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# **JD Edwards World Manufacturing and Distribution Planning Guide**

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# 1 Overview



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# Overview to Manufacturing and Distribution Planning

Manufacturing and Distribution Planning consists of the following systems, as well as the execution of those plans.

- Resource and Capacity Planning
- Material Planning Operations

The Manufacturing and Distribution Planning system is a part of Enterprise Resources Planning and Execution (ERP<sub>x</sub>). ERP<sub>x</sub> allows you to coordinate your inventory, raw materials, and labor resources to deliver products according to a managed schedule. This closed-loop manufacturing system helps manage your data and optimize resources across your entire manufacturing and distribution logistics environment. ERP<sub>x</sub> formalizes the activities of company and operations planning.

This section contains the following:

- [Resource and Capacity Planning](#)
- [Material Planning Operations](#)
- [System Integration](#)
- [Terms and Concepts](#)
- [Planning and Production Environments](#)
- [Planning a Total Business Solution](#)
- [Tables for Manufacturing and Distribution Planning](#)
- [Menu Overview](#)

## Resource and Capacity Planning

Resource and Capacity Planning allows you to prepare a feasible production schedule that reflects your demand forecasts and production capability. Resource and Capacity Planning consists of:

Component	Description
Resource Requirements Planning (RRP)	Uses a summary forecast to estimate the time and resources that are needed to make a product family.

<b>Component</b>	<b>Description</b>
Rough Cut Capacity Planning (RCCP)	<p>Compares the master production scheduling resource requirements to the capacity available in critical work centers.</p> <p>You use RCCP to determine if you should revise the master schedule to create feasible work loads or improve utilization of limited resources.</p>
Capacity Requirements Planning (CRP)	<p>Compares the material requirements plans to the capacity available in all work centers.</p> <p>You use CRP to determine if you should revise the material requirements plan to create feasible work loads or improve utilization of limited resources.</p>

## Material Planning Operations

Material Planning Operations provides a short-range plan to cover material requirements that are needed to make a product. Material Planning Operations analyzes demand from all your operations, including:

- Central and satellite distribution centers and warehouses
- Rate-based repetitive manufactured items
- Process and discrete manufactured items
- Engineer-to-order contracted items
- Maintenance, repair, and operational items for plant and equipment maintenance
- Supplier-managed inventory

Material Planning Operations consists of:

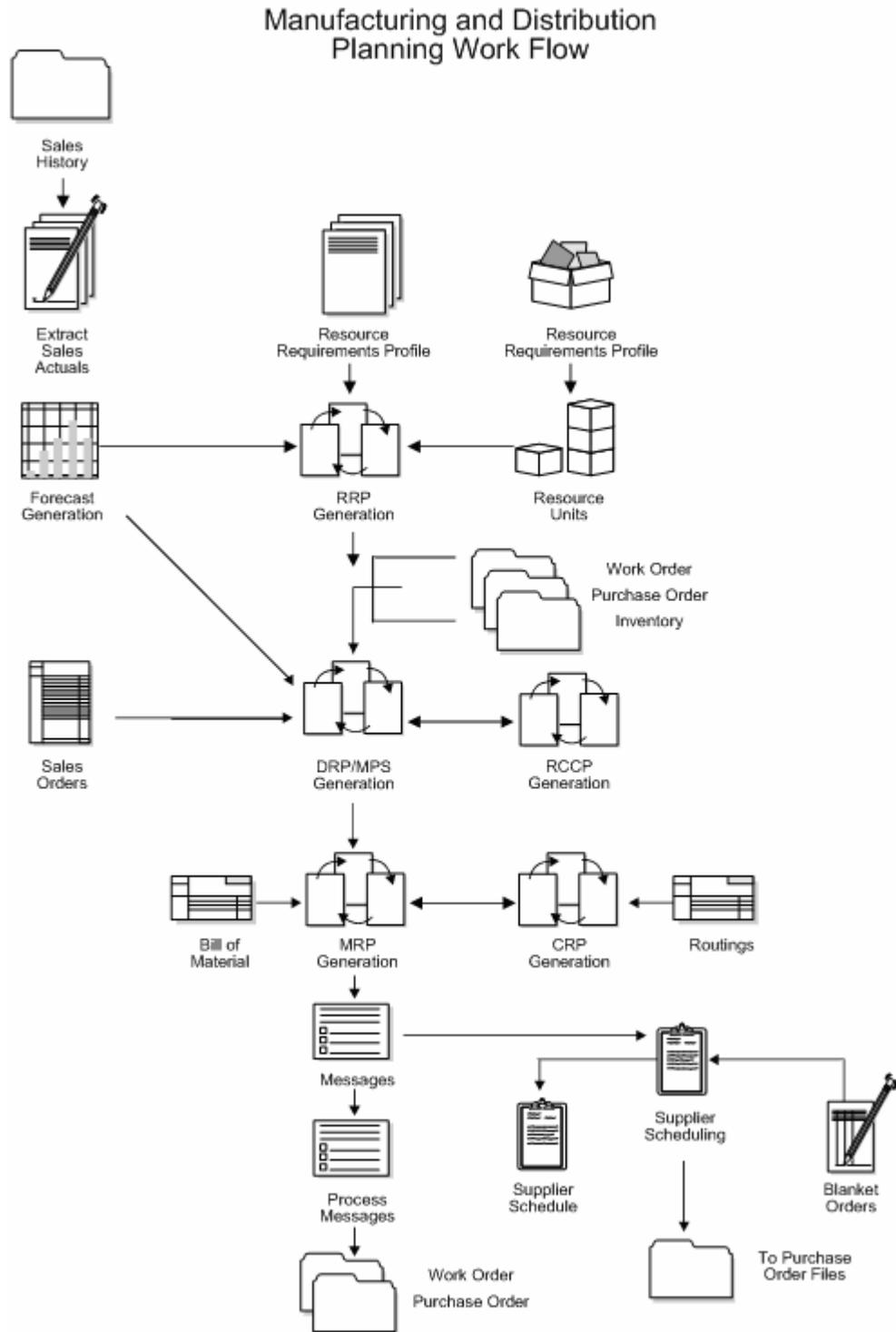
<b>Component</b>	<b>Description</b>
Distribution Requirements Planning (DRP)	Plans and controls the distribution of finished goods based upon demand. In addition, DRP provides centralized control of distribution inventories and creates a coordinated replenishment plan.
Master Production Scheduling (MPS)	A schedule of items and quantities that a company expects to manufacture.
Material Requirements Planning (MRP)	Uses the master production schedule, open orders, the bill of materials, and inventory records to calculate time-phased net requirements for every item, and creates a plan for covering material requirements.

## System Integration

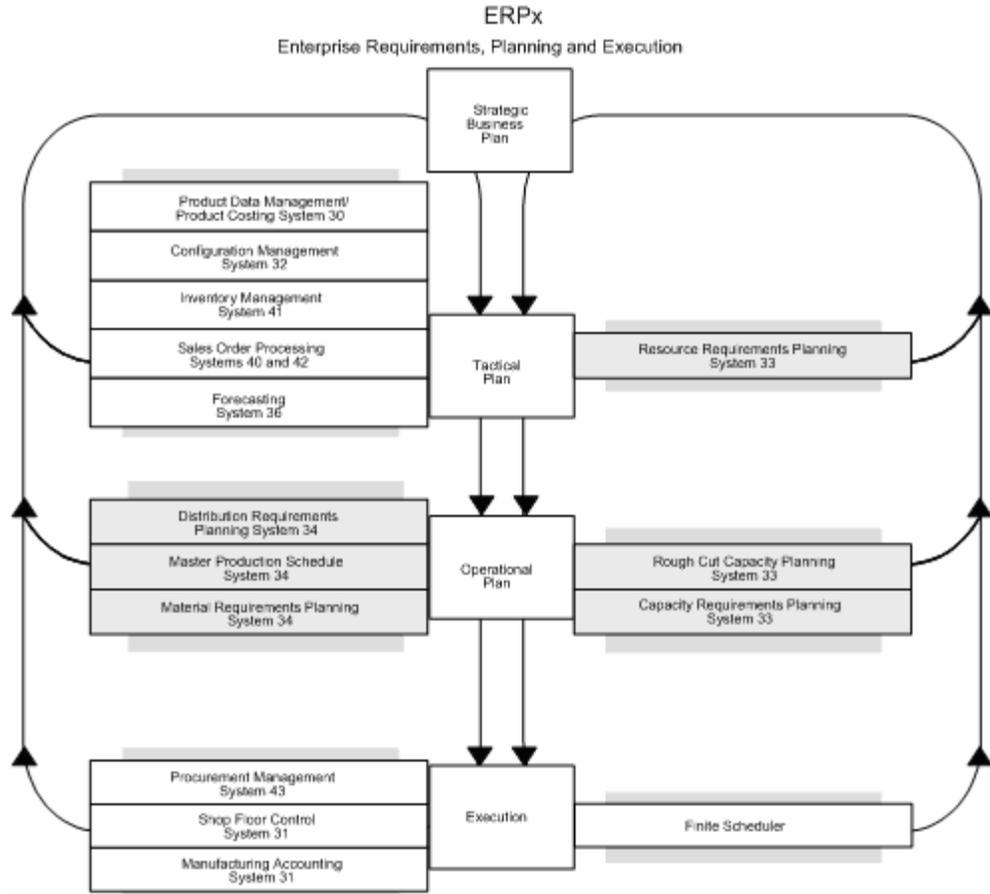
The Manufacturing and Distribution Planning system integrates with the following systems:

<b>System</b>	<b>Description</b>
Inventory Management	Supplies the basic information about each item (or ingredient), such as part number, description, unit of measure, stocking type, and location.
Configuration Management	Supplies information for assemble-to-order and make-to-order items.
Forecasting	Generates sales projections that are used to develop the master production schedule.
Shop Floor Control	Uses bills of material and routings to schedule work activity within the plant.
Product Costing	Uses bill of material, routing, and work center information to calculate the standard cost of an item.
Manufacturing Accounting	Calculates costs for labor, overhead, and material for each primary unit of the parent using routing and work center information.
Sales Order Management	Uses bills of material for kit processing and acts as a source of demand for purchased or manufactured items.
Purchase Management	Uses expected delivery dates and recommends replenishment actions.

The following graphic illustrates the Manufacturing and Distribution Planning work flow.



The following graphic illustrates how Manufacturing and Distribution Planning integrates with other JD Edwards World systems.



## Terms and Concepts

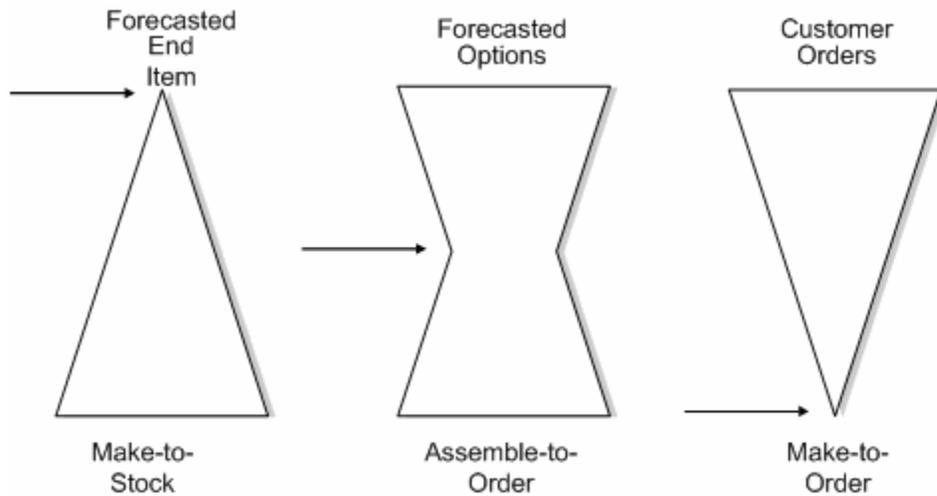
Manufacturing and Distribution Planning encompasses:

Component	Description
Bills of material	<p>The components and relationships required to produce a parent item. Use bills of material to:</p> <ul style="list-style-type: none"> <li>Maintain many configurations for an item without creating additional part numbers</li> <li>Define quantities of intermediate products in any unit of measure as they progress through the manufacturing process</li> <li>Enter similar items by copying bills of material, routings, and processes</li> </ul>
Routings	<p>The operations required to produce the parent item. Use routings to:</p> <ul style="list-style-type: none"> <li>Define each step of the manufacturing process with allowances for anticipated yield and scrap</li> <li>Add alternate operations to routings</li> </ul>

Component	Description
Work centers	<p>The facilities on the shop floor where the routing operations occur. Use work centers to:</p> <ul style="list-style-type: none"> <li>▪ Define work center number and description</li> <li>▪ Define the number of operators or machines</li> <li>▪ Define setup, labor, machine, and overhead rates</li> <li>▪ Define information for Capacity Planning</li> </ul>
Engineering change orders (ECOs)	<p>The document that you use to define and implement changes to your products structure. Use engineering change orders to:</p> <ul style="list-style-type: none"> <li>▪ Control item changes from a single source</li> <li>▪ Incorporate approved changes to bills of material</li> </ul>

## Planning and Production Environments

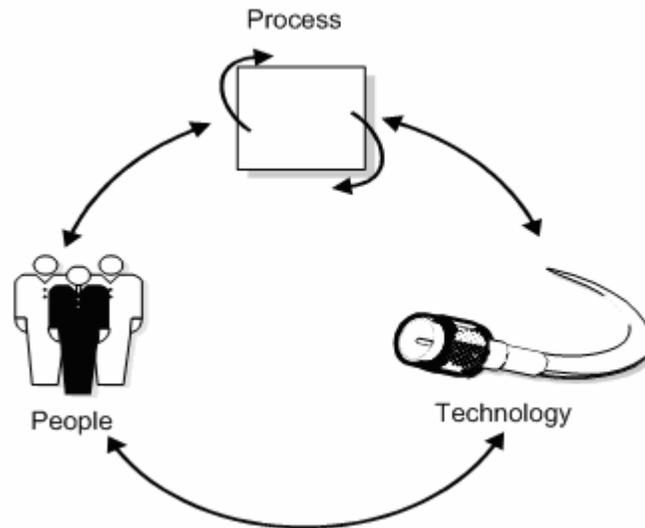
Successful planning leads to customer satisfaction. Depending upon when you meet your customer in the production process, the planning systems provide business solutions. As illustrated by arrows in the following graphic, customers impact the product development at different points in the various environments.



Option	Description
Make-to-stock	<p>You meet your customer after the product is completed. This environment generally involves retail items. Forecasting of end items is a crucial factor.</p>

Option	Description
Assemble-to-order	<p>You meet your customer after options are fabricated, but before final assembly of the product. The customer specifies the options in the final end product. Some factors to consider in this environment are:</p> <ul style="list-style-type: none"> <li>▪ Items are configured according to formally set rules</li> <li>▪ Items are forecasted and master schedules are created at the option level</li> </ul>
Make-to-order	<p>You meet your customer before you begin production at any level in the product structure. This includes the following factors:</p> <ul style="list-style-type: none"> <li>▪ Products are customized for specific needs</li> <li>▪ Capacity needs are forecasted</li> <li>▪ Production requires longer lead times</li> </ul>
Engineer-to-order	<p>You add engineering design time into the lead time. This might use a job cost business solution.</p>

## Planning a Total Business Solution



A total business solution integrates three important elements:

Element	Description
People	For the most important element in your solution, you must provide education and management commitment.

Element	Description
Process	To develop the policies and practices to manage effectively, you can employ: <ul style="list-style-type: none"> <li>▪ Business process re-engineering</li> <li>▪ Best manufacturing practices</li> <li>▪ Formal documentation of the process that is approved by management</li> </ul>
Technology	To acquire the best tools to do the job, you should use: <ul style="list-style-type: none"> <li>▪ JD Edwards World software</li> <li>▪ Complementary products</li> <li>▪ AS/400 or open systems platforms</li> </ul>

## People

People are the keys to success. Involving and empowering people to get the job done are important steps in ensuring the success of your enterprise.

Key Components	Description
Management commitment	Implementing a successful business solution requires a management involvement that includes: <ul style="list-style-type: none"> <li>▪ Committing the time and financial resources to do it right the first time</li> <li>▪ Empowering the implementation team with the authority, responsibility, and accountability to do the job</li> </ul>
Implementation team	Effective and thorough work on the front-end ensures good performance in the future. To promote integrated solutions at implementation time and during use, the future owners of the process should participate in the implementation process. In addition, the team should be cross-functional.
Education and training	For knowledge of the broader business issues that are associated with Manufacturing and Distribution implementation, participants in the process should be educated in the American Production and Inventory Control Society (APICS) (or an equivalent). Ideally, this education should precede training in specific JD Edwards World training courses. Understanding Best Practices in the industry ensures quality solutions.
Managing change	Implementing a broad-scale business solution entails great change in the way that people accomplish their work. To make this paradigm shift without disruption of product deliverance requires skills in helping employees cope with change in the workplace.

Key Components	Description
Partnership	JD Edwards World Response Line and consulting, provides continued support. Our relationship is ongoing for your long-term future success. Business partners broaden this relationship through additional worldwide assistance.

## Process

Costs, schedule, and quality are the direct outputs of the business process. Quality processes result in a quality product. The product meets customer specifications of design, schedule, and price.

JD Edwards World supports your business process re-engineering through flexibility. The software can be tailored to reflect new processes as they evolve. Multiple plants can be at different stages of the re-engineering effort, depending upon their maturity or schedule for implementation. Some of the features that JD Edwards World software provides are:

- User defined codes
- Processing options
- Branch/plant constants
- Manufacturing constants
- Customized menus

JD Edwards World strongly supports Best Practices as documented by industry experts. As new practices are presented and recommended, JD Edwards World has made a commitment to evolve the software functionality to support these findings.

## Technology

Seamless integration between all the JD Edwards World systems provides a unified solution to your enterprise planning. JD Edwards World Inventory, Sales, and Purchasing systems are fully integrated distribution systems that support the Manufacturing and Distribution Planning system.

## Tables for Manufacturing and Distribution Planning

The following is a list of the tables that are used throughout Manufacturing and Distribution Planning.

Table	Description
Item Master (F4101)	Stores basic information about each defined inventory item, such as item numbers, description, category codes, and units of measure.

<b>Table</b>	<b>Description</b>
Branch/Plant Master (F4102)	Defines and maintains warehouse or plant level information, such as costs, quantities, physical locations, and branch level category codes.
Bill of Materials Master (F3002)	Contains information at the business unit level about bills of material, such as quantities of components.
Capacity Messages (F3311)	Contains the action messages that are generated by the Resource Requirements Planning regeneration.
Detail Forecast (F3460)	Contains the forecast data that RRP validates. It is also used as input to DRP/MPS/MRP.
Routing (F3003)	Stores routing information, including operator sequence, work center, run, setup, and machine time.
Resource Units (F3007)	Contains the available capacity for each work center by day, month, and year.
Work Center Master (F30006)	Contains detail data about all defined work centers.
Resource Profile (F3303)	Contains all resource profiles used in Resource Requirements Planning.

## Menu Overview

JD Edwards World systems are menu-driven. System functions are organized according to their function and frequency of use.

Manufacturing and Distribution Planning encompasses two systems:

- Resource and Capacity Planning
- Material Planning Operations

### Resource and Capacity Planning Menus

The commonly used menus for Resource and Capacity Planning are listed below.



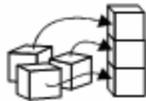
### Daily Processes

- \* Resource Requirements Planning G3311
- \* Rough Cut Capacity Planning G3312
- \* Capacity Requirements Planning G3313



### Periodic Processes

- \* Resource/Capacity Planning G3321



### Setup Processes

- \* Resource/Capacity Planning G3341

## Fast Path Commands for Resource and Capacity Planning

The following table illustrates the fast path commands you can use to move among the Resource and Capacity Planning menus. From any menu, enter the fast path command at the command line.

Fast Path	Menu	Title
DRRP	G3311	Daily Resource Requirements Planning
RCCP	G3312	Daily Rough Cut Capacity Planning
DCRP	G3313	Daily Capacity Requirements Planning
PCAP	G3321	Periodic Resource/Capacity Planning
CAPS	G3341	Resource/Capacity Planning Setup

## Material Planning Operations Menus

The commonly used menus for Material Planning Operations are listed below.



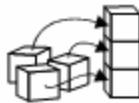
### Daily Processes

- \* DRP G3411
- \* MPS G3412
- \* MRP G3413
- \* Multi-Facility Planning G3414



### Periodic Processes

- \* Forecasting G3421
- \* Single Site Planning G3422
- \* Multi-Facility Planning G3423



### Setup Processes

- \* Forecast Setup G3441
- \* Requirements Setup Planning G3442
- \* Multi-Plant Setup G3443

## Fast Path Commands for Material Planning Operations

The following table illustrates the fast path commands you can use to move among the Material Planning Operations menus. From any menu, enter the fast path command at the command line.

Fast Path	Menu	Title
MAT	G34	Material Planning Operations
DDRP	G3411	Daily DRP
DMP	G3414	Daily Multi-Plant Planning
DMPS	G3412	Daily Master Production Schedule
DMRP	G3413	Daily MRP
DRP	G3411	Distribution Requirements Planning
MATS	G3442	Set Up Single Site Material Planning
MPS	G3412	Master Scheduling
MRP	G3413	Material Requirements Planning
MULTI	G3414	Multi-Plant Planning
PMP	G3423	Periodic Multi-Plant
PSS	G3422	Periodic Single Site Planning
SMAT	G3440	Set Up Material Planning

<b>Fast Path</b>	<b>Menu</b>	<b>Title</b>
SMP	G3443	Set Up Multi-Plant Material Planning



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## **2 Item Master and Branch/Plant Review**



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# Overview to Item Master and Branch/Plant Review

## Objectives

- To provide the system with details about the stock and non-stock items in inventory

## About Item Entry

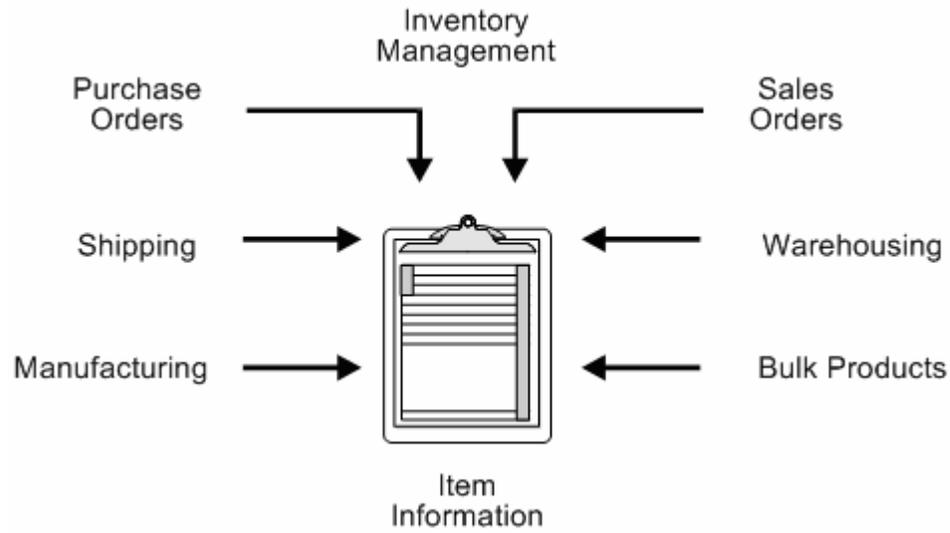
Prior to working with your inventory, you must provide the system with information about the items you stock. When you enter each inventory item, you provide the system with details such as:

- Item identifiers
- Item descriptions (foreign and domestic)
- Item rules
- Item costs and prices
- Item weights and measures

You must also provide the system with information about the location of each item, including:

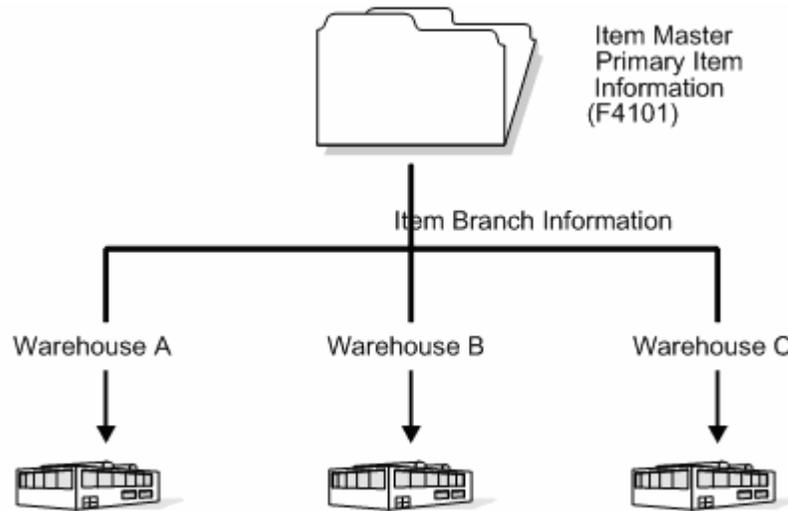
- The branch/plant where each item resides
- The locations used within each branch/plant

The system uses this information to help track and process each item through your distribution and manufacturing systems.



Entering an item includes two steps:

1. Enter item master information, which includes basic information about an item.
2. Customize the item master information to suit each branch or plant that the item occupies.



When you enter item master information, the system creates a record in the Item Master table (F4101). When you enter branch/plant information for an item, the system creates records in the Item Branch Master table (F4102) and the Item Location Information table (F41021).



#### Item Branch Master

Item information that applies throughout the branch, such as:

- \* Category codes
- \* Planner/buyer numbers



#### Item Location

Item information specific to certain locations. For example:

- \* On-hand quantities
- \* General Ledger class code

To enter item information, complete the following steps:

- Enter item master information
- Enter branch/plant information
- Enter item cost information
- Enter sales price information

## Before You Begin

- Read System Setup in the Inventory Management Guide
- Set up G/L class codes
- Review and modify branch/plant constants
- Set up next numbers
- Set up default locations and printers
- Set up applicable user defined code tables, including:
  - G/L posting categories
  - Stocking type codes
  - Units of measure
  - Classification code categories
  - Cost method codes
  - Language preference codes



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# Enter Item Master Information

## Entering Item Master Information



From Inventory Management (G41), choose **Inventory Master/Transactions**  
From Inventory Master/Transactions (G4111), choose **Item Master Information**

You must enter general information for all stock and non-stock items. The system uses this information to identify and process each item in the distribution and manufacturing systems.

To enter item information, complete the following tasks:

- [Entering Basic Item Information](#)
- [Entering Item Text](#)
- [Assigning Item Responsibility](#)
- [Entering Item Classification Codes](#)
- [Entering Item Unit of Measure Information](#)
- [Entering Item Manufacturing Information](#)
- [Entering Item Grade and Potency Information](#)

When you enter a new item, the system creates an item master record in the Item Master Information table (F4101).

## What You Should Know About

### Setting up a template

You might want to set up a template that contains common values for fields. Enter an item with the common field values, then locate the item, and enter the new item information as necessary.

### Deleting item master information

You cannot delete master information for an item if any of the following exists:

- Item branch records
- Bills of material
- Item cross-reference numbers
- Supplier relationships
- Sales prices

### Displaying additional item information

You can set processing options to display additional item information subsequent to item master information (for example, item branch/plant information).

### Displaying EDI transaction information

You can either set processing options to display the Item Master Information-UCC (Uniform Code Council) screen or access the Exit to Item Master Maintenance UCC128 function from Item Master Information.

For more information on UCC128 processing, see *Setting Up UCC 128 Processing* in the *Sales Order Management* guide.

## See Also

- *Entering Item Cost Information (P4105)* for information about entering master information that pertains to item costs
- *Entering Sales Price Information (P4106)* for information about entering master information that pertains to item prices

## Entering Basic Item Information

To enter basic item information, complete the following tasks:

- Enter item identifiers
- Enter item descriptions and search text
- Enter item processing information

Each item can have up to three identifiers. You use the identifiers to locate the item. These identifiers can represent universal product codes (UPCs), bar codes, supplier numbers, or a user-defined value.

In Branch/Plant Constants, you must specify a primary item identifier. In the item master, you must also enter an item description and the text on which a user is most likely to search when trying to locate the item. You can also translate item descriptions and search text into multiple languages to accommodate those users who must locate items using alternate languages.

Item processing information consists of values that control how the system processes the item. These values pertain to stocking, packaging, accounting transactions, system interfaces, and so on.

## What You Should Know About

**Locating other identifiers** To locate an item using an identifier other than the primary identifier, you can perform a wildcard search by typing a special symbol, such as an asterisk (\*), before the identifier. This only applies for screens that contain the Item Number field.

## See Also

- *Defining Branch/Plant Constants (P41204)* for more information about specifying the primary item identifier

### To enter item identifiers

On Item Master Information

Complete the following fields:

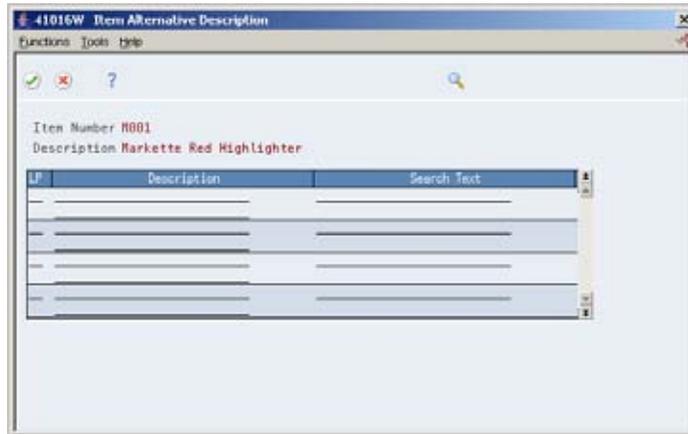
- Item Number-Short
- Product No (Product Number)

- Catalog No (Catalog Number)

## To enter item descriptions and search text

On Item Master Information

1. To enter descriptions and search text in your native language, complete the following fields:
  - Desc (Description)
  - Srch (Search)
2. To enter descriptions and search text in alternate languages, access Item Alternative Description.



