked, you can view the pieces of that part currently in inventory. Select **Info**, **Inventory Pieces**.

If you are licensed to use multiple sites, the Inventory Pieces dialog box shows the inventory for all of your warehouses in all of your sites. If you are licensed to use a single site, the Inventory Pieces dialog box shows the inventory for all of your warehouses.

Viewing Trace Summary

If the part that you selected in the Material Planning Window is a traced part, you can view summarized information about the part's lot IDs.

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site ID to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. Select **Info**, **Trace Summary**. This information is displayed:

   Label – The ID of the lot.

   Quantity Received – The quantity received in the lot.

   Quantity Issued – The quantity issued from the lot.

   Quantity Remaining – The quantity remaining in the lot.

   Comments – The comments specified when receiving the lot.

   Expiration Date – The expiration date of parts in the lot.

Viewing Trace Details

If the part you selected in the Material Planning Window is a traced part, you can view the part's trace details. If you are licensed to use multiple sites, the Trace Details dialog box displays trace information for the selected site only. If you are licensed to use a single site, the Trace Details dialog box displays all available trace information for the selected part.

To view trace details:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site ID to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. Select **Info**, **Trace Details**.
4. To filter the information in the dialog box, select this information:

   Warehouse – To view trace information for a specific warehouse, click the **Warehouse ID** arrow and select the Warehouse ID to view. To view all warehouses, select *All*.

   Location – To view trace information for a specific location, click the **Location ID** arrow and select the location to view. To view all locations, select *All*.

   Show Qty Remaining > 0 – Select this check box to display trace IDs that have quantities remaining to be issued only. Clear this check box to display all trace IDs.

To exit the dialog box, click **Close**.

Viewing Purchase History

The Purchase History dialog box shows a list of all purchase orders placed for the part. To display the purchase history:

1. Select **Info**, **Purchase History**. If you had selected a part in the Material Planning Window before accessing the Purchase History dialog box, the history for the selected part is shown. If you are licensed to use multiple sites, only the purchase orders for the part in the selected site are shown.
2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view. If you are licensed to use a single site, this field is unavailable.
3. Click the **Part ID** button and select the part whose purchase history you want to view.
4. To change the sort order for the dialog, click an option in the Sort Order section. You can sort the purchase orders by Order Date, Receive Date, or Purchase Order ID. In the Sort Sequence section, click **Ascending** to sort the information in ascending order and **Descending** to sort the information in descending order.
5. To exit the Purchase History dialog box, click **Close**.

Viewing Quoting History

Use the Quoting History feature to view information about the quotes for your parts.

If you are licensed to use multiple sites, you can view quotations for multiple sites simultaneously.

To view quote history:

1. Select **Info**, **Quoting History**.

   If you were viewing a part in the Material Planning Window, information for the part is displayed in the Part Quote History dialog.

2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view in the dialog.

3. Click the **Part ID** browse button and select the part to view.

4. To sort the quotes displayed in the dialog, use the options in the Sort Order section. You can select:

   - Quote Date
   - Customer
   - Quote Order

5. To sort the quotes, select the order sequence to use from the Order Sequence section. You can select:

   - Ascending
   - Descending

6. For each quote, this information is displayed:

   Sales Performance – The initial Quote Date, the Won/Lost date, and the Expected Date is displayed along with the customer and Sales Rep.

   Site ID – The site in which the quote was created.

   Price History – The Quoted Quantity, Quoted Unit Price, and Discount % is displayed along with the standard unit price for the part.

Viewing Selling History

The Selling History dialog box shows a list of all customer orders placed for the part. To display the selling history:

1. Select **Info**, **Selling History**. If you had selected a part in the Material Planning Window before accessing the Selling History dialog box, the history for the selected part is shown. If you are licensed to use multiple sites, only the customer orders for the part in the selected site are shown.

2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view. If you are licensed to use a single site, this field is unavailable.

3. Click the **Part ID** button and select the part whose selling history to view.

4 To change the sort order for the dialog, click an option in the Sort Order section. You can sort the customer orders by Order Date, Desired Ship Date, or Customer Order ID. In the Sort Sequence section, click **Ascending** to sort the information in ascending order and **Descending** to sort the information in descending order.

5 To exit the Selling History dialog box, click **Close**.

Viewing Purchase Requisition History

The Part Requisition History dialog box shows a list of all purchase requisitions placed for the part. To display the purchase requisition history:

1 Select **Info**, **Part Requisition History**. If you had selected a part in the Material Planning Window before accessing the dialog box, the history for the selected part is shown. If you are licensed to use multiple sites, only the purchase requisitions for the part in the selected site are shown.

2 If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view. If you are licensed to use a single site, this field is unavailable.

3 Click the **Part ID** button and select the part.

4 To change the sort order for the dialog, click an option in the Sort Order section. You can sort the requisitions by Requisition Date, Receive Date, or Requisition ID. In the Sort Sequence section, click **Ascending** to sort the information in ascending order and **Descending** to sort the information in descending order.

5 To exit the Part Requisition History dialog box, click **Close**.

Viewing Purchase Requisitions by Status

The Part Requisition Status dialog box shows a list of purchase requisitions by status. You can select which statuses to view. To display the purchase requisition status information:

1 Select **Info**, **Part Requisition Status**. If you had selected a part in the Material Planning Window before accessing the dialog box, the purchase requisitions for the selected part are shown.

2 If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view. If you are licensed to use a single site, this field is unavailable.

3 Click the **Part ID** button and select the part.

4 Specify which status of the purchase requisitions to view. You can select multiple statuses.

5 To exit the dialog box, click **Close**.

Viewing Vendor RFQs by Status

The Part RFQ Status dialog box shows a list of vendor RFQs by status. You can view RFQs by the status of the RFQ or by the status of the vendor quotes within the RFQ. To display the RFQ status information:

1. Select **Info**, **RFQs Status**. If you had selected a part in the Material Planning Window before accessing the dialog box, the RFQs for the selected part are shown. If you are licensed to use multiple sites, only the RFQs for the part in the selected site are shown.
2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view. If you are licensed to use a single site, this field is unavailable.
3. Click the **Part ID** button and select the part.
4. To view RFQs of a certain status, select the statuses in the RFQ Status section. To view RFQs that have vendor quotes of particular status, select the status in the RFQ Vendor Quote Status section.
5. To exit the dialog box, click **Close**.

Viewing Where Used Information

Use the Where Used dialog box to view the work orders and engineering masters that use the selected part. If you are licensed to use multiple sites, you can view where a part is used on a site-by-site basis. If you are licensed to use a single site, you can view where a part is used throughout your enterprise.

To view Where Used information:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site ID to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. Select **Info**, **Where Used**.

   Each engineering master and work order that uses the part is listed. If you are licensed to use multiple sites, only the engineering masters and work order that use the part in the site you selected are shown.
4. To open an engineering master or work order in the Engineering Window, double-click the line.
5. To exit the dialog box, click **Close**.

Viewing Document References

You can view documents that have been attached to the part in Part Maintenance. You can view existing document attachments only. You cannot add new document references in the Material Planning Window.

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site ID to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view.
3. Select **Info**, **Document Reference**.
4. Double-click the document ID, or select the row and click **Open Doc**.

Viewing Subordinate Parts

The Material Planning Window allows you to easily work with each level of the bill of materials for fabricated parts.

To view subordinate parts:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the fabricated part, containing subordinate parts, in which you are interested.
3. Select **Info**, **Subordinate Parts,** then select one of these options:

   Use Engineering Master – Select this option to use the current engineering master for the list of material requirements for the part. You do not need to select an order in the Material Planning Window before you can view subordinate parts based on the engineering master.

   Use Selected Material Requirement Order – Select this option to view subordinate parts for a work order requiring the current purchased or fabricated part. Before using this option, select the line with a requirement pegged to the work order of interest. This moves up a level, and allows material planning for of all the sibling parts of the current part. This option is available in the Standard Material Planning Window only.

   Use Selected Work Order – Select this option to use a specific Work Order to determine material requirements. Before using this option, select the Work Order to use. This option is useful if you have customized a work order for a standard part, and if that work order contains additional material requirements you did not specify in the master. This option is available in the Standard Material Planning Window only.

   The Subordinates Parts List dialog box is displayed, listing all the subordinate parts based on your selection.
4. Select the material requirement to view, then click **View Part**.

   You can also view the parent part (the part requiring the subordinate parts) of the subordinate parts listed, by pressing the View Parent Part button. This is especially useful when using the Use Selected Material Requirement Order option.

Viewing Buy/Sell Information

If you created internal purchase orders and sales orders, use the Show Buy/Sell Status dialog box to track the status of your purchase orders and sales orders.

You can view buy/sell information on a part-by-part basis.

To view buy/sell information:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
2. Click the **Part ID** browse button and select the part to view in the dialog box.
3. Use the fields at the top of the dialog box and the check box at the bottom of the dialog box to filter the information in the table. Specify this information:

   Purchase Order Site – Specify the site for which to view internal purchase orders. By default, the site you specified in the Material Planning Window is inserted. You can select a different site, or specify no value in this field to view purchase orders from all of your viewable sites.

   Purchase Order – To view a particular purchase order, click the browse button and select the purchase order. After you select a purchase order, the ID of the site on the purchase order header is inserted in the Site ID field and the ID of the associated purchase order is inserted in the Customer Order ID field.

   Customer Order Site – Specify the site for which to view internal customer orders. If you clear the Purchase Order Site field and the Purchase Order field, you can view all internal customer orders by clearing this field.

   Customer Order – To view a particular customer order, click the browse button and select the customer order. After you select a customer order, the ID of the associated purchase order is inserted in the Purchase Order field. The site specified on the header of the purchase order is inserted in the Purchase Order Site field.

   Include Back Orders – To include internal back orders, select this check box. To exclude internal back orders, clear this check box.
4. The dialog box shows this information:

   Purchase Order – The ID of the purchase order is inserted.

   Internal Order – If the Internal Order check box is selected on the purchase order, then Yes is inserted in this column. The purchase order was created using the automated internal order process. If the Internal Order check box is not selected on the purchase order, then No is inserted in this column. The purchase order was created using the manual internal order process.

   Is Backorder – If this order is a back order, Yes is inserted. If this order is not a back order, No is inserted.

   PO Status – The current status of the order is inserted.

   Customer Order – The ID of the corresponding customer order is inserted.

   Is Backorder – If this order is a back order, Yes is inserted. If this order is not a back order, No is inserted.

   CO Status – The current status of the order is inserted.

PO Site – The site that owns the purchase order is inserted. This is the site that is receiving materials.

CO Site – The site that owns the customer order is inserted. This is the site that is shipping materials.

PO Entity – The entity associated with the PO site is inserted.

CO Entity – The entity associated with the CO site is inserted.

Ln # – The line number of the customer order and purchase order.

Part ID – The ID of the part purchased is inserted.

PO Order Qty – The quantity ordered on the purchase order is inserted.

Received – The quantity of the part that has been received by the PO Site is inserted.

CO Order Qty – The quantity of the part ordered is inserted.

Shipped – The quantity of the part that has been shipped by the CO Site is inserted.

Description – The description of the part is inserted.

5 To view a purchase order, select the line and click Purchase Order. To view a customer order, select the line and click Customer Order.

Viewing Information for Multiple Sites

This section applies to users who are licensed to use multiple sites only.

If you are licensed to use multiple sites, you can view planning information for more than one site in the Material Planning Window. You can view combined site information in both the Standard and the Advanced Material Planning Window.

Viewing Both Demand and Supply Information for Viewable Sites

You can view both demand and supply information for sites marked as viewable in the Set Viewable Sites dialog box. To view both demand and supply information for viewable sites:

1. To designate which of your allowable sites are viewable, select **View**, **User Viewable Sites**.
2. Select the **Viewable** check box for each site you want to view.
3. Click **Ok**.
4. Select **View**, **Viewable Sites**.
5. Click the **Part ID** browse button and select the part to view.