3. On Item Alternative Description, complete the following fields:
  - LP (Language Preference)
  - Description
  - Search Text

## To enter item processing information

On Item Master Information

Complete the following fields:

- Stocking Type
- G/L Class
- Line Type
- Bulk/Packed Flag
- Backorders Allowed
- Unit of Measure
- Check Availability Y/N
- ABC Codes

<b>Field</b>	<b>Explanation</b>
Item Number - Short	<p>An identifier for an item.</p> <p><i>Form-specific information</i></p> <p>The first of three identifiers you can assign to an item. The system assigns this number if you activate the Next Number program. This field is numeric only.</p> <p>If you leave the other two item identifier fields blank, the system copies this number to those fields.</p>
Product No	<p>An identifier for an item.</p> <p><i>Form-specific information</i></p> <p>The second of three identifiers that you can assign to an item. This field is alphanumeric.</p> <p>If you leave the third identifier field blank, the system copies this number to that field.</p>
Catalog No	<p>An identifier for an item.</p> <p><i>Form-specific information</i></p> <p>The third of three identifiers you can assign to an item. This field is alphanumeric.</p> <p>If you leave the second identifier field blank, the system copies that number to this field.</p>
Description:	A brief description of an item, a remark, or an explanation.
Srch:	<p>A field that specifies how the system searches for an item. Your entry should be specific and descriptive of the item. Type the words in the order in which you are likely to enter them.</p> <p>In single-byte environments, where computer storage space can contain only Latin-based language character sets, the system inserts the first 30 characters from the item's description if you do not enter search text.</p> <p>In double-byte environments where computer storage space can contain more complex language character sets (in languages such as Japanese, Chinese, and Korean), you must complete this field. This is a single-byte field that you complete with single-byte characters to phonetically represent the item description (which can be single-byte, double-byte, or both).</p>

<b>Field</b>	<b>Explanation</b>
Stocking Type	<p>A user-defined code (41/I) that indicates how you stock an item (for example, as finished goods, or as raw materials). The following stocking types are hard-coded and you should not change them:</p> <ul style="list-style-type: none"><li>B Bulk floor stock</li><li>C Configured item</li><li>F Feature</li><li>K Kit parent item</li><li>N Non-stock</li></ul>
G/L Class	<p>A user-defined code (system 41/type 9) that controls which general ledger accounts receive the dollar amount of inventory transactions for this item.</p>
Line Type	<p>A code that controls how the system processes lines on a transaction. It controls the systems with which the transaction interfaces (General Ledger, Job Cost, Accounts Payable, Accounts Receivable, and Inventory Management). It also specifies the conditions under which a line prints on reports and is included in calculations. Codes include:</p> <ul style="list-style-type: none"><li>S Stock item</li><li>J Job cost</li><li>N Non-stock item</li><li>F Freight</li><li>T Text information</li><li>M Miscellaneous charges and credits</li><li>W Work order</li></ul>
Bulk/Packed Flag	<p>A code that indicates if the item is a bulk liquid product. If it is a bulk product, you must perform temperature and density/gravity conversions. To record the movement of bulk products, you must use screens designed specifically for bulk products. If you try to record movement using standard inventory screens, the system prevents the movement. Valid values are:</p> <ul style="list-style-type: none"><li>P Packaged</li><li>B Bulk liquid</li></ul> <p>If you leave this field blank, the system uses P.</p>

Field	Explanation
Backorders Allowed	<p>A code that indicates whether you allow backorders for this item. You can allow backorders by item (through Item Master or Item Branch/Plant), or by customer (through Billing Instructions).</p> <p>Y Yes, allow backorders for this item.</p> <p>N No, do not allow backorders for this item, regardless of the backorders code assigned to the customer.</p> <p><b>Note:</b> The system does not use this information if you have set the option on Branch/Plant Constants to indicate that you do not allow backorders in your operating environment.</p>
Unit of Measure	<p>A code (table 00/UM) that indicates the primary unit of measure for the item. The primary unit of measure should also be the smallest unit of measure in which you handle the item.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure you specify in processing options.</p>
Check Availability Y/N	<p>This field controls whether availability checking is performed throughout the Sales Order Management system. You might want to check availability for some items. For other items, you can assume that an adequate supply is available. Valid values are:</p> <p>Y Check availability</p> <p>N Do not check availability</p>

Field	Explanation
ABC Codes	<p>A code that specifies this item's ABC ranking by sales amount.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> <li>A Assign this item to the first (largest) amount ranking.</li> <li>B Assign this item to the second (intermediate) amount ranking.</li> <li>C Assign this item to the third (smallest) amount ranking.</li> <li>D Do not include this item when you run ABC Analysis.</li> </ul> <p>There are three types of ABC analysis, which include sales, margin, and on-hand value. Within each type of analysis, you can have three groups, including A, B, and C.</p> <p>The ABC Code fields contain a percentage that defines the A, B, and C groups for categorizing items during ABC analysis. Each group measures a total within the type of analysis.</p> <p>For all groups, the system compares the appropriate sales, margin, or on-hand value totals of a single item to the appropriate total for all items and calculates the value of each item. An item's value is its percentage of the appropriate total. The system arranges the values of all items from highest to lowest value and accumulates the percentages. Then, depending on the group, the system processes the information as follows:</p> <ul style="list-style-type: none"> <li>A If an item's value causes the accumulated total to exceed the A accumulated percentage, the system assigns the item to the B group.</li> <li>B When the accumulated total reaches the percentage you entered for items in the A group, it continues to add values until it reaches the percentage you entered for items in the B group. The system assigns all items whose value falls between the A and B percentages to the B group.</li> <li>C The C group consists of items whose accumulated value exceeds the B percentage. The percentage that you usually enter for the C group is .999.</li> </ul>

## Entering Item Text

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Master Information</b></p>
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You might want to enter text about an item that others can view or print when working with the item. When you enter item master information, you can use one of two methods to enter item text:

- Attach messages to an item
- Enter notes for an item

Item messages are predefined, so you can attach the same message to multiple items.

Unlike item messages, item notes are not predefined. If notes already exist for an item, the words *See Memo* appear as highlighted text at the top of Item Master Information.

## Before You Begin

- Before you can attach a predefined message to an item, you must create text for the message. Where you create this text depends on the message type.

### To attach messages to an item

On Item Master Information

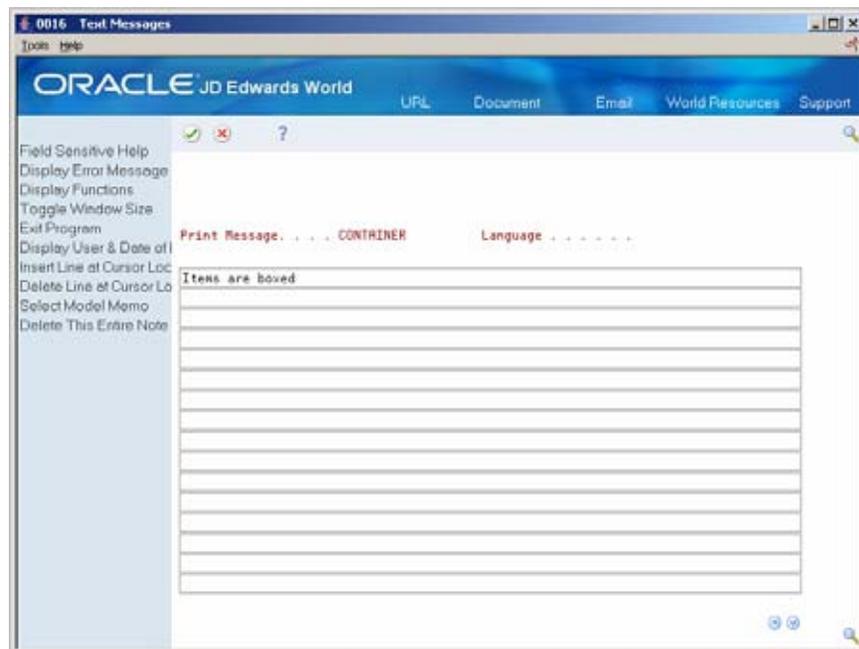
Complete the following fields:

- Print Message
- Item Flash Message

### To enter notes for an item

On Item Master Information

1. Choose F1 with the cursor in the Print Messages field
2. Access Text Messages.



3. On Text Messages, enter the appropriate text.
4. Click Enter to save.

Field	Explanation
Print Message	A code (table 40/PM) that represents a predefined message set up on Print Message Revisions. You can print the message on sales orders, purchase orders, and so forth.
Item Flash Message	A code (table 40/FL) that directs the system to display a specific message each time someone works with the item. The message is the description for the user-defined code.  If you work with an item that has a flash message, the message displays next to the item number or the system highlights the item number. If the number is highlighted, you can access the message by placing the cursor on the item number and performing the appropriate function for the program.

## Assigning Item Responsibility

	From Inventory Management (G41), choose <b>Inventory Master/Transactions</b> From Inventory Master/Transactions (G4111), choose <b>Item Master Information</b>
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When you enter master information for an item, you can specify those persons or businesses that are responsible for the item, including the buyer, planner, and preferred carriers.

Before you can assign a responsible person or business to an item, each must have an address book number in the Address Book system.

### To assign item responsibility

On Item Master Information

1. Complete the following fields:
  - Planner Number
  - Buyer Number
2. Access Classification Code (F5) from Item Master Information.

3. On Classification Code, complete the following fields:

- Sales: Preferred Carrier
- Purchasing: Preferred Carrier

Field	Explanation
Planner Number	The address number of the material planner for this item.
Buyer Number	The address number of the person responsible for setting up and maintaining the correct stocking levels for the item.
Preferred Carrier	The address number for the preferred carrier of the item. The customer or your organization might prefer a certain carrier due to route or special handling requirements.  This value serves as the carrier default when you enter a sales order for the item.

## See Also

- *Entering Basic Address Book Information (P01051)* in the Address Book system for more information about adding address numbers

## Entering Item Classification Codes

	From Inventory Management (G41), choose <b>Inventory Master/Transactions</b> From Inventory Master/Transactions (G4111), choose <b>Item Master Information</b>
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You might want to group items with similar characteristics so that you can work with the entire group at the same time. For example, for sales analysis, you can group items together for reporting purposes.

To group items, you assign classification codes to them. You can assign classification codes to items when you enter item master information or when you enter item branch/plant information.

There are several categories of classification codes. Each category represents a different item classification or property type, such as shipping conditions. From the shipping conditions category, you can select a code that indicates the condition under which you ship an item, such as fragile.

You can assign one of four groups of classification codes. Each group relates to one of the following JD Edwards World systems:

- Sales Order Management
- Procurement
- Inventory Management
- Advanced Warehouse Management

Complete the following optional tasks:

- Enter sales classification codes
- Enter purchasing classification codes
- Enter inventory classification codes
- Enter warehouse classification codes

### To enter sales classification codes

On Item Master Information

1. Access Classification Code (F5).

2. On Classification Codes, complete the following fields:

- Sales Catalog Section
- Sub Section
- Sales Category Code 3
- Sales Category Code 4
- Sales Category Code 5
- Preferred Carrier
- Category Code 6
- Category Code 7
- Category Code 8
- Category Code 9
- Category Code 10

### To enter purchasing classification codes

On Item Master Information

1. Access Classification Code (F5).
2. On Classification Codes, enter a classification code for each of the following fields:
  - Commodity Class
  - Commodity Sub Class
  - Supplier Rebate Code

- Master Planning Family
- Landed Cost Rule

## To enter inventory classification codes

On Item Master Information

1. Access Classification Code (F5).
2. On Classification Codes, enter a classification code for each of the following fields:
  - Shipping Conditions Code
  - Shipping Commodity Class
  - Cycle Count Category

## To enter warehouse classification codes

On Item Master Information

1. Access Classification Code (F5).
2. On Classification Codes, enter a classification code for each of the following fields:
  - Item Dimension Group
  - Warehouse Process Group 1
  - Warehouse Process Group 2
  - Warehouse Process Group 3

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Field	Explanation
Sales Catalog Section	A code (table 41/S1) that represents an item property type or classification, such as color, material content, or so forth. The system uses this code to sort and process like items.  This field is one of ten classification categories available primarily for sales purposes.
Sub Section	A code (table 41/S2) that represents an item property type or classification, such as color, material content, use, or so forth. The system uses this code to sort and process like items.  This field is one of ten classification categories available primarily for sales purposes.
Sales Category Code 3	A code (table 41/S3) that represents an item property type or classification, such as color, material content, use, or so forth. The system uses this code to sort and process like items.  This field is one of ten classification categories available primarily for sales purposes.

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<b>Field</b>	<b>Explanation</b>
Category Code 6	<p>A code (table 41/S6) that represents an item property type or classification, such as color, material content, use, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of ten classification categories available primarily for sales purposes.</p>
Commodity Class	<p>A code (table 41/P1) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>
Commodity Sub Class	<p>A code (table 41/P2) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>
Supplier Rebate Code	<p>A code (UDC table 41/P3) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>
Master Planning Family	<p>A code (table 41/P4) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>
Landed Cost Rule	<p>A user-defined code (41/P5) that indicates the landed cost rule for an item. The landed cost rule determines purchasing costs that exceed the actual price of an item, such as broker fees, commissions, and so forth. You set up landed cost rules on Landed Cost Revisions.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>When you enter a purchase order for the item, this is the default landed cost rule. If you enter a landed cost rule for the entire purchase order, it overrides the landed cost rule for the item.</p> <p>This is the only purchasing classification category that is hard coded. You can use it for landed cost rules only. This field corresponds to purchasing reporting code 5.</p>

Field	Explanation
Shipping Conditions Code	<p>A code (table 41/C) that represents an item property type or classification, such as special shipping conditions. The system uses this code to sort and process like items.</p> <p>This field is one of three classification categories available primarily for inventory and shipping purposes.</p>
Shipping Commodity Class	<p>A user-defined code (system 41/type E) that represents an item property type or classification, such as international shipment handling. The system uses this code to sort and process like items.</p> <p>This field is one of three classification categories available primarily for inventory and shipping purposes.</p>
Cycle Count Category	<p>A code (table 41/8) that represents the family or cycle in which an item is counted. Cycle counting means that you count different inventory items at different times. Cycle codes commonly represent item values, item locations, time frames, or product groups.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>This inventory classification category is hard coded. You can use it for cycle count codes only.</p>
Item Dimension Group	<p>A code (system 41/type 01) that identifies a group of items that share the same size specifications, such as height and width. An item dimension group defines the size specifications for all items that belong to the group. After you set up an item dimension group, you can assign items to the group through Classification Codes.</p>
Warehouse Process Grp 1	<p>A code (system 41/type 02) that identifies a group of items that you want to move the same way. An item's process group determines the movement instructions the system uses to put away, pick, and replenish the item. You assign items to process groups using Classification Codes.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>You must define at least one process group for each item to have warehouse processes take place.</p> <p>You use Process Selection to define putaway, picking, and replenishment instructions for warehouse process groups.</p>

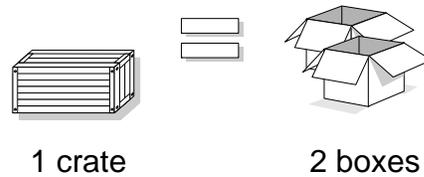
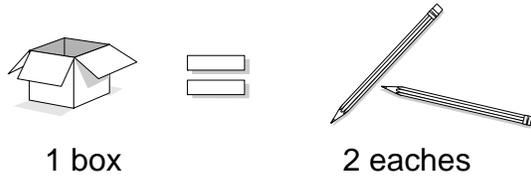
## Entering Item Unit of Measure Information

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Master Information</b></p>
---	--

You must provide the system with the item units of measure that are most common to each of your distribution processes, such as sales, purchasing, and so on. For

example, you might purchase an item in pallets, stock it in boxes, and ship it in individual containers.

If you work with an item in multiple units of measure, you must specify how to convert one unit of measure to another. For example, if you stock items in boxes and crates, you must specify the number of individual items in a box and the number of boxes in a crate.



In some instances, the system must work with an item in its smallest (primary) unit of measure. The item conversions you specify must enable the system to trace all units of measure back to the primary unit of measure.

You can set up unit of measure conversions that are specific to an item or to an item and branch/plant combination. You specify whether item conversions are specific to a branch/plant in System Constants. You can also set up units of measure that are standard for all items.

You must set up all units of measure for an item in the Unit of Measure Conversion table (F41002) or the Standard Unit of Measure Conversion table (F41003). The system verifies the item unit of measure conversions before using standard unit of measure conversions.

Complete the following tasks:

- Enter default units of measure for items
- Define item unit of measure conversions

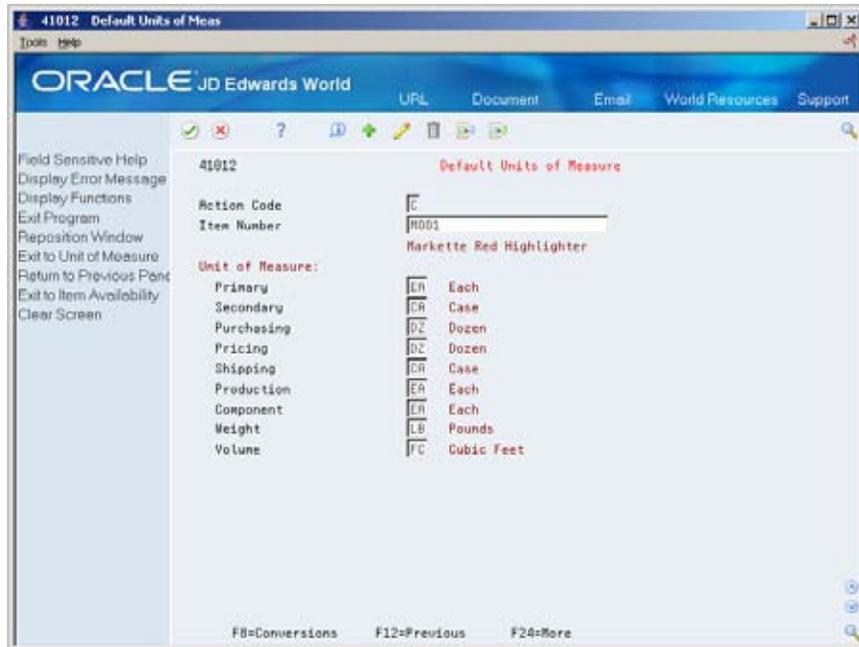
## See Also

- *Setting Up Standard Units of Measure (P41003)*

## To enter default units of measure for items

On Item Master Information

1. Choose Weights & Measures (F8).



2. On Default Units of Measure, complete the following field to locate the item:

- Item Number

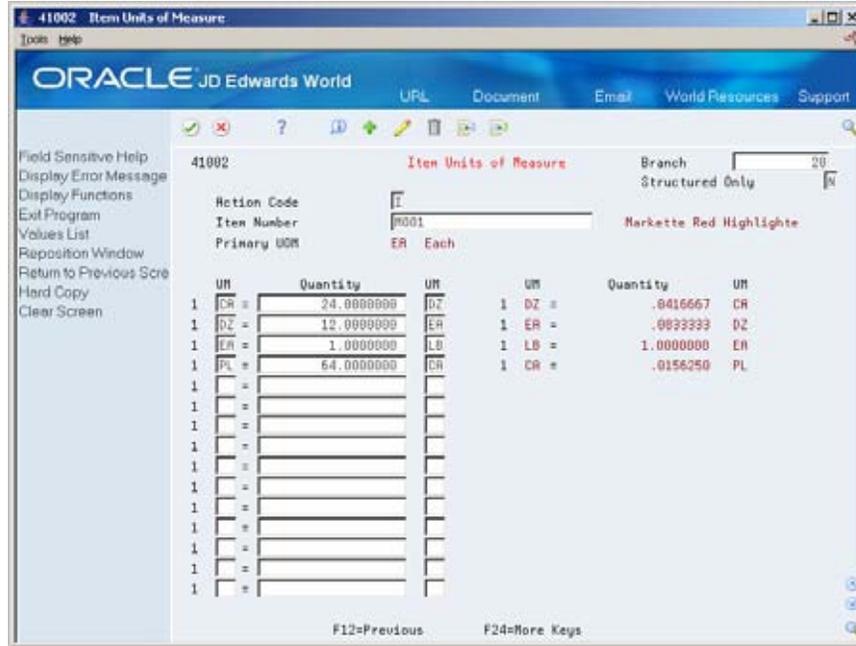
3. Complete the following fields:

- Primary
- Secondary
- Purchasing
- Pricing
- Shipping
- Production
- Component
- Weight
- Volume

### To define item unit of measure conversions

On Item Master Information

1. Access Weights & Measures (F8).
2. On Default Units of Measure, choose Exit to Unit of Measure.



3. On Item Units of Measure, complete the following fields:

- Structured Only
- Item Number

The Branch field displays only if item unit of measure conversions are specific to branch/plants.

4. For each unit of measure that the system must convert for the item, complete the following fields:

- UM (Unit of Measure To)
- Quantity
- UM (Unit of Measure From)

Field	Explanation
Primary	<p>A code (table 00/UM) that indicates the primary unit of measure for the item. The primary unit of measure should also be the smallest unit of measure in which you handle the item.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>This is the primary stock accounting unit (PSAU) of measure that the system uses to store all inventory. If you change the primary unit of measure, the conversion factors in the item-level conversion table will no longer be valid.</p> <p>The default for this field is the unit of measure that you specify for the item on Item Master Information.</p>

Field	Explanation
Secondary	<p>A code that indicates an alternate unit of measure for the item. See the User Defined Code table for system 00, record type UM.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.</p>
Purchasing	<p>A user-defined code (00/UM) that identifies the unit of measure in which you usually purchase the item.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.</p>
Pricing	<p>A code (system 00/type UM) that indicates the unit of measure in which you usually price the item.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.</p>
Shipping	<p>A code (table 00/UM) that indicates the unit of measure in which you usually ship the item.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.</p>
Production	<p>A code (table 00/UM) that indicates the unit of measure in which you produce the item.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.</p> <p>This code serves as the default for:</p> <ul style="list-style-type: none"> <li>▪ The order quantity when you create a work order</li> <li>▪ The batch quantity when you create a new bill of material or routing</li> <li>▪ The rate schedule quantity in Rate Schedule Revision</li> </ul>

Field	Explanation
Component	<p>A code (table 00/UM) that indicates the unit of measure for an item when it serves as a component.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the primary unit of measure that you specify in the processing options for Item Master Information.</p> <p>This code serves as the default value for:</p> <ul style="list-style-type: none"> <li>▪ The quantity per parent when you add the component item to a bill of material or work order parts list</li> <li>▪ The quantity in the assembly inclusion rules in Configuration Management</li> </ul>
Weight	<p>A user-defined code (system 00/type UM) that identifies the unit of measure that the system uses to display weight for this item. You can specify ounces, grams, kilograms, and so on, as weight standards. The system uses this unit of measure for the item or overrides it for an individual item or container.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field is the weight unit of measure you specify in processing options for Item Master Information.</p>
Volume	<p>A code (system 00/table UM) that indicates the unit of measure by metric conversion for ambient volume. For example, the unit of measure code for a gallon might be GL, or for a liter might be LT.</p>
Structured Only	<p>A code that determines whether the system displays all units of measure for an item and branch/plant or only the structured units of measure that have been set up for the Advanced Warehouse Management system.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>If you use the Advanced Warehouse Management system, you must structure conversions from large to small. For example:</p> <ul style="list-style-type: none"> <li>▪ 1 Pallet (24 Cases ) - Structure Code 1</li> <li>▪ 1 Case (36 Boxes ) - Structure Code 2</li> <li>▪ 1 Box (6 Eaches) - Structure Code 3</li> </ul> <p>You assign structure code 1 to the largest unit of measure and codes 2, 3, and so on, to the smaller units of measure.</p> <p><b>Note:</b> You do not have to define the primary unit of measure within a structure. This value is always the default for the lowest level.</p>

Field	Explanation
UM	<p>A user-defined code (system 00/type UM) that identifies the unit of measure for an item. For example, it can be eaches, cases, boxes, and so on.</p> <p><i>Form-specific information</i></p> <p>This unit of measure to which you are converting.</p>
Quantity	<p>The factor that the system uses to convert one unit of measure to another unit of measure.</p> <p><i>Form-specific information</i></p> <p>The quantity and the unit of measure from which you are converting must equal the unit of measure to which you are converting.</p>

## Entering Item Manufacturing Information

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Master Information</b></p>
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You can define manufacturing information about an item when you enter item master information. This information includes:

Information	Description
Requirements planning information	You enter requirements planning information to develop a planning forecast for the items that you use to run your distribution and manufacturing operations.
Lead time information	You enter lead time information to calculate the time frames that are necessary to assemble or manufacture an item.
Engineering information	You enter reference information about the drawing plans for an item, so that you can refer back to the plans as necessary.

Complete the following tasks:

- Enter requirements planning information
- Enter leadtime information
- Enter engineering information

### To enter requirements planning information

On Item Master Information

1. Access Manufacturing Values (F10).

2. On Manufacturing Values Entry, complete the following fields:

- Value Order Policy
- Planning Code
- Planning Fence Rule
- Accounting Cost Qty
- Round to Whole Number
- Planning Fence
- Freeze Fence
- Message Display Fence

## To enter leadtime information

On Item Master Information

1. Access Manufacturing Values (F10).
2. On Manufacturing Values Entry, complete the following fields:
  - MFG Leadtime Quantity
  - Fixed/Variable
  - Leadtime Level
  - Leadtime Manufacturing
  - Leadtime Cumulative
  - Leadtime Per Unit
  - Issue Type Code

## To enter engineering information

### On Item Master Information

1. Access Manufacturing Values (F10).
2. On Manufacturing Values Entry, complete the following fields:
  - Drawing Size
  - Drawing Rev. Level (Drawing Revision Level)
  - Drawing Number

Field	Explanation
Value Order policy	<p>A field that the system uses in conjunction with the order policy code. It can show three types of data:</p> <ul style="list-style-type: none"> <li>▪ The value of the fixed order quantity when you select order policy code 2 (fixed order quantity).</li> <li>▪ The number of additional days of supply after demand is encountered when you select order policy code 4 (periods of supply).</li> <li>▪ The desired inventory level when you select order policy code 5 (rate scheduled item). If the ending available quantity does not meet or exceed the desired inventory level, then MPS/MRP/DRP generation issues an "increase rate to" or a "decrease rate to" message.</li> </ul>
Planning Code	<p>A code that indicates how Master Production Schedule (MPS), Material Requirements Planning (MRP), or Distribution Requirements Planning (DRP) processes this item. Valid codes are:</p> <ul style="list-style-type: none"> <li>0 Not Planned by MPS, MRP, or DRP</li> <li>1 Planned by MPS or DRP</li> <li>2 Planned by MRP</li> <li>3 Planned by MRP with additional independent forecast</li> <li>4 Planned by MPS, Parent in Planning Bill</li> <li>5 Planned by MPS, Component in Planning Bill</li> </ul> <p>These codes are hard-coded.</p>

Field	Explanation
Planning Fence Rule	<p>A code (system 34, table TF) that the system uses in conjunction with the Planning Time Fence Days field to determine how forecast demand or actual customer demand is used.</p> <p>For example:</p> <p>S     Use customer demand before the time fence and forecast after the time fence</p> <p>F     Use forecast before the time fence and forecast plus customer demand after the time fence</p> <p>For example, if you enter 5 in the Planning Time Fence Days field and S in this field, then the system uses only customer demand for the regeneration for the first 5 days. After 5 days, the system uses the forecast for the regeneration.</p> <p>Valid codes are:</p> <p>C     Customer demand before, greater of forecast or customer demand after</p> <p>F     Forecast before, forecast plus customer demand after</p> <p>G     Greater of forecast or customer demand before, forecast after</p> <p>S     Customer demand before, forecast after</p> <p>1     Zero before, forecast after</p> <p>3     Zero before, forecast plus customer demand after</p>
Accounting Cost Qty	<p>An amount that the system uses in the cost rollup program to determine the allocation of setup costs. The system totals the setup costs and divides the sum by this quantity to determine a unit setup cost. The default is 1.</p>
Round to Whole Number	<p>A code that determines if an item should be rounded to the closest whole number for planning purposes. Valid codes are:</p> <p>R     Round to the closest whole number.</p> <p>Blank Do not round.</p> <p>For example, if the calculated requirements for an item are 4.6 and this field contains a Round to Whole Number code of R, the system rounds the quantity required to 5. If the calculated requirements are 4.4, the system rounds the quantity required to 4.</p>

<b>Field</b>	<b>Explanation</b>
Planning Fence	<p>The number of days that the system uses in conjunction with the time fence rule to determine how the forecast is used. Enter the number of days from the start date, after which the time fence rule changes from the first rule to the second rule.</p> <p>For example, if the time fence rule is S (customer demand before the time fence, forecast after the time fence), and the planning time fence is 5 days, the system plans for the first 5 days using customer demand. After the fifth day, the system plans using the forecast.</p>
Freeze Fence	<p>The number of days from the generation start date within which the system should not generate order messages.</p> <p>For example, if the generation start date is 01/01/99, and the freeze time fence is 6 days, the planning system does not issue messages with dates less than or equal to 01/07/99.</p>
Message Display Fence	<p>The number of days after the generation start date that the system should not generate order messages.</p> <p>For example, if the generation start date is 01/01/99, and the message time fence is 60 days, the system does not issue messages with dates greater than or equal to 03/01/99. However, the planning horizon for orders continues past this date and is reflected in available to promise totals.</p>
MFG Leadtime Quantity	<p>The quantity that determines the lead time level for a manufactured item. Each of the routing steps for the item is extended by this quantity. For the system to calculate the lead time level, the quantity in this field must be a value other than zero.</p>
Fixed/Variable	<p>A code that determines whether the system uses fixed or variable lead times. This code works in conjunction with the value from either the Level Leadtime field or the Leadtime Per Unit field. Valid codes are:</p> <ul style="list-style-type: none"><li>F Fixed lead time - The system calculates work order start dates using the value from the Leadtime Level field.</li><li>V Variable lead time - The system calculates work order start dates using the value from the Leadtime Per Unit field.</li></ul>

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Field	Explanation
Level Leadtime	<p>A value that represents the lead time for an item at its assigned level in the production process, as defined on Plant Manufacturing Data. The system uses this value to calculate the start dates for work orders using fixed lead times. Level lead time is different for purchased and manufactured items:</p> <p>You can enter level lead time manually on Manufacturing Values Entry, or you can use the Leadtime Rollup program calculate it. To calculate level lead time using the Leadtime Rollup program, you must first enter a quantity in the Manufacturing Leadtime Quantity field in the Item Branch table (F4102).</p>
Manufacturing Leadtime	<p>The total number of days required to build an item from its lowest level components to the final assembly. This value is the total of the level lead times for all manufactured items, plus the highest manufacturing lead time for all its components.</p> <p>If all components are purchased, the manufacturing lead time equals the item's level lead time. Purchased item lead times are not included in the calculation of manufacturing lead times.</p> <p>You can enter the manufacturing lead time manually or you can have the system calculate it when you run the Leadtime Rollup program.</p>
Cumulative Leadtime	<p>The total number of days required to build an item from its lowest level components to the final assembly. The system calculates the value differently for manufactured and purchased items.</p> <p>Manufactured - The total of all level lead times for all manufactured items, plus the highest cumulative lead time of all its components.</p> <p>Purchased - The item's level lead time. Purchased item lead times are included in the calculation of cumulative lead times.</p> <p>You can enter this value manually or you can have the system calculate it when you run the Leadtime Rollup program.</p>
Leadtime Per Unit	<p>The total number of hours required to build one unit as specified on the routing. This value is factored by the time basis code.</p> <p>You can enter this value manually, or you can have the system calculate it when you run the Leadtime Rollup program. The system overwrites this value when you run the Leadtime Rollup program.</p> <p>The system uses this field to calculate start dates for work orders when you use variable lead times.</p>

Field	Explanation
Issue Type Code	<p>A code that defines how the system issues each component in the bill of material from stock. In shop floor control, it indicates how the system issues a part to a work order.</p> <p>Valid codes are:</p> <p>I Manual issue (default)</p> <p>F Floor stock (no issue)</p> <p>B Backflush (when part is reported as complete)</p> <p>P Preflush (when parts list is generated)</p> <p>U Super backflush (at pay-point operation)</p> <p>S Sub-contract item (send to supplier)</p> <p>Blank Shippable end item</p> <p>You can issue a component in more than one way within a specific branch/plant by using a different code on the bill of material and work order parts list. The bill of material code overrides the branch/plant value.</p>
Drawing Size	<p>A code that represents the engineering drawing size. For example:</p> <p>A A-size drawing</p> <p>D D-size drawing</p>
Drawing Rev. Level	<p>This number is a subset to the drawing number. It provides an additional description of the drawing and is useful should the system use an engineering drawing as a reference for this item.</p>
Drawing Number	<p>An engineering drawing number that might be the same as the part or item number.</p>

## Entering Item Grade and Potency Information

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Master Information</b></p>
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After you enter item master information or item branch/plant information, you specify whether grade or potency applies to an item. Grades enable you to classify items (for example, grade A eggs and grade B eggs). Potency allows you to specify the active ingredient in a product (for example, the percentage of alcohol in liquor).

When you activate grade or potency control for an item, you can enter a standard grade or potency for the item and a range of acceptable values. If you receive or issue items that are not within the range, the system provides a warning message. You cannot perform sales on items that are not within the range.

Item grade and potency are applicable only to items that are produced in lots. You cannot use both grade control and potency control for the same item.

## See Also

- *Entering Information for Lots (P4108)* for information about specifying grade and potency values for lots

## To enter item grade and potency information

On Item Master Information

1. Access Manufacturing Values (F10).
2. On Manufacturing Values Entry, complete the following fields:
  - Grade/Potency Pricing
  - Potency Control
  - Standard Potency
  - From Potency
  - Thru Potency
  - Grade Control
  - Standard Grade
  - From Grade
  - Thru Grade

Field	Explanation
Grade/Potency Pricing	<p>A code that indicates whether you price the item by grade or potency range. You must control the item by grade to price it by grade, just as you must control the item by potency to price it by potency. Valid values are:</p> <p>Blank No potency or grade pricing</p> <p>1 Potency pricing</p> <p>2 Grade pricing</p>
Potency Control	A code that indicates whether you control the item by potency.
Standard Potency	The percentage of active ingredients normally found in an item.
From Potency	<p>A number that indicates the minimum potency, or percentage of active ingredients, acceptable for an item.</p> <p>The system displays a warning message if you try to purchase or issue items that do not meet the minimum acceptable potency. The system does not allow you to sell items that do not meet the minimum acceptable potency.</p>

Field	Explanation
Thru Potency	<p>A number that indicates the maximum potency, or percentage of active ingredients, that is acceptable for an item.</p> <p>The system displays a warning message if you try to purchase or issue items that have a potency that exceeds the maximum potency acceptable. The system does not allow you to sell items that have a potency that exceeds the maximum potency acceptable.</p>
Grade Control	<p>A code that indicates whether you control the item by grade.</p>
Standard Grade	<p>A code (table 40/LG) that represents the normal grade for an item.</p>
From Grade	<p>A code (system 40, type LG) that indicates the minimum grade that is acceptable for an item.</p> <p>The system displays a warning message if you try to purchase or issue items with grades that do not meet the minimum grade acceptable. The system does not allow you to sell items with grades that do not meet the minimum acceptable level.</p>
Thru Grade	<p>A code (system 40, type LG) that indicates the maximum grade that is acceptable for an item.</p> <p>The system displays a warning message if you try to purchase or issue items with grades that exceed the maximum grade acceptable. The system does not allow you to sell items with grades that exceed the maximum grade acceptable.</p>

## What You Should Know About

<b>Lots</b>	<p>You can specify the grade or potency of all items in a specific lot on Lot Master Revisions. If you do not specify a grade or potency, the system uses the standard grade or potency from Item Master or Item Branch Information.</p>
<b>Grade and potency ranges for sales purposes</b>	<p>You can specify an acceptable grade or potency range for each of your customers using preference profiles.</p> <p>For more information, see Setting Up Preference Types in the Sales Order Management Guide.</p>

## See Also

- *Entering Information for Lots (P4108)* for information about specifying grade and potency values for lots

## Processing Options

See [Item Master Revisions \(P4101\)](#).



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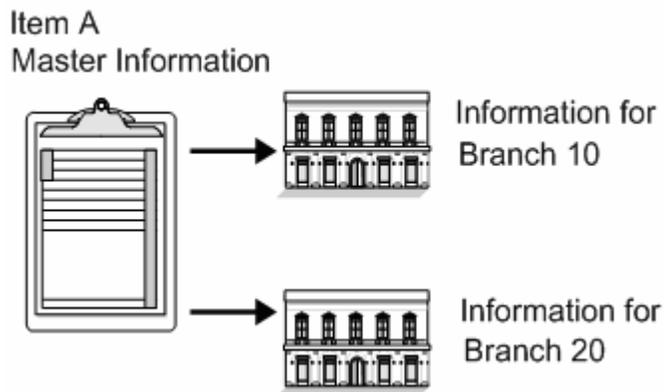
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# Enter Branch/Plant Information

## Entering Branch/Plant Information

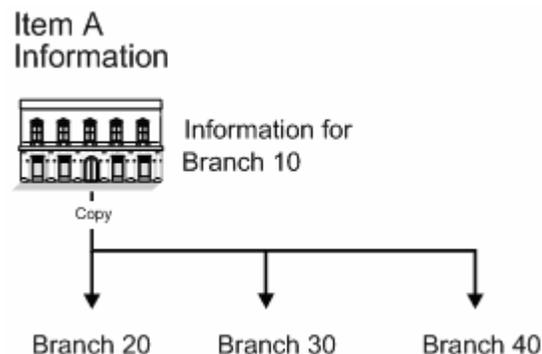
Information about an item might differ from warehouse to warehouse. For example, taxes might be applicable to an item in one warehouse, but not in another. You might also have different quantity requirements for each item based on the warehouse.

After you enter master information for an item, you can assign the item to different warehouses or branch/plants. You can then customize the item information for each branch/plant. You can also specify the locations in the branch/plant in which the item is stored.



Every JD Edwards World system that retrieves item information searches for an item's branch/plant information before using an item's master information.

You can enter item information for a single branch/plant or copy existing item information and duplicate it for multiple branch/plants.



To enter item branch/plant information, complete the following tasks:

- [Assigning an Item to a Branch/Plant](#)
- [Working with Item Locations](#)
- [Entering Item Tax Information](#)
- [Locating Item Sources](#)
- [Entering Item Reorder Quantities](#)
- [Entering Item Branch/Plant Manufacturing Information](#)
- [Duplicating Item Information for Multiple Branch/Plants](#)

After you enter item information for a specific branch/plant, the system creates a record in the Item Branch table (F4102).

## What You Should Know About

### Default values

Most fields on Item Branch/Plant Information are identical to those on Item Master Information. The system uses the default values from Item Master Information. The only fields that do not exist on Item Master Information are:

- Branch/Plant
- Sales Taxable
- Purchasing Taxable
- Country of Origin
- Supplier
- Margin Maintenance (%)
- Mix Lots/Serial Numbers

### Accessing other branch/plant information

Use processing options to specify that other item information displays subsequent to item branch/plant information, such as item unit of measure defaults.

## Assigning an Item to a Branch/Plant

	From Inventory Management (G41), choose <b>Inventory Master/Transactions</b> From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b>
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After you enter master information for an item, you must assign the item to a specific branch/plant. After assigning the branch/plant, you can locate the item and branch/plant to customize the master information.

## To assign an item to a branch/plant

### On Item Branch/Plant Information

Complete the following fields:

- Branch/Plant
- Item Number

Field	Explanation
Branch/Plant	<p>A code that identifies a separate entity within a business for which you want to track items and costs. This entity might be a warehouse location, job, project, work center, or branch/plant. The Business Unit field is alphanumeric.</p> <p><i>Form-specific information</i></p> <p>This is the branch/plant or warehouse to which this item information is applicable.</p>

## Working with Item Locations

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b></p>
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After you assign an item to a branch/plant, you can indicate multiple locations in which the item resides. For each branch/plant, you can assign:

- A primary location
- Multiple secondary locations

The system usually processes an item through its primary location. For example, when you receive an item, the system assigns the item to its primary location, unless you specify a secondary location.

The system prompts you for the primary location immediately after you assign an item to a branch/plant. You can assign secondary locations to an item when you enter branch/plant information. The system automatically assigns a secondary location if you enter a location other than the primary location for an item when you receive it.

If you specify location control on System Constants, you can assign an item to only those locations set up on Branch/Plant Location Master. If you do not specify location control, you can assign an item to any location.

Each time you enter a location for an item, the system creates a record in the Item Location table (F41021).

In addition to assigning locations to an item and branch/plant, you can assign multiple lot numbers to each location. You can enter lot numbers manually when you enter item locations or when you receive the items.

You can prevent the assignment of an item that belongs to multiple lots and has multiple statuses within a lot to a single location. For example, assume that a pharmaceutical company receives a portion of a lot, approves the received portion, and stores it in a warehouse. The remainder of the lot arrives but needs to be approved. The pharmaceutical company stores the unapproved portion of the lot in a staging location, rather than storing the unapproved portion with the approved portion.

Complete the following tasks:

- Assign a primary location to an item
- Assign a secondary location to an item
- Change the primary location for an item

## What You Should Know About

### Creating a lot

When you assign locations, you might be able to create a lot if you have set the branch/plant constants appropriately.

For more information, see *Setting Up Constants (P41204)*.

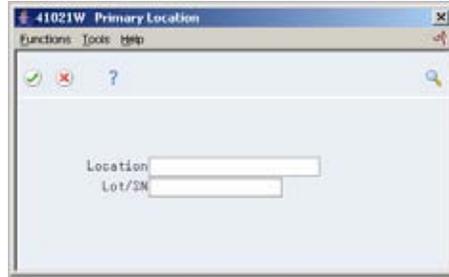
## See Also

- *Entering Information for Lots (P4108)* for information about defining lot details
- *Working with Lot Statuses (P00051)* for information about putting lots and locations on hold

## To assign a primary location to an item

On Item Branch/Plant Information

1. Assign a branch/plant to an item.



2. On Primary Location, complete the following fields:

- Location
- Lot/SN (Lot/Serial Number)

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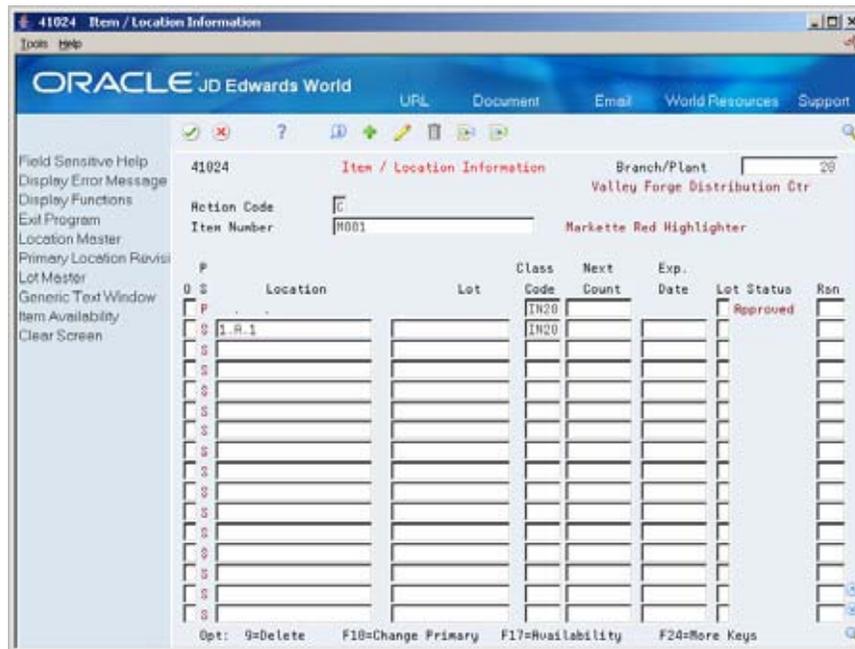
**Note:** For integrity reasons, JD Edwards World recommends that you leave the primary blank as an imaginary location, and add your physical locations as secondary locations.

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## To assign a secondary location to an item

On Item Branch/Plant Information

1. Access Item/Location Information.



2. Enter S in the following field to identify the secondary (S) locations for an item:

- P/S (Primary/Secondary Location)

3. For each secondary location and lot, complete the following fields:

- Location
- Lot

- Lot Status

## To change the primary location for an item

### On Item Branch/Plant Information

1. Access Item/Location Information.
2. On Item/Location Information, enter P in the following field to identify the primary (P) location for the item:
  - P/S (Primary/Secondary Location)
3. Access Primary Location.
4. On Primary Location, complete the following fields:
  - Location
  - Lot
5. Return to Item/Location Information.
6. On Item/Location Information, complete the following field:
  - P/S (Primary/Secondary Location)

After you change the primary location for an item, the previous primary location becomes a secondary location.

Field	Explanation
Location	<p>A code that identifies inventory locations in a branch/plant. You define the format of the location identifier by branch/plant.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>If you do not specify a location in this field, the system uses the blank location set up for the branch/plant in Branch/Plant Location Master.</p>
Lot/SN	A number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.
P S	<p>A value that indicates if this is the primary or secondary location for this item within this stocking location. Valid values are:</p> <p>P    Primary storage location</p> <p>S    Secondary storage location</p> <p><b>Note:</b> You can only have one storage area within each branch or warehouse marked as primary. In some cases, the system uses the primary storage area as the default.</p>

Field	Explanation
Lot Status	<p>A user defined code (table 41/L) that indicates the status of the lot. If you leave this field blank, it indicates that the lot is approved. All other codes indicate that the lot is on hold.</p> <p>You can assign a different status code to each location in which a lot resides on Item/Location Information or Location Lot Status Change.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>The default for this field comes from the lot status code (including a blank value) that you assign to the item on Item Master Information or Item Branch/Plant Information.</p> <p>The code that you enter here serves as the lot status default when you assign an item to a secondary location.</p>

## What You Should Know About

<b>Effects on quantities</b>	<p>If you change an item's primary location and any of the following quantities exist, the quantities transfer to the new primary location:</p> <ul style="list-style-type: none"> <li>▪ Quantity on backorder</li> <li>▪ Quantity on purchase order</li> <li>▪ Quantity on work order</li> <li>▪ Other purchasing 1</li> <li>▪ Quantity on soft commit</li> </ul>
<b>Deleting a primary location</b>	<p>To delete a primary location, you must first change it to a secondary location. No quantities can exist in the locations that you delete.</p>
<b>Reviewing lot information</b>	<p>To display more specific information about the lot, access the Lot Information screen. This screen displays the item that belongs to the lot, the branch/plant to which the lot is assigned, the lot expiration date, the lot status, and so on.</p> <p>For more information, see Viewing Lot Availability (P41280).</p>

## Entering Item Tax Information

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b></p>
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You can specify whether an item is subject to tax when you enter branch/plant information. The system uses the values that you enter as default information in the Sales Order Management and Procurement systems.

- Working With Detail Information (P42114) in the Sales Order Management Guide and Entering Tax Information for a Purchase Order Detail Line (P4311) in the Procurement Guide

## To enter tax information

On Item Branch/Plant Information

Complete the following fields:

- Sales Taxable
- Purchasing Taxable

Field	Explanation
Sales Taxable	A code that indicates whether the item is subject to sales tax when you sell it. The system calculates tax on the item only if the customer is also taxable.
Purchasing Taxable	A code that indicates whether the item is subject to sales tax when you purchase it. The system calculates tax on the item only if the supplier is also taxable.

## Locating Item Sources

	From Inventory Management (G41), choose <b>Inventory Master/Transactions</b> From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b>
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You can locate the country in which an item originates and the preferred supplier for an item. Locating these sources allows you to distinguish items based on a country or supplier. You specify this information when you enter branch/plant information for an item.

## To locate item sources

On Item Branch/Plant Information

Complete the following fields:

- Country of Origin
- Supplier

Field	Explanation
Country of Origin	A code (system 00/type CN) that identifies the country in which the item originates. This is useful for organizations that must periodically separate their inventory by source.

Field	Explanation
Supplier	<p>The address book number of the preferred provider of this item.</p> <p>You can enter the number for the supplier or you can have the system enter it each time that you receive the item from a supplier. You specify whether the system enters the supplier using processing options for Enter Receipts.</p>

## Entering Item Reorder Quantities

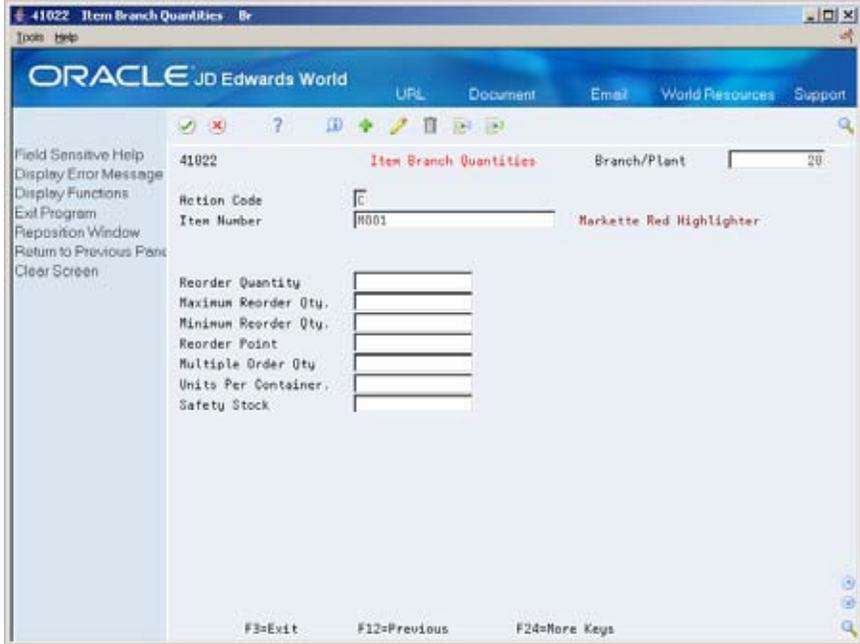
	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b></p> <p>From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b></p>
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You can specify the minimum, maximum, and normal reorder quantities for an item during your entry of branch/plant information. You can also specify the level of stock at which reordering takes place. The system uses these values for the Enterprise Requirements Planning and Execution system.

### To enter item reorder quantities

#### On Item Branch/Plant Information

##### 1. Access Quantities.



##### 2. On Item Branch Quantities, complete the following fields:

- Reorder Quantity
- Maximum Reorder Qty

- Minimum Reorder Qty
- Reorder Point
- Multiple Order Qty
- Units Per Container
- Safety Stock

Field	Explanation
Reorder Quantity	The estimated reorder quantity for an item. You can enter this quantity if there is not enough sales history available for the system to accurately calculate a reorder quantity.
Maximum Reorder Qty	The maximum order quantity for an item. You can base the quantity on factors other than usage, such as perishability, storage capacity, and so forth.
Minimum Reorder Qty	The minimum order quantity for an item. You can base the quantity on factors other than usage, such as perishability, storage capacity, and so forth.
Reorder Point	<p>A quantity for an item that specifies when replenishment occurs. Typically, this occurs when the total quantity on-hand plus the quantity on order equal or do not meet a specified quantity. You can enter this quantity or the system can calculate it if there is sufficient sales history.</p> <p>If there is no safety stock quantity defined, the system first calculates the safety stock by multiplying the square root of the average leadtime quantity. Then, the system adds the calculated safety stock quantity to the average leadtime quantity to determine the reorder point.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>Define the quantity that specifies when replenishment occurs. If you leave this field blank, the system calculates the replenishment quantity by adding the safety stock quantity (defined in the Item Location table (F41021)) to the average leadtime quantity.</p>
Multiple Order Qty	A multiple for rounding up planned order quantities in MPS/MRP. The system rounds up the planned order quantity to the nearest multiple that you enter in this field.
Units Per Container	The standard quantity of containers that you use in the manufacturing process (typically, in a repetitive manufacturing environment). The quantity that you enter determines the number of bar code labels that you will need for shipping. It also modifies order release quantities.
Safety Stock	The quantity of stock kept on hand to cover high-side variations in demand.

## Entering Item Branch/Plant Manufacturing Information

	From Inventory Management (G41), choose <b>Inventory Master/Transactions</b> From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b>
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You can define manufacturing information for an item that is specific to each branch/plant. This information includes:

Information	Description
Requirements planning information	You enter information about inventory shrinkage for the item to plan for the quantity you need to replace due to shrinkage.
Lead time information	You enter lead time information to calculate the time frames that are necessary to assemble or manufacture an item.
Engineering information	You enter reference information about the drawing plans for an item, so that you can refer back to the plans.

Complete the following tasks:

- Enter requirements planning information
- Enter leadtime information
- Enter engineering information

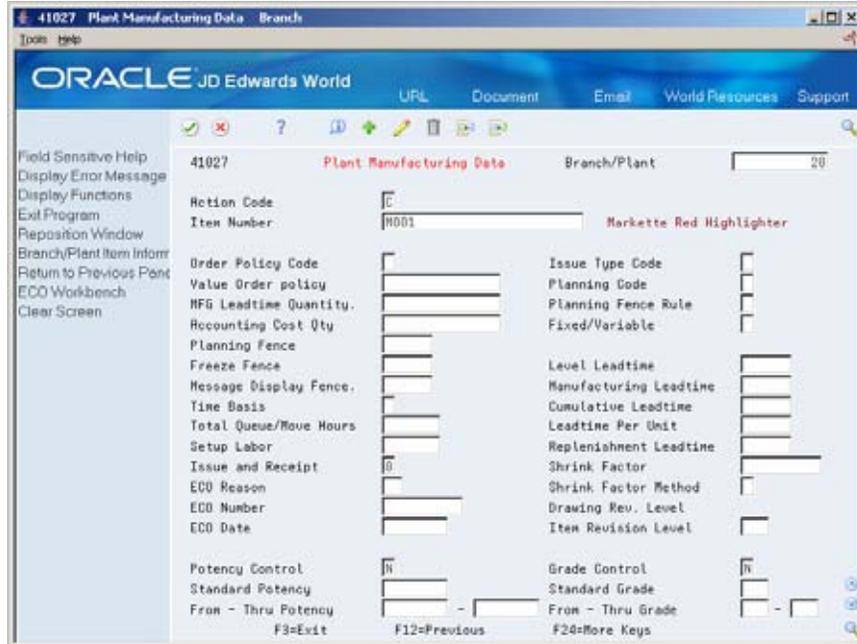
### What You Should Know About

**Default values** Most of the items on Plant Manufacturing Data are identical to those on Manufacturing Values Entry. The system uses the default values from Manufacturing Values Entry.

### To enter requirements planning information

On Item Branch/Plant Information

1. Access Manufacturing Values (F10).



2. On Plant Manufacturing Data, complete the following fields:

- Shrink Factor
- Shrink Factor Method

### To enter leadtime information

On Item Branch/Plant Information

1. Access Manufacturing Values (F10).
2. On Plant Manufacturing Data, complete the following fields:
  - Time Basis
  - Queue Hours
  - Standard Setup Hours

### To enter engineering information

On Item Branch/Plant Information

1. Access Manufacturing Values (F10).
2. On Plant Manufacturing Data, complete the following fields:
  - ECO Reason
  - ECO Number
  - ECO Date
  - Item Revision Level

<b>Field</b>	<b>Explanation</b>
Order Policy Code	The purpose of this field is to designate the rules for reordering inventory in the MPS/DRP/MRP system. See detailed table below.
Shrink Factor	<p>A fixed quantity or percentage that the system uses to determine inventory shrinkage for an item. The system increases the planned order quantity by this amount in MPS/MRP/DRP generation. The shrink factor method you specify for the item determines whether the shrink factor is a percentage or a fixed quantity.</p> <p>If you are entering a percentage, enter 5% as 5.00 and 50% as 50.00.</p>
Shrink Factor Method	<p>A value that determines whether the shrink factor you enter for this item is a percentage or a fixed quantity. Valid values are:</p> <p>%    Percentage of order or requested quantity</p> <p>F    Fixed amount to be added to quantity</p>
Time Basis	<p>A user defined code (system 30, type TB) that identifies the time basis or rate for machine or labor hours entered for any routing step. You can set rates per unit, per 10, per 1000, and so on.</p> <p>The system uses the values in the Description-2 field on the User Defined Codes screen for costing and scheduling calculations. The description is what the code represents, but is not used in calculations.</p>
Total Queue/Move Hours	<p>The total time (in hours) that an order is expected to be in queue at work centers and moving between work centers.</p> <p>The system stores this value in the Item Branch table (F4102). You can calculate this value using the Leadtime Rollup program or you can enter it manually. When you run the Leadtime Rollup program, the system overrides manual entries with calculated values.</p>
Setup Labor	The standard setup hours you expect to incur in the normal completion of this item.
ECO Reason	A code (table 40/CR) that identifies the reason for the engineering change order.
ECO Number	The number assigned to an engineering change order.
ECO Date	The date of the engineering change order.
Item Revision Level	The revision level for an item. If you enter a revision level, verify that the revision level of the routing for an item matches the revision level on the bill of material for the item.

## Order Field Code

Code	Description
0	<p>Reorder point - If an item has an order policy code of zero then the MRP/MPS/DRP system will not plan this item. Component demand will only show up in the MRP system if there are active work orders (WOs) for the parent item that have parts lists attached.</p>
1	<p>Lot-for-lot or as required - If an item has an order policy code of one, then the system will create messages for either WOs or POs (purchase orders), for the exact amount needed - no more, no less. However, if you use this order policy code in conjunction with the Item Branch Quantities (P41022), the user can specify quantities like minimum and maximum reorder quantities, multiple order quantities, etc.</p>
2	<p>Fixed order quantity (FOQ) - If an item has an order policy code of two, the system will create messages for either WOs or POs based on the value entered in the Value Order Policy (OPV) in the Plant Manufacturing Data (P41027). This value (OPV) is in the primary unit of measure, and becomes the FOQ. If demand exceeds the FOQ, then the system will create another PLO for the FOQ.</p> <p>Example: demand for period 1 is 25, FOQ = 10, then three different PLOs for a quantity of 10 each will be created.</p>
3	<p>Economic Order Quantity (EOQ) - If an item has an order policy code of three, then the system will create messages for POs (EOQ is valid for purchased items only) based on the following formula:</p> $EOQ = \text{Division of } [2(\text{POCS})/(\text{INCS})] * [(\text{SQ01} + \text{SQ02} + \dots + \text{SQ12})/(\text{CSTA})]$ <ul style="list-style-type: none"> <li>▪ POCS = Cost to issue a purchase order from the value entered in the Branch Plant Constants. (P41024)</li> <li>▪ SQ01 through SQ12 = Monthly sales, in units, calculated from data contained in the Item History File (F4115). These fields are added together to get the annual sales.</li> <li>▪ CSTA = Average Cost of the item, from the Cost Ledger File (F4105) field UNCS.</li> <li>▪ INCS = Cost of carrying inventory from the value entered in the Branch Plant Constants (P41001).</li> </ul> <p>If demand for any given period is greater than the EOQ then the system will only generate PLO's in multiples of the EOQ.</p> <p>Example: demand in period 1 is 100, EOQ = 75, then the system creates two different PLOs for a quantity of 75 each.</p>

Code	Description
4	<p>Periods of supply – If an item has a planning code of four then the system will generate messages for either WOs or POs based on the value entered in the Value Order Policy (field OPV). The number of days in the Value Order Policy is based on the Shop Floor Calendar (P00071) for manufactured items and calendar days for purchased items, and is the number of additional days after an unsatisfied demand is encountered that PLO's will plan for.</p> <p>Example: demand on October 15th of 150 and demand on October 22 of 150. Value Order Policy of 5 days, MRP will plan one PLO for October 15th of 300.</p> <p>JD Edwards World designed this order policy code to be used with high-use/low cost items for which the user is not concerned about carrying excess inventory.</p> <p>The system does not create decrease messages for an item with this order policy code.</p>
5	<p>This is a rate-scheduled item. If an item has a planning code of 5, then the system will generate messages based on existing rates and rate generation rules. This order policy code is for <i>parent rate-scheduled items only</i> – components of rate items should not use this policy code. Order policy code 5 is also used in conjunction with the Value Order Policy field. The value entered in the Value Order Policy code with rate scheduled items behaves much like a safety stock. If the ending available is below or above this number, then the MRP system will create “increase rate to” or “decrease rate to” messages for the rate scheduled item.</p>

## Processing Options

See [Branch/Plant Item Information \(P41026\)](#).