   The supply and demand orders for site in the Site ID are displayed in bold text. The supply and demand orders for other sites are displayed in normal-weight text.

   While you can view multiple sites in the planning window, you can only perform tasks on the site selected in the Site ID field. For example, while you can view customer order information for MMC-I while site MMC is selected, you can only place a work order for a customer order created in site MMC.

   In the Advanced Mode, the total demand and supply for the part is shown. Click a demand or supply line to view a list of individual transactions.

Designating Supply Sites and Demand Sites

You can choose to view only the supply orders for certain sites and only demand orders for other sites. To categorize your sites into viewable demand and viewable supply sites:

1. To designate the sites from which to view demand, select **View**, **Set Viewable Demand Sites**.
2. To view demand from a site, select the **Viewable** check box.
3. To designate the sites from which to view supply, select **View**, **Set Viewable Supply Sites**.
4. To view supply from a site, select the **Viewable** check box.
5. Select **View**, **Show Viewable Demand and Supply Sites**. The sites whose demand you chose to view and the sites whose supply you chose to view are shown in the table. The demand and supply for the site currently selected in the Material Planning Window are displayed in bold text.

In the Advanced Material Planning Window, the total of your viewable demand orders and viewable supply orders are shown.

Printing Reports

You can print these reports:

- Material Planning Report
- Order Point Report
- Legs in Inventory
- Search List Report

Printing Material Planning Reports

The Material Planning Report is a printed summary of the information available on the Material Planning Window.

If you are licensed to use multiple sites, you can print the Material Planning Report on a site-by-site basis only.

To print the report:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site ID to use for the report. If you are licensed to use a single site, this field is unavailable.
2. Select **File**, **Print Material Planning Report**.
3. Specify the parts to include in the report. If you selected a part ID in the Material Planning Window before accessing the Print Material Planning Report dialog box, the part you selected is inserted in the Starting Part ID and Ending Part ID fields. To specify a range of parts, type in the starting part ID and ending part ID in the Starting Part ID and Ending Part ID fields. To view information for all parts, leave both the Starting Part ID and Ending Part ID fields blank.
4. To print a report with only the parts with shortages, select the **Parts with Shortages Only** check box,
5. Select the type of parts to include in the report. You can select:

   Fabricated Parts Only – To include only fabricated parts, select the **Fabricated Parts Only** option.

   Purchased Parts Only – To include only purchased parts, select the **Purchased Parts Only** option.

   Fab/Pur Parts Only – To include parts that are both fabricated and purchased, select the **Fab/Pur Parts Only** option.

   Either, but Not Both – To include parts that are either fabricated parts or purchased parts, select the **Either, but not Both** option. This report excludes any parts that are both fabricated and purchased.
6. Select these options for the report:

   Include Obsolete Parts – To include obsolete parts in the report, click the **Include Obsolete Parts** check box.

Net Nettable Quantity – To calculate starting inventory based on the nettable quantity for the part, select this check box. For each part, the quantities in Regular and Floor Stock locations are included in the quantity, provided that the location status is Available or On Hold. Unavailable quantities are not included. Quantities in Transit locations are also not included regardless of the location status. If you select this check box, the Net Available Quantity check box is unavailable.

Net Available Quantity – To include the available quantities for the parts in the report, click the **Net Available Quantity** check box.

Deduct Safety Stock – To remove the safety stock from the available quantity, select the **Deduct Safety Stock** check box.

Include On Hold Orders – To include your On Hold orders in the report, select the **Include On Hold Orders** check box.

Include Planned Orders – To include your planned orders in the report, select the **Include Planned Orders** check box.

Include Unreleased Orders – To include your unreleased orders in the report, select the **Include Unreleased Orders** check box.

7 In the Part Selection section, specify additional filters for the part information in the report. Select these options:

All Parts – To print material planning reports for all parts, click the **All Parts** option.

Parts With Material Requirements Dated Between – To constrain the report based on material requirements within a range of dates, select the **Parts With Material Requirements Dated Between** and use the calendar buttons to select the **Starting** and **Ending** dates for the report.

Parts With Customer Orders Dated Between – To constrain the report based on customer orders within a range of dates, select the **Parts With Customer Orders Dated Between** option and use the calendar buttons to select the **Starting** and **Ending** dates for the report.

8 In the Netting Type section select the appropriate Netting Options to use for the report. You can click:

- Net By Date
- Net Using MRP Rules

9 In the Report Format section, click one of these options:

Standard – Click this option to view information as it is displayed in the Standard Material Planning Window. If you click this option, the Print Horizon section becomes available. Use the Print Horizon section to limit the time frame for the report. Specify the number of days from the current date to include in the report. The report includes orders are required or due in the time frame you specify.

Repetitive – Click this option to view information as it is displayed in the Advanced Material Planning Window.

10 In the Sequence section, specify how to sort the information in the report. You can click:

- Part ID
- Product Code
- Commodity Code
- Planner User ID

- Buyer User ID

11 Select the output for this report. Click the arrow and select one of these options:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

If you selected E-Mail, when you generate the report the system attaches the file to a Microsoft Outlook e-mail. For more information on addressing and sending the e-mail, refer to your Microsoft Outlook user documentation. If you are sending a PDF, VISUAL starts the distiller, converts the document to PDF, and attaches it to the e-mail.

12 Click **Ok**.

Printing Order Point Reports

The Order Point report provides a management tool for parts that are not planned by MRP and have specified order points.

If you are licensed to use multiple sites, you can run this report on a site-by-site basis only.

To run this report:

1 If you are licensed to use multiple sites, click the Site ID browse button and select the site to use for the report. If you are licensed to use a single site, this field is unavailable.

2 Select **File**, **Print Order Point Report**.

3 Specify the Part IDs to view in the report. If you selected a part ID in the Material Planning Window before accessing the Print Order Point Report dialog box, the ID you selected is inserted in the Starting Part ID and Ending Part ID fields. To view a range of parts in the report, specify the starting and ending IDs in the Starting Part ID and Ending Part ID fields. To view all parts in the report, leave the fields blank.

4 Specify how to filter the part IDs you selected. Select this options:

Parts At Or Below Order Point Only – To include only those parts whose on hand quantity is less than or equal to the part's order point, select this check box. Clear this check box to include all parts with order points.

Include Obsolete Parts – To include parts that have been marked obsolete, select this check box. Clear this check box to omit obsolete parts from the report.

Purchased Parts Only – To include parts that you purchase, select this check box.

Fabricated Parts Only – To include parts that you fabricate, select the **Fabricated Parts Only** option.

5 Select the output method for this report. Click the arrow and select one of these options:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

If you selected E-Mail, when you generate the report the system attaches the file to a Microsoft Outlook e-mail.

6 Click **Ok**.

For each part, the Part ID, Description, Product Code, Commodity Code, Unit of Measure, Allocated Quantity, On Order Quantity, and Order Point are shown. Allocated quantity is the total quantity of outstanding demands. On Order Quantity is the total quantity of outstanding supply orders.

Printing Work Order Legs in Inventory Reports

Use the Work Order Legs in Inventory Report to generate a list of fabricated parts in your inventory that are used as legs in other fabricated parts.

If you are licensed to use multiple sites, you can generate this report on a site-by-site basis only. If you are licensed to use a single site, you can generate this report on an enterprise-wide basis only.

To generate the Work Order Legs in Inventory report:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.

2 Select **File**, **Print Legs in Inventory**.

3 Select the output method for this report. Click the arrow and select one of these options:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail.

4 Click **Ok**.

The report lists the fabricated parts that are used as legs and the work orders that require them.

Printing Reports from Search Results

After you run a search for a part, you can print a Material Planning Report and a Summary List report.

If you are licensed to use multiple sites, you can print these reports on a site-by-site basis only. If you are licensed to use a single site, you can print search results reports on an enterprise-wide basis only.

Printing Material Planning Reports

To print Material Planning reports from your search results:

1 In the search results dialog box, select the parts to include in the report.

To print reports for all parts, do not make any selections.

2 In the Material Planning section, click one of these buttons:

Print Entire List – Click this button to print the material planning report for all parts in the search results.

Print Selections – Click this button to print the material planning report for the parts you selected in the search results table.

3 Select these options for the report:

Net Available Quantity – To include the available quantities for the parts in the report, click the **Net Available Quantity** check box.

Deduct Safety Stock – To remove the safety stock from the available quantity, select the **Deduct Safety Stock** check box.

Include Planned Orders – To include your planned orders in the report, select the **Include Planned Orders** check box.

Include Obsolete Parts – To include obsolete parts in the report, click the **Include Obsolete Parts** check box.

Netting Type – Click the netting type to use in the report. You can click Net by Date or Net by MRP Rules.

4 Select an output for the report. Click the arrow and select one of these options:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

5 Click **Ok**.

Printing Part Summary List Reports

To print a Part Summary List report from your search results:

1. In the search results dialog box, select the parts to include in the report.

   To print reports for all parts, do not make any selections.

2. In the Print Summary List section, click one of these buttons:

   Print Entire List – Click this button to print the Part Summary List for all parts in the search results.

   Print Selections – Click this button to print the Part Summary List for the parts you selected in the search results table.

   To include obsolete parts in the report, select the Include obsolete parts check box. To omit obsolete parts, clear the check box.

3. Select an output for the report. Click the arrow and select one of these options:

   Print – Use the Print option to send your reports to a printer.

   View – Use the View option to send your report to a report view application so you can see the report on screen.

   File – Use the File option to send the report to a text file and save it to your computer.

   E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box.

4. Click **Ok**.

   The report lists basic part information and includes the on-hand quantity, the allocated quantity, the on order quantity, and the worst planning exception for the part.

Chapter 10: Physical Inventory Count

This chapter includes:

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What is Physical Inventory Count?

Use Physical Inventory Count to manage the process of periodic counts of inventoried parts and the resulting reconciliations. Physical Inventory Count provides the following functions:

- Printing of tags and reports to assist in the counting process
- Entry of actual counts and recounts
- Analysis of discrepancies by quantity and/or value thresholds
- Automatic creation of adjustment transactions to update on-hand balances

A physical inventory count involves these steps:

1 Start the count by creating database tags.

This process creates a database entry for each part in each location for a specified warehouse. These entries track the counts and recounts performed during the inventory process.

2 Print tags or tag reports.

You can manage your counts using individual tags or a checklist-like report. Each tag or report is printed with all necessary information and areas to enter counts and recounts.

3 Perform physical count and fill in printed tags or reports.

Parts are counted, and recounted if necessary, and recorded on the tags or report lists.

4 Enter counts and recounts.

Enter finished counts in the Count and Recount dialog boxes. A count review dialog box allows final entries and adjustments.

5 Analyze results of counts.

You can print comparison reports by part or by individual tags. A convenient threshold feature lets you search for discrepancies by quantity or value.

6 Close physical count and perform adjustments.

When you end a physical count, you can choose to generate inventory adjustments to bring on-hand balances in line with physical counts. You can also choose to permanently save the results of the count.

You can also choose not to update the on-hand balances based on the counts you entered.

If you are licensed to use multiple sites, you can perform physical inventory counts on a site-by-site basis only.

Audit Trails in Physical Inventory Count

Physical Inventory Count supports audit trails.

During “blank tag” inventories, if you enter a tag for a trace part that has the same location and Trace ID as a tag previously entered, you are prompted to append the tag to the first tag created. This creates a sub tag off of the first tag and removes all of the information from the second tag, making it available to you to use again. To create an audit trail, VISUAL does not remove the information from

the second tag but enters and saves the second and all subsequent tags with a status of void. In addition, VISUAL adds a reference to the original tag and sub tag. To view this reference, look at the RECOUNT_USER_ID field in the PHYS_COUNT_TAG table.

VISUAL records the reference to the voided tag in the SUB_COUNT_USER field in the PHYS_TRACE_COUNT table and appends it to the User ID. Because of the nature of Audit Trails, VISUAL does not allow you to change tags that have been voided as part of the audit trail—even the system administrator cannot remove voided records.