## Duplicating Item Information for Multiple Branch/Plants

	<p>From Inventory Management (G41), enter 27  From Inventory Advanced and Technical Operations (G4131), choose <b>Item/Branch Duplication</b></p>
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You might have items for which the same information applies across multiple branch/plants. You can enter item information for one branch/plant and then duplicate that information for up to ten other branch/plants by doing the following:

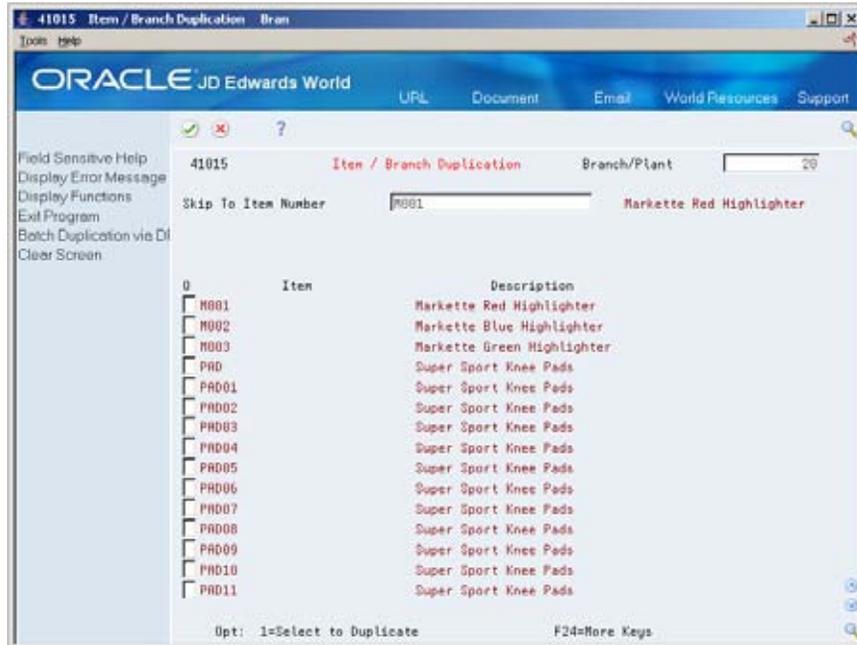
- Use Item Branch Duplication to select individual items for duplication
- Use the Item Branch Duplication batch program to define criteria for items that you want to duplicate

For both procedures, you use processing options to specify the branches for which you are duplicating information. You can also specify additional information to duplicate, such as costs, prices, units of measure, and so on.

If you use Item Branch Duplication to select individual items for duplication, you can set processing options to display up to four search fields that allow you to locate items for a particular branch/plant.

## To duplicate item information for multiple branch/plants

On Item/Branch Duplication



1. To specify the branch/plant from which you are duplicating information, complete the following field:
  - Branch Plant
2. To locate the appropriate items, enter search criteria.
3. Select the appropriate items to duplicate.
4. To activate the batch job, exit the screen.

## What You Should Know About

### Primary locations

The system does not duplicate the primary location for an item. The system uses the blank location that you have set up for the branch/plant to which you are duplicating information.

For information about blank locations for branch/plants, see *Setting Up Warehouse Locations (P4100)*.

## Processing Options

See [Item/Branch Duplication \(P41015\)](#).

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## 3 Forecasting Review



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# Overview to Forecasting Review

## Overview

Effective management of distribution and manufacturing activities begins with understanding and anticipating the needs of the market. Implementing a forecasting system allows you to quickly assess current market trends and sales so that you can make informed decisions about your company.

Forecasting is the process of projecting past sales demand into the future. An accurate forecast helps you make operations decisions. For this reason, forecasting should be a central activity in your operations. You can use forecasts to make planning decisions about:

- *Customer orders*
- *Inventory*
- *Delivery of goods*
- *Work load*
- *Capacity requirements*
  - Warehouse space
  - Labor
  - Equipment
- *Budgets*
- *Development of new products*
- *Workforce requirements*

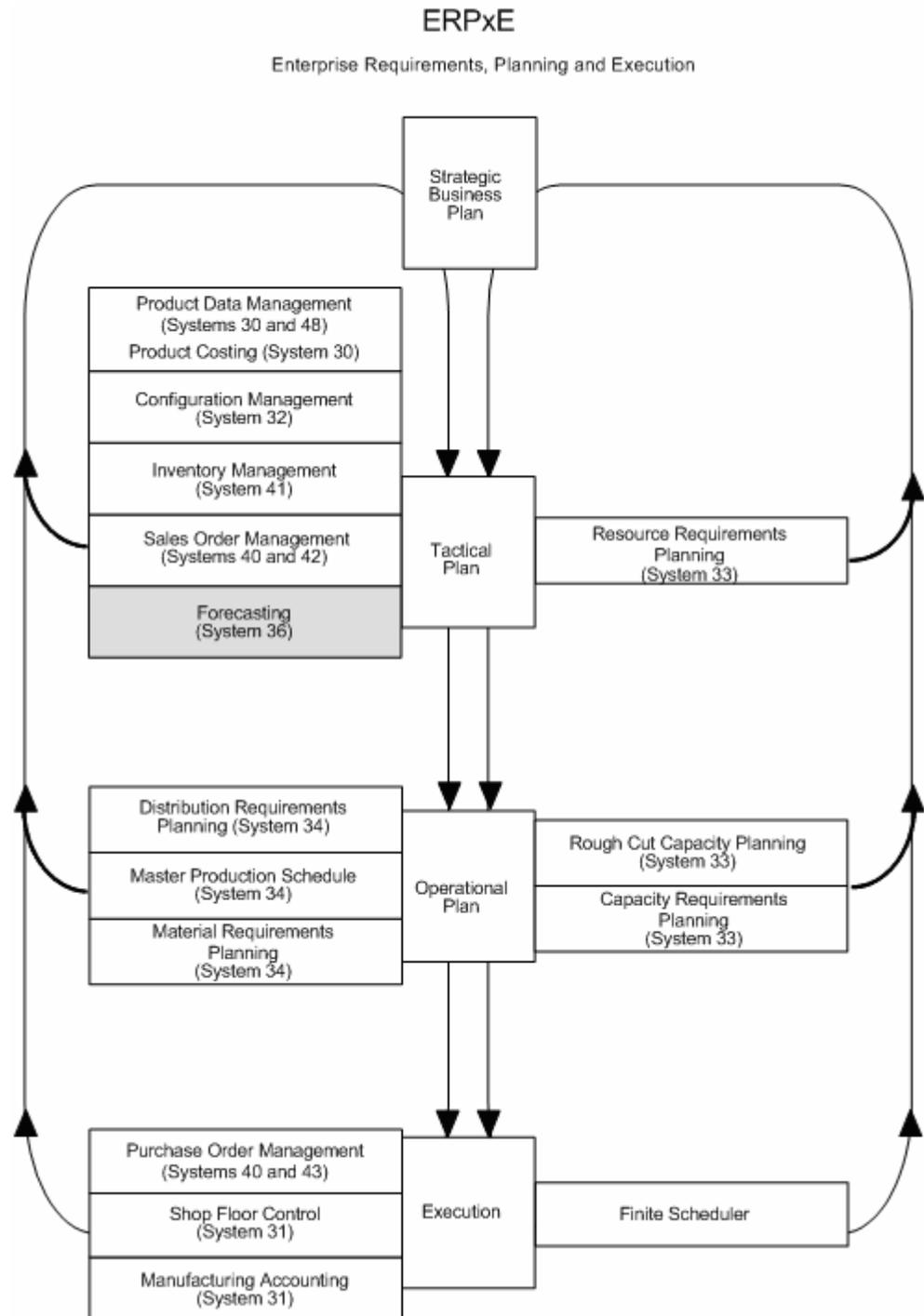
The Forecasting system can generate the following types of forecasts:

Type of Forecast	Description
Detail forecasts	Detail forecasts are based on individual items.
Summary forecasts	Summary (or aggregated) forecasts are based on larger groups, such as a product line.
Planning bill forecasts	Planning bill forecasts are based on groups of items in a bill of material format that reflect how an item is sold, not how it is built.

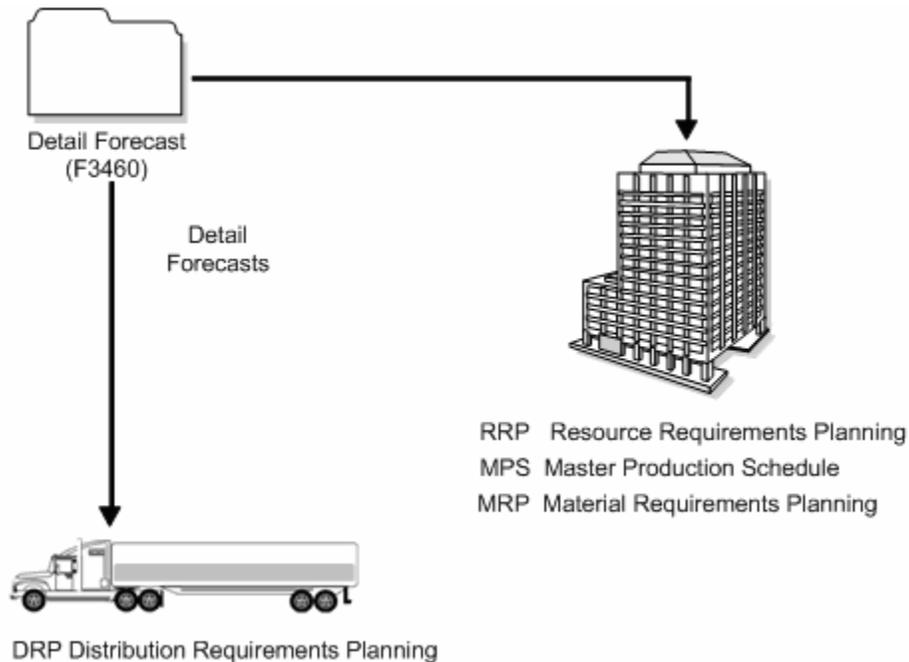
## System Integration

Forecasting is one of many systems that make up the Enterprise Requirements Planning and Execution (ERP<sub>x</sub>) system. Use the ERP<sub>x</sub> system to coordinate your inventory, raw material, and labor resources to deliver products according to a managed schedule. ERP<sub>x</sub> is fully integrated and ensures that information is current and accurate across your business operations. It is a closed-loop manufacturing system that formalizes the activities of company and operations planning, as well as the execution of those plans.

The following systems make up the JD Edwards World ERPx product group.



The Forecasting system generates demand projections that you use as input for JD Edwards World planning and scheduling systems. These systems calculate material requirements for all component levels, from raw materials to complex subassemblies.



The Resource Requirements Planning (RRP) system uses a forecast of future demand to estimate the time and resources needed to make a product.

The Master Production Schedule (MPS) system plans and schedules what a company expects to manufacture. Data from the Forecasting system is one MPS input that helps determine demand before you execute production plans.

Material Requirements Planning (MRP) is an ordering and scheduling system that explodes the requirements of all MPS parent items to the components. You can also use forecast data as demand input for lower-level MRP components that are service parts with independent demand (demand not directly or exclusively tied to production of a particular product at a particular branch or plant).

Distribution Requirements Planning (DRP) is a management system that plans and controls the distribution of finished goods. You can use forecasting data as input for DRP so you can more accurately plan the demand that you supply through distribution.

## Features

You can use the Forecasting system to:

- *Generate forecasts*
- *Enter forecasts manually*
- *Maintain both manually entered forecasts and forecasts generated by the system*
- *Summarize the sales order history data in weekly or monthly time periods*
- *Generate forecasts based on any or all of 12 different formulas that address a variety of forecast situations you might encounter*
- *Calculate which of the 12 formulas provides the best fit forecast*

- *Define the hierarchy that the system uses to summarize sales order histories and detail forecasts*
- *Create multiple hierarchies of address book category codes and item category codes, which you can use to sort and view records in the detail forecast table*
- *Review and adjust both forecasts and sales order actuals at any level of the hierarchy*
- *Integrate the detail forecast records into DRP, MPS, and MRP generations*
- *Force changes made at any component level to both higher levels and lower levels*
- *Set a bypass flag to prevent changes generated by the force program being made to a level*
- *Store and display both original and adjusted quantities and amounts*
- *Attach descriptive text to a forecast at the detail and summary levels*

Flexibility is a key feature of the JD Edwards World Forecasting system. The most accurate forecasts take into account quantitative information, such as sales trends and past sales order history, as well as qualitative information, such as changes in trade laws, competition, and government. The system processes quantitative information and allows you to adjust it with qualitative information. When you aggregate, or summarize, forecasts, the system uses changes that you make at any level of the forecast to automatically update all other levels.

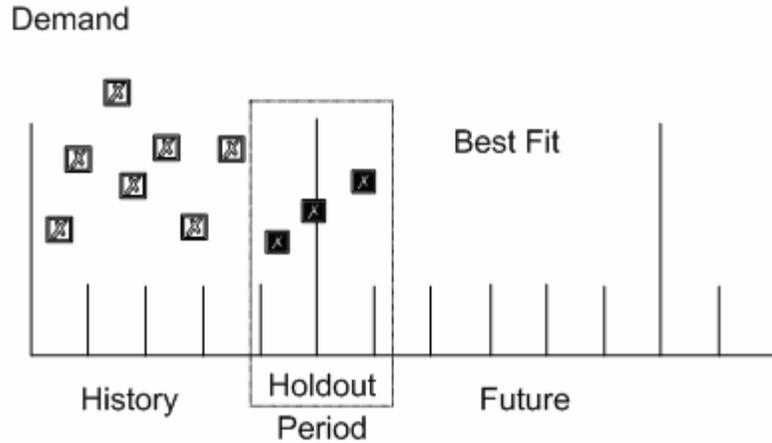
You can perform simulations based on the initial forecast, which allows you to compare different situations. After you accept a forecast, the system updates your manufacturing and distribution plan with any changes you have made.

## Forecasting Levels and Methods

You can generate both single-item (detail) forecasts and product line (summary) forecasts that reflect product demand patterns. Select from 12 forecasting methods, and the system analyzes past sales to calculate the forecast. The forecast includes detail information at the item level and higher-level information about a branch or the company as a whole.

### Best Fit

The system recommends the best fit forecast by applying the selected forecasting methods to past sales order history and comparing the forecast simulation to the actual history. When you generate a forecast, the system compares actual sales order histories to forecasts for the months or weeks you indicate in the processing option and computes how accurately each of the selected forecasting methods would have predicted sales. Then, the system recommends the most accurate forecast as the best fit.



The system determines the best fit in the following sequence:

1. Uses each of the methods that you selected in processing options to simulate a forecast for the holdout period.
2. Compares actual sales to the simulated forecasts for the holdout period.
3. Calculates the percent of accuracy or the mean absolute deviation to determine which forecasting method closest matched the past actual sales. The system uses the percent of accuracy or the mean absolute deviation based on the processing options that you select.
4. Recommends a best fit forecast by the percent of accuracy that is closest to 100% (over or under) or the mean absolute deviation closest to zero.

### Forecasting Methods

The Forecasting system uses 12 methods for quantitative forecasting. The system also indicates which of the methods provides the best fit for your forecasting situation.

Method	Description
Method 1 - Percent Over Last Year	This method uses the Percent Over Last Year formula to multiply each forecast period by a percentage increase or decrease that you specify in a processing option. This method requires the periods for the best fit plus one year of sales history. It is useful for seasonal items with growth or decline.
Method 2 - Calculated Percent Over Last Year	This method uses the Calculated Percent Over Last Year formula to compare the periods specified of past sales to the same periods of past sales of the previous year. The system determines a percentage increase or decrease, then, multiplies each period by the percentage to determine the forecast.  This method requires the periods of sales order history indicated in the processing option plus one year of sales history. It is useful for short-term demand forecasts of seasonal items with growth or decline.

<b>Method</b>	<b>Description</b>
Method 3 - Last Year to This Year	This method uses last year's sales for the following year's forecast. This method requires the periods best fit plus one year of sales order history. It is useful for mature products with level demand or seasonal demand without a trend.
Method 4 - Moving Average	This method uses the Moving Average formula to average the months that you indicate in the processing option to project the next period. This method requires periods best fit from the processing option plus the number of periods of sales order history from the processing option. You should have the system recalculate it monthly or at least quarterly to reflect changing demand level. It is useful for mature products without a trend.
Method 5 - Linear Approximation	<p>This method uses the Linear Approximation formula to compute a trend from the periods of sales order history indicated in the processing options and projects this trend to the forecast. You should have the system recalculate the trend monthly to detect changes in trends.</p> <p>This method requires periods best fit plus the number of periods that you indicate in the processing option of sales order history. It is useful for new products or products with consistent positive or negative trends that are not due to seasonal fluctuations.</p>
Method 6 - Least Square Regression (LSR)	<p>This method derives an equation describing a straight line relationship between the historical sales data and the passage of time. LSR fits a line to the selected range of data such that the sum of the squares of the differences between the actual sales data points and the regression line are minimized. The forecast is a projection of this straight line into the future.</p> <p>This method is useful when there is a linear trend in the data. It requires sales data history for the period represented by the number of periods best fit plus the number of historical data periods specified in the processing options. The minimum requirement is two historical data points.</p>
Method 7 - Second Degree Approximation	This method uses the Second Degree Approximation formula to plot a curve based on the number of periods of sales history indicated in the processing options to project the forecast. This method requires periods best fit plus the number of periods indicated in the processing option of sales order history times three. It is not useful for long-term forecasts.

Method	Description
Method 8 - Flexible Method (Percent Over n Months Prior)	<p>This method allows you to select the periods best fit block of sales order history starting <math>n</math> months prior and a percentage increase or decrease with which to modify it. This method is similar to Method 1, Percent Over Last Year, except that you can specify the number of periods that you use as the base.</p> <p>Depending on what you select as <math>n</math>, this method requires months best fit plus the number of periods indicated in the processing options of sales data. It is useful for a planned trend.</p>
Method 9 - Weighted Moving Average	<p>The Weighted Moving Average formula is similar to the Method 4, Moving Average formula, because it averages the previous number of months of sales history indicated in the processing options to project the next month's sales history. However, with this formula you can assign weights for each of the prior periods in a processing option.</p> <p>This method requires the number of weighted periods selected plus a month's best fit data. Similar to Moving Average, this method lags demand trends, so it is not recommended for products with strong trends or seasonality. This method is useful for mature products with demand that is relatively level.</p>
Method 10 - Linear Smoothing	<p>This method calculates a weighted average of past sales data. You can specify the number of periods of sales order history to use in the calculation (from 1 to 12) in a processing option. The system uses a mathematical progression to weigh data in the range from the first (least weight) to the final (most weight). Then, the system projects this information to each period in the forecast.</p> <p>This method requires the months best fit plus the number of periods of sales order history from the processing option.</p>
Method 11 - Exponential Smoothing	<p>This method uses one equation to calculate a smoothed average. This becomes an estimate representing the general level of sales over the selected historical range.</p> <p>This method is useful when there is no linear trend in the data. It requires sales data history for the time period represented by the number of months best fit plus the number of historical data periods specified in the processing options. The minimum requirement is two historical data periods.</p>
Method 12 - Exponential Smoothing with Trend and Seasonality	<p>The Exponential Smoothing with Trend and Seasonality method calculates a trend, a seasonal index, and an exponentially smoothed average from the sales order history. The system then applies a projection of the trend to the forecast and adjusts for the seasonal index. This method requires a month's best fit plus two years of sales data and is useful for items that have both trend and seasonality in the forecast. Use the processing options to enter the alpha and beta factor rather than have the system calculate them.</p>

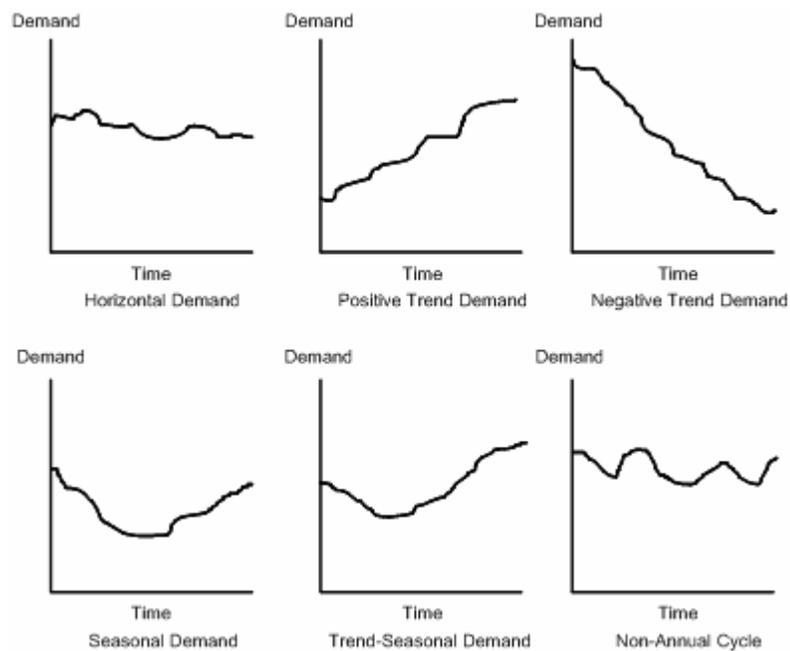
## See Also

- *Appendix A – Forecast Calculation Examples in the Forecasting Guide*

## Demand Patterns

The Forecasting system uses sales order history to predict future demand. Different examples of demand follow. Forecast methods available in the JD Edwards World Forecasting system are tailored for these demand patterns.

### Six Typical Demand Patterns



You can forecast the independent demand of the following items for which you have past data:

- *Samples*
- *Promotional items*
- *Customer orders*
- *Service parts*
- *Inter-plant demands*

You can also forecast demand for the following item types determined by the manufacturing environments in which they are produced:

Item Type	Description
Make-to-stock	End items to meet customers' demand that occurs after the product is completed

Item Type	Description
Assemble-to-order	Subassemblies to meet customers' option selections
Make-to-order	Raw materials and components stocked in order to reduce lead time

## Forecast Accuracy

The following statistical laws govern the accuracy of a forecast:

- *A short-term forecast is more accurate than a long-term forecast, because the farther into the future you project the forecast, the more variables can impact the forecast.*
- *A forecast for a product family tends to be more accurate than a forecast for individual members of the product family. Some errors cancel as the forecasts for individual items summarize into the group.*

## Forecast Considerations

You should not rely exclusively on past data to forecast future demands. The following circumstances might affect your business and require you to review and modify your forecast:

- *New products that have no past data*
- *Plans for future sales promotion*
- *Changes in national and international politics*
- *New laws and government regulations*
- *Weather changes and natural disasters*
- *Innovations from competition*
- *Economic changes*

You might use any of the following kinds of long-term trend analysis to influence the design of your forecasts:

- *Market surveys*
- *Leading economic indicators*
- *Delphi panels*

## See Also

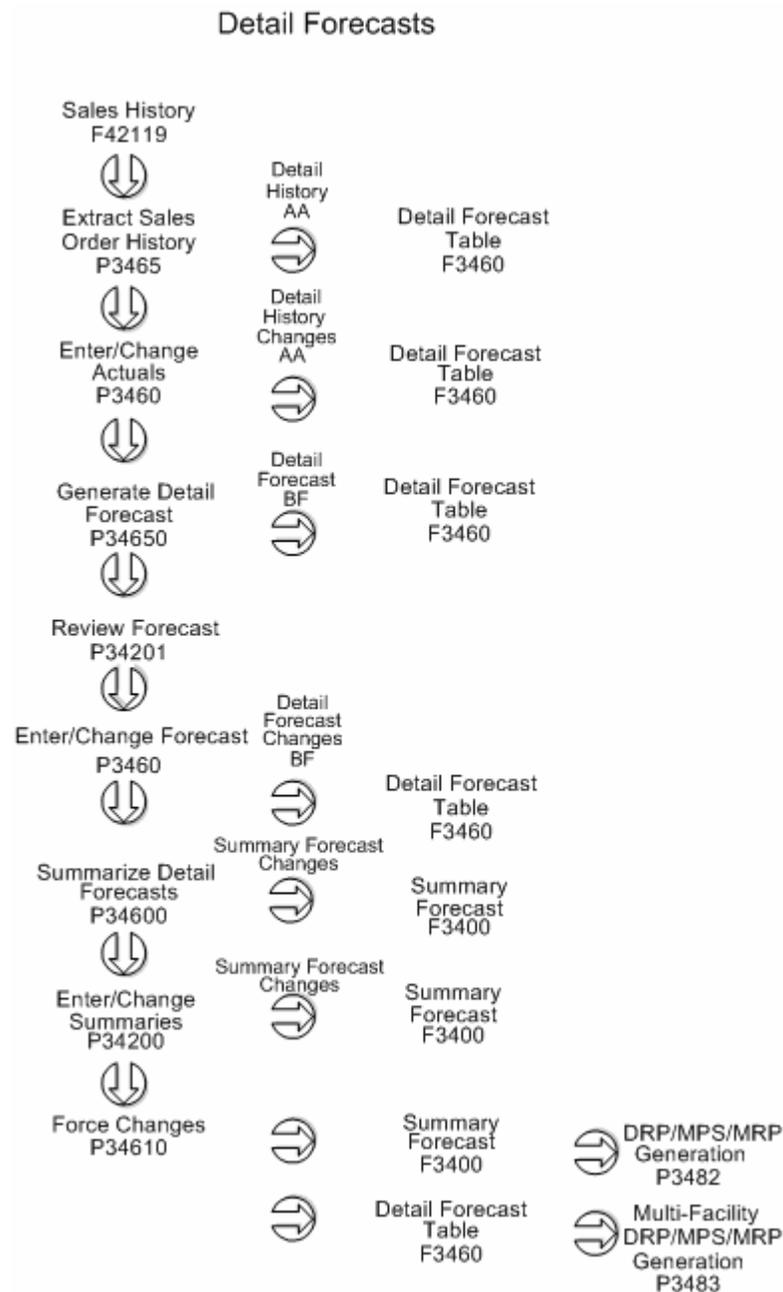
- *Appendix A – Forecast Calculation Examples in the Forecasting Guide*

## Forecasting Process

You use Extract Sales Order History to copy data from the Sales History table (F42119) into either the Detail Forecast table (F3460) or possibly the Summary Forecast (F3400) table, depending on the kind of forecast you plan to generate.

You can generate detail forecasts or summaries of detail forecasts based on data in the Detail Forecast table. Data from your forecasts can then be revised. The process is illustrated in the following graphic.

The following graphic illustrates the sequences you follow when you use the detail forecasting programs.



## Major Tables

<b>Table</b>	<b>Description</b>
Summary Forecast (F3400)	Contains the summary forecasts generated by the system and the summarized sales order history created by the Extract Sales Order History program.
Detail Forecast (F3460)	Contains the detail forecasts generated by the system and the sales order history created by the Extract Sales Actuals program.
Summary Constants (F4091)	Stores the summary constants that you have set up for each product hierarchy.
Sales History (F42119)	Contains past sales data, which provides the basis for the forecast calculations.
Sales Order Detail (F4211)	Provides sales order demand by the requested date. The system uses this table to update the Sales History table for forecast calculations.

## Supporting Tables

<b>Table</b>	<b>Description</b>
Item Master (F4101)	Stores basic information about each defined inventory item, such as item numbers, description, category codes, and units of measure.
Branch/Plant Master (F4102)	Defines and maintains warehouse or plant level information, such as costs, quantities, physical locations, and branch level category codes.
Business Unit Master (F0006)	Identifies branch, plant, warehouse, or business unit information, such as company, description, and assigned category codes.
Address Book (F0101)	Stores all address information pertaining to customers, vendors, employees, prospects, and other information.
Forecast Summary Work (F34006)	Ties the summary records (F3400) to the detail records (F3460).

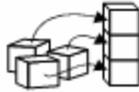
## Menu Overview

JD Edwards World classifies the Forecasting system's menus according to frequency of use.



### Periodic Processes

\* Periodic Forecasting Operations G3421



### Setup Processes

\* Forecasting Setup G3441

## Fast Path Commands

The following chart illustrates the fast path commands that you can use to move among the Forecasting menus. From any menu, enter the fast path command at the command line.

Fast Path Command	Menu	Title
PFOR	G3421	Periodic Forecasting Operations
SFOR	G3441	Forecasting Setup



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# Work with Detail Forecasts

## Working with Detail Forecasts

After you set up the actual sales history on which you plan to base your forecast, you generate the detail forecast. You can then revise the forecast to account for any market trends or strategies that might make future demand deviate significantly from the actual sales history.

Working with detail forecasts includes the following tasks:

- [Creating Detail Forecasts](#)
- [Reviewing Detail Forecasts](#)
- [Revising Detail Forecasts](#)

## Creating Detail Forecasts



From Material Planning Operations (G34), choose <b>Forecasting</b> From Periodic Forecasting Operations (G3421), choose <b>Create Detail Forecast</b>
--

Create Detail Forecast applies multiple forecasting methods to past sales histories and generates a forecast based on the method that is calculated to provide the most accurate prediction of future demand. The program can also calculate a forecast based on a selected method.

When you run Create Detail Forecast, the system:

- Extracts sales order history information from the Detail Forecast table (F3460)
- Calculates the forecasts using methods that you select
- Calculates the percent of accuracy or the mean absolute deviation for each selected forecast method
- Creates a simulated forecast for the months indicated in the processing option
- Recommends the best fit forecast method
- Creates the detail forecast in either dollars or units from the best fit forecast

The system designates the extracted actual records as type AA and the best fit model as BF. Unlike forecast types 01 through 12, these forecast type codes are not hard-coded, so you can specify your own codes. The system stores both types of records in the Detail Forecast table. The system does not automatically save the other forecast types 01 through 12 unless you set the processing options to do so.

This program allows you to:

- Specify the number of months of actual data to use to create the best fit
- Forecast for individual large customers for all methods
- Run the forecast in proof or final mode
- Create zero or negative forecasts, or both
- Run the forecast simulation interactively

## Processing Options

See [Forecast Generation \(P34650\)](#).

## Reviewing Detail Forecasts

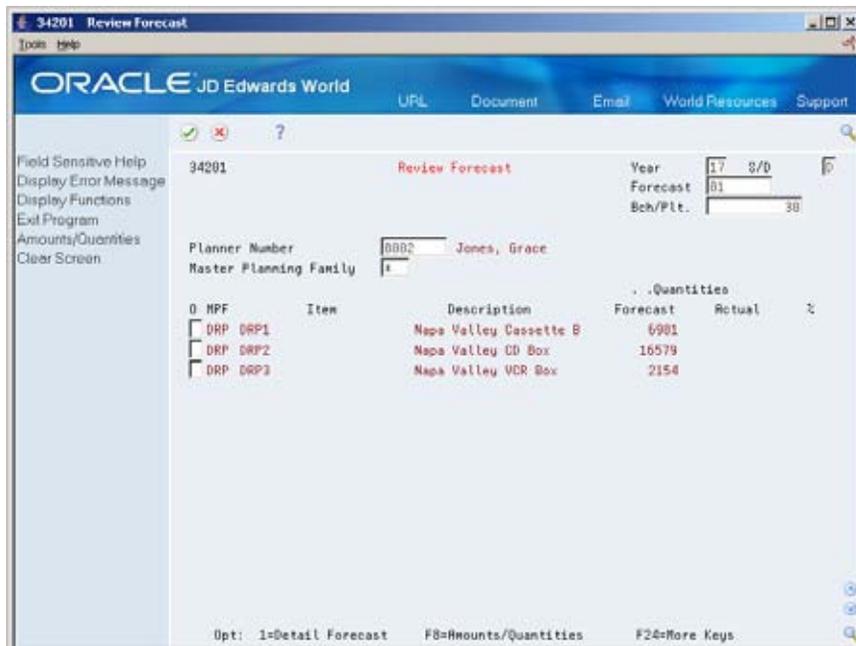
	From Material Planning Operations (G34), choose <b>Forecasting</b> From Periodic Forecasting Operations (G3421), choose <b>Review Forecast</b>
---	---

You can display information by planner, master planning family, or both. You can then change the forecast type to compare different forecasts to the actual demand. You can also:

- Display the data in summary or detail mode. Detail mode lists all item numbers. Summary mode consolidates data by master planning family.
- Display all information stored in the Detail Forecast table.
- Choose between quantities and amounts to review.

### To review detail forecasts

On Review Forecast



Item	Description	Forecast	Actual
DRP DRP1	Napa Valley Cassette B	6901	
DRP DRP2	Napa Valley CD Box	16579	
DRP DRP3	Napa Valley VCR Box	2154	

1. Complete the following fields:
  - Year
  - Forecast Type
  - Branch/Plant
2. Complete one of the following fields:
  - Master Planning Family
  - Planner Number
3. Review the following fields:
  - Quantities Forecast
  - Quantities Sales Order History
  - Percent (%)
4. To access the amounts fields, choose Amounts/Quantities.
5. Review the following fields:
  - Amounts Forecast
  - Amounts Sales Order History
6. To display data in detail mode, choose the Detail selection on an item line.

Field	Explanation
Year	The calendar year.
Forecast Type	<p>A code from the user defined code table 34/DF that indicates either:</p> <ul style="list-style-type: none"> <li>▪ The forecasting method used to calculate the numbers displayed about the item</li> <li>▪ The actual historical information about the item</li> </ul>
Bch/Plt	<p>Identifies a branch or plant.</p> <p><b>Note:</b> You can enter numbers and characters in this field. The system right-justifies them (for example, C0123 appears as ___ C0123). You cannot locate business units for which you have no authority.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>On this form, this is the branch/plant for which you review and revise a forecast.</p>
Master Planning Family	<p>A code (table 41/P4) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>

Field	Explanation
Planner Number	<p>The address number of the material planner for this item.</p> <p><i>Form-specific information</i></p> <p>You can use this field, along with the Master Planning Family and Year fields, to display specific forecast items. For example, you can show items within a planning family that were forecasted by a specific planner for a specific year.</p>
Quantities Forecast	<p>The quantity of units affected by this transaction.</p> <p><i>Form-specific information</i></p> <p>The quantity of units in the sales order history on which a forecast is based.</p>

## Processing Options

See [Forecast Review \(P34201\)](#).

## Revising Detail Forecasts

	<p>From Material Planning Operations (G34), choose <b>Forecasting</b></p> <p>From Periodic Forecasting Operations (G3421), choose <b>Enter/Change Forecast</b></p>
--	--

After you generate and review a forecast, you can revise the forecast to account for changes in consumer trends, market conditions, competitors' activities, your own marketing strategies, and so on. When you revise a forecast, you can:

- Change information in an existing forecast manually
- Add a forecast
- Delete a forecast

You can access forecasts that you want to revise by item number, branch plant, forecast type, or any combination of these elements. If your forecast is extensive, you can specify a beginning request date to limit the display.

As you revise the forecast, be aware that the following combination must be unique for each item number and branch record:

- Forecast type
- Request date
- Customer number

For example, if two records have the same request date and customer number, they must have different forecast types.

This program (P3460) supports import/export functionality. See the *Technical Foundation Guide* for more information.

## Example: Revising a Detail Forecast

You expect increased sales for a specific month. On Enter/Change Forecast, you manually increase the forecast for that month, and add a qualitative forecast for new items with no sales history.

In the following example, the forecast for the Cassette boxes has been increased for the 02/28/17 from 541 to 700 to accommodate the increased sales.

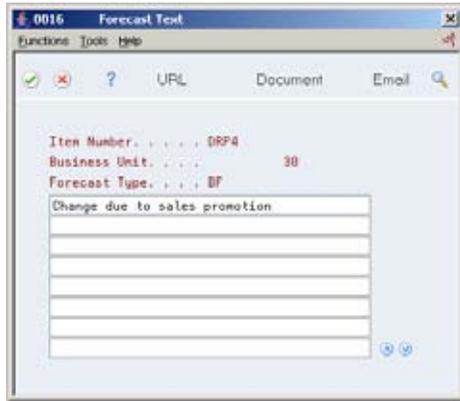
Forecast Type	Date	Quantity Adjusted	Quantity Original	Pass	Customer Number
BF	01/31/17	540	535	N	
BF	02/28/17	700	541	N	
BF	03/31/17	545	546	N	
BF	04/30/17	550	552	N	
BF	05/31/17	560	557	N	
BF	06/30/17	565	562	N	
BF	07/31/17	570	568	N	
BF	08/31/17	570	573	N	
BF	09/30/17	580	579	N	
BF	10/31/17	585	584	N	
BF	11/30/17	590	589	N	
BF	12/31/17	595	595	N	

### To revise detail forecasts

On Enter/Change Forecast

- To choose the forecast you want to revise, review the following fields:
  - Branch/Plant
  - Forecast Type
  - U/M (Unit of Measure) (Optional)
  - Item Number
- Complete the following field:
  - Quantity Adjusted
- To access amounts, choose Amounts/Quantities.
- Revise the following field:
  - Amount Adjusted (F15)

5. To enter descriptive text, access Generic Text.



6. On Forecast Text, enter any descriptive text for the forecast.

Field	Explanation
Bch/Plt	<p>Identifies a branch or plant.</p> <p><b>Note:</b> You can enter numbers and characters in this field. The system right-justifies them (for example, C0123 appears as _ _ _ C0123). You cannot locate business units for which you have no authority.</p> <p><i>Form-specific information</i></p> <p>On this form, this is the branch/ plant for which you are reviewing and revising a sales order history or forecast.</p>
Forecast Type	<p>A code from the user defined code table 34/DF that indicates either:</p> <ul style="list-style-type: none"> <li>▪ The forecasting method used to calculate the numbers displayed about the item</li> <li>▪ The actual historical information about the item</li> </ul>
U/M	<p>A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).</p> <p><i>Form-specific information</i></p> <p>The Material Requirements Planning system converts this to the primary unit of measure for planning purposes.</p>
Item Number	<p>A number that the system assigns to an item. It can be in short, long, or 3rd item number format.</p>
Original Adjusted	<p>The quantity of units affected by this transaction.</p> <p><i>Form-specific information</i></p> <p>The original quantity of units forecasted for production during a planning period.</p>
Amount Adjusted	<p>The current amount of the forecasted units for a planning period.</p>

## See Also

- *Work with PC Import/Export in the Technical Foundation Guide.*

## Processing Options

See [Forecast Revisions \(P3460\)](#).



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## **4 Resource Requirements Planning**



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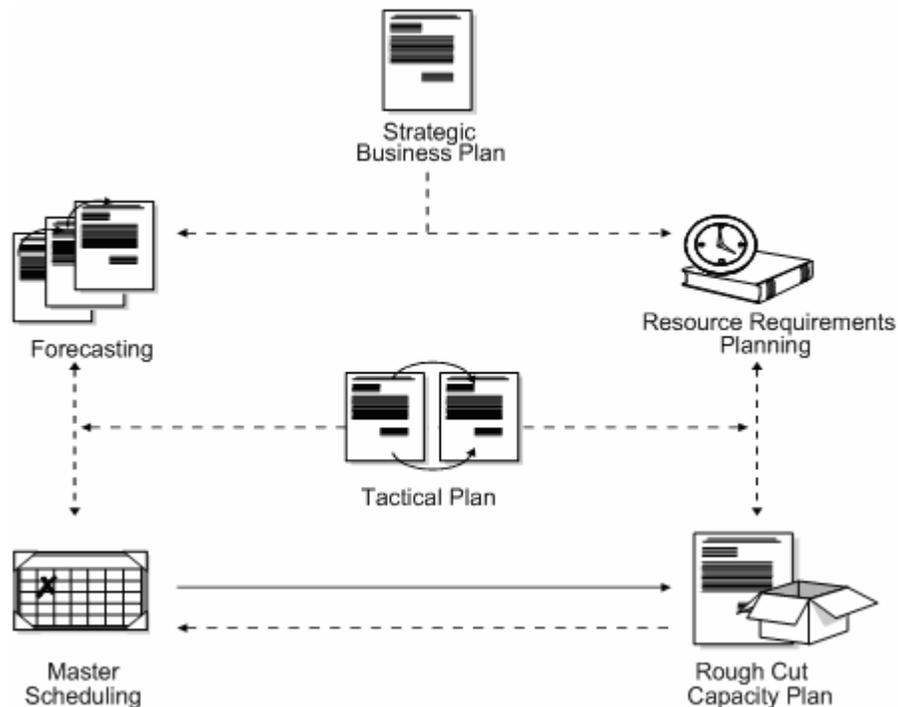
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# Overview to Resource Requirements Planning

## Objectives

- To create a profile of a work center's load that the system uses to validate a forecast
- To determine available capacity
- To determine long-range requirements for a work center
- To review the actual and planned load on work centers, either together (as a dispatch group) or individually
- To understand the different ways you can view actual and planned load information
- To set up Resource Requirements Planning (RRP)

## About Resource Requirements Planning



You generate a resource requirements plan after you generate your long-term forecast, but before you run the Master Scheduling program. Resource Requirements Planning uses data from a forecast of future sales to estimate the time and resources that are required to make a product.

RRP can help you resolve long-range planning issues, such as:

- Expanding existing facilities
- Acquiring new facilities
- Staffing loads
- Determining capital expenditures for equipment

RRP enables you to support your company's strategic business plan with a realistic tactical plan that:

- Is shorter in range than the strategic plan and has a planning horizon of 12 months to 3 years
- Allows planning at the product family level and is in greater detail than the strategic plan
- Validates the monetary amounts allotted to the business plan as closely as possible

## How Do You Use Demand Forecasting?

Demand forecasting is the logical starting point for developing a resource requirements plan. However, it is important to remember that the demand forecast is not the actual plan, but that you use it only as an input to the plan. Because you use the forecast in place of work orders, RRP provides an estimate of the time and resources that you will need to produce a product.

Manufacturing must determine whether the production plan is supportable as is or if additional future resource requirements are needed, such as:

- Additional skilled labor
- New machinery
- New facilities or additional real estate

## What Factors Should You Consider?

You must consider the following factors when you generate the resource requirement plan:

- Include allowances for forecast error
- Use inventory to absorb fluctuations in demand and to level the work center load
- Weigh the cost of carrying inventory versus the cost of lost revenues if you are out of stock

## How Do You Determine Long-Range Capacity Plans?

The Resource Requirements Planning program generates a capacity plan by critical work center. In order to answer long-range planning questions, you need to know your current capacity and the requirements to support the planned work load.

Complete the following tasks:

- Enter work centers
- Determine available capacity
- Determine long-range load
- Generate resource requirements plans
- Review resource requirements plans
- Set up resource requirements plans

Entering work centers defines the work center as machine or labor-paced and whether it is a critical work center. You also specify other values, such as the percent efficiency and utilization of the work center and the crew.

After you estimate how much capacity you will need to produce a product, you must determine how much capacity you actually have. You determine a work center's available capacity on a given day by entering resource units.

Long-range load is an estimate of how many load hours are required to meet sales projections. To determine long-range load, the system uses resource profiles. The resource profile is a list of all work centers and their load requirements for a master scheduled item.

After you have entered resource units and resource profiles, you generate the resource requirements plan to obtain long-range estimates of the capacity needs at your work centers.

After you generate the resource requirements plan, the system creates a load profile that shows the load during each planning period for critical work centers. You can view this as a spreadsheet or as a graphical display. You can also review summaries of each period.

The system records resource requirements planning information in the following tables:

Table	Description
Resource Units (F3007)	The Resource units table contains the available capacity for each work center by day, month, and year.
Work Center Master (F3006)	The Work Center Master table contains detail data about all defined work centers.
Resource Profile (F3303)	The Resource Profile contains all resource profiles that are used in RRP.
Forecast (F3460)	The forecast table contains the forecast data that the resource requirements plan validates. It is also used as input for distribution requirements planning, material requirements planning, or the master production schedule.



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# Enter Work Centers

## Entering Work Centers for Resource Requirements Planning



From Resource & Capacity Planning (G33), choose **Periodic Resource Planning**  
From Periodic Resource/Capacity Planning (G3321), choose **Enter/Change Work Centers**

Enter work center information that corresponds to the facilities on your shop floor. Entering work centers for RRP defines the work center as machine or labor-paced and whether it is a critical work center. You also specify other values, such as the percent efficiency and utilization of the work center and the crew.

You can also maintain general information about a work center, including:

- Pay points
- Prime load codes
- Number of machines and workers
- Crew size
- Backflush locations

### Before You Begin

- Set up your work centers and dispatch groups as valid business units on the Single Business Unit Revisions screen. See *Setting Up Business Units* in the *General Accounting I Guide*.

## To enter work centers for Resource Requirements Planning On Enter/Change Work Centers

The screenshot shows the 'Enter/Change Work Centers' form in Oracle JD Edwards World. The form is titled '3006 Enter/Change Work Centers' and includes a 'Branch/Plant' field with the value 'R30'. The form is divided into several sections:

- Action Code:** 1
- Work Center:** 200-203
- Dispatch Group:** 200-200
- Work Center Type:** (empty)
- Calendar Name:** (empty)
- Pay Point Code:** (empty)
- Prime Load Code:** (empty)
- Critical Work Center:** (empty)
- Crew Size:** 1.0
- Number of Machines:** 10
- Number of Employees:** 50
- Queue Hours:** (empty)
- Move Hours:** (empty)
- Resource Offset:** 1
- Efficiency:** 75.00
- Utilization:** 100.00
- Previous Product:** Blister Pack
- Assembly Department:** Blending/Filling W/C
- Location - Issue:** (empty)
- Location Branch:** R30
- Location - Completion:** (empty)
- Capacity Std:** (empty)
- Capacity UOM:** (empty)
- Capacity Min:** (empty)
- Capacity Max:** (empty)

At the bottom of the form, there are function key instructions: F8=Work Center Rates, F10=Business Unit Revisions, and F24=More Keys.

1. Complete the following field:
  - Work Center
2. Complete the following optional fields:
  - Dispatch Group
  - Work Center Type
  - Calendar Name
  - Prime Load Code
  - Critical Work Center
  - Branch
  - Resource Offset
  - Efficiency
  - Utilization

Field	Explanation
Work Center	<p>An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, or branch/plant.</p> <p>You can assign a business unit to a voucher, invoice, fixed asset, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department.</p> <p>Security for this field can prevent you from locating business units for which you have no authority.</p> <p><b>Note:</b> The system uses this value for Journal Entries if you do not enter a value in the AAI table.</p>
Dispatch Group	<p>A super category code to group work centers within an overall business unit. For example, you can group like machines operating out of several work centers that report to one business unit under a dispatch group.</p>
Work Center Type	<p>Defines the type of work center. Possible values are :</p> <p>Blank Stand alone work center</p> <p>1      Production line in a repetitive environment</p> <p>2      Reporting work station within a production line</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>For repetitive manufacturing, the system verifies the value is not valid as a work center for an operation from the routing.</p>
Calendar Name	<p>Enter the value of the calendar which corresponds to the calendar type. For example, if the calendar type is ROUTE, enter a valid route code to display the calendar for a particular route.</p>
Critical Work Center	<p>A code that identifies the work center as critical or not critical when the system calculates capacity. Valid values are:</p> <p>N      Not a critical work center</p> <p>1      A critical work center in calculating resource requirement planning only</p> <p>2      A critical work center in calculating capacity requirements planning only</p> <p>3      A critical work center in calculating resource requirements planning and capacity requirements planning</p> <p>4      Not a capacity work center (will not be generated in capacity planning)</p> <p><b>Note:</b> The system displays Type 3 work centers whenever type 1 or type 2 is selected in this field.</p>

Field	Explanation
Branch/Plant	<p>A code that represents a high-level business unit. It can be used to reference a branch or plant that might have departments or jobs, which represent lower-level business units (data item MCU), subordinate to it. For example:</p> <p style="padding-left: 40px;">Branch/Plant (MMCU) Dept A (MCU) Dept B (MCU) Job 123 (MCU)</p> <p>Business unit security is based on the higher-level business unit.</p>
Resource Offset	<p>A value used in the Resource Profile table (F3303) to determine the number of days that the actual use of a work center resource should be offset from the forecasted need date.</p>
Efficiency	<p>A user defined value that indicates how efficiently a work center operates. This value usually refers to people efficiency. When you enter a value in this field, and the Modify Cost by Work Center Efficiency field in the Job Shop Manufacturing Constants table (F3009) is set to Y, the system creates a new cost component (B4) from the cost calculated from the direct labor cost (B1). The system also uses this value to calculate rated capacity.</p> <p>Example: If the constant is set to Y, the value of this field is 80%, and the direct labor cost is 10, the system creates a B4 cost component for 2 in the Item Cost Component Add-Ons table (F30026).</p> <p>Enter percents as whole numbers, for example, enter 80% as 80.00.</p>
Utilization	<p>A percentage that indicates how intensively a work center is being used. This value usually refers to machine use. It is the ratio of the direct time charged for production activities to the planned hours. This value is also used to calculate rated capacity.</p> <p>Enter percents as whole numbers, for example, enter 80% as 80.00.</p>

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# Determine Available Capacity

## Determining Available Capacity

After estimating how much capacity you need to produce a product, you must determine how much capacity you actually have. You determine a work center's available capacity on a given day by entering resource units. The system uses this information to backschedule work orders in the Shop Floor Control system and to determine available hours for capacity planning.

You can either enter resource units manually or have the system generate the resource units. Enter units manually if you need to make adjustments. Use the Generate Resource Units program to automatically recalculate the work center hours. The system generates resource units based on hours (HR) unit of measure.

Complete the following tasks:

- [Entering Resource Units Manually](#)
- [Generating Resource Units](#)

## Before You Begin

- Verify that work centers exist for all resource units that you enter. See *Entering Work Centers for Resource Requirements Planning*.
- Set a default unit of measure in the processing options.

## What You Should Know About

### Using different units of measure

You can assign resource units for different units of measure in different work centers. For example, you might want to estimate the square footage you need for storage of items as well as the hours needed to produce an item.

## Entering Resource Units Manually



From Resource & Capacity Planning (G33), choose **Periodic Resource Planning**  
 From Periodic Resource/Capacity Planning (G3321), choose **Enter/Change Resource Units**

Enter resource units manually if you need to make adjustments to them. For example, you might need to make adjustments to account for machine downtime or employee vacations.

### To enter resource units manually

#### On Enter/Change Resource Units

The screenshot displays the 'Enter/Change Resource Units' window in Oracle JD Edwards World. The window title is '3007 nter/Change Resource Units Branch'. The main area shows a calendar for June 2017 with resource units entered for each day. The total resource units are 352.00, and the utilization is 100.00. The screen also shows a list of actions on the left and a navigation bar at the top.

Day	Resource Units
Sunday	4
Monday	5
Tuesday	6
Wednesday	7
Thursday	8
Friday	9
Saturday	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30

Weekend resource units: 16.00 (for each of the four weekend periods shown).

Total Resource Units: 352.00  
 Efficiency: 120.00  
 Utilization: 100.00

1. Complete the following required field:
  - Work Center
2. Complete the following optional fields:
  - Unit of Measure
  - Shift Code
  - Efficiency
  - Utilization
  - Daily Resource Units
3. Review the following field:
  - Total Resource Units

Field	Explanation
Unit of Measure	A user-defined code (system 00/type UM) that identifies the unit of measurement for an amount or quantity. For example, it can represent a barrel, box, cubic yard, gallon, an hour, and so on.
Shift Code	<p>A user-defined code (00/SF) that identifies daily work shifts. In payroll systems, you can use a shift code to add a percent or amount to the hourly rate on a timecard.</p> <p>For payroll and time entry:</p> <p>If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time.</p> <p>If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>You can view the total resources available for a given day by entering an asterisk (*) in this field.</p> <p>For repetitive manufacturing, enter a 1-6 to allow the system to display a specific shift's units, or enter a * to view the total resource availability for the specified time period. While this program displays the total units for the shift/day for work centers defined with a standard capacity and unit of measure in those units, the system stores the data in hours.</p>
Total Resource Units	The total resource units for the month.

## What You Should Know About

### Changing resource unit information

You can change the values on the Enter/Change Resource Units screen to account for scheduled or unscheduled downtime, additional shifts, or vacation time. However, each time you run Refresh Resource Units, the program recalculates the screen values and overwrites your manual changes based on information in the Work Center Master table (F3006), the Shop Floor Calendar program, and the Manufacturing Constants table (F3009).

## Processing Options

See [Work Center Resource Units \(P3007\)](#).

## Generating Resource Units



From Resource & Capacity Planning (G33), choose **Periodic Resource Planning**  
From Periodic Resource/Capacity Planning (G3321), choose **Refresh Resource Units**

Run this program to automatically recalculate the work center hours. You can view the results on Enter/Change Resource Units.

You should run this program whenever you revise the hours per day on the Manufacturing Constants, the number of machines, or the number of employees assigned to work centers. You can also run the program to define resource units for specific time periods.

The system recalculates the resource units for a work center based on the following information:

- Hours per day in the Work Center Master table (F3006)
- Shop Floor Calendar
- Manufacturing Constants table

---

**Caution:** Any manual changes that you have made to the units on Enter/Change Resource Units will be overwritten when you run Refresh Resource Units.

---

### Before You Begin

- Set up manufacturing constants. See Setting up DRP, MPS, and RCCP.
- Determine the branch/plants for which you want to generate resource units.
- Verify that a current shop calendar for the time period you specify is set up.

### What You Should Know About

**Resource unit calculations** The program uses the following resource unit calculation for machine-related hours:

- Prime load code = C or M

Number of machines x work hours per day

The program uses the following resource unit calculation for labor-related hours:

- Prime load code = L or B

Number of employees x work hours per day

### Processing Options

See [Work Center Resource Units Refresh \(P3007G\)](#).

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# Determine Long-Range Load

## Determining Long-Range Load

Long-range load is an estimate of how many load hours are required to meet sales projections. To determine long-range load, the system uses resource profiles. The resource profile is a list of all work centers and their load requirements for a master scheduled item. It is the sum of all labor, machine, and setup hours required for all work centers and is for all parts in the master schedule items' multi-level bill of material.

You can manually enter a resource profile or have the system generate the profile. You manually enter the profile if you have not defined bills of material (BOMs) and routings for an end item. You can also use the manual method for prototype items and new products. You can have the system generate the profile if the BOMs and routings are available.

Complete the following tasks:

- [Defining Resource Profiles Manually](#)
- [Generating Resource Profiles](#)

## Defining Resource Profiles Manually

	From Resource & Capacity Planning (G33), choose <b>Periodic Resource Planning</b> From Periodic Resource/Capacity Planning (G3321), choose <b>Enter/Change Resource Profile</b>
---	--

You manually enter the profile if you have not defined bills of material (BOMs) and routings for an end item. You can also use the manual method for prototype items and new products. If BOMs and routings are available, the system can generate the profile.

### Before You Begin

- Enter item branch/plant information. See *Setting Up Branch/Plant Information* in the *Inventory Management Guide*.

## To define a resource profile manually

### On Enter/Change Resource Profile

3303 Enter/Change Resource Profile

Branch/Plant: [ ] 939  
Unit Type: [ ]

Action Code: [ ]  
Item Number: 5120  
Skip to Work Center: [ ]

Oak Desk With Chair

Work Center	Description	Units	UN Offset	Unit Type
<input type="checkbox"/> 200-101	Drill Press	40	HR	2 Run Labor
<input type="checkbox"/> 200-101	Drill Press	3	HR	2 Setup Labo
<input type="checkbox"/> 200-102	Milling Machine	20	HR	3 Run Labor
<input type="checkbox"/> 200-102	Milling Machine	9	HR	3 Setup Labo
<input type="checkbox"/> 200-102	Milling Machine	1	HR	3 Setup Labo
<input type="checkbox"/> 200-102	Milling Machine	29	HR	3 Machine Ho
<input type="checkbox"/> 200-102	Milling Machine	2	HR	3 Machine Ho
<input type="checkbox"/> 200-103	Screw Machine	10	HR	3 Run Labor
<input type="checkbox"/> 200-103	Screw Machine	10	HR	3 Machine Ho
<input type="checkbox"/> 200-202	Molding	1	HR	1 Run Labor
<input type="checkbox"/> 200-202	Molding	1	HR	1 Setup Labo
<input type="checkbox"/> 200-202	Molding	5	HR	1 Machine Ho
<input type="checkbox"/> 200-203	Blister Pack	04	HR	1 Run Labor
<input type="checkbox"/> 200-203	Blister Pack	3	HR	1 Setup Labo

Opt: 1=M/C Rev F8=BOM Inquiry F24=More Keys

1. Complete the following field:
  - Item Number
2. Complete the following optional fields:
  - Work Center
  - Units
  - Unit of Measure
  - Offset
3. Access the detail area (F4).