The fields:

COUNT_USER_ID

RECOUNT_USER_ID

SUB_COUNT_USER and

SUB_RECOUNT_USER

are the inputs to the reports:

VMPHYRP3.QRP

VMPHYRP4.QRP

VMPHYRP5.QRP and

VMPHYRP6.QRP.

You can use these inputs to add fields to your reports and view audit information.

Starting the Physical Inventory Count Window

To start Physical Inventory Count window, select **Inventory**, **Physical Inventory Count**.

Initializing a Physical Count

Use the Initialize Physical Count dialog box to set up the parameters of your count.

If you are licensed to use multiple sites, you can set up physical inventory counts on a site-by-site basis only.

To set up your count:

1. Select **File**, **Initialize Physical Count**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
3. Specify a unique identifier for this count in the Physical Count ID field and a description in the Description field.

   The description you specify is displayed during the count and is printed on reports.
4. Click the **Warehouse ID** browse button and select the warehouses to use for this count. You can select multiple warehouses. You must specify at least one warehouse ID.
5. If you selected a single warehouse, you can specify the starting and ending locations for the count. Click the appropriate Starting and Ending Location ID arrows and select the locations to count.
6. Specify this tag information for the count:

   Tags Per Group – Specify the number of tags for each group to print.

   Tags are used to record inventory counts, to mark actual stock to show that it has been counted, and to indicate the count for auditors.

   One tag is created for each Part ID/Location ID in the warehouse. If a part has 3 defined locations, a tag is created for each location. You can also create blank tags.

   The Tags per Group field allows you to break the printing of tags into separate groups. You can distribute tags to different counters and more easily manage large numbers of tags. Each group prints on its own set of pages, with an identifying group number.

   For example, if there are 250 tags and you specify 100 tags per group, Group 001 contains 100 tags, Group 002 contains 100, and Group 003 contains the remaining 50 tags.

   Starting and Ending Tag Numbers – Each tag is identified by a seven-digit number, with leading zeros shown. This number uniquely identifies the tag and is not the same as the Part ID or location.

   The Starting Tag Number defaults to 0000001. You can change the starting tag number. Specify an ending tag number in the Ending Tag Number field. If you specify an ending number that does not allow enough tags to be created, the value is increased. If you specify an ending number that produces more tags than you need, the extra tags are blank.

   This feature is most useful when creating blank tags only. When creating regular tags, you can just set the ending number to the starting number, and the required tags are automatically created.

   Extra Blank Tags Per Part – To provide for misplaced tags for each part counted, enter the number of blank tags to create in the **Extra Blank Tags Per Part** field.

You can also use extra tags to account for items that may not currently be entered into the inventory system.

7 In the Adjustment GL Account ID field, specify the adjustment account to credit or debit the adjustments resulting from this count.

During the End Physical Count phase, you have the option of adjusting inventory levels based on the counts. This ultimately results in general ledger entries when you process the Part Adjustment Journal in the Costing Utilities. Normally, the Adjustments to Inventory default account is debited or credited based on any overages or underages. To specify an override asset account, enter its Account ID here.

8 If you are performing a cycle count, enter this information in the Cycle Counting section:

Enable Cycle Counting – To enable cycle counting, select the **Enable Cycle Counting** check box.

Product Code – To perform cycle count on parts with a specific product code, click the arrow and select the code to use.

Commodity Code –To perform cycle count on parts with a specific commodity code, click the arrow and select the code to use.

ABC Code – To count parts based on an ABC Code, specify the code to count in the ABC Code field.

Number of Parts To Count – To count a specific number of parts of each ABC Code, specify the quantity of parts in the **Number of Parts To Count** field.

Percent of "A", "B", and "C" Parts – To count specific quantities of ABC Code parts, specify the percentage of each ABC Code to count. The percentage must total 100.

Cycle counting is the ability to decide which parts to count and when and how often to count them. Cycle counting typically refers to a part's ABC code to determine to which group of parts it belongs.

Use cycle counting allows to setup counting rules by part and by warehouse so that VISUAL can determine the next time you should physically count each part.

9 Select these count option settings:

Create Blank Tags Only – To generate blank tags, select the **Create Blank Tags Only** check box. You cannot generate blank tags if you have selected multiple warehouses.

Lock Each Location – To prevent transactions from occurring against the parts currently under evaluation in physical inventory count, select **Lock Each Location** check box.

Lock All Part Inventory – To prevent all part transactions during your physical inventory count, select the **Lock All Part Inventory** check box.

Process Non-Zero Locations Only – To count parts only in locations that you currently show inventory levels, select the **Process Non-Zero Locations Only** check box. If you do not select this box, all locations are processed regardless of inventory level.

10 Select a sort sequence. By default, VISUAL sorts by Warehouse first, then by Location, then by Part.

To change the sort preferences, make the appropriate selections.

11 If you use User Dimensions, specify the dimension IDs to use when the physical count does not match the quantity recorded in VISUAL. Use the Deficit area to specify dimension IDs to use when the physical count is less than the quantity recorded. Use the Overstock area to specify dimension IDs to use when the physical count exceeds the quantity recorded.

When you enter counts, the dimension codes you specified during initialization are inserted after you specify a quantity. You can override the codes.

If you generate inventory adjustments when you close the physical count, the dimension IDs you specified are used for the inventory adjust in and adjust out transactions. The Deficit IDs are used for the adjust in transactions. The Overstock IDs are used for the adjust out transactions.

12 To initialize the count, click the **Ok** button.

Because a database entry is created for each tag, the process may take some time.

Using Blank Tags

You can use two types of tags in physical inventory counts: standard and blank. Standard tags include the Location ID and the Part ID, in that sequence. Blank tags do not have this information so you can use them to record the count for any part and location. When entering a count for a standard tag, VISUAL automatically recalls Location ID and Part ID; when entering a blank one, you must specify this information along with the counted quantity.

Depending on the layout of your warehouse and the location numbering scheme, you may determine one of the following options to be easier than the other:

a Sorting through printed tags to find a desired part/location tag, and/or searching a location to find the parts for a tag that you have

b Writing in Location ID and Part ID for each tag, and typing it in during the Enter Count phase

If option B is preferable to you, then check the Create Blank Tags Only check box. VISUAL prints the specified numbering and grouping of blank tags. You then print tags and enter the Part ID, Location ID, and quantity as you perform the count.

If you prefer option A, clear the Create Blank Tags Only check box. VISUAL then prints tags with Part ID and Location ID. You can still use blank tags as you need them.

Printing Tags

After you initialize the physical inventory count, print the tags. You can manage the count in one of two ways:

- Use Print Tags to print individual tags to record counts and mark inventory.
- Use Print Tag List to print all tags in report format, and enter counts on this report. This is less common than printing individual tags.

To print tags:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that contains the physical inventory count. If you are licensed to use a single site, this field is unavailable.

2 In the table, select the physical inventory count.

3 Select **File**, **Print Tags.**

4 Click the output arrow and select the output method for your tags.

Print – Use the Print option to send your tags to a printer.

View – Use the View option to send your tags to a report view application so you can see the tags on screen.

File – Use the File option to send the tags to a text file and save it to your computer.

E-Mail – Select this option to send the tags in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

If you selected E-Mail, when you generate the report the system attaches the file to a Microsoft Outlook e-mail. For more information on addressing and sending the e-mail, refer to your Microsoft Outlook user documentation. If you are sending a PDF, VISUAL starts the distiller, converts the document to PDF, and attaches it to the e-mail.

5 Select the appropriate Sort By option:

- Tag #
- Warehouse ID/Location ID/Part ID
- Warehouse ID/Part ID/Location ID
- Location ID/Warehouse ID/Part ID
- Location ID/Part ID/Warehouse ID
- Part ID/Warehouse ID/Location ID
- Part ID/Location ID/Warehouse ID

6 Click the **Ok** button.

A standard Windows print dialog box appears.

7 Make the appropriate selections and click the **Ok** button.

VISUAL prints your tags.

The standard tag format shows Tag Number, Location ID, Part ID, Part Description, and Unit of Measure. There are also blank lines for entering Quantity and Counted By information.

Note: You should modify the standard tag form during implementation. Depending on the size of your tag forms, you may need to adjust the report. You may also want to setup to print double-tags to allow one to mark the location and another to be forwarded for data entry.

Entering Counts and Recounts

After you have counted your physical inventory and entered those quantities on the tags, you are ready to enter the resulting counts into VISUAL.

To begin this process:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.
2. In the table, select the physical inventory count you are entering.
3. Select **File**, **Enter Counts**.
4. If necessary, change the Count Date.

   The Count Date defaults to the current date.
5. Specify how to enter the physical count:

   Automatic Save When Filled In – To save the count by pressing the ENTER key, select this check box. If you clear this check box, you must click **Save** to save the count.

   Automatic Advance to Next Tag – To advance to the next tag after you have save the previous tag, select this check box. If you clear this check box, you must manually enter the next tag #.
6. In the Tag # field, specify the Tag Number.

   If the tag is not a blank tag, the Part ID, Location ID, and Description appear. You may want to verify this information against the printed tag.

   If the tag is a blank tag, you must enter the Part ID and Location ID in the appropriate fields.
7. Specify the quantity from the tag:

   For piece tracked parts only, specify the number of pieces, length, width, and height of the part in the appropriate fields. These fields are unavailable if the part is not a piece tracked part.

   For all other parts, specify the Quantity of the part you counted from the tag.
8. If you specified user dimensions when you initialized the count, the appropriate dimensions are inserted after you specify a quantity. You can override these dimensions.
9. Save the count.

   If you selected the Automatic Save When Filled In check box, press the ENTER key to save the information.

   If you cleared the Automatic Save When Filled In check box, click **Save**.

   If you selected the Automatic Advance to Next Tag check box, the next tag number is inserted in the Tag # field.

   If you use the TAB key to move the focus past the Clear button, VISUAL clears the tag number and prepares the dialog for the next entry. This is useful when you are not using the automatic save feature.

Entering Recounts

You cannot modify tag quantities after you have entered them. To enter a recount, use the Enter Recounts dialog box.

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.
2. In the table, select the physical inventory count you are entering.
3. Select **File**, **Enter Recounts**.

The Enter Recounts dialog box looks like and has the same function as the Enter Counts dialog box, with the following exceptions:

- You can only use it for a tag after you have entered an initial count using Enter Counts. You cannot use it for new tag counts
- You can re-enter a quantity for a tag as many times as necessary. Each time you enter a new count, a new record is created.

Creating Extra Tags

During a count, you may discover that you need more blank tags. This is not the same as printing tags again; you need new tag numbers.

To create extra tags:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.
2. In the table, select the physical inventory count for which to create new tags.
3. Select **Edit**, **Create New Tags**.

   Because you can only use this option to add tags to the current count you cannot edit the Count ID that is displayed in the dialog box.

   Tags per group automatically default to the value specified when the count was initialized. You cannot modify this value.
4. If you specified multiple warehouses in the original count, click the **Warehouse ID** arrow and select the warehouse for which you are creating extra tags.
5. To change the Starting Tag Number, enter the number to use in the Starting Tag # field.

   The next available number appears when the dialog box opens but you can change it if needed.
6. Define the total number of extra tags by entering the Ending Tag Number.
7. Click **OK**.

Reviewing Physical Inventory Counts

You can review and analyze physical inventory counts while the count is in progress.

Use the Review All Counts feature to view and manipulate physical inventory count information by tag group. The Print Tag Comparison and Print Part Comparison options provide analysis of on-hand quantities vs. counted quantities.

Reviewing Count Information

To review count information:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.
2. In the table, select the physical inventory count to review.
3. Select **File**, **Review All Counts**.

   Use this window to review the current count, or a previously saved one. If a count is in progress, the Count ID defaults to the current count. You can enter the Count ID for a previous count. The Warehouse ID for the count appears.
4. In the Review Sequence section, select either the **Group Number** or **Location ID/Part ID** option.