4. Complete the following optional fields or allow the system to enter a default:

- Effective From
- Effective Thru
- Unit Type
- Time Basis

Field	Explanation
Units	The quantity of units affected by this transaction.
Offset	A value used in the Resource Profile table (F3303) to determine the number of days that the actual use of a work center resource should be offset from the forecasted need date.
Eff From	<p>A date that indicates one of the following:</p> <ul style="list-style-type: none"> <li>▪ When a component part goes into effect on a bill of material</li> <li>▪ When a routing step goes into effect as a sequence on the routing for an item</li> <li>▪ When a rate schedule is in effect</li> </ul> <p>The default is the current system date. You can enter future effective dates so that the system plans for upcoming changes. Items that are no longer effective in the future can still be recorded and recognized in Product Costing, Shop Floor Control, and Capacity Requirements Planning. The Material Requirements Planning system determines valid components by effectivity dates, not by the bill of material revision level. Some screens display data based on the effectivity dates you enter.</p>

Field	Explanation
Eff Thru	<p>A date that indicates one of the following:</p> <ul style="list-style-type: none"> <li>▪ When a component part is no longer in effect on a bill of material</li> <li>▪ When a routing step is no longer in effect as a sequence on the routing for an item</li> <li>▪ When a rate schedule is no longer active</li> </ul> <p>The default is December 31 of the default year defined in the Data Dictionary for Century Change Year. You can enter future effective dates so that the system plans for upcoming changes. Items that are no longer effective in the future can still be recorded and recognized in Product Costing, Shop Floor Control, and Capacity Requirements Planning. The Material Requirements Planning system determines valid components by effectivity dates, not by the bill of material revision level. Some screens display data based on the effectivity dates you enter.</p>
Unit Type	<p>A code that indicates the type of resource unit associated with this work center. Possible types are:</p> <ul style="list-style-type: none"> <li>1 Run Labor Hours</li> <li>2 Setup Labor Hours</li> <li>3 Machine Hours</li> <li>9 Miscellaneous (Storage Space, and so on)</li> </ul>
Time Basis	<p>A user defined code (system 30, type TB) that identifies the time basis or rate for machine or labor hours entered for any routing step. You can set rates per unit, per 10, per 1000, and so on.</p> <p>The system uses the values in the Description-2 field on the User Defined Codes screen for costing and scheduling calculations. The description is what the code represents, but is not used in calculations.</p>

## Generating Resource Profiles

	<p>From Resource &amp; Capacity Planning (G33), choose <b>Periodic Resource Planning</b>  From Periodic Resource/Capacity Planning (G3321), choose <b>Generate Resource Profile</b></p>
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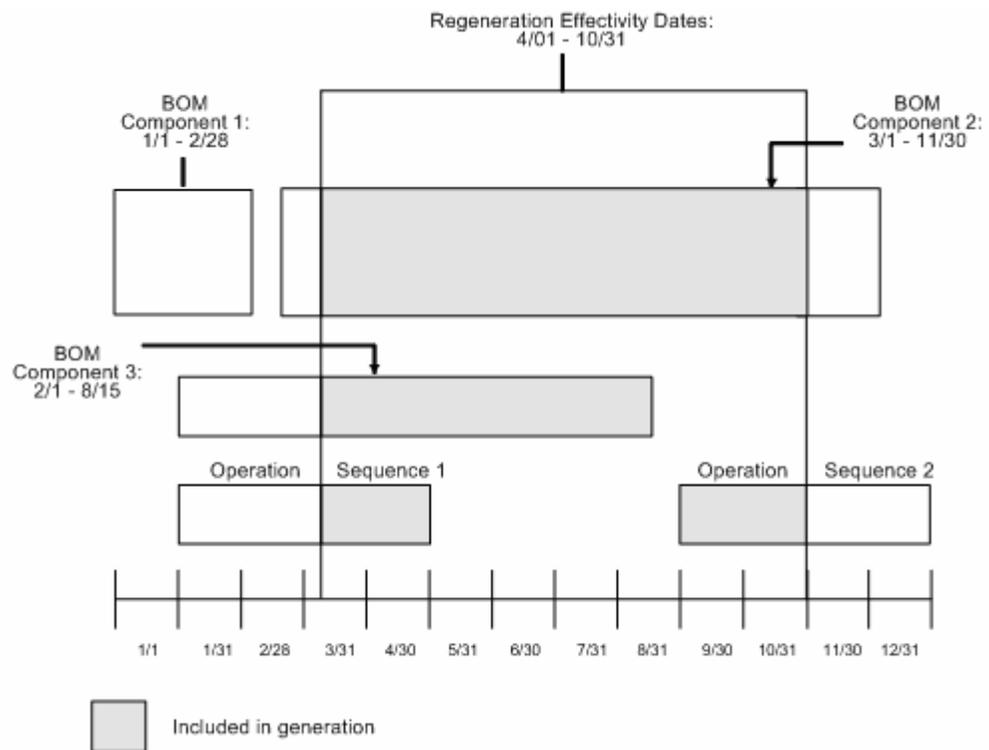
If you have defined bills of material (BOMs) and routings for an end item and all its subassemblies, you can run **Generate Resource Profile** to automatically generate the resource profile. The program calculates the load on a work center by extending the hours in the routing by the forecasted quantities for the master scheduled items.

**Resource Profile Generation** creates units of measure only in hours (HR). Enter the resource profile manually if you want to use other units of measure.

Generate Resource Profile changes or updates the resource profile using components with effectivity dates within the period that you specify. The specific items affected by the program are determined by the following factors:

- The system retrieves routings only for BOM components that are effective within the range of effectivity dates in the processing options for the regeneration.
- The system creates resource profiles only from BOM components with effectivity dates that are within the effectivity dates assigned to the item and the processing options.
- The Effective From date in the resource profile is the latest of the dates in the processing option, the BOM, or the routing Effective From dates.
- The resource profile Effective Through date is the earliest of the dates in the processing option, the BOM, or the routing Effective From dates.

The following graphic illustrates all the BOMs and routings with effectivity dates that are within the Effective From and Effective Through dates.



## Before You Begin

- Enter all applicable bills of materials, work centers, and routings. See *Entering Work Centers in the Product Data Management Discrete Manufacturing Guide*.

## Processing Options

See [Resource Profile Regeneration \(P3365\)](#).



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# Generate Resource Requirements Plans

## Generating Resource Requirements Plans



From Resource & Capacity Planning (G33), choose **Periodic Resource Planning**  
From Periodic Resource/Capacity Planning (G3321), choose **Resource Requirements Plan**

After you have entered resource units and resource profiles, you run the program that generates the resource requirements plan to obtain long-range estimates of the capacity needs at your work centers, such as:

- The number of production staff that you need to hire now to meet future production needs
- The number of additional machines you will need for a new product line
- What real estate you will need to buy for additional facilities

Because you use the forecast in place of work orders for long-range planning, the data that this program creates is an estimate of capacity needs based on the forecast. The resource profile offsets required dates for capacity.

The types of data you can create include:

- Over- or under-capacity messages
- New load profile information based on the type of work center load:
  - Rated profile is the available units from the Resource Units table (F3007).
  - Loaded profile is the forecasted load derived from the master planned items' forecasts and their resource profiles.
  - Percent resource used is the loaded profile divided by the rated profile.
  - Resource available is the rated profile minus the loaded profile
  - Accumulated resources available is a running total of the resources available
- Period summaries about work centers

### Before You Begin

- Verify that resource units exist for all work centers in your facility. See *Determining Available Capacity*.
- Verify that resource profiles exist for all master schedule items. See *Determining Long-Range Load*.

- Verify that the resource profile is set up for the appropriate units of measure. You can use a maximum of five units of measure. See *Determining Long-Range Load*.
- Create a detail forecast for the master scheduled items using Enter/Change Forecasts. See *Working with Detail Forecasts* in the *Forecasting Guide*.
- Determine which forecast types you want to use in the generation. You can use a maximum of five. See *Setting Up Summary Forecasts* in the *Forecasting Guide*.
- Set up the shop calendar for all summary time periods for which you want to generate RRP. See *Setting Up the Shop Floor Calendar* in the *Shop Floor Control Discrete Manufacturing Guide*.

## See Also

- *Reviewing Resource Requirements Plans (P3313)*

## Processing Options

See [Resource Requirements Planning \(P3380\)](#).

## Data Selection for Critical Work Centers

The options you have for data selection determine whether to process only critical work centers or to process all work centers. The choices in the Critical Work Center data selection option are:

Option	Description
N	Process only non-critical work centers
1	Process critical work centers in calculating Resource Requirements Planning only
2	Process critical work centers in calculating Resource Requirements Planning and Capacity Requirements Planning
4	Not a Capacity Work Center (will not be generated in the Capacity Planning System)

The system also displays Type 3 work centers whenever you select Type 1 or Type 2.

## Data Selection for Branch/Plant and Dispatch Group

You can select the following data for planning facilities and dispatch groups:

- A specific planning facility and/or the dispatch groups
- A group of planning facilities and/or the dispatch groups using the \*RANGE or \*VALUE

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# Review Resource Requirements Plans

## Reviewing Resource Requirements Plans

When you generate a resource requirements plan, the system creates a time series that shows the load during each planning period for a work center. You can view the time series as a spreadsheet or as a graphical display. If you have organized several work centers as a dispatch group according to common functions, similar operations, or steps in routing, you can view the group to see how the production plan affects capacity of the work centers as a group.

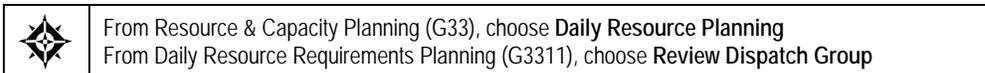
Complete the following tasks:

- [Reviewing Dispatch Groups for Resource Requirements Planning](#)
- [Reviewing Work Center Load for Resource Requirements Planning](#)
- [Reviewing Period Summaries](#)
- [Reviewing Message Detail](#)
- [Validating Resource Requirements Plans](#)

You can review summaries of each period to determine the load that is placed on a work center by each item or order. You can also review messages for each work center and delete, clear, or hold messages.

If the system encounters over- or under-capacity conditions, you can review the plan and identify the periods or work centers in which the conditions occur. It might be necessary to adjust the forecast or capacity and generate the RRP again.

## Reviewing Dispatch Groups for Resource Requirements Planning

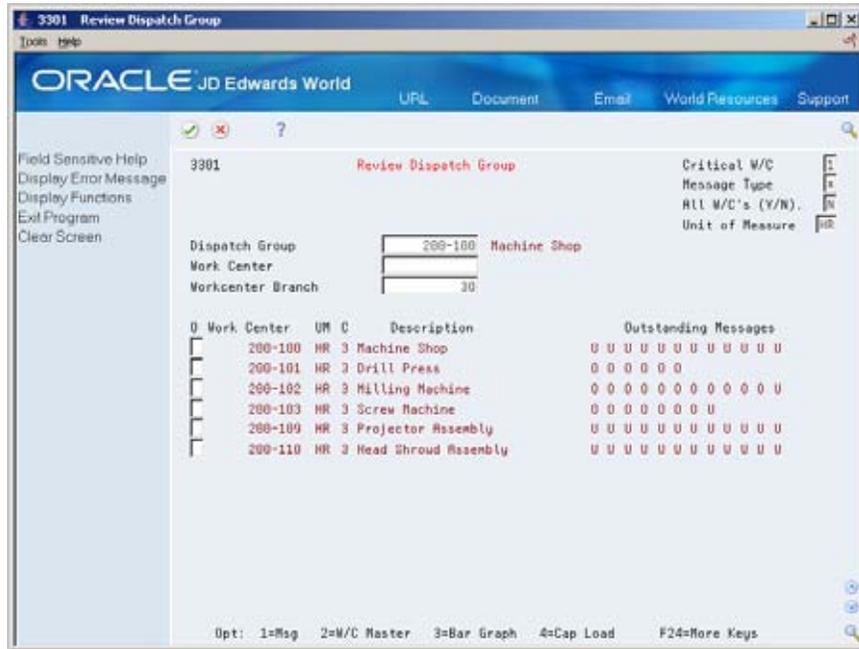


If you have several work centers that are organized as a dispatch group, you can view the group to determine how capacity affects all of the work centers in the group. Dispatch groups enable you to organize work centers according to common functions, similar operations, or steps in routing.

When you review dispatch groups, you can also review messages about all the work centers in the group and use that information to redistribute the load within the group.

## To review dispatch groups for Resource Requirements Planning

### On Review Dispatch Group



1. Complete the following field:
  - Dispatch Group
2. Complete the following optional fields:
  - Critical Work Center
  - Message Type
  - Unit of Measure
  - Work Center Branch
3. Review the following field:
  - Outstanding Messages

Field	Explanation
Message Type	<p>A code that distinguishes different messages generated in the Distribution Requirements Planning/Master Production Schedule/Material Requirements Planning system. Valid codes are:</p> <p>A Warning messages (user controlled)</p> <p>B Order and expedite</p> <p>C Cancel</p> <p>D Defer</p> <p>E Expedite</p> <p>F Frozen order (user controlled)</p> <p>G Increase order quantity to (user controlled)</p> <p>H Decrease rate quantity to</p> <p>I Increase rate quantity to</p> <p>L Decrease order quantity to (user controlled)</p> <p>M Manual reminder</p> <p>N Create rate</p> <p>O Order</p> <p>P Firm order</p> <p>S FPO adjustment suggestion</p> <p>T Past due order</p>
Workcenter Branch	This is the branch/ plant to which the work center belongs and must exist in the business unit master (F0006) and branch plant constants file (F41001).

## Processing Options

See [Message Inquiry \(P3301\)](#).

## Reviewing Work Center Load for Resource Requirements Planning

	<p>From Resource &amp; Capacity Planning (G33), choose <b>Daily Resource Planning</b></p> <p>From Daily Resource Requirements Planning (G3311), choose <b>Review Work Center Load</b></p>
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You can review the capacity load at each work center. Use this information to determine whether to adjust capacity or the forecast.

You can view the time series as a spreadsheet or as a graphical display. The spreadsheet provides a numerical breakdown, by planning period, of the load placed on a work center. The bar graph provides the same information as the Review Work Center Load screen. The graph uses time series information from Resource Requirements Load to generate the comparison. The capacity load at the work center displays for each planning period based on several calculations.

Complete the following tasks:

- Review the work center load as a spreadsheet
- Review the work center load as a graph

## Before You Begin

- Verify that your resource units and resource requirements plan are current

To review the work center load as a spreadsheet

On Review Work Center Load

Description	01/31/17	02/28/17	03/31/17	04/30/17	05/31/17	06/30/17
Rated Profile	336	320	352	352	336	352
Loaded Profile	315	305	306	457	310	399
% Resource Used	94	120	110	130	95	113
Resource Available	21	65-	34-	105-	18	47-
Accum. Resource Avail	21	44-	77-	182-	164-	211-

1. Complete the following field:

- Work Center

2. Review the following fields:

- Unit of Measure
- Description

Field	Explanation
Work Center	<p>An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, or branch/plant.</p> <p>You can assign a business unit to a voucher, invoice, fixed asset, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department.</p> <p>Security for this field can prevent you from locating business units for which you have no authority.</p> <p><b>Note:</b> The system uses this value for Journal Entries if you do not enter a value in the AAI table.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>You enter the work center for which you want to display the capacity load.</p>

## What You Should Know About

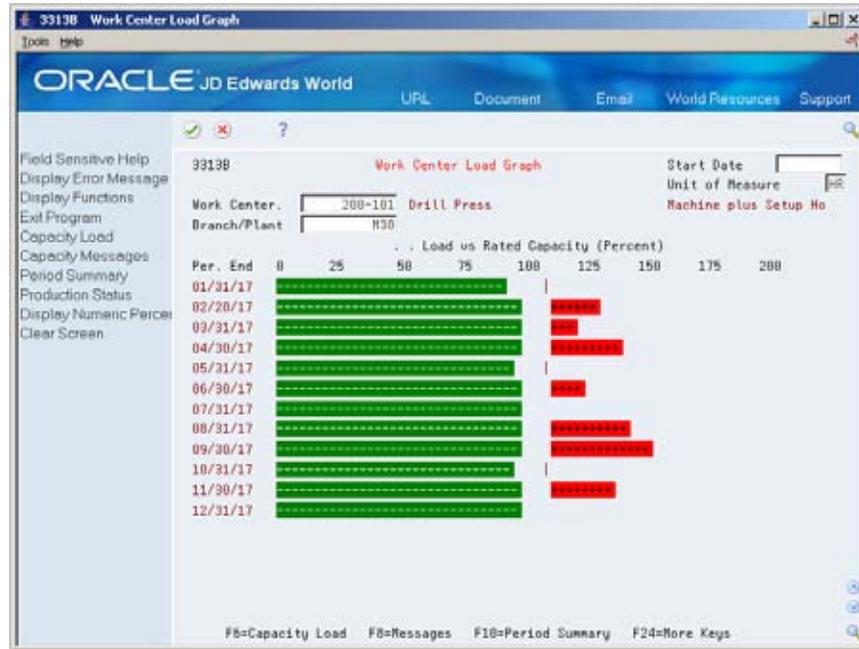
<b>Prime load code</b>	The entry in the Prime Load Code field on Enter/Change Work Center determines the type of load. For example, if you have entered machine and setup hours as the prime load code, the numbers that appear will be different than if you entered machine hours only.
<b>Resource offset</b>	The demand is offset by the number of days set on the Resource Profile screen.
<b>Type of load</b>	<p>The type of load is determined by the prime load code. Calculations for the types of load are:</p> <ul style="list-style-type: none"> <li>▪ Rated profile - The amount of capacity available for a work center.</li> <li>▪ Loaded profile - The capacity that is required to meet the forecast. Loaded profile = (Forecast quantity x labor or machine hours) / (efficiency x utilization) x Time Basis Code</li> <li>▪ Percent resource used - The loaded profile divided by rated profile.</li> <li>▪ Resource available - The rated profile minus the loaded profile.</li> <li>▪ Accumulated resource available - A running total of resource available.</li> </ul>

## Processing Options

See [Load \(P3313\)](#).

## To review the work center load as a graph

### On Work Center Load Graph



1. Complete the following field:
  - Work Center
2. Review the following field:
  - Unit of Measure
3. On Capacity Load Percent, review the amount of load.

## What You Should Know About

**Over-capacity work centers** The system displays the portion of the bar graph that is over 100% in a color different from the portions less than 100%.

## Processing Options

See [Load Bar Graph \(P3313B\)](#).

## Reviewing Period Summaries



From Resource & Capacity Planning (G33), choose **Daily Resource Planning**  
 From Daily Resource Requirements Planning (G3311), choose **Review Period Summary**

In addition to reviewing the capacity load of a work center, you can also evaluate the load that is placed on a work center by period and by item. You can review period summaries either online or on a printed report. You can review:

- The items that are scheduled for a work center.
- The number of units of an item that make up the load.
- The percent of the total load on the work center that is for a specific item's forecast. This is the percent of the total load planned for the work center that the item consumes. The system summarizes the load by the period using the unit of measure that you specify.

You use this information to determine whether to adjust the forecast or the capacity at the work center.

## To review period summaries

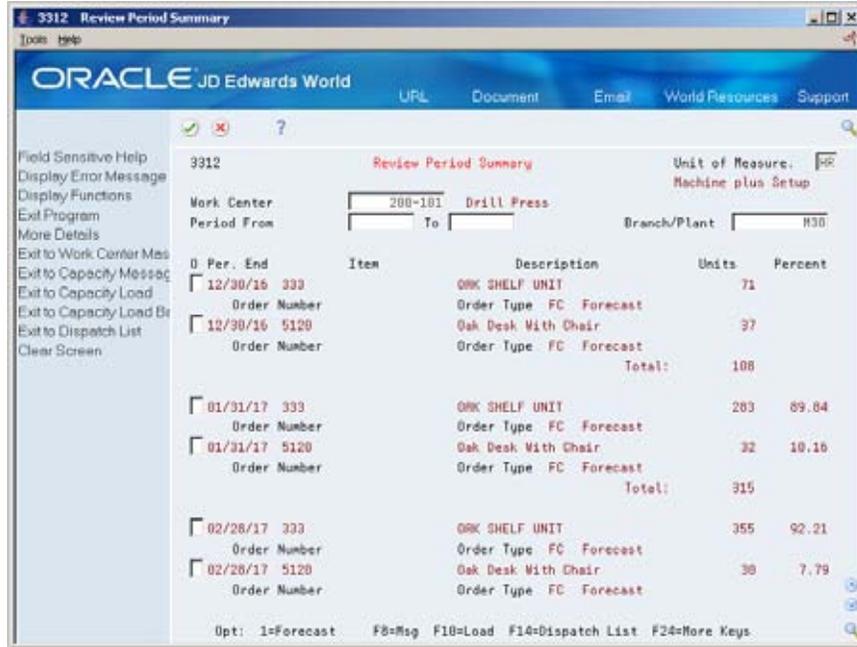
### On Review Period Summary

Per. End	Item	Description	Units	Percent
12/30/16 333	ORK SHELF UNIT		71	
12/30/16 5120	Oak Desk With Chair		37	
		Total:	100	
01/31/17 333	ORK SHELF UNIT		203	89.84
01/31/17 5120	Oak Desk With Chair		32	10.16
		Total:	315	
02/28/17 333	ORK SHELF UNIT		355	92.21
02/28/17 5120	Oak Desk With Chair		30	7.79
		Total:	385	
03/31/17 333	ORK SHELF UNIT		355	91.97
03/31/17 5120	Oak Desk With Chair		31	8.03
		Total:	386	
04/30/17 333	ORK SHELF UNIT		424	92.78
04/30/17 5120	Oak Desk With Chair		33	7.22
		Total:	457	
05/31/17 333	ORK SHELF UNIT		282	88.68

1. Complete the following field:
  - Work Center
2. Complete the following optional fields:
  - Unit of Measure
  - Period From - To
3. Review the following fields:
  - Period End
  - Item
  - Units

- Percent Completed
- Total

4. Access the detail area (F4).



5. Review the following field:

- Order Number

Field	Explanation
Period From	A number that identifies either a fiscal period (numbers from 1 to 14) or a beginning date. The information displayed begins with this date or period. If you leave this field blank, the system displays all transactions up to the Thru Date. Totals are for the transactions displayed.
To	A number that either identifies the period number or date for which you want to review information. If you leave this field blank, the system uses the end date of the current period for the company that contains the business unit. Valid period numbers are from 1 through 14.  <i>Form-specific information</i> If you leave this field blank, the system displays all orders since the From date.
Per. End	The date that an item is to arrive or that an action is to be complete.
Units	The quantity of units affected by this transaction.
Percent	The percentage of the planned amount that has been completed.

## Processing Options

See [Period Summary \(P3312\)](#).

## Reviewing Message Detail

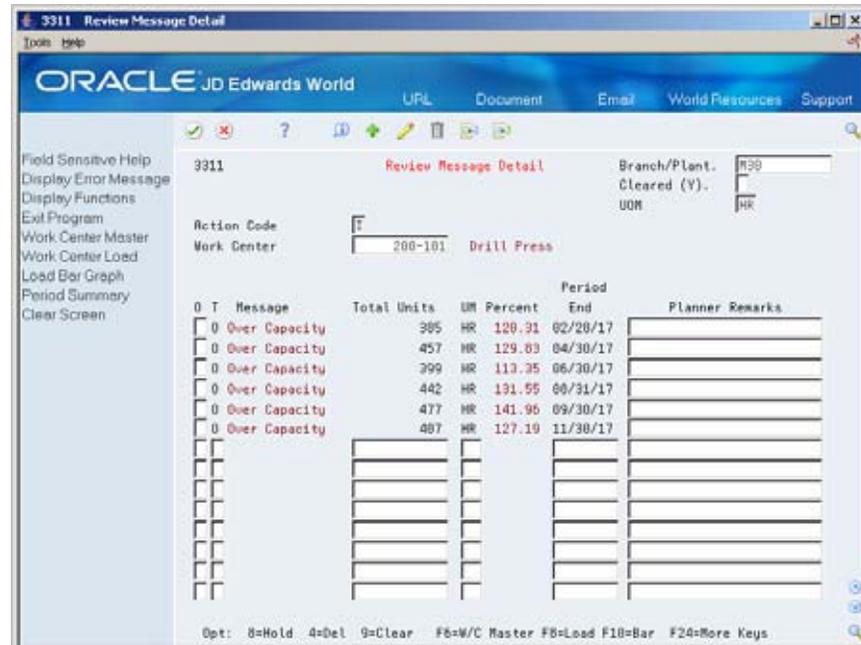
	From Resource & Capacity Planning (G33), choose <b>Daily Resource Planning</b> From Daily Resource Requirements Planning (G3311), choose <b>Review Message Detail</b>
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Each time you generate a resource requirements plan, the system creates messages to identify work centers whose loads are in conflict with planned capacity. Review Message Detail indicates whether you have over-load or under-load conditions. It displays messages for each work center alphabetically by message type.

Use Review Message Detail to delete, clear, or hold messages. You can add remarks for each message as a record for the actions you take. In addition, you can access related screens to confirm or change dates, amounts, and key plant manufacturing data for the work center.

### To review message detail

On Review Message Detail



O T Message	Total Units	UM Percent	Period End	Planner Remarks
<input type="checkbox"/> 0 Over Capacity	385	HR 120.31	02/20/17	
<input type="checkbox"/> 0 Over Capacity	457	HR 129.03	04/30/17	
<input type="checkbox"/> 0 Over Capacity	399	HR 113.35	06/30/17	
<input type="checkbox"/> 0 Over Capacity	442	HR 131.55	08/31/17	
<input type="checkbox"/> 0 Over Capacity	477	HR 141.96	09/30/17	
<input type="checkbox"/> 0 Over Capacity	487	HR 127.19	11/30/17	

1. Complete the following field:
  - Work Center
2. Review the following fields:

- Message Type
- Message
- Total Units
- Unit of Measure
- Percentage
- Period End
- Planner Remarks

Field	Explanation
Total Units	This field displays the unit quantities making up the load and resources used for each period shown in the time series for DRP/MPS/MRP and CRP.
Planner Remarks	A brief description of an item, a remark, or an explanation. <i>Form-specific information</i> You can use this field to enter a brief note or comment about each message.

## What You Should Know About

<b>Retrieving cleared messages</b>	When you clear or delete messages, the system no longer displays them on the Review Message Detail screen. Enter a Y in the Cleared (Y) field to retrieve cleared messages.
<b>Held messages</b>	The system retains held messages until you manually clear or delete them. When you generate the Rough Cut Capacity Plan or Capacity Requirements Plan programs, the system deletes all current non-held messages.
<b>Deleted messages</b>	You can generate a plan more than once. When you regenerate a resource requirements plan, the system will not delete the following messages: <ul style="list-style-type: none"><li>▪ Manually entered messages</li><li>▪ Messages that you have placed on hold</li></ul>

## Processing Options

See [Message Detail \(P3311\)](#).

## Validating Resource Requirements Plans

Validating the resource requirements plan consists of identifying the overloaded work centers, making adjustments in forecast or resources, and generating the plan again to see if your adjustments distributed the loads among the work centers.

## To validate a resource requirements plan

- 1.** Complete the steps for reviewing the requirements plan.  
*See [Reviewing Resource Requirements Plans](#).*
- 2.** Revise the forecast.  
*See [Revising Summaries of Forecasts in the Forecasting Guide](#).*
- 3.** Complete the steps for generating the requirements plan.  
*See [Generating Resource Requirements Plans](#).*
- 4.** Complete the steps for reviewing the revised requirements plan.  
*See [Reviewing Resource Requirements Plans](#).*
- 5.** Repeat the steps until all loads at each work center are appropriate.



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# Set Up Resource Requirements Plans

## Setting Up Resource Requirements Plans

Before you generate a resource requirements plan, you must define information for processing. The system uses setup information to determine how to select and display data.

Complete the following tasks:

- [Setting Up Resource Requirements Display](#)
- [Setting Up Unit Types](#)

## Setting Up Resource Requirements Display

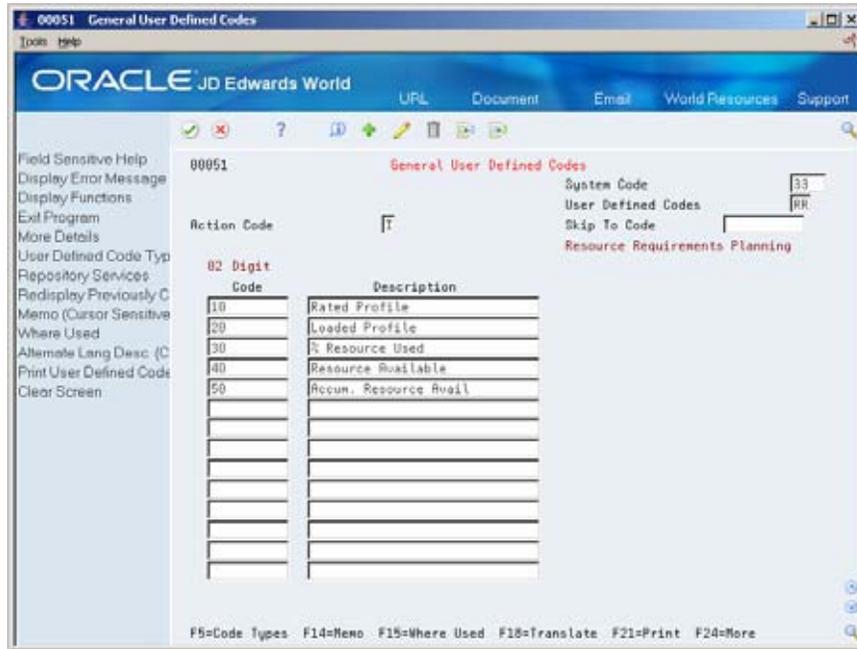


From Resource & Capacity Planning (G33), enter **29**  
From Resource & Capacity Planning Setup (G3341), choose **Resource Requirements Display**

The Resource Requirements Display identifies the types of loads on a work center. You can review these on the Review Work Center Load form. See *Reviewing Work Center Load for Resource Requirements Planning* for more information on the calculations for the types of load.

## To set up resource requirements display

On User Defined Code Revisions/Resource Requirements Planning



Complete the following fields:

- Code
- Description

Field	Explanation
Code	This column contains a list of valid codes for a specific user-defined code list. The number of characters that a code can contain appears in the column title.
Description	A user-defined name or remark.

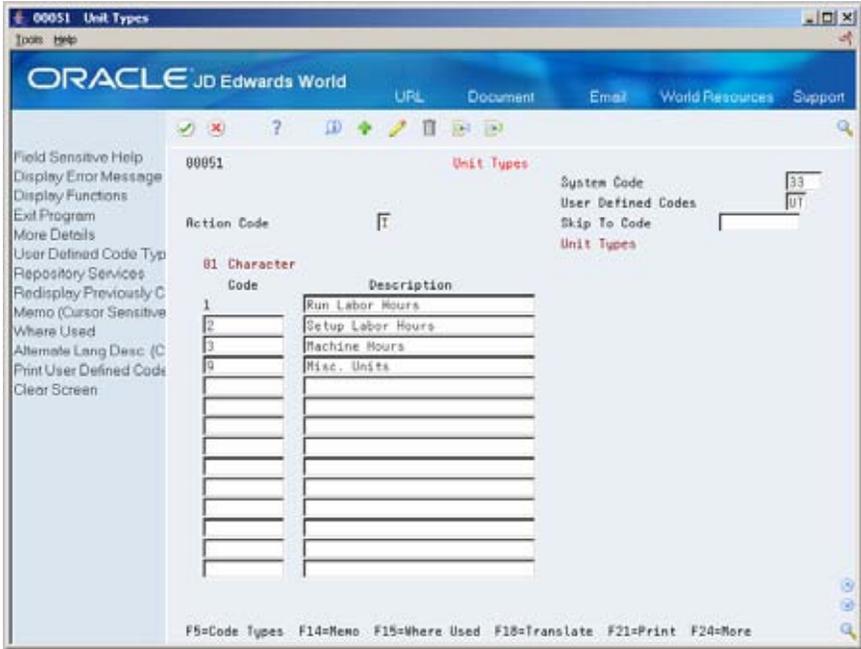
## Setting Up Unit Types

	From Resource & Capacity Planning (G33), enter 29 From Resource & Capacity Planning Setup (G3341), choose Unit Types
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You need to identify all the different types of resource units that can be associated with any work center. Unit types are system 33, type UT UDCs.