   If you select Group Number, you can select which group to display in the table.

   If you select Location ID/Part ID, you can select what location/Part to display in the table.

   The following columns appear in the table. You can modify them as noted:

   Tag Number – Identifies the tag and cannot be modified.

   Location ID – The Location ID for the part count. Modification is allowed, but is not usual, because you would not create a new tag, but would instead change the location.

   Warehouse ID – The Warehouse for the part count.

   Part ID – The Part ID that was counted for the location. Modifications are allowed here.

   Description – Description of the part. You cannot edit this field.

   Count – The Quantity you entered for the tag in Enter Counts or Enter Recounts. You can enter or modify this value here. This is equivalent to using Enter Counts or Enter Recounts.

   Sub-Tags – The number of sub-tags per tag.

   Status – Tags have two status values: **Active** or **Void**. Use void to ignore the count for a particular part. Tags cannot be deleted. A Voided tag is ignored in comparisons and adjustments of inventory unless you specifically include it. To activate or void one or more tags, select the line or lines, and click the **Activate** or **Void** button. You cannot enter or reenter counts for voided tags.

   User ID – The ID of the user who entered the Count or Recount.

   User Dimension 1 and User Dimension 2 – If you specified \user dimensions when entering the count, the dimension ID is displayed. You can specify a different user dimension ID.

Cust Order ID – If you specified a customer order ID to associated with the count, the order ID is displayed. You can specify a different customer order ID.

5 Click **Save**.

Viewing Piece Tracked Parts

To view the individual pieces for a piece tracked part, select the appropriate line and click the **Pieces** button.

View the number of pieces, the length, width, and height of piece tracked parts.

Printing Tag List Reports

Use the Tag List report to print tags in a one-to-a-line report format. You can use this report to enter counts or to recount tags with a discrepancy above a certain threshold. Count quantities are not shown on this report. Use the Tag Comparison Report to analyze counted quantities.

To run this report,

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.

2 In the table, select the physical inventory count.

3 Select **File**, **Print Tag List**.

4 In the Type section, select the information to include in the report.

Uncounted Tags – To include only the tags you have not counted, select the **Uncounted Tags** option.

Counted Tags Where… – To focus only on differences in quantity or value above a defined level, select the **Counted Tags Where…** option and specify the limits for the report:

Quantity Change Exceeds – Select either Units or Percentage and enter the Plus and Minus limits to use for the quantity change counts appearing in the report.

Value Change Exceeds – Select either Dollars or Percentage and enter the Plus and Minus limits to use for the value change counts appearing in the report.

Include Uncounted Tickets – To display uncounted tickets in the report, select the **Include Uncounted Tickets** check box.

For example, if you are interested in tags where the counted quantity is lower than the on-hand balance by more than five percent. Select the Percent option button, and enter 20 in the Plus field, and 5 in the Minus field.

Voided Tags – To include the tags you have voided, select the **Voided Tags** option.

5 In the Sort By section, select how to sort the information in the report. You can select:

- Tag #

- Group #
- Warehouse ID/Location ID/Part ID
- Warehouse ID/Part ID/Location ID
- Location ID/Warehouse ID/Part ID
- Location ID/Part ID/Warehouse ID
- Part ID/Warehouse ID/Location ID
- Part ID/Location ID/Warehouse ID

6 To print barcodes on this report, select the **Print Barcodes** check box and select a barcode type.

Code39 – This barcode type, also known as Code 3 of 9, contains variable length, discrete symbology. You must have a Code 39 barcode font installed to view the barcode. If you do not have the Code 39 font installed, then the alphanumeric ID is displayed instead with a prefix and suffix. This pattern is used: *%ID%*.

QR Code – This is a two-dimensional or matrix barcode. QR stands for quick response.

7 To include blank tags on this report, select the **Include Blank Tags** check box.

8 To include obsolete parts in this report, select the **Include Obsolete Parts** check box.

9 Select an output method for the report. Click the arrow and select one of these options:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

If you selected E-Mail, when you generate the report the system attaches the file to a Microsoft Outlook e-mail. For more information on addressing and sending the e-mail, refer to your Microsoft Outlook user documentation. If you are sending a PDF, the document is converted to PDF and attached to the e-mail.

10 Click **OK**.

The selected tags print one to a line, with the following information for each: Tag Number, Part ID, Part Description, Unit of Measure, Location ID. Additionally, a blank line for Count and Recount is printed.

If printing by Group Number/Tag Number, each group is printed on a separate set of pages. At the end of each group (or the report, if printing in Tag sequence) blank lines are provided for Counted By, Recounted By, Entered By, and Checked By identification.

Printing Tag Comparison Reports

Use the Print Tag Comparison report to compare on-hand quantities with counted quantities on a tag-by-tag basis.

To use this report:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.
2. In the table, select the physical inventory count.
3. Select **File**, **Print Tag Comparison**.
4. In the Type section, select the information for the report:

   All Counted Tags – To include only the tags you have counted, select the **All Counted Tags** option.

   All Tags – To print all tag details, select the **All Tags** option.

   Tags Where… – To focus only on differences in quantity or value above a defined level, select the **Tags Where…** option and specify the limits to use for the report:

   Quantity Change Exceeds – Select either Units or Percentage and enter the Plus and Minus limits to use for the quantity change counts appearing in the report.

   Value Change Exceeds – Select either Dollars or Percentage and enter the Plus and Minus limits to use for the value change counts appearing in the report.

   Include Uncounted Tickets – To display uncounted tickets in the report, select the **Include Uncounted Tickets** check box.

   For example, if you are interested in tags where the counted quantity is lower than the on-hand balance by more than five percent. Select the Percent option button, and enter 20 in the Plus field, and 5 in the Minus field.

   Obsolete Parts – To include obsolete parts in this report, select the **Include Obsolete Parts** check box.
5. In the Sequence section, select how the information is sorted in the report. You can select:
   - Tag
   - Part ID
   - Location ID
6. Specify an output method. Click the arrow and select one of these options.

   Print – Use the Print option to send your reports to a printer.

   View – Use the View option to send your report to a report view application so you can see the report on screen.

   File – Use the File option to send the report to a text file and save it to your computer.

   E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

If you selected E-Mail, when you generate the report the system attaches the file to a Microsoft Outlook e-mail. For more information on addressing and sending the e-mail, refer to your Microsoft Outlook user documentation. If you are sending a PDF, the document is converted to PDF and attached to the e-mail.

7 Click **OK**.

This information is shown for each tag:

- Tag Number
- Part ID
- Location ID
- On-Hand Quantity for the Location
- Previous Value (value based on the Location Quantity)
- Count, and New Value (value based on the Count)

If you selected to sort by Part ID, the unit of measure for the part is also displayed. Previous Value and New Value are totaled.

Printing Part Comparison Reports

The Part Comparison report is similar to Tag Comparison, only it shows quantities and values for a Part ID, rather than individual tags. For example, if a Part ID is found in 5 locations, there are 5 tags for it. The Tag Comparison report shows all 5 tags. The Part Comparison report shows one summarization line for all 5 tags of the part.

To use this report:

1 If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.

2 In the table, select the physical inventory count.

3 Select **File**, **Print Part Comparison**.

4 In the Restrict section, select the information for the report.

All Counted Tags – To include only the tags you have counted, select the **All Counted Tags** option.

All Tags –To print all tag details, select the **All Tags** option.

Tags Where… – To focus only on differences in quantity or value above a defined level, select the **Tags Where…** option and specify the limits to use for the report:

Quantity Change Exceeds – Select either Units or Percentage and enter the Plus and Minus limits to use for the quantity change counts appearing in the report.

Value Change Exceeds – Select either Dollars or Percentage and enter the Plus and Minus limits to use for the value change counts appearing in the report.

Include Uncounted Tickets – To display uncounted tickets in the report, select the **Include Uncounted Tickets** check box.

For example, if you are interested in tags where the counted quantity is lower than the on-hand balance by more than five percent. Select the Percent option button, and enter 20 in the Plus field, and 5 in the Minus field.

5 To include obsolete parts in this report, select the **Include Obsolete Parts** check box.

6 In the Sequence section, select how to sort the information in the report. You can select:

- Tag #
- Part ID
- Location ID

7 Select the output method for the report. Click the arrow and select one of these options:

Print – Use the Print option to send your reports to a printer.

View – Use the View option to send your report to a report view application so you can see the report on screen.

File – Use the File option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in a Rich Text Format through electronic mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

If you selected E-Mail, when you generate the report the system attaches the file to a Microsoft Outlook e-mail. For more information on addressing and sending the e-mail, refer to your Microsoft Outlook user documentation. If you are sending a PDF, the document is converted to a PDF and attached to the e-mail.

8 Click **OK**.

For each tag listed, the following information appears:

- Tag Number
- Part ID
- Location ID
- On-Hand Quantity for the Location
- Previous Value (value based on the Location Quantity)
- Count, and New Value (value based on the Count)

If you selected to sort by Part ID, the unit of measure for the part also appears. Previous Value and New Value are totaled.

Ending a Physical Inventory Count

When a physical inventory count is completed and entered, you need to signal the end of the count and make inventory adjustments if necessary.

Caution: Because part records may be changing, make sure all users have logged-off your database. Concurrent inventory transactions may not be possible if many users are logged into the database.

To end physical inventory counts:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site where you conducted the count. If you are licensed to use a single site, this field is unavailable.
2. In the table, select the physical inventory count.
3. Select **File**, **End Physical Counts**.

   If you used any blank tags, it is possible that you entered more than one count for a single Part ID/ Location ID combination. If this happens, you are warned when you access the dialog box. You can then examine the Duplicates field to see how many duplicates exist. You can use Review All Counts to void unwanted tags, and adjust others.

   The dialog box shows the Count ID, Description and Count Date of the current count. The following read-only information about the count is shown:

   Starting Tag Number/Ending Tag Number – The starting and ending tag numbers you originally assigned.

   Counted Tags – The number of active tags that have had a quantity entered through Enter Counts or Review All Counts.

   Uncounted Tags – The number of active tags that have not had a Quantity entered.

   Voided Tags – The number of tags with status Void.

   Total Tags – Total number of created tags. Equal to Counted Tags + Uncounted Tags + Voided Tags.

   Duplicates – If you used blank tags, the potential exists to have more than one count entered for the same Part ID and location. This field shows how many of these duplicates exist. If this field is not zero, a warning message is shown when you start up this window. See above.

   Recounted Tags – The total number of tags that have had Quantity entered through Enter Recounts, or re-entered in Review All Counts.
4. In the Ending Actions section, select the actions that occur when you end the count:

   Updating Part Balances – Select this option to generate the adjust in and adjust out transactions necessary to match the system's inventory record to the physical count you entered.

   Do Not Update Part Balances – Select this option to make part balance adjustments manually., For example, you may need lower level control over the adjustment account used. Selecting not to update is also useful when learning how Physical Inventory Count works; you can start a count, enter some quantities, and end it. If you do not keep the history, the net effect will be zero.

Keeping History – Because your count history is discarded when you end the count, select the **Keep History** check box to keep a record of your tags after the count has finished. You can print tags and tag lists, review all counts, and run comparison reports on historical count records: you cannot enter counts or recounts or restart an ended count.

Zero part locations without tags – Select this option to remove inventory for part locations for which you did not print tags. Inventory for which you did not specify a count quantity on a tag is also removed.

Unlock Inventory for all tags – If you locked inventory when you initialized the physical inventory count, select this option to unlock locations and part inventory.

5 To end the count, click the **Ok** button.

If you selected the Update Part Balances option, the adjustments are made. This may take some time, depending on the number of tags that need adjustments. If you did not retain the tags, they are deleted.

Chapter 11: Consigned Inventory

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What is Consigned Inventory?

Consigned inventory is inventory—parts and material—kept in a location but owned by the supplying company. For example, you have a vendor supplying you with PART A. You purchase the part one hundred at a time but your vendor ships them one thousand at a time. Your vendor may ship you one thousand of which you purchase one hundred and stock nine hundred on consignment: you own one hundred and the vendor owns nine hundred even though you are stocking the nine hundred. The next time you purchase one hundred, you take ownership of that one hundred and the vendor continues to own the remaining eight hundred.

Note: Dimensional Inventory for Consigned Inventory is not supported.

If you are licensed to use multiple sites, consignment is tracked on a site-by-site basis.

How Does Consignment Work?

Inventory that you consign to a vendor or customer must be stored in a Consignment Warehouse, while inventory that your customer or vendor consigns to you must be stored at a Consignment Location within a non-Consignment Warehouse.

Using the consigned inventory functionality, you can manage the four types of consigned inventory:

At Customer – Inventory owned by you but stored at your customer’s location. When the customer consumes the inventory, they notify you and take ownership.

Initially this material resides in your warehouse until you ship it to your customer.

1. Create a consignment warehouse and assign it to your customer. You are creating a warehouse located at your customer’s site where the parts are physically located: a consignment warehouse assigned to your customer.
2. Use the Inter Branch Transfer windows to perform the shipping and receipt transactions necessary to move the material from your standard warehouse to the consignment warehouse (assigned to the customer). This will allow you to set up addresses for the warehouse assigned to the customer.
3. When your customer consumes the material, create a customer order and shipment to transfer ownership of the consumed material to the customer.

From Customer – Inventory owned by your customer but stored at your location. When you consume the inventory, you notify the customer but there is no transfer of ownership and no cost to you because you never own it. You use the material to build a product for the same customer.

Typically these would be unique Part ID's in your system. To help ensure the separation of materials, store these materials in warehouse locations assigned to those customers until you issue them to jobs to build the customer's finished product.

1. Create an inventory location assigned to the customer.
2. Use the Consignment Receiving window to receive consignment parts into inventory.
3. Issue the parts to your jobs as normal.

At Vendor – Inventory owned by you but sent to your vendor to be used to complete a service. When the vendor consumes the inventory, they notify you so you can issue it to the job.

1. Create a consignment warehouse assigned to the vendor.
2. Use the Inter Branch Transfer windows to perform the shipping and receipt transactions necessary to move the material from the standard warehouse to the consignment warehouse (assigned to the vendor). This will allow you to set up addresses for the warehouse assigned to the vendor.
3. When the vendor consumes the material and notifies you, issue the material to the job as normal.

From Vendor – Inventory owned by your vendor but stored at your location. When you consume the inventory, you notify the vendor and take ownership.

To accomplish this:

1. Create an inventory location assigned to the vendor.
2. Create a consignment purchase order with the consigned location selected.
3. Use the Consignment Receiving window to receive consignment parts into inventory.

   Parts and material in consignment locations have no value because they are owned by the vendor.
4. Assume ownership by Creating a Purchase Order Receiver for the consigned material.

   The material is moved from the consigned location into a standard location and a value is assigned to the material—you now own that material.

Consignment and Costing Method

If you use Standard Costing methods, you can use By Part or By Part Location for your FIFO Method / Inventory Grouping.

If you use Actual or Average Costing methods, you must use By Part Location as your FIFO Method / Inventory Grouping. If you use Actual or Average Costing methods with FIFO By Part, the From Vendor and From Customer location types are removed from Warehouse Maintenance. An error message is displayed if you attempt to access Consignment Receiving.

Maintaining Zero Costs for Customer Inventory Consigned to You

For inventory that the customer consigns to you, you must maintain unique Part IDs for each customer. Maintaining unique Part IDs for each customer allows for easier traceability through the system.

Working With Consignment Related Information

Use these programs to manage your consignment inventory:

- Warehouse Maintenance
- Part Maintenance (Warehouse Locations for Parts)
- Inter Branch Transfer
- Customer order Entry
- Shipping Entry
- Consignment Receiving
- Purchase Order Entry
- Purchase Receipt Entry

Creating Consignment Warehouses

Create consignment warehouses to use for the goods you store at your customer or vendor's site.

Create consignment warehouses the same as you would any standard warehouse with the addition of assigning it as a Consignment Warehouse and selecting the customer or vendor where the warehouse is located.

If you are licensed to use multiple sites, you must create consignment warehouses on a site-by-site basis.

Creating Consignment Locations

Create Consignment locations to store customer and vendor consignments to you.

You do not have to create special warehouses to hold your consignment locations: consignment locations can exist in any warehouse except Consignment Warehouses.

If you use Actual or Average costing methods, you must use By Part Location as your FIFO Method / Inventory grouping to create consignment locations. If you use By Part as your FIFO method, you cannot select From Customer or From Vendor in the location type field. If you use Standard costing, you can use any FIFO method.

To create consignment locations:

1. Either create a new warehouse or open the warehouse in which to create consignment locations.
2. Click **Insert**.
3. In the Location ID column, specify an identifier for this location.
4. In the Type column, click the arrow and select one of these options:

   From Customer – To specify a location where you store a customer-owned inventory, select the **From Customer** option. Double-click the **Customer ID** browse button and select the customer whose inventory is stored in this location.

   From Vendor – To specify a location where you store vendor-owned inventory, select the **From Vendor** option. Double-click the **Vendor ID** browse button and select the vendor whose inventory is stored in this location.
5. Enter a description for this consignment. Because consignment locations must be assigned to a customer or vendor, you may want to consider using a name that reflects who the consignment is from.
6. Click the **Save** button.

Assigning Parts to Consignment Warehouses and Locations

While you cannot designate parts as consignment parts, assigning parts to a consignment warehouse or location and storing parts in those locations signifies that they are on consignment.

If you are licensed to use multiple sites, you must define part consignment locations on a site-by-site basis.

To assign parts to consignment warehouses or locations:

1. If you are licensed to use multiple sites, in the Part Maintenance window select the Site ID that contains the part to assign. If you are licensed to use a single site, this field is unavailable.
2. In the Part ID field, click the browse button and select the part to assign to a consignment warehouse or consignment location.
3. Select **Maintain**, **Warehouse Locations**.
4. Click **Insert**.
5. Double-click the Warehouse ID browse button and select the warehouse to which to assign the part.

   For “to” consignments, this will be a consignment warehouse.

   For “from” consignments, this will be the warehouse containing the consignment location.
6. Double-click the Location ID browse button and select the location to which to assign the part.

   For “to” consignments, this will be a standard location within the consignment warehouse.

   For “from” consignments, this will be the consignment location.
7. Specify this order information:

   Order Point Quantity – The quantity at which the user should replenish the part location or warehouse. The value cannot be greater than the Order Up To Qty.

   Order Up To Qty – The quantity for replenishment of the part location or warehouse: the maximum quantity allowed. The value must be greater than zero and cannot be less than the Order Point.

Inter Branch Transfer

Use Inter Branch Transfer to create the documentation for inventory transfers into consignment warehouses. Consignment warehouses are warehouses you assign to a customer or vendor and physically reside at their location.

When using Inter Branch Transfer Entry to move parts or material into a consignment warehouse, the Consignment section of the Other tab identifying the type of transfer—consignment—is populated and the name of the customer or vendor you assigned to the consignment warehouse is inserted.

When using Inter Branch Transfer Shipping Entry to ship transfers to consignment warehouses, the Consignment Transfer check box is selected, identifying the type of transfer, and the name of the customer or vendor you assigned to the consignment warehouse is inserted.

When using Inter Branch Transfer Receiving Entry to receive transfers to consignment locations, the type of transfer is identified—consignment—and the name of the customer or vendor you assigned to the consignment location is entered.

For more information, refer to “Inter Branch Transfer” on page 8-1 in this guide.

Viewing Consignment Transfers

To view your consignment-related IBTs:

1. In the Inter Branch Transfer Entry window, select **Info**, **Transit Inquiry**.
2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to view. If you are licensed to use a single site, this field is unavailable.
3. To view only your consignment related IBTs, select the **Consignment Transfers Only** check box.
4. Select any other relevant information in the window and click the **Search** toolbar button.

   Your consignment IBTs are displayed in the upper table.

   To view the shippers and receivers of an IBT, select the IBT from the upper table. The lower table is populated with the shipper and receiver details.
5. When you have finished viewing your IBTs, select **File**, **Exit**.

Customer Order Entry

Use Customer Order Entry to enter orders for your customer to whom you have consigned parts and materials.

Select the **Consignment Tracking** check box to designate the order as a consignment order.

For each line on the order, a consignment warehouse must exist for the customer, and the part must be assigned to the consignment warehouse.

If you are licensed to use multiple sites, you must enter customer orders on a site-by-site basis. The consignment warehouse must have the same site ID as the site placing the customer order.

See “Customer Order Entry” on page 7-1 of the Sales guide.

Consignment Auto Ship Preferences

Using the Auto Ship functionality for consignment orders you can open the Shipping Entry window automatically after saving the customer order.

To set up Auto Ship preferences:

1. In the Customer Order Entry window, select the **Preferences** option from the Options menu.
2. In the Consignment Auto Ship On Save section, select one of these options:

   Never – If you do not want the Shipping Entry window opened when you save a consignment related order, select the **Never** option

   Open Shipping – To open the Shipping Entry window and populate it with the current consignment order, select the **Open Shipping** option.

   Ship Order – To ship this consignment order, select the **Ship Order** option. When you save the order, the Shipping Entry window opens, and is populated with the current order and a Ship All is performed.

   Note: All of the standard ship criteria is enforced for the auto shipment. For example, if you do not have enough stock, a message box is displayed.
3. Click **Done**.

Order Management Window

When using the Order Management Window and working with consignments, select the **Consignment Tracking** check box to designate the order as a consignment order.

For each line on the order, a consignment warehouse must exist for the customer, and the part must be assigned to the consignment warehouse.

If you are licensed to use multiple sites, you must enter customer orders on a site-by-site basis. The consignment warehouse must have the same site ID as the site placing the customer order.

See “Order Management Window” on page 8-1 of the Sales guide.

Shipping Entry

When shipping any part that is marked for consignment, the Consignment Tracking check box appears selected.

Note: The Consignment tracking check box is unavailable, indicating that you cannot make changes to its status.

See “Shipping Entry” on page 9-1 of the Sales guide.

Consignment Receiving

If you are receiving a consignment of parts or materials from a vendor or customer, use the Consignment Receiving window to record the receipt of the consignment. No costs are assumed during consignment receipt: you do not own it at this time.

When you use the Purchase Receipt Entry to receive consignments, the costs of the goods you receive are assumed: you now own it.

If you use Actual or Average costing methods, you must use By Part Location as your FIFO Method / Inventory grouping to access this window. If you use By Part as your FIFO method, a message is displayed when you access this window. If you use Standard costing, you can use any FIFO method. If you use multiple sites, your currently selected default site must meet the costing criteria. If your currently selected default site does not meet the costing criteria, you cannot access the Consignment Receipt Entry window, even if you have other sites that meet the costing criteria.

To receive consigned inventory:

1. Select **Purchasing**, **Consignment Receipt Entry**.
2. If you are entering Consignment Receiver from vendors, click the **Vendor** tab; for customers, click the **Customer** tab.
3. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site that is receiving the materials. The Site ID list displays only those sites that can receive consigned shipments based on the costing method in use. If you are licensed to use a single site, this field is unavailable.
4. For Consignment Receivers from vendors, click the browse button and select the Order ID; for customers, select the Customer ID.

   For vendors, this information is displayed:

   - Vendor ID
   - Contact Information
   - Buyer
   - FOB
   - Ship Via
   - Order Status
5. To edit intrastat information for this consignment receipt, click the **Intrastat** browse button and enter the information to use for this shipment.