### To set up unit types

On User Defined Code Revisions/Unit Types



Complete the following fields:

- Code
- Description



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## **5 Single Level Master Scheduling**



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# Overview to Single Level Master Scheduling

## Objectives

- To create Distribution Requirements Plans (DRP) or Master Production Schedules (MPS)
- To understand the Net Change program
- To read and use time series displays
- To understand time fence rules
- To interpret Ending Available (EA), Available to Promise (ATP), Cumulative Available to Promise (CATP), and Forecast Consumption (FCP) calculations
- To review and process action messages
- To process purchase orders with or without blanket order check
- To consolidate messages and purchase orders
- To add a freeze code on purchase orders and work orders
- To use Rough Cut Capacity Planning (RCCP) to validate the master schedule
- To set up master planning and rough cut capacity displays
- To process work orders

## About Single Level Master Scheduling

A single level master schedule is a statement of what the company expects to produce based on the tactical plan and budget constraints.

A master scheduled item is critical in its impact on lower-level components or resources, such as skilled labor, key machines, or revenues. Single level implies master scheduling at the end deliverable item level.

The master scheduling process consists of:

- Determining what you need (forecast, customer orders, and interplant demands)
- Subtracting what you have (inventory, purchase orders, and work orders)
- Calculating net requirements and when you need them

You can generate master planning for all items or for a net change generation, which includes only items that have been affected by transactions since the last generation. After you generate DRP/MPS output, you can review and respond to messages.

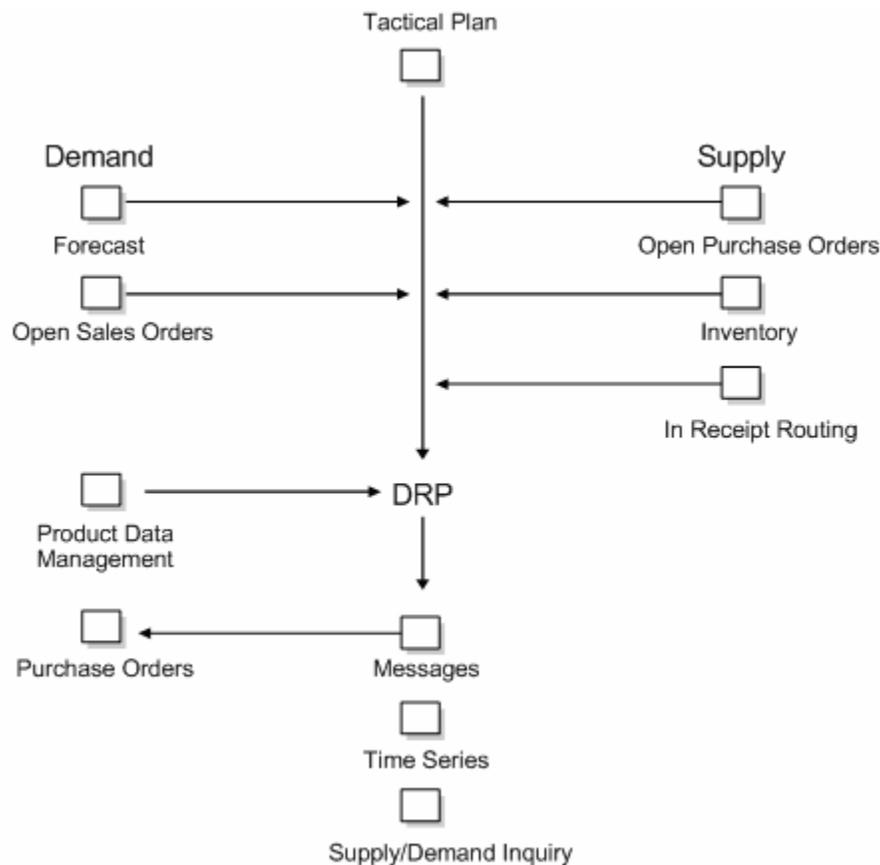
Master scheduling consists of the following:

- Understanding time fences and system messages
- Generating single level master schedules
- Understanding forecast consumption
- Working with master schedules
- Validating master schedules
- Setting up DRP, MPS, and RCCP
- Processing orders

## Master Scheduling Applications

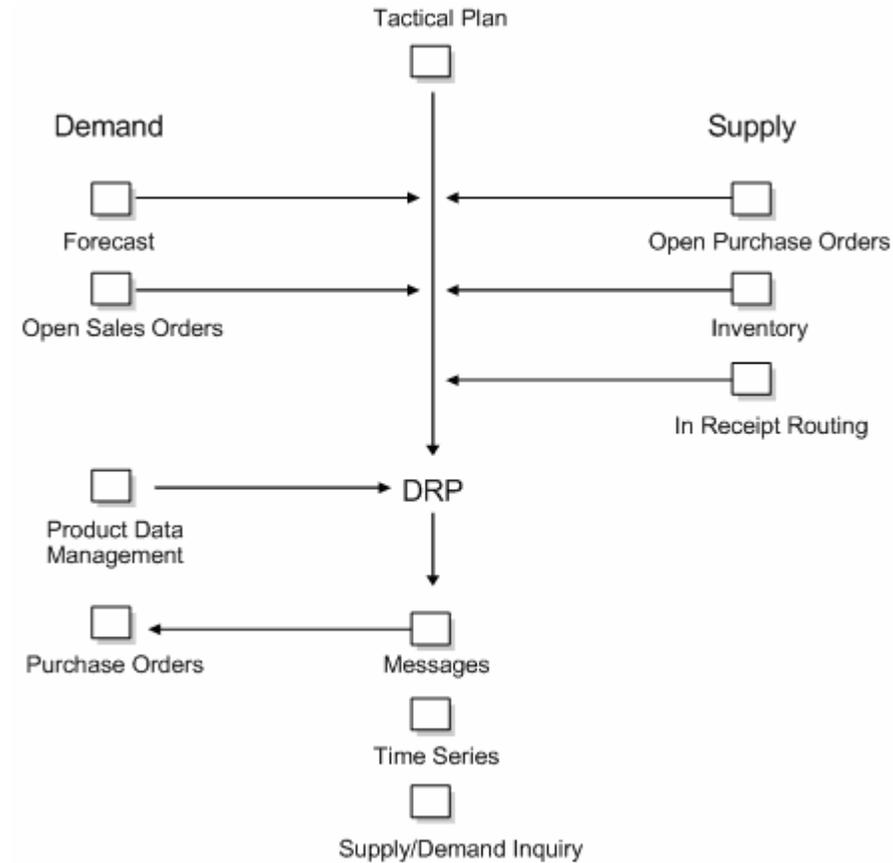
### DRP and Purchased Items

For distribution businesses, DRP provides centralized control of distribution inventories and creates a coordinated replenishment plan.



## MPS and Manufactured Items

You use MPS to generate the master schedule for manufactured items. JD Edwards World systems plan replenishment for both purchased items and manufactured items in the same generation program. Processing options control how the system runs the generation.





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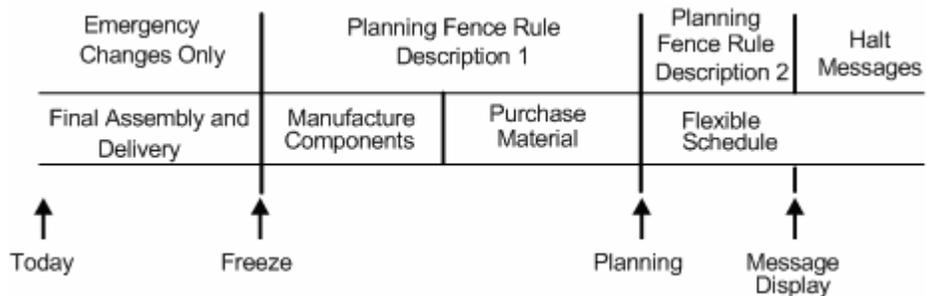
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# Understand Time Fences and System Messages

## About Time Fences

Time fences are points in time in which you can make changes to either policy or operating procedures. JD Edwards World software includes three fences:

- Freeze
- Planning
- Message Display



Fence	Description
Freeze Fence (F)	<p>A freeze fence holds, or freezes, the master schedule. In doing so, the system does not generate any planned orders from the current date to the number of days set in the field. This enables the master scheduler to review the schedule and make adjustments manually if required. The system allows the schedule to be “frozen.”</p> <p>In addition, the system does not generate any messages that require action on existing work orders (such as an expedite message) within the frozen period of time. It displays warning action messages.</p> <p>JD Edwards World recommends that you set this fence at a point in time in which you need to freeze the MPS, depending on the nature of your product and the nature of the business environment.</p>

Fence	Description
Planning Fence (P)	<p>A planning fence controls how the system uses the demand from forecast and customer orders in the ending available (EA) calculation. This fence also indicates where the method used to calculate ending available inventory changes from the demand rule in “Description 1” to “Description 2.”</p> <p>For planning purposes, JD Edwards World recommends that you set the planning fence at a point from the current date that equals at least 1-1/2 times the cumulative lead time. This will depend upon the business environment and the nature of the product. Once inside the planning fence, you have committed resources to the product line.</p>
Message Display Fence (D)	<p>A message display fence suppresses action messages beyond the number of days that you selected from the current date. When you set this fence, calculations are not affected.</p> <p>JD Edwards World recommends that you set the message display fence at the point in which you do not need to act on action messages, depending on the cumulative lead time of the product and the business environment.</p>

## What Are Time Fence Rules?

When you use a planning time fence rule that calculates an ending available that is based on the greater of forecast or customer demand, the forecast is “consumed.” For rules C and G, this means that the forecast is reduced by the amount of the customer demand on that same time bucket. The system displays all adjusted and unadjusted values. In the previous table, this applies to rules C, G, and H.

JD Edwards World software uses the following planning time fence rules:

Rule	Description
Rule C	<p>Description 1 Customer demand</p> <p>Description 2 Whichever is greater, forecast or customer demand</p>
Rule F	<p>Description 1 Forecast</p> <p>Description 2 Forecast plus customer demand</p>
Rule G	<p>Description 1 Whichever is greater, forecast or customer demand</p> <p>Description 2 Forecast</p>

Rule	Description
Rule H	Description 1 Whichever is greater, forecast or customer demand <b>Note:</b> When you use planning fence rule H, JD Edwards World recommends that you set the Planning Fence field on the Plant Manufacturing Data screen to the end of the planning horizon.
Rule S	Description 1 Customer Demand Description 2 Forecast
Rule 1	Description 1 Zero Description 2 Forecast
Rule 3	Description 1 Zero Description 2 Forecast plus customer demand

## What Are the Time Series Calculations?

The Manufacturing and Distribution Planning systems provide four different time series calculations. These are:

- Ending Available
- Available to Promise
- Cumulative Available to Promise
- Forecast Consumption

### Example: Ending Available Calculation

Ending Available (EA) is the amount of product available at the end of a time bucket after the system calculates the effect of all supplies and all demands for the time bucket.

The system uses the planning time fence rule and the following formula to calculate the ending available amount:

- Add within the time bucket:
  - Beginning Available (+BA)  
 For the first weekly time period, +BA = quantity on hand - safety stock

For remaining time periods, +BA = Ending Available from the previous time period (=EA)

- Subtract according to the planning time fence rule:
  - Forecast (-FC)
  - Customer Demand (sales orders and interplant demand)
- The remainder is the ending available (EA)

The following table shows how the system calculates the amount of product available at the end of a time period. Assume that the Lot Size = Lot for Lot, Planning Time Fence Rule = C.

Periods								
On Hand = 80	1	2	3	4	5	6	7	8
+BA	80	60	45	45	20	20	20	20
-FC	20	20	20	20	20	20	20	20
-SO	20	15		40			45	
-PO								
=EA	60	45	45	20	20	20	20	20
+DRP				15	20	20	45	20
(Order Start)			15	20	20	45	20	

### Available to Promise Calculation

Available to Promise (ATP) is the uncommitted portion of a company’s inventory or planned acquisitions.

Available to Promise uses actual customer orders to identify inventory that might be promised to a customer. The planning time fence rule has no effect on ATP. Forecast is never included in ATP calculations.

The system uses the following formula to calculate the ATP quantity:

- First period ATP = on-hand balance + work orders + purchase orders + planned orders - sales orders - work order parts list demand - interplant demand - unconsumed expired lot quantities.
- After the first period, ATP = work orders + purchase orders + planned orders - sales orders - work order parts list demand - interplant demand - unconsumed expired lot quantities.

The system does not display negative ATP for following periods. However, the system reduces the Cumulative Available to Promise (CATP) by the negative amount.

## Cumulative Available To Promise Calculation

Cumulative Available to Promise (CATP) is a running total of the ATP.

The system calculates CATP as follows:

- First period CATP = ATP in first period - all negative ATP.
- CATP in subsequent periods = sum of previous ATP + current period ATP - total negative ATP in future periods.

After the first period, CATP = sum of previous ATP + current period ATP - total negative ATP in future periods.

## About System Messages

After you generate DRP/MPS output, the system creates action messages that:

- Alert the master scheduler of possible adverse conditions
- Display action recommendations that the master scheduler can process

The system displays messages by type. You can identify which items require attention based on the following message types:

Message Type	Description
A	Warning Message – User controlled
B	Order and Expedite
C	Cancel
D	Defer
E	Expedite
F	Frozen
G	Increase Order Quantity To
H	Decrease Rate Quantity To
I	Increase Rate Quantity To
L	Decrease Order Quantity To
M	Manual Reminder
N	Create Rate
O	Order
P	Firm Order
S	FPO Adjustment Suggestion

<b>Message Type</b>	<b>Description</b>
T	Past Due Order

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# Generate Single Level Master Schedules

## Generating Single Level Master Schedules

You can regenerate a master schedule for a single item or all items. When you generate a master schedule, the system evaluates selected information, performs calculations, and recommends a time-phased planning schedule for all selected items. You should run MPS weekly, at a minimum, to keep the plan current.

You can use net change processing to include only items that have changed since the last generation. Use Net Change Review to determine which items to include in the net change generation.

Complete the following tasks:

- [Generating a Master Schedule for All Items](#)
- [Reviewing Items for Master Schedule Selection](#)
- [Generating a Master Schedule for Selected Items](#)

## Before You Begin

- Generate a forecast for independent demand items. See *Generating Detail Forecasts in the Forecasting Guide*.

## Net Change Flag Update

The net change flag in the Item Branch table (F4102) is activated by any transaction that causes a change in supply or demand during the next MRP run. Examples include:

- You have taken action on an order message, and the quantity, start date, or requested date changes.
- You have taken action on an Expedite or Defer message, and the recommended start date or recommended requested date is processed.
- You cancel an order.

## Net Change Flag Control

The following is a list of programs that automatically activate the net change flag:

Program	Description
Parts List Revisions	Any addition, change, or deletion activates the flag for that item. If a branch is changed for an item, the system updates both old and new locations.
Parts List Substitutes	Any selection activates the flag for both the selected item and the item being substituted.
Work Order Entry	Any addition or deletion activates the flag for the item. If you change an item request date or quantity, the system activates the flag for the item. If an item status changes to 99, and the quantity ordered is not equal to the quantity completed, the system activates the flag for that item. If a branch is changed for an item, both the old and new locations are updated.
Work Order Inventory Issues	The flag is activated only on overissues.
Work Order Inventory Completions	If an item status changes to 99, and the quantity ordered is not equal to the quantity completed, the system activates the flag for that item.
Inventory Adjustments	The system activates the flag for any item whose inventory has been adjusted.
Inventory Transfers	When inventory is transferred from one branch to another, the system activates the flag for the affected items in both locations.
Bill of Materials Master	Any addition or deletion of a component item activates the flag for the parent of the changed component. If the item, quantity per, scrap, or effectivity dates change for any component item, the system activates the flag for the parent of that component.
Message Where Used Update	Any change to a component item activates the flag for the parent of the changed component.
Detail Message Review	If you take action on an order message and the quantity, start date, or request date changes, the system activates the flag for the item. If you take action on an expedite or defer message and the recommended start date or recommended request date changes, the system activates the flag for the item.
Forecast Revisions	Any addition, change, or deletion activates the flag for the affected item.
Manufacturing Data Revisions	Any addition, change, or deletion activates the flag for the affected item.

Program	Description
Repost Open Quantities	A repost cancels the commit component inventory on work orders that have a status equal to the status indicated in the processing option (usually status 99).
Leadtime Rollup	This program can change critical manufacturing data in the Item Branch table.
Sales Order Entry	Any addition, change, or deletion activates the flag for the affected item.
Purchase Order Entry	Any addition, change, or deletion activates the flag for the affected item.
Net Change Review	Any manual update to the Net Change field activates the flag for the affected item.

## Generating a Master Schedule for All Items

	From Material Planning Operations (G34), choose <b>Single Site Planning</b> From Single Site Periodic Planning (G3422), choose <b>DRP or MPS Regeneration</b>
---	--

DRP and MPS regenerations use the same report writer to produce a single level DRP or MPS schedule for all items that meet the data selection criteria. The program:

- Reads the selected forecast or sales orders
- Uses data from the DRP/MPS/MRP inclusion rules to calculate requirements for master planned items
- Does not explode planned orders to the bill of material components

You can also generate a master schedule for items using forecast consumption planning rule H. Forecast consumption occurs when forecasted demand is reduced by actual sales orders received or shipped up to the forecasted quantity. By consuming the forecast, you can revise your production schedules to reflect the most up-to-date information.

Before the program generates a schedule, it deletes the message and time series tables for the selected items.

### See Also

- *Understand Forecast Consumption*

### Data Selection

Base your selection on branch/plant, category codes (usually Master Planning Family), and planning code. Any selection from based-on table fields can be processed.

## Data Sequence

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**Caution:** Copy the data sequence from the DREAM Writer example. Do not change this sequence or unpredictable results might occur.

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## Processing Options

See [Gross Regeneration \(P3482\)](#).

## Reviewing Items for Master Schedule Selection

	From Material Planning Operations (G34), choose <b>Single Site Planning</b> From Single Site Periodic Planning (G3422), choose <b>Net Change Review</b>
---	--

Use the Net Change Review program to review items that have changed, either through certain planned or unplanned activities, throughout the Manufacturing and Distribution Planning systems. You can locate a selected group of items by planner number, planning family, branch/plant, and specific planning codes. You can access related time series, inventory, and scheduling information screens for any of the items.

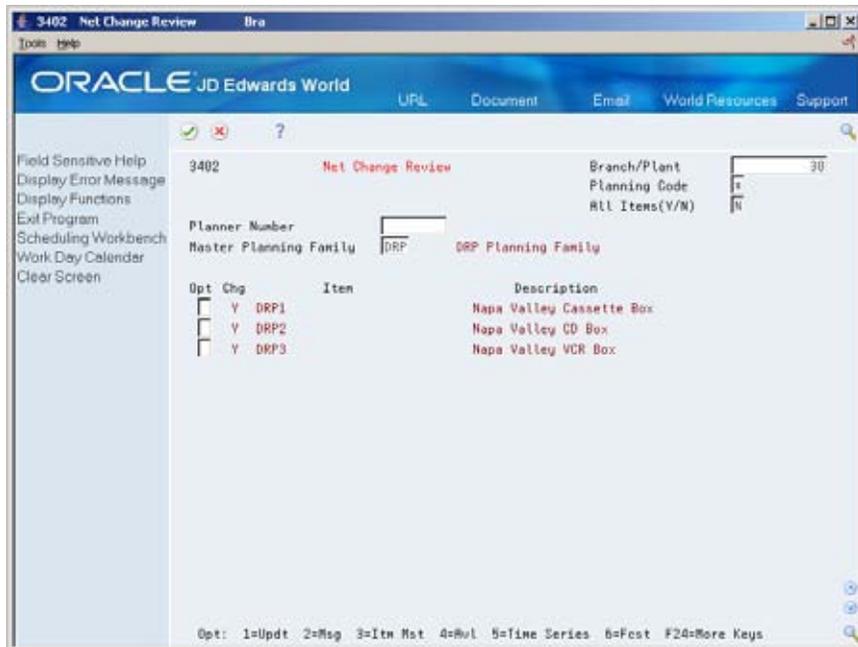
---

**Caution:** This program allows you to set the net change flag. Secure the program so that only a few people, such as master scheduling supervisors, have access.

---

### To review items for master schedule selection

#### On Net Change Review



Opt Chg	Item	Description
<input type="checkbox"/> Y	DRP1	Napa Valley Cassette Box
<input type="checkbox"/> Y	DRP2	Napa Valley CD Box
<input type="checkbox"/> Y	DRP3	Napa Valley VCR Box

To locate the items for net change generation, complete the following fields:

- Branch/Plant
- Master Planning Family

Field	Explanation
Master Planning Family	<p>A code (table 41/P4) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p>

## Processing Options

See [Net Change Review \(P3402\)](#).

## Generating a Master Schedule for Selected Items



From Material Planning Operations (G34), choose **Single Site Planning**  
 From Single Site Periodic Planning (G3422), choose **DRP or MPS Net Change**

DRP and MPS net change use the same batch program as the DRP and MPS regenerations. You can further define the data selection to include only specific items on the Net Change Review screen. When you run DRP Net Change or MPS Net Change, the system:

- Evaluates selected information
- Performs calculations
- Generates a time series and messages for the selected items

The system bases item selection from Net Change Review on the following types of activities:

- Bill of material changes
- Inventory transactions
- Forecast adjustments
- Work order changes
- Purchase order changes
- Leadtime rollup that results in new leadtime values
- Sales order changes
- Changes in parent order requirements

You should run Net Change on a regular basis to continually update your schedule. The program writes to the Action Message, Pegging, and Time Series tables. You can

view the information that is generated by this program online by using the time series and message review programs.

## See Also

- *Generating Master Schedules for All Items (P3482)* for the processing options for this program

## Data Selection Values

The data selections are similar to the DRP/MPS generation, except for the net change flag. Set this flag to '1' to select items that have changed since the last generation of the program.

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# Working with Forecast Consumption

## About Forecast Consumption

Forecast consumption logic takes into account forecasts and total customer sales including shipments when planning, and uses whichever is greater to calculate requirements within user defined periods. Open sales orders and shipments “consume” the forecast until sales quantities exceed forecast quantities, at which point, the excess sales order demand drives requirements planning.

## Setting Up Forecast Consumption

In order to use forecast consumption, you must set up the following in the system.

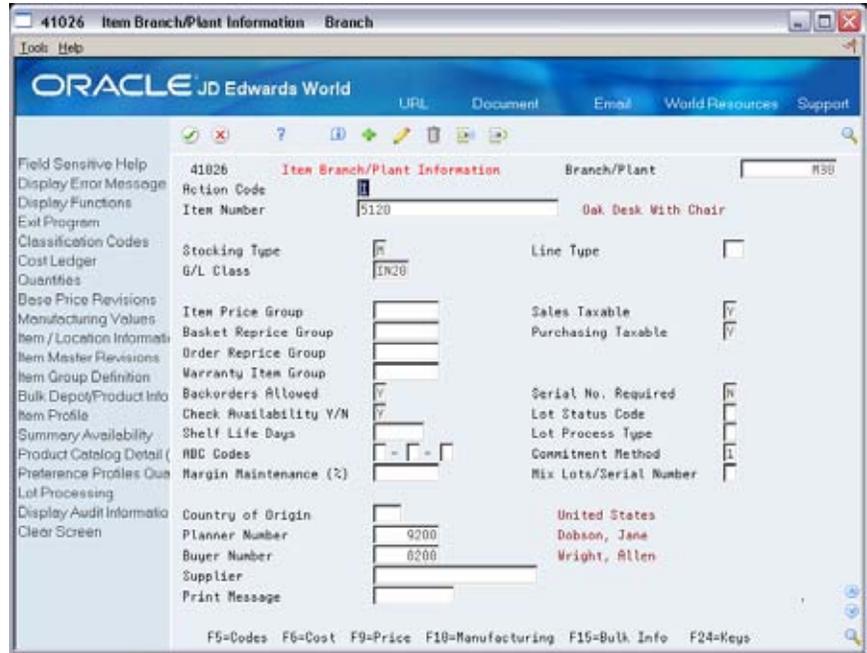
- Planning fence information in the Item/Branch Plant
- Sales order document type(s) in the UDC table 40/CF
- Forecast Consumption Periods
- Processing Options – Planning Generation
- Processing Options – Time Series

## Adding Planning Fence Information

To enter planning fence information in the Item Branch/Plant

	From Inventory Management (G41), choose <b>Inventory Master/Transactions</b> From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b>
---	---

On Item Branch/Plant Information



1. Choose Manufacturing (F10) to display the Plant Manufacturing Data – Branch screen.

2. Enter H in the following field:
  - Planning Fence Rule
3. Enter the number of days greater than or equal to the planning horizon in the following field:
  - Planning Fence

For example, with planning horizon periods set for 12 monthly buckets, set Planning Fence field to at least 366.

## Adding Sales Order Document Type

To add a sales order document type to the UDC table

	From (G00), choose General User Defined Codes
---	---

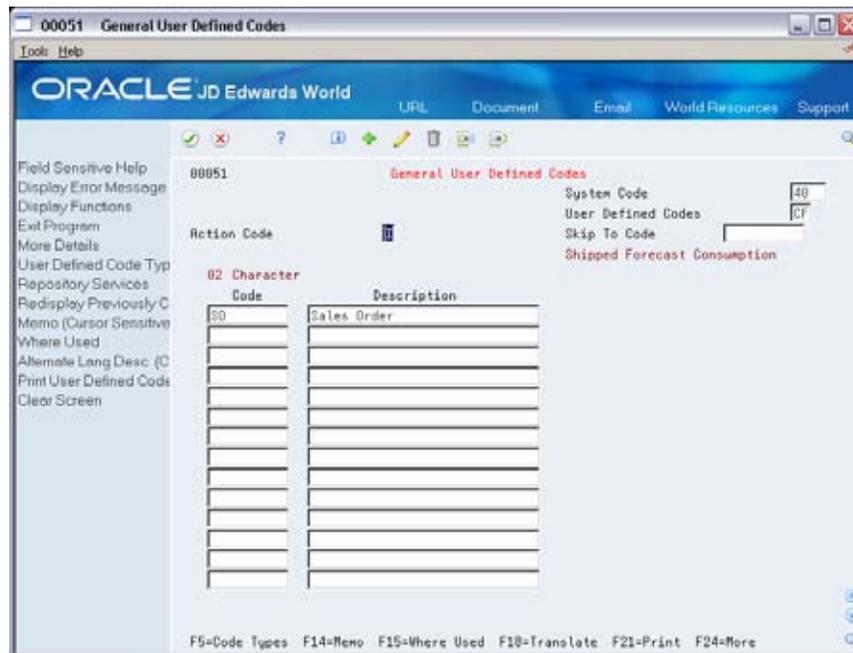
All sales order document types selected in the inclusion rules specified in planning program processing options need to be specified on this 40/CF UDC table if using forecast consumption. When an order is ship confirmed, if the document type is set up in this table, the quantity is written to the Forecast Shipment Summary file (F3462) and these quantities continue to consume forecast in the appropriate period (-SHIP appears on the time series) until their scheduled pick date is prior to the current forecast consumption period.

---

**Note:** If a sales order document type is added to 40/CF after shipments are made for orders with that doc type, the orders already shipped will not be included in F3462, and therefore the -SHIP for the period in which they were shipped will not appear.

---

## On General User Defined Codes



1. Enter I in the following field:
  - Action Code
2. Enter 40 in the following field:
  - System Code
3. Enter CF in the following field:
  - User Defined Codes
4. Press Enter to inquire on this table.
5. Review or change the following fields, as needed:
  - Code
  - Description

## Defining Monthly Forecast Consumption Periods

In order to use forecast consumption, forecast consumption periods must be defined. These periods determine what forecasts are consumed by what sales orders, depending on where forecasts and sales orders fall within the specified periods.

There are two valid Period Types:

- FC – Forecast consumption period
- TS – Time series bucket

The end date of each forecast consumption period is defined with FC in the Period Type field. When you enter forecast consumption periods, this information will apply system wide, can be any length, and can end on any date. If the end date

entered is a non-workday, the system will use the last workday prior as the end date. The beginning date of a period is the first working day after the prior period end date.

Each period end date forces a time series bucket. When you run Planning Generation, the daily and weekly buckets specified in the planning horizon processing options will appear on the time series, but the months specified will be replaced by forecast consumption periods. The TS period type is used to generate time series buckets when forecast consumption periods are greater than a month.

For example, if quarterly forecast consumption periods are set up without any TS periods, only quarterly time series buckets will be written after any daily and/or weekly buckets. If time series buckets within the forecast consumption periods (i.e. monthly time series buckets within quarterly forecast consumption periods) are required, they are defined by the TS period type.