   The intrastat is tracked for this consignment receipt. When you take ownership of this consignment by entering a purchase order, you are not allowed to enter intrastat information because you have already done so at the consignment phase.
6. To change the Receive Date, click the calendar button and select the appropriate date.
7. For vendors, click the arrows in the field and select the FOB and Ship Via information for this consignment receiver.
8. If you are receiving a different quantity than specified on the order, enter the quantity you are receiving in the Quantity Received column for each line item.

9 If you are receiving a complete order, click the **Receive All** toolbar button.

If you are receiving a partial order, click the **Save** toolbar button.

Printing Consignment Receiver Information

You can print consignment receivers for vendors or customers.

To print a list of your consigned receipts:

1 Click the **Vendor** tab or the **Customer** tab in the Consignment Receiving window.

Click the Vendor tab, if you want to print consignment receivers for vendors.

Click the Customer tab, if you want to print consignment receivers for customers.

2 Select **File**, **Print Receiver**.

3 If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to use for the report. If you are licensed to use a single site, this field is not available.

4 Select options for printing the Consignment Receiver Report:

Print current Receiver - Select this option to print only the current receiver in the report. If a receiver is currently selected in the Consignment Receiving window, the Print current Receiver option is selected by default.

Print received on - Select this option to print receivers for consignments received on a given date and enter the date in the date field.

5 Select a report output option:

Print – Select this option to send your report to a printer.

View – Select this option, if you want to view the report using VISUAL's report viewer.

File – Select this option to send the report to a text file and save it to your computer.

E-Mail – Select this option to send the report in RTF (Rich Text Format) through e-mail. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this report via e-mail to the associated contacts, select the **Send to document contacts** check box.

If you selected E-Mail, when you generate the report a Microsoft Outlook message opens with the report attached. If you are sending a PDF, the distiller is started, and the document is converted to PDF, and then is attached to the e-mail message.

6 To print barcodes in your report, select the **Print Barcodes** check box and select a barcode type.

Code39 – This barcode type, also known as Code 3 of 9, contains variable length, discrete symbology. You must have a Code 39 barcode font installed to view the barcode. If you do not have the Code 39 font installed, then the alphanumeric ID is displayed instead with a prefix and suffix. This pattern is used: *%ID%*.

QR Code – This is a two-dimensional or matrix barcode. QR stands for quick response.

7 Click **Ok**.

Printing Consignment Receiver Thermal Labels

The Consignment Receiver window allows you to print thermal labels for receivers, both individually and as a part of a group. Before you can print thermal labels, you must create the appropriate label types to use in the window.

To print thermal labels:

1. In the Print Consignment Receiver dialog box, click **Thermal Labels**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use. If you are licensed to use a single site, this field is unavailable.
3. Select the type of label to print:
   - To print single labels, click the **Label ID** browse button to select the label to print.
   - To print a group of labels that have been previously set up, click the **Label Group ID** browse button and select the Label Group to print. If you are printing only one label, do not select a group. Your choice is limited to either a Label ID or a Label Group ID.

     The table shows the members of the group when you select a group.

   The table shows the Label Type field depending on the type of label you select.
4. In the Spool Into section, click the **Directory** browse button to select where your thermal print order spools before printing.

   The File field displays the spooled file.
5. To temporarily add or delete more labels to a group that is to be printed, click **Insert** and add any new labels. or click **Delete** to remove labels.
6. Specify a print quantity for each label type in the **Print Qty.** column.
7. Select the **Multiplier** check box if you are printing multiple labels per consignment order received. The specified Print Qty becomes the multiplying factor.
8. Select when your thermal labels are printed: **Before Shipment** or **After Shipment**.
9. Select **Print One Label For Each Part** to print one label for each part.
10. Verify that your thermal label printer is configured properly, and then click **Print Labels**.

Purchase Order Entry

For “From Vendor” consignments, use the Consignments tab in the Purchase Order Entry window to indicate that the order is a consignment and to specify the consignment location for the order.

See “Purchase Order Entry” on page 8-1 of the Purchasing guide.

Purchase Receipt Entry

When receiving consignment purchase orders from your vendors, you must specify the correct consignment location into which to receive the part.

See “Purchase Receipt Entry” on page 10-1 of the Purchasing guide.

Shipping and Receiving Intrastat Items on POs

When editing intrastat data for the shipment or receipt of orders containing consignments, the system selects the check box in the Consignment column.

See “Purchase Receipt Entry” on page 10-1 of the Purchasing guide.

See “Shipping Entry” on page 9-1 of the Sales guide.

Inventory Transaction Entry

If you are viewing inventory movements for consignments, either the Consign/In or Consign/Out option button is selected. Because you cannot perform inventory transactions for consignments in the Inventory Transaction Entry window, the Consign/In and Consign/Out option buttons are always unavailable, indicating that you cannot select them.

For more information, refer to “Inventory Transaction Entry” on page 7-1 in this guide.

Barcode Transaction Entry

Barcode Transaction Entry modules provide validation for the following consignment related transactions:

- Prevents purchase receipt of consignment purchase order if the receive quantity is greater than consigned quantity.
- Prevents receipt of purchase orders to vendor locations.
- Prevents purchase returns from vendor locations.
- Prevents shipments from vendor consignment locations.
- Prevents shipments of non-consigned customer orders from consignment warehouses.
- Forces shipments of consignment customer orders to use the consigned warehouses on order lines.
- Prevents inventory transfers from or to vendor locations.
- Prevents inventory transfers from customer locations to different customer or non-customer locations.
- Prevents issues to work orders from vendor locations or customer warehouses.
- Prevents receipts of work orders to vendor or customer locations or vendor or customer warehouses.
- If parts are traced, BTS ignores trace prompt when entering physical counts for vendor locations. Material in vendor locations are owned by the vendor, and do not need trace applied until you take ownership during the purchasing stage.
- Prevents ship via packlist (Trace) for consignment customer orders.
- Ignore traced material in consignment warehouses and vendor locations when using ship via packlist (Trace) option.
- Prevents issue return to customer warehouses and vendor locations.
- Ignores trace prompt when adjusting in or out for vendor locations.

Drum Buffer Rope Scheduling

When using the Drum Buffer Rope scheduler, you are provided with validation for the following consignment related transactions:

- Prevents consignment warehouse inventories from being allocated to supply non-consignment demand or demand from any other warehouses.
- Prevents supply orders for consignment warehouses from being allocated to supply non-consignment demand or demand from any other warehouses.
- Prevents supply orders for a non-consignment warehouses from being allocated to any consignment warehouse demand.
- Includes consignment IBT demand against non-consignment warehouses in material netting. This allows DBR to create work orders to supply the IBT.
- Includes IBT supply for non-consignment warehouses which are coming from consignment warehouses.
- DBR ignores all customer order demand for consignment warehouses.
- DBR does not create supply work orders or planned orders for consignment warehouses.
- Excludes consignment warehouse inventory from the available for netting.
- Excludes customer order demand against a consignment warehouses.
- Includes IBT supply orders for non-consigned warehouses coming from a consigned warehouse.
- Excludes IBT supply orders for consigned warehouses.
- Includes IBT demand orders against non-consigned warehouses.
- Excludes IBT demand orders for consigned warehouses.
- Excludes material requirement demand against a consignment warehouses.
- Excludes purchase order supply for consignment warehouses.

Purchase Management Window

You can view consigned inventory information in several places in the Purchase Management Window:

Purchase Order Entry – A Consignment tab is available in the header panel.

See “Purchase Order Entry” on page 8-1 of the Purchasing guide.

Search Criteria – Use the Consignment tab to make selections for your consigned inventory.

Vendor History – You can choose to view only consigned parts in the Vendor History table.

Consigned Inventory – The Consigned Inventory child window contains a list of your consigned inventory warehouses and locations.

Printing Consigned Inventory Reports

These reports include a reference to the type of transaction—Consign In or Consign Out—shown on the line:

- Inventory Transaction Report
- Inventory Valuation Report

Printing IBT Receipt Acknowledgement Reports

Send this report to the recipient of the consigned material so that they can return it to you when they have received the material. This allows you to create an IBT receiver so that you can move the material into the consignment warehouse.

To print IBT Receipt Acknowledgement reports:

1. Select **Inventory**, **Inter Branch Transfer Shipping Entry**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site involved in the consignment transaction. If you are licensed to use a single site, this field is unavailable.
3. Click the **Shipper ID** browse button and select the shipper for the Receipt Acknowledgement Report to print.
4. Select **File**, **Print Receipt Acknowledgement**.
5. Select the content for the report:

   Print Current IBT Shipper – To print the current inter branch transfer information, select the **Print Current IBT Shipper** option. If you select this option and you are licensed to use multiple sites, your selection in the Site ID(s) field does not apply to the report. The site ID of the IBT you selected before accessing this dialog box is used in the report.

   Print All Shipped IBTs Through – To print information for a range of inter branch transfers, select the **Print All Shipped IBTs Through** option.

   Click the calendar buttons and select From and Through dates for your range.

   If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to include in the report. If you are licensed to use a single site, this field is unavailable.

   Print Traceable Part Properties – Select this check box to include trace information on the report.

   Do Not Print Previously Printed Acknowledgements – Select this option if you do not want acknowledgements you have previously printed to appear on the report.

   Consignment Transfers Only – Because the primary use of this report is to print acknowledgements you can send to consignment customers or vendors, the Consignment Transfers Only check box is selected. To print reports containing all of your IBT shipments regardless of whether they are consignments, clear the **Consignment Transfers Only** check box.
6. Click the arrow and select the output for the report. Select one of these options:

Print – Select this option to output the file to a printer. The file is sent to the selected default printer.

View – To see what the printed output will look like before you print it, select View. When the information appears on the screen, you can scroll through and print it.

File – To save the information to a text file, select File. You can then edit the file outside of VISUAL.

E-Mail – Select this option to send the report in a Rich Text Format through a Microsoft Outlook e-mail message. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

7 In the Format section, select the output format to use for the report.

You can select the **Standard**, **Print Form**, or any of three user defined formats. The User-Defined option buttons are active only if you have created user defined report formats.

Select the Print Form option button to print the report with a preprinted form using a laser printer. The resulting report is of better quality than the report you can print using the Standard print format option.

8 Click **Ok**.

The report is printed using the selections you made.

Note: Notice the Quantity Used area for the vendor or customer to use for their inventory usage and the Received By signature area.

Printing Consigned Usage Reports

When you use parts and material consigned to you, use the Consigned Usage Report to print a list of those parts. Complete the report and send it to your vendors or customers notifying them of the parts you have used.

To print Consigned Usage Reports:

1 Select **Inventory**, **Consignment Usage Report**.

2 In the Consignment Type section, select the type of report to print:

From Vendor – To print a list of inventory owned by your vendor but stored at your location, select the From Vendor option. Use this option to notify your vendor that you have used some of their consignment to you.

From Customer – To print a list of inventory owned by your customer but stored at your location, select the **From Customer** option. Use this option to notify your customer that you have used some of their consignment to you. Because the customer owns this inventory, you are only notifying them that you used it.

At Vendor – To print a list of inventory owned by you but sent to your vendor to be used to complete a service, select the **At Vendor** option. Use this option to send your vendor a report they can complete and return to you indicating their consumption of your inventory.

At Customer – To print a list of inventory owned by you but stored at your customer's location, select the **At Customer** option. Use this option to send your customer a report they can complete and return to you indicating their consumption of your inventory.

3 In the Filters section, select the information to display in the report:

Site ID(s) – If you are licensed to use multiple sites, click the Site ID(s) arrow and select the sites to include in the report. If you are licensed to use a single site, this field is unavailable.

Date – To include inventory sent between a range of dates, click the calendar buttons and select the From and To dates to use.

Vendor – To include specific vendors or customers in the report, click the browse buttons and select the starting and ending IDs to use.

Warehouse Location – To display specific warehouse locations in the report, click the browse buttons and select the starting and ending IDs to use. If you are selecting locations, select the warehouse then click the arrow and select the location from the list.

4 If you do not want zero balance inventories to appear in the report, select the **Exclude Zero Balance** check box.

5 In the Output section, click the arrow and select the output for the report. Select one of these options:

Print – Select this option to output the file to a printer. The file is sent to the selected default printer.

View – To see what the printed output will look like before you print it, select View. When the information appears on the screen, you can scroll through and print it.

File – To save the information to a text file, select File. You can then edit the file outside of VISUAL.

E-Mail – Select this option to send the report in a Rich Text Format through a Microsoft Outlook e-mail message. To convert this document to PDF (Portable Document Format), select the **PDF Format** check box. To send this e-mail to all of the contacts associated with this document, select the **Send to Document Contacts** check box.

6 Click the **Print** toolbar button.

The report is printed using the selections you made.

Note: Notice the Quantity Used area for the vendor or customer to use for their inventory usage.

Chapter 12: Inventory Reports

This chapter includes:

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Printing Inventory Valuation Reports	12–3

What are Inventory Reports?

Use Inventory reports to keep track of the inventory activities of your enterprise. You can use Inventory Out reports to keep track of parts in transit. You can use Inventory Valuation Reports to display inventory values.

Printing Inventory Out Reports

An Inventory Out report lists the status of all inventory that you still own but have moved off-site. Service Dispatches and Inter Branch Transfers are the two transaction types that allow you to ship inventory to other locations but still retain ownership of the shipped materials.

This option is available on the Inventory Menu depending on your settings in Site Maintenance and Accounting Entity Maintenance. On the Shipment Track tab in Site Maintenance, you must select the Shipment Tracking Enabled check box. On the Intrastat tab in Accounting Entity Maintenance, you must clear the Intrastat Enabled check box.

To print Inventory Out reports:

1. Select **Inventory**, **Inventory Out Report**.
2. If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to use. If you are licensed to use a single site, this field is unavailable.
3. To specify a date range for the report, select starting and ending dates using the Calendar buttons.

   To generate the report as of a certain date onwards, enter a Starting Date only.

   To generate the report before a certain date, enter an Ending Date only
4. To specify a range of parts to include in the report, click the **Part ID** browse buttons and select the Starting and Ending parts for the report.
5. In the Sort By section select how to sort the information in the report. You can select:
   - Date
   - Part ID
   - Reason Code
6. Click the **Report Currency** arrow and select the currency for the report. If you are printing a report for a single site, the entity currency associated with the site is inserted. If you are printing a report for multiple sites, the drop-down list shows the tracking currencies shared by the selected sites. If no shared tracking currencies are found, “Not Available” is inserted. Either clear site selections until a shared currency is found, or run the report in native currency.
7. To include Service Dispatches in the report, select the **Service Dispatches** check box.
8. To include Inventory Transfers in the report, select the **Inventory Transfers** check box.
9. Click the output arrow and select the output method for the report:

   Print – To send the report to your printer, select the **Print** option.

View – To view the report using the report viewer, select the **View** option.

File – To send the report to text file, select the **File** option. Your report is prepared as a CSV file and a dialog box appears prompting you to enter the location and file name for the file to be saved.

E-mail – To prepare the report and attach it to an e-mail, select the **E-mail** option. The report is prepared as a CSV file, a Microsoft Outlook e-mail message is opened, and the file is attached. Specify the recipients of the e-mail and add text to the message. Click the **Send** button when you are ready to send the message.

To attach a PDF (Portable Document Format) file to your e-mail instead of a CSV file, select the **PDF Format** check box in the Type section.

10 Click the **Print** toolbar button.

If you selected the Print output, a standard print dialog box appears allowing you to select the print quantity and range.

Printing Inventory Valuation Reports

This report provides a breakdown and total value for all parts in your inventory.

For each Part ID, this information is displayed:

- Description
- On-Hand Quantity
- Material Cost
- Labor Cost
- Burden Cost
- Service Cost
- Total Value = Material + Labor + Burden + Service

Total value also appears for entire inventory.

When printing by a Cost Layer Detail report by Part ID, each of the inventory transactions making up the cost layers is listed, with the following information:

- Inventory Transaction ID
- Transaction Type and Associated Work Order ID, if any
- Material Cost
- Labor Cost
- Burden Cost
- Service Cost
- Quantity of Transaction
- Total Value

If you are licensed to use multiple sites, you can run the report for a single site or for multiple sites. If you run the report for multiple sites, the information in the report is broken down by site.

If you are licensed to use a single site, you can run the report on an enterprise-wide basis only.

To print Inventory Valuation Reports:

1 Select **Inventory**, **Inventory Valuation Report**.

2 In the Selection Criteria section, select the basis for the report. You can select:

Part ID – You can print Posted Value Reports or Cost Layer Detail reports.

Warehouse ID – You can only print Posted Value reports.

Product Code – You can only print Posted Value reports.

Commodity Code – You can only print Posted Value reports.

Site ID(s) – If you are licensed to use multiple sites, click the **Site ID(s)** arrow and select the sites to include in the report. If you are licensed to use a single site, this field is unavailable.

Report Currency – Click the arrow and select the currency for the report. If you are printing a report for a single site, the entity currency associated with the site is inserted. If you are printing a report for multiple sites, the drop-down list shows the tracking currencies shared by the selected sites. If no shared tracking currencies are found, “Not Available” is inserted. You cannot run the report if no shared tracking currency are found. Clear site selections until a shared currency is found.

3 To limit the report to a range of the criteria you selected, click the browse buttons and select the starting and ending record to use.

4 Select the appropriate option check boxes.

Show Parts with Non-Zero Amounts Only – If you have many part masters for which you are not currently carrying inventory, you may want to use this option to reduce the size of the report.

Use Part Standard Unit Cost Instead of FIFO Actual – If using actual costing, received materials are valued at FIFO based on the invoice or purchase order amount. Depending on your use of the report, you may want to value inventory based on the standard cost as defined in Part Maintenance, rather than actual costs.

5 If you selected to print the report based on Part IDs and want to include the cost layer detail information, select the **Show Cost Layer Detail** option. in the Report Type section.

Note: If you select the Show Cost Layer Detail option, the Part ID criteria option is selected. You can only use these options if you are using the actual costing method; set on the Costing tab of the Maintenance window.

Show All Parts in Range – All parts are reported regardless of zero or negative cost layers.

Show Parts with Zero Cost Layers Only – The report only prints for parts that have one or more cost layers with a zero value. This option helps you track any parts that may not have been valued correctly. For example, if you adjusted parts into inventory and did not provide the appropriate costs.

Show Parts with Negative Balance Cost Layers – The report only prints for parts that have one or more cost layers with a negative value.

6 Click the output arrow and select the output method for the report:

Print – To send the report to your printer, select the **Print** option.

View – To view the report using the report viewer, select the **View** option.

File – To send the report to text file, select the **File** option. Your report is prepared as a CSV file and a dialog box appears prompting you to enter the location and file name for the file to be saved.

E-mail – To have the report prepared and attached to an e-mail, select the **E-mail** option. The report is prepared as a CSV file, a Microsoft Outlook e-mail message is opened, and the file is attached. Specify the recipients of the e-mail and add text to the message. Click the **Send** button when you are ready to send the message.

To attach a PDF (Portable Document Format) file to your e-mail instead of a RTF file, select the **PDF Format** check box in the Type section.

7 Click the **Print** toolbar button.

If you selected the Print output, a standard print dialog box appears allowing you to select the print quantity and range.

Note: The Sequence and Transaction Detail Options sections are related to Projects/A&D. For more information, refer to the Projects/A&D User's Guide.

Chapter 13: Cost Simulation

This chapter includes:

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Understanding Cost Simulation Results	13–9
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What is Cost Simulation?

Predicting your overall costs prior to actually making adjustments to costs or burdens in your database can be a useful planning tool for your business. Cost simulation allows you to manage an unlimited number of simulations for materials, labor, burden, service costs, and unit price for parts, resources, and outside services. This feature is particularly useful if you manufacture in a repetitive mode and maintain a standard cost database—you can make adjustments and observe what the changes are before you commit those changes to your database.

Cost simulation is useful for:

- Simulating costs prior to setting Annual Standards
- Simulating and setting changes during the year for commodities or significant price changes by vendor
- Adjustments for labor rate changes during the year

If you are licensed to use multiple sites, you can run cost simulations on a site-by-site basis only. If you are licensed to use a single site, you can run cost simulations on an enterprise-wide basis only.

Note: Use cost simulation to reset costs only. If you need to revalue your inventory, use the standard revaluation process.

Working with Cost Simulations

Because cost simulation profiles are sets of costs, you can create as many sets of costs as you want and save each one using a different identifier.

Note: Each simulation profile is created with a status of Active. After updating parts, resources and outside services, the status is changed to Updated and posts the date of update in the Date Updated section.

Creating New Cost Simulations

To create a new cost simulation profile:

1. Select **Inventory**, **Cost Simulation**.
2. If you are licensed to use multiple sites, click the **Site ID** arrow and select the site to use for the simulation. If you are licensed to use a single site, this field is unavailable.
3. Click in the Simulation ID section and enter an identification for this simulation.
4. Click in the Description section and enter a description for this simulation.
5. If you are basing this cost simulation on an engineering master, click the **Eng Master** button to select the appropriate master.

   A list of the parts, resources, and outside services from the master you selected appears in the window.

   Note: The Lot ID and Split ID are automatically inserted for the master you select.

   If you do not want to base this cost simulation on an Engineering master, you can add parts, resources, and outside services manually as you need.
6. If you have selected an engineering master, select what type of part to display in the Part table. In the Engineering Master Part Type section, you can select:

   Purchased – Select the **Purchased** option button to view only purchased parts from your engineering master.

   Fabricated – Select the **Fabricated** option button to view only fabricated parts from your engineering master.

   Both – Select the **Both** option button to view both purchased and fabricated parts from your engineering master.
7. Click the **Save** button on the toolbar.

Deleting Cost Simulations

Caution: Deleting Cost Simulations completely removes them from your database. Make sure you want to delete the simulation before you do so.

To delete cost simulations:

1. Open the cost simulation to delete.
2. Click the **Delete** button on the toolbar.

   You are prompted to confirm the deletion in the dialog box.
3. To confirm the deletion, click the **Yes** button.

   If you do not want to delete the simulation, click the **No** button.

The cost simulation is deleted from your database.

Note: You cannot delete simulations with a status of Updated.

Copying Cost Simulations

Sometimes you may find it helpful to create cost simulations based on previous simulations or create several simulations with minor differences.

To copy cost simulations:

1. Open the simulation to copy.
2. Click in the Simulation ID section and enter the ID to use for the new simulation.

   Note: You may want to change the description to better fit the new ID.
3. Press the TAB key or click in another section in the window.
4. Click the **Save** button on the toolbar.

Entering Simulation Costs

Using the Cost Simulation window, you can enter as many cost scenarios as you want, saving each different scenario so you can compare the effects of the changes before committing them to your database. The Cost Simulation window also allows you to make global changes to your costs and burdens.

For example, if you are working with a group of parts, resources, or outside services, and have each member of that group populated in the appropriate table, you can apply a single change to all or multiple changes to multiple items and update all of the costs and burdens at one time.

Using the Fill Down Feature

The Fill Down feature is particularly useful if you have several parts populated in the Parts table and want to apply a single percentage simulation to the remaining parts in the table.

To use the Fill Down feature:

1. Enter the appropriate percentage for the highest line in the group of parts to which you want the percentage to apply.
2. With the appropriate column active, right-click the column and click the **Fill Down** button.

   In the same column, all of the remaining rows below the current row are populated with the percentage you entered. The system does not apply the percentage to any row above the selected row.
3. After you have finished making changes to your cost simulation, click the **Save** button on the toolbar.

Adding Parts to Cost Simulations

Note: If you have based a cost simulation on an existing engineering master, you cannot add new parts to the cost simulation.

To add a part to the Parts table of the Cost Simulation window:

1. Click the **List/Insert Parts** button on the toolbar.

   A list of your parts appears. If you are licensed to use multiple sites, only the parts that belong to the selected site are listed.
2. Double-click the part to add.

   A new line is inserted at the bottom of the Parts table and the appropriate information for the part you selected appears on the line.

Adding Resources to Cost Simulations

Note: If you have based a cost simulation on an existing engineering master, you cannot add new resources to the cost simulation.

To add a resource to the Resource table of the Cost Simulation window:

1. Click the Resources tab.
2. Click the **List/Insert Resources** button on the toolbar. If you are licensed to use multiple sites, only the resources that belong to the selected site are listed.
3. Double-click the resource to add. A new line is inserted at the bottom of the Resources table and the appropriate information for the resource you selected appears on the line.

Adding Outside Services to Simulations

Note: If you have based a cost simulation on an existing engineering master, you cannot add new outside services to the cost simulation.

To add outside services to the Resource table of the Cost Simulation window:

1. Click the Outside Services tab.
2. Click the **List/Insert Outside Services** button on the toolbar. If you are licensed to use multiple sites, only the resources that belong to the selected site are listed.
3. Double-click the resource to add. A new line is inserted at the bottom of the Outside Services table and the appropriate information for the resource you selected appears on the line.

Deleting Parts, Resources, and Outside Services from Cost Simulations

To delete parts, resources, or outside services from cost simulations:

1. With the appropriate cost simulation open, click the row header for the part or resource to delete.

   The row appears highlighted.
2. On the toolbar, click the appropriate Delete Row button.

   An X appears in the row header to indicate you have marked the row for deletion. The row is not deleted until you save the simulation.
3. When you are sure you have only marked lines you want to delete, click the **Save** button on the toolbar.

Updating Parts, Resource Costs, and Outside Service Costs from Cost Simulations

After you have set up your cost simulation, and are satisfied with the results, you can transfer your simulation costs to the appropriate parts, resources, and outside services in your VISUAL database.

Note: This process ONLY updates the VISUAL costs and resources tables and NOT the associated Engineering Master's requirements.

To update your parts, resources, and outside services:

1. If you are licensed to use multiple sites, click the **Site ID** arrow and select the Site Id to use. If you are licensed to use a single site, this field is unavailable.
2. In the Simulation ID field, click the browse button and select the simulation to use.
3. Select **File**, **Update Parts, Resources and Services**.

   The costs are updated for the parts, resources, and outside services with the figures from the current simulation. The status of the cost simulation is also set to Updated and the system inserts the date in the Date Updated section.

   If you are using VISUAL Financials and a Standard Costing method, a dialog box appears with further GL integration information.

   Note: After you have updated your costs from a particular cost simulation, you cannot make further changes to that simulation.

Updating Engineering Master Costs from Cost Simulations

After you have run cost simulations for an engineering master and decided to update that master's costs, you must use the Cost Implode Utilities. When you update engineering master costs using the Cost Simulation window, only the costs of the individual parts, resources, and outside services are updated, not those of the master.

To run cost simulations on engineering masters:

1. If you have not done so already, create a cost simulation for the engineering master whose costs you want to update.
2. Make changes to the engineering master costs in the Cost Simulation window and save the simulation.
3. Select **Maintain**, **Eng Master Costs**.

   The Engineering Master Costs window appears populated with the costs from the current master.

   If you have made any cost simulations for this master, those figures appear in blue in the Engineering Master window.
4. To save the cost simulation for this master, click the **Save** button.

   Note: You cannot make cost simulation changes directly in the Engineering Master Cost window; to make changes, close the window and make changes in the Cost Simulation window.

Printing Engineering Master Cost Simulation Reports

To print a report from the Engineering Master Costs window:

1 Select the type of report you want from the drop-down list.

You can select **Print**, **View, File**, or **E-mail**.

2 Click the **Print** button on the toolbar.

The report is printed to the device you specified.

Understanding Cost Simulation Results

To get the most benefit from the Cost Simulation window, you need to understand what information appears, from where it is populated, and what changes you can make using the window.

Understanding Parts Cost Simulation

The following information for each part appears in the Parts table of the Cost Simulation window:

Part ID – The Part ID appears in the Part ID column.

Simulation Unit Price – The simulation unit price is calculated for the part depending on the Unit Price Markup Type you select and the Price Markup Percent you specify.

Unit Price Markup Type – Specify the method to use when the Simulated Unit Price is calculated.

To select a Markup Type, click in the Unit Price Markup Type column and click the arrow that appears, select the Type from the list.

You can select:

% + Total Cost – The Simulation Unit Price is calculated by multiplying the Total Original Cost by the Price Markup Percent. For the example above, the calculation is (0.10x150.00)+150.00=$165.00

% + Current Cost – The Simulation Unit Price is calculated by multiplying the Original Unit Price by the price Markup Percent. For the example above, the calculation is (0.10x170.00)+170.00=$187.00

Amount + Cost – The Simulation Unit Price is calculated as the Total Original Cost plus the Price Markup Amount. For the example above, the calculation is 350.00+10.00=$360.00

Amount + Price – The Simulation Unit Price is calculated as the Original Unit Price plus the price Markup Amount. For the example above, the calculation is 270.00+10.00=$280.00

Price Markup Amount – Enter the amount by which this part's cost or price is marked up.

Price Markup Percent – Enter the percentage by which this part's cost or price is marked up.

Current Material Cost – The current cost of the material from your Part table appears in the Current Material Cost column. If you have not set up a cost for the part, the column appears empty.

Simulation Material Cost – To enter a new material cost instead of a markup percentage, enter the cost in the Simulation Material Cost column.

The Simulation Material Cost is calculated as the Current Material Cost multiplied by the Sim Markup Material %. For the PART_A in the example above, the calculation is:

(100.00x0.2)+100.00=$120.00

To mark up this part's material cost by a percentage, click in the Sim Markup Material % column and enter the percentage.

Note: Entering a simulation markup material percent after entering a simulation material cost prompts

an override to the simulation material cost in favor of the percent you enter.

If the part on this line is fabricated and has labor cost, that cost appears in this Current Labor Cost column.

Simulation Labor Cost – To enter a new labor cost instead of a markup percentage, enter the cost in the Simulation Labor Cost column.

The Simulation Labor Cost is calculated as the Current Labor Cost multiplied by the Sim Markup Labor %. For the PART_A in the example above, the calculation is:

(50.00x0.1)+50.00=$55.00

Sim Markup Labor % – To mark up this part's labor cost by a percentage, click in the Sim Markup Labor % column and enter the percentage.

Note: Entering a simulation markup labor percent after entering a simulation labor cost prompts an override of the simulation labor cost in favor of the percent you enter.

Current Burden Cost – If the part on the line is fabricated and has a burden cost in the part table, that cost appears in the Current Burden Cost column. If you have not set a burden cost for this part, the column appears empty.

Simulation Burden Cost – To enter a new burden cost instead of a markup percentage, enter the cost in the Simulation Burden Cost column.

The Simulation Burden Cost is calculated as the Current Labor Burden multiplied by the Sim Markup Burden %. For the PART_A in the example above, the calculation is:

(12.00x0.2)+12.00=$14.40

Note: In the example above, because PART_B does not have a current burden cost in the part table, the 10% Sim Markup Burden % results in a Null (Nothing) Simulation Burden Cost.

Sim Markup Burden % – To mark up this part's burden cost by a percentage, click in the Sim Markup Burden % column and enter the percentage.

Current Service Cost – If the part on the line is fabricated and has a service cost in the part table, that cost appears in the Current Burden Service column. If you have not set a service cost for this part, the column appears empty.

Simulation Service Cost – To enter a new service cost instead of a markup percentage, enter the cost in the Simulation Service Cost column.

Sim Markup Service % – To mark up this part's service cost by a percentage, click in the Sim Markup Service % column and enter the percentage.

Current Fixed Cost – If the part on the line is purchased and has a fixed cost in the part table, that cost appears in the Current Fixed Cost column. If you have not entered a fixed cost for this part, the column appears empty.

Simulation Fixed Cost – To enter a new fixed cost instead of a markup percentage, enter the cost in the Simulation Fixed Cost column.

The Simulation Fixed Cost is calculated as the Current Fixed Cost multiplied by the Sim Markup Fixed %. For the PART_A in the example above, the calculation is:

(186.00x0.10)+186.00=$204.60

Sim Markup Fixed % – To mark up this part's fixed cost by a percentage, click in the Sim Markup Fixed % column and enter the percentage.

Total Sim Cost – Based on the simulated values you specified, the total simulated cost is calculated as:

Simulation Material Cost + Simulation Labor Cost + Simulation Burden Cost + Simulation Service Cost

For PART_A in the example above, the calculation is:

120.00+55.00+14.40+27.60=$217.00

Note: The Total Original Cost appears next to the Total Simulated Cost for easy comparison.

After you have used the Cost Simulation window to update your parts, the following information appears for comparison purposes:

Total Original Cost – The total original costs from the part table appear in the Total Org Cost Column. This is the current cost from the part table.

Previous Unit Price – The Unit Price from the part table appears in the Previous Unit Price column.

Previous Total Cost – The total cost of this part prior to an update appear in the Previous Total Cost column.

Understanding Resource Cost Simulation

The following information for each resource, from your database, appears in the Resource table of the Cost Simulation window:

Note: To make any changes to your resource costs use the Shop Resource Maintenance window.

Resource ID – The ID of the resource appears in the Resource ID column.

If you have entered setup and run figures for the resource on the line, those figures appear in the appropriate columns. The following columns appear in the Resource table:

- Original Setup Cost/Hour
- Original Run Cost/Hour
- Original Run Cost/Unit
- Original Setup Burden/Hour
- Original Run Burden/Hour
- Original Run Burden/Unit
- Original Fixed Burden

Note: These are the current figures from your resource database.

For each of the costs and burdens in the Resource table, you can enter a simulation figure. To enter a simulation figure, click in the appropriate column and enter the figure.

After you have used the Cost Simulation window to update your resources, the following information appears for comparison purposes:

- Previous Setup Cost/Hour
- Previous Run Cost/Hour
- Previous Run Cost/Unit
- Previous Setup Burden/Hour
- Previous Run Burden/Hour
- Previous Run Burden/Unit
- Previous Fixed Burden

Note: These are the figures from your resource database prior to updating your resources.

Understanding Outside Service Cost Simulation

The following information for each outside service, from your database, appears in the Outside Service table of the Cost Simulation window:

Service ID – The ID of the outside resource appears in the Service ID column.

Service Part ID – If a part is related to this service its ID appears in the Service Part ID column.

Preferred Vendor ID – The ID of the preferred vendor for this service appears in the Preferred Vendor ID column.

The following columns appear in the Outside Service table:

- Current Cost Per Unit
- Simulation Cost Per Unit
- Current Base Chg/Srv (Charge per Service)
- Simulation Base Chg/Srv (Charge per Service)
- Current Min Charge
- Simulation Min Charge

Note: These are the current figures from your outside service database.

For each of the costs and burdens in the Outside Service table, you can enter a simulation figure. To enter a simulation figure, click in the appropriate column and enter the figure.

After you have used the Cost Simulation window to update your outside service charges, the following information appears for comparison purposes:

- Previous Cost Per Unit
- Previous Base Chg/Srv (Charge per Service)
- Previous Min Charge

Note: These are the figures from your outside service database prior to updating your services.

Printing Cost Simulation Reports

There are four output options for your simulation reports—print, view, file, and e-mail.

To print cost simulations:

1. With the appropriate simulation open in the Cost Simulation window, click the Print Type arrow and select the output to use for this report.
2. Click the **Print** button on the toolbar.

   If you selected **Print**, the report is sent to your printer.

   If you selected **View**, the report appears in the Report Viewer window.

   If you selected **File**, you are prompted for the file name in the dialog box. Enter the file name and click **OK**.

   If you selected **E-mail**, the system attaches the file to a Microsoft Outlook e-mail. For more information on addressing and sending the e-mail, refer to your Microsoft Outlook user documentation.

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