## To define monthly forecast consumption periods



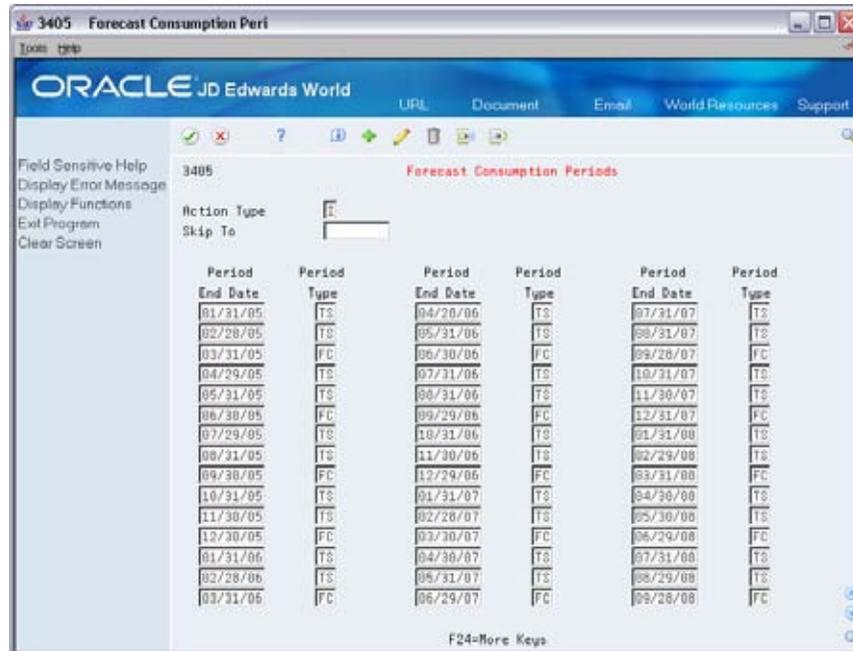
From Material Planning (G34), choose **Hidden Selection 29**  
 From Material Planning Setup (G3440), choose **Requirements Planning Setup**  
 From Material Planning Setup (G3442), choose **Forecast Consumption Periods**

### On Forecast Consumption Periods

1. Complete the following field for each consumption period to add:
  - Period End Date
2. To set up a monthly forecast consumption period, enter FC in the following field:
  - Period Type

Period End Date	Period Type	Period End Date	Period Type	Period End Date	Period Type
04/30/16	FC	07/31/17	FC	10/31/18	FC
05/31/16	FC	08/31/17	FC	11/30/18	FC
06/30/16	FC	09/30/17	FC	12/31/18	FC
07/31/16	FC	10/31/17	FC	01/31/19	FC
08/31/16	FC	11/30/17	FC	02/28/19	FC
09/30/16	FC	12/31/17	FC	03/31/19	FC
10/31/16	FC	01/31/18	FC	04/30/19	FC
11/30/16	FC	02/28/18	FC	05/31/19	FC
12/31/16	FC	03/31/18	FC	06/30/19	FC
01/31/17	FC	04/30/18	FC	07/31/19	FC
02/28/17	FC	05/31/18	FC	08/31/19	FC
03/31/17	FC	06/30/18	FC	09/30/19	FC
04/30/17	FC	07/31/18	FC	10/31/19	FC
05/31/17	FC	08/31/18	FC	11/30/19	FC
06/30/17	FC	09/30/18	FC	12/31/19	FC

3. If the forecast consumption periods are greater than a month, you can generate time series buckets in between period end dates. Enter TS in the following field:
  - Period Type



## Processing Options – Planning Generation

(P3482 or P3483) processing options must have forecast consumption logic turned on and two past due periods selected

Two past due periods are only appropriate in conjunction with forecast consumption logic. The reason two past due buckets are used for forecast consumption is because there are times when the current forecast consumption period will cross over the generation date, leaving part of the period in the past. The Past Due 1 bucket includes supply and demand quantities due prior to the beginning of the current forecast consumption period. The Past Due 2 bucket consists of the period from the beginning date of the current forecast consumption period to the generation date of the planning run. Unlike other planning fence rules, forecasts prior to the generation date are still relevant (within the current forecast consumption period).

See [Master Planning Schedule – Plant Maintenance \(P3482\)](#).

See [Multi-Facility - Gross Regeneration \(P3483\)](#).

## Processing Options – Time Series

To properly view the Time Series (P3413), its processing options must also have two past due periods specified and forecast consumption logic turned on.

See [Time Series \(P3413\)](#).

## Forecast Consumption Example

The following sequence of time series demonstrates the use of forecast consumption logic. For these examples, the planning generation processing options specified two weekly buckets then monthly, the forecast consumption periods were monthly, and quantities were forecasted for the first day of the month.

From a generation on the first day of the month, an unadjusted forecast of 1242 (-FCU) appears in the first weekly bucket. The forecast is consumed by 140 that have already shipped (-SHIP), and the sum of the sales orders within the forecast consumption period which is 650 (-SO) for an adjusted forecast quantity of 452 (-FC). The beginning available quantity of 445 minus adjusted forecast and sales order quantities results in an unadjusted ending available of -657 (=EAU) and a planned order for 657 (+PLO).

	Past Due 1	Past Due 2	01/05/18	01/12/18 L	01/31/18	02/28/18
+BRU	445	445	445	657-	657-	657-
+BR	445	445	445			
-FCU			1242			1052
-FC			452			652
-SHIP			140			
-SOU				500	150	400
-SO			658			400
-EAU	445	445	657-	657-	657-	1709-
+ER	445	445				
+PLO			657			1052

Notice that with the forecast consumption processing option behind the time series turned on, period end dates are highlighted making forecast consumption periods easy to see.

On this time series, generated a few days later, we see the 657 are in process (+WOU/+WO) and another sales order for 100 (-SOU) has been accepted bringing the adjusted sales order quantity to 750 (-SO) and the adjusted forecast to 352 (-FC). Notice that the forecast and shipped quantities now appear in the Past Due 2 bucket; their dates are prior to the generation start date but still within the current forecast consumption period.

Code	Quantity	Code	Quantity	Code	Quantity	Code	Quantity
+BRU	445	445	657-				
+DR	445	445	657-				
+WOU			657				
+W0			657				
-FCU	1242						1052
-FC		352					652
-SHIP	140						
-SOU			100	500	150		400
-S0		750					400
=ERU	445	657-					1052-
=ER	445	657-					
+PLO							1052

The following week, the work order has been completed, 100 more have shipped, and more sales orders have been accepted (see -SOU of 400 in the 01/31 bucket) to the point that the forecast has been exceeded by 48. The unadjusted forecast of 1242 is fully consumed by the 240 shipped and adjusted sales of 1002; the remaining sales appear in the appropriate bucket (-SO of 48 in the 01/31 bucket) with a planned order for the same quantity as a result.

Code	Quantity	Code	Quantity	Code	Quantity	Code	Quantity
+BRU	1002	1002	48-				
+DR	1002	1002					
-FCU	1242						1052
-FC			652				
-SHIP	240						
-SOU			500	150	400		400
-S0		1002			40		400
=ERU	1002				48-		1100-
=ER	1002						
+PLO					40		1052

**See Also**

- [Appendix C – Time Series Quantity Types](#)

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# Work with Master Schedules

## Working with Master Schedules

DRP/MPS output consists of information in the time series and action messages. Use the time series information to decide whether to accept the planning that is suggested by the system or to override it. You should review the action messages for individual item numbers to determine which action, if any, to take.

Working with the master schedule consists of the following tasks:

- [Reviewing DRP/MPS Time Series](#)
- [Reviewing Planning Families](#)
- [Working with Messages](#)
- [Adding a Freeze Code to a Purchase Order](#)
- [Adding a Freeze Code to a Work Order](#)

## Reviewing DRP/MPS Time Series

	From Material Planning Operations (G34), choose <b>DRP</b> From DRP Daily Operations (G3411), choose <b>DRP Time Series/ATP Inquiry</b>
---	--

Alternatively, to review information for Master Production Schedule, choose Daily MPS from the Material Planning Operations menu. Then, choose MPS Time Series from the MPS Daily Operations menu.

Use the DRP or MPS time series inquiry programs to review the master schedule. This is a record of time-phased supply and demand netting for selected items. This data is derived from the most recent generation or net change run. Use processing options in the DRP/MPS generation program to set up daily, weekly, or monthly time periods (buckets).

When you review a time series, you can:

- Review the following information for an item:
  - MPS adjusted and unadjusted quantities
  - Time-phased inventory activity in any unit of measure
  - Available to promise quantities in any valid unit of measure
- Identify the following information:
  - Time fences and item level leadtime
  - Cumulative leadtime occurrences

- Manufacturing leadtime occurrences
- Choose rows of information to select, suppress, or both
- Toggle between two different quantity type displays that you specify in user defined code quantity lists
- Run an online single item DRP or MPS generation
- Summarize the following:
  - All demand lines into one DEM line
  - All supply lines into one SUP line
- Choose the following:
  - Supply/Demand Inquiry, to view all actions that affect the item's quantities
  - Pegging Inquiry, to determine from where higher level demands are being generated
  - Message File Revisions, to review message detail and take any appropriate actions
  - Manufacturing Data Revisions, to verify item setup details
  - Detail Forecast Revisions, to review item forecasts and sales history
  - Rate Schedule Revisions, to review item rate schedules

To review the time series, complete one of the following tasks:

- Review DRP time series
- Review MPS time series

## Quantity Types for DRP and MPS

Use the DRP or MPS Time Series Inquiry form to review the quantity types that the system has generated for the master schedule.

When you access DRP or MPS Time Series/ATP Inquiry, you can display different quantity types for the master schedule by creating a new user defined code table and changing the processing option to display this new table. You can also display two different tables, such as adjusted and unadjusted quantities, by changing the processing options.

Each table displays only those items that are pertinent to its application. For example, table 34/DR displays only those data items applicable to DRP items. If the code is not defined in table 34/DR, it will not appear on the DRP Time Series/ATP Inquiry form or report. DRP and MPS calculations are not affected by the appearance of this code.

If you do not specify a particular user defined code list, all quantity types display. However, the time series calculation is not affected by the quantity types that are not pertinent to the application.

### Valid Quantity Types for DRP

The following lists the valid quantity types and descriptions that are defined for DRP in user defined code table 34/DR:

Quantity Types	Description
+BA	+ Beginning Available
+IR	+ In Receipt Routing
+PO	+ Purchase Orders
-LEXP	- Lot Expired
-FC	- MPS/Forecast
-SHIP	- Shipped Quantity
-SO	- Sales Orders
-ID	- Interplant Demand
=EA	= Ending Available
+DRP	+ Distribution Requirements Plan
ATP	Available to Promise
CATP	Cumulative Available to Promise

### Valid Quantity Types for MPS

The following lists the valid quantity types and descriptions that are defined for MPS in user defined code table 34/MS:

Quantity Types	Description
+BAU	+ Beginning Available (Unadjusted)
+BA	+ Beginning Available
+IR	+ In Receipt Routing
+POU	+ Purchase Orders (Unadjusted)
+PO	+ Purchase Orders
+WOU	+ Work Orders (Unadjusted)
+WO	+ Work Orders
+RSU	+ Rate Schedule (Unadjusted)
+RS	+ Rate Schedule

Quantity Types	Description
-LEXP	- Lot Expired
-FCU	- MPS/Forecast (Unadjusted)
-FC	- MPS/Forecast
-SHIP	- Shipped Quantity
-SOU	- Sales Orders (Unadjusted)

## What You Should Know About

<b>Period quantities</b>	<p>Period quantities are either:</p> <ul style="list-style-type: none"> <li>▪ Adjusted – Assumes that the user will process the messages.</li> <li>▪ Unadjusted – Assumes that the action messages will not be processed. The U at the end of quantity types indicates that period quantities are unadjusted.</li> </ul>
<b>Time series calculation</b>	<p>When you use a planning time fence rule that calculates the ending available that is based on the greater of forecast or customer demand, such as G, C, or H, the forecast is consumed. This means that the forecast is reduced by the amount of the customer demand in that same period.</p>
<b>ATP unadjusted calculation (ATPU)</b>	<p>Unadjusted ATP assumes that no action messages have been processed.</p>
<b>Negative ATP/ATPU</b>	<p>After you run the MPS generation, ATP/ATPU that have a negative value appear blank on the Time Series/ATP Inquiry form, except for the first period.</p>
<b>Cumulative available to promise unadjusted (CATPU) calculation</b>	<p>The following calculation assumes the user has not acted on the messages:</p> <ul style="list-style-type: none"> <li>▪ <math>CATPU = \text{running total of ATPU}</math></li> </ul> <p>If ATPU is negative inside the planning time fence, then the system displays the resulting CATPU, whether it is positive or negative, in all previous time periods.</p>
<b>Suppressing blank lines</b>	<p>You can use a function key to suppress the quantity types that have no data in them.</p>

To review DRP time series

On DRP Time Series/ATP Inquiry

Field Sensitive Help  
Display Error Message  
Display Functions  
Exit Program  
Exit to Forecast Revisio  
Run Single Item MPS  
Display MPS Key Windi  
Display Calendar Windi  
Exit to Enter/Change Re  
Exit to Pegging Inquiry  
Exit to Message Detail  
Suppress Blank Line Tc  
Exit to Supply/Demand  
Quantity Type Toggle  
Exit to Mtg. Date Revisio  
Window Left  
Window Right  
Clear Screen

3413 DRP Time Series/ATP Inquiry Branch/Plant  
Start From Date. 30  
Unit of Measure. Etl  
Napa Valley Soft Side CD Case

Item Number DRP4  
Leadtime Level 7 Fixed  
Safety Stock

	Past Due	01/31/18 L	02/28/18	03/30/18	04/30/18	05/31/18
+BRU	150	150	15	526-	1072-	1624-
+BR	150	150				
+POU		400				
+PO		385				
-FCU		535	541	546	552	557
-FCST		535	541	546	552	557
-ER	150					
+DRP			541	546	552	557
ATPU		550				
ATP		535	541	546	552	557
CRTP		550	550	550	550	550
CRTP		535	1076	1622	2174	2731

F8=Code F13=Peg F14=Msg F16=Sup/Dem F19=Left F20=Right F24=More Keys

To locate the time series for your item, complete the following fields:

- Branch/Plant
- Item Number

You can press F15 to suppress blank lines

## To review MPS time series

### On MPS Time Series Inquiry

Past Due	01/31/18	02/28/18	03/30/18	04/30/18	05/31/18
+BRU	445	445	1052-	2054-	3091-
+BR	445	445			
+WU	797				
+W	797				
-FCU	1242	1052	1002	1037	1093
-FC	1242	1052	1002	1037	1093
-ERU	445	1052-	2054-	3091-	4104-
-ER	445				
+PLO		1052	1002	1037	1093
ATPU	1242				
ATP	1242	1052	1002	1037	1093
CATPU	1242	1242	1242	1242	1242
CATP	1242	2294	3296	4333	5426

To locate the time series for your item, complete the following fields:

- Branch/Plant
- Item Number

## Processing Options

See [Time Series \(P3413\)](#).

## Reviewing Planning Families

	From Material Planning Operations (G34), choose <b>DRP</b> From <b>DRP Daily Operations (G3411)</b> , choose <b>DRP Planning Family Review</b>
--	---

After you generate **DRP/MPS**, you can review all item numbers that have messages. You can display the list of items that have messages using the following filters:

- Branch/Plant
- Thru Date
- Planning Code
- Message Type
- Stocking Type
- Planner Number

- Buyer Number
- Master Planning Family

Processing a message through P3401 is similar to P3411 but has some additional functionality. Since you are able to inquire on more than one item at a time in Planning Family Review, the program allows you to create orders for more than one item at a time, provided they have the same supplier. To consolidate by supplier turn on processing option #1 of the version of the Detail Message Review program that is called from the P3401.

An item can be inquired on by using planner number, buyer number, supplier number, or master planning family. Once there are a number of items on the screen that are to be processed on the same PO, place a 1 in the option field to exit to the detail message review program. Then to process the message follow the same procedure that was explained in the detailed message review section. Once the message has been cleared from the screen an F3 will exit back to the Planning Family Review program. To put an additional item on the order place a 1 in the option field of the next item that is to be processed. Once all of the items that are to be on the order are processed an F3 from the P3401 Planning Family Review program will bring up the PO Generator Window P43032. An F6 will then create the order for all of the messages that have been processed.

## To review planning families

### On Planning Family Review

Opt	Item	Description	Outstanding Messages
<input type="checkbox"/>	DRP1	Napa Valley Cassette Box	0 0 0 0
<input type="checkbox"/>	DRP2	Napa Valley CD Box	0 0 0
<input type="checkbox"/>	DRP3	Napa Valley VCR Box	0 0 0
<input type="checkbox"/>	DRP4	Napa Valley Soft Side CD Case	1 0 0 0

To locate your planning family, complete the following fields:

- Branch/Plant
- Master Planning Family

## Processing Options

See [Review Planning Family \(P3401\)](#).

## Working with Messages

As an alternative to processing messages using Planning Family Review, you can access the messages directly using the Detail Message Review program.

Working with messages consists of the following tasks:

- Reviewing detail messages
- Processing work order messages
- Processing purchase order messages

Work order messages on Detail Message Review have an order type of WO. Purchase order messages on Detail Message Review have an order type of OP.

The action messages for DRP/MPS/MRP are defined in user defined code list 34/MT. The character codes are hard-coded. Do not change the character codes in this list.

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**Caution:** Depending on the organization of your company, the person working with the DRP/MPS/MRP action messages should coordinate with Shop Floor or Purchasing personnel before taking action on messages affecting these departments.

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## What You Should Know About

<b>Placing messages on hold</b>	You can place a message on hold so that the system does not change the message during the next generation (for example, to preserve a manual reminder). Because the system does not indicate that a message is on hold, JD Edwards World recommends that you add a planner remark that indicates the message is on hold.
<b>Clearing messages</b>	You can remove a message from Detail Message Review if you do not choose to process it. To view the message again after it has been removed, enter a Y in the Cleared field.
<b>Deleting messages</b>	You can delete any message that you have reviewed but did not process.

## Reviewing Detail Messages



From Material Planning Operations (G34), choose **Daily DRP**  
From Daily DRP Operations (G3411), choose **DRP Detail Message Review**

After you generate DRP/MPS, you review the action messages for the individual item numbers. After you review the message, you can place the message on hold, or clear, delete, or process the message.

### To review detail messages

#### On DRP Detail Message Review

Order	Ty	Quantity	Required	Planner Remarks
124578	DP	385	01/31/18	Manual Adjustment Necessary

Complete the following fields to locate the messages for the item:

- Branch/Plant
- Item Number

## Processing Work Order Messages



From Material Planning Operations (G34), choose **Daily DRP**  
From Daily DRP Operations (G3411), choose **DRP Detail Message Review**

After you review the messages, you can process them. When you process a message, the system creates work order headers in the Work Order Master table (F4801) and assigns work order numbers. No parts list or routing is attached at this time.

After you process the work order messages, the master schedule is firm through the date that the orders were processed. These firm orders will not be automatically replanned in subsequent MPS generations.



- Released
- Canceled
- Deferred
- Expedited
- Increased

## What You Should Know About

<b>Processing messages</b>	When you process a message, the system removes it from the Detail Message Review form. To view the message again, enter a Y in the Cleared field and scroll to the end of the message list.
<b>Fixed order quantity (FOQ)</b>	When you use FOQ, MPS/DRP does not generate an Increase message for an existing order to cover demand. Instead, the system generates Order messages in multiples of FOQ as needed to cover the demand.
<b>Order status</b>	When you create or update an order, you can modify the status to indicate the stage of production. To do so, enter a new status in the Status field in the fold area. The system displays this field only for those messages that are related to order processing.

## Processing Purchase Order Messages

	From Material Planning Operations (G34), choose <b>Daily DRP</b> From Daily DRP Operations (G3411), choose <b>DRP Detail Message Review</b>
---	--

You can process a purchase order message using one of following methods:

- Process a single action message without blanket order checking or consolidation
- Process one or more action messages with blanket order checking
- Process messages using purchase order consolidation to place more than one item on a purchase order
- Process purchase order messages using a planning family
- Process messages using the Supplier Scheduling system

JD Edwards World recommends that you set up different versions of the previous methods to expedite processing messages. That is, set up one version to process a single action message without blanket order checking or consolidation, another version to process one or more action messages with blanket order checking, and so on.

Complete the following tasks:

- Process a single action message
- Process messages using consolidation

- Cancel items on a purchase order

Depending on how you set the processing option for the DRP/MPS generation program, the program creates either a purchase requisition (OR) or a purchase order (OP). The program places a user ID on the purchase order and uses the system date as the date that the purchase order was created.

In addition, the program creates the purchase order in the purchasing unit of measure, even though the action message displays the primary unit of measure. The program makes the proper unit of measure conversions. After the next DRP/MPS regeneration, the quantities associated with processed messages appear in the time series display on the +PO quantity type row.

Processing messages will firm that portion of the DRP/MPS replenishment plan. Subsequent DRP/MPS regeneration will not change the timing or quantities associated with previously processed messages. However, if the new regeneration finds a mismatch between the supply and demand quantities or dates, the program issues a message recommending realignment of the existing +POs.

## What You Should Know About

<b>Processing messages using blanket order checking</b>	A processing option controls whether the system verifies the existence of a blanket order for the item you are processing. If the part has any open blanket orders, the system displays the Blanket Order Release form in the Purchasing system. The system releases the amount that you are processing against the blanket order.
<b>Consolidating multiple item numbers</b>	You can consolidate several order lines for the same supplier into one purchase order. Do this by setting a processing option for DRP Detail Message Review.
<b>Process messages using a planning family</b>	You can process messages by family using DRP Planning Family Review. After you select all the items that you want to process, DRP Detail Message Review appears for each item that you selected. Process the messages for each item in the same way you process messages using consolidation.
<b>Freezing purchase orders</b>	When you sign a purchasing contract with a supplier, you can freeze purchase orders in time and quantity so that DRP/MPS does not generate any action messages to change orders.
<b>Obsolete or use-up items</b>	When processing planning messages, JD Edwards World respects O or U stocking type designations for items by not allowing automatic creation of a purchase order from planning message processing.

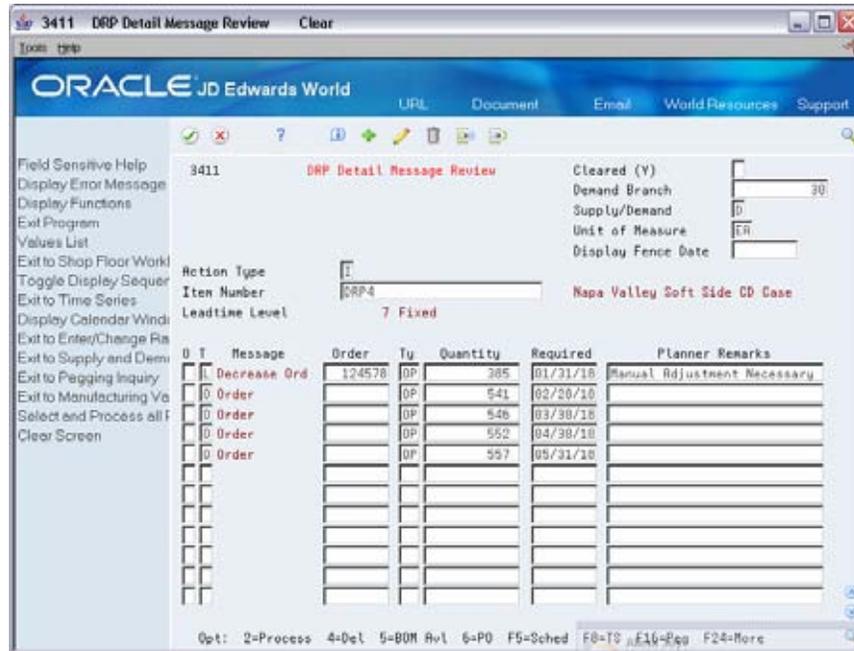
## See Also

- *Processing Orders (P31410)*
- *Generating Supplier Schedules (P3482)* for information on processing messages using this system

- *Reviewing Planning Families (P3401)*

## To process a single action message

### On Detail Message Review



1. Complete the following required fields:
  - Demand Branch
  - Item Number
2. Enter the selection option next to the message that you want to process.
3. To process the message, accept the record.
4. Exit the program.

The system displays Suppliers Selected For Order.



5. On Suppliers Selected For Order, press F6 or click on Create Order on the Functions menu to create the purchase order.
6. To close the window, choose the appropriate selection option.
7. To display the message you processed, complete the following field:
  - Cleared

## To process messages using consolidation

The system creates one purchase order header with as many detail line items as necessary. Dates correspond to the messages. If a part has more than one supplier, you can change the supplier number in the message detail area. The system produces a purchase order for each supplier.

### On DRP Daily Operations

1. Access the processing options for DRP Detail Message Review.
2. To consolidate all messages for the same supplier into one purchase order, set the appropriate processing option.
3. Choose DRP Detail Message Review.

Message	Order	Ty	Quantity	Required	Planner Remarks
Decrease Ord	124578	OP	385	01/31/18	Manual Adjustment Necessary
Order		OP	546	03/30/18	
Order		OP	552	04/30/18	
Order		OP	557	05/31/18	

4. On DRP Detail Message Review, complete the following required fields to locate the messages for the item:
  - Demand Branch
  - Item Number
5. Enter the selection option next to the messages that you want to process.
6. To process the messages, accept the record.
7. Exit the program.

The system displays Suppliers Selected For Order.

The screenshot shows a window titled '43032 Suppliers Selected For Order'. It contains a table with the following data:

Supplier	Supplier Name	Cost	Branch	Order	Ty
4343	Vector Manufacturing C	10,900.00	30		OP

8. On Suppliers Selected For Order, press F6 or click on Create Order on the Functions menu to create the purchase order.
9. To close Suppliers Selected For Order, choose the appropriate selection option.
10. To display the messages you processed, complete the following field:
  - Cleared

### To cancel items on a purchase order

If there are items that you do not want to include, you can delete them from the purchase order.

On Suppliers Selected For Order

The screenshot shows a window titled '43032 Suppliers Selected For Order'. It contains a table with the following data:

Supplier	Supplier Name	Cost	Branch	Order	Ty
4343	Vector Manufacturing C	10,900.00	30		OP

1. Enter the selection option next to the supplier for whom you want items to be canceled.

The system displays Item Selected For Order.

Item	Quantity	Unit	Unit/Extended	Request	Item/Account
545	10.0000	EH	10.0000	03/30/18	0694
552	10.0000	EH	10.0000	04/30/18	0694

2. On Items Selected For Order, enter the selection option next to the items that you want to cancel.

The corresponding message reappears as an unprocessed message on DRP Detail Message Review.

3. Accept the record.
4. To close Items Selected For Order, choose the appropriate selection option.

## Processing Options

See [Message Detail \(P3411\)](#).

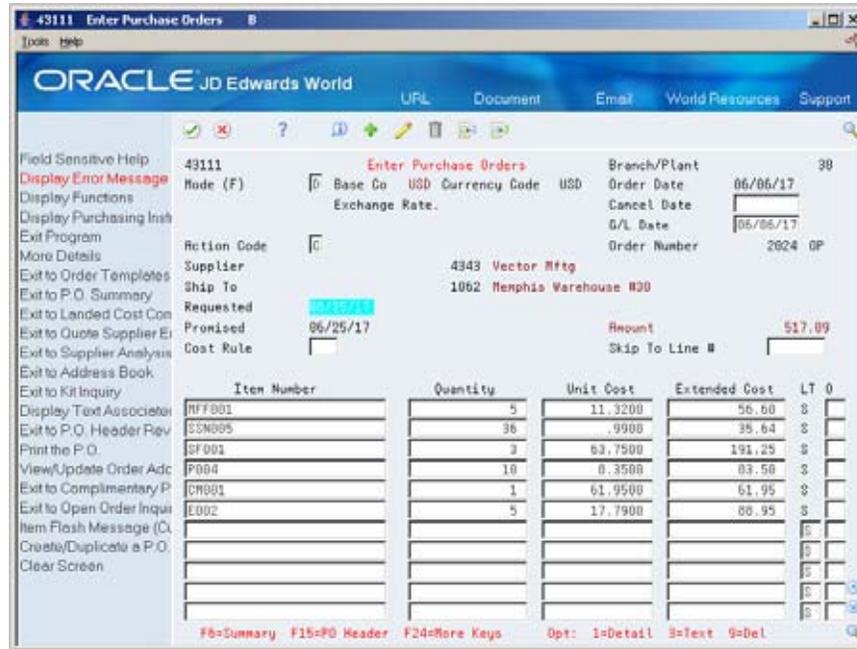
## Adding a Freeze Code to a Purchase Order

	From Stock Based Purchasing (G43A), choose <b>Purchase Order Processing</b> From Purchase Order Processing (G43A11), choose <b>Enter Purchase Orders</b>
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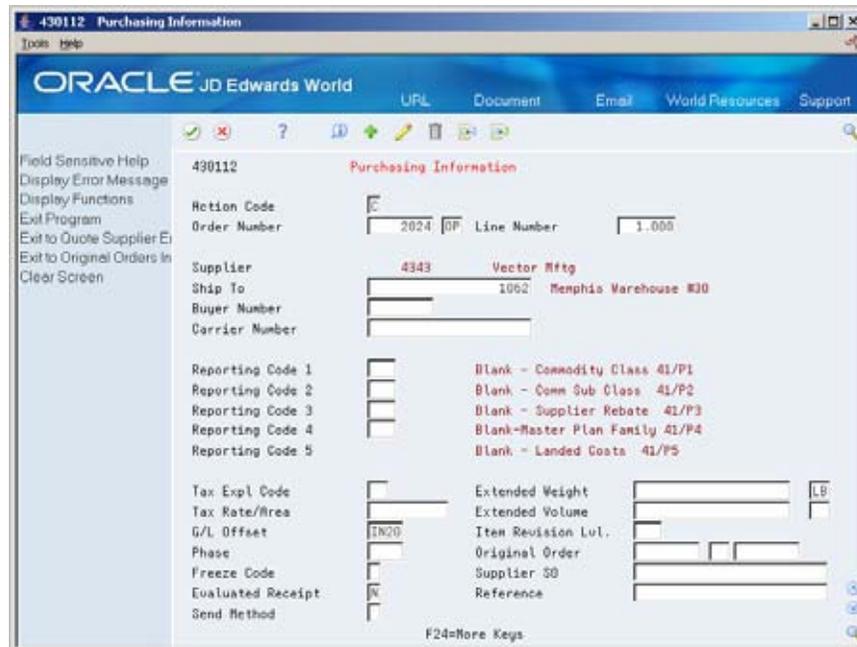
You can freeze the time and quantity values in the purchase order so that DRP/MPS does not generate any action messages to change the order. You freeze purchase orders before negotiations are final or when a purchasing contract has been signed with a supplier.

## To add a freeze code to a purchase order

### On Enter Purchase Orders



- To locate your purchase order, complete the following fields:
  - Branch/Plant
  - Order Number
- On the item line, enter the option Exit to Additional P.O. Line Information.



3. On Purchasing Information, complete the following field to identify the purchase order as frozen:
  - Freeze Code

Field	Explanation
Order Number	The number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Freeze Code	A code that indicates if the order is frozen. MPS/MRP will not plan for frozen orders.  Valid codes are: Y Yes, freeze the order N No, do not freeze the order (Default)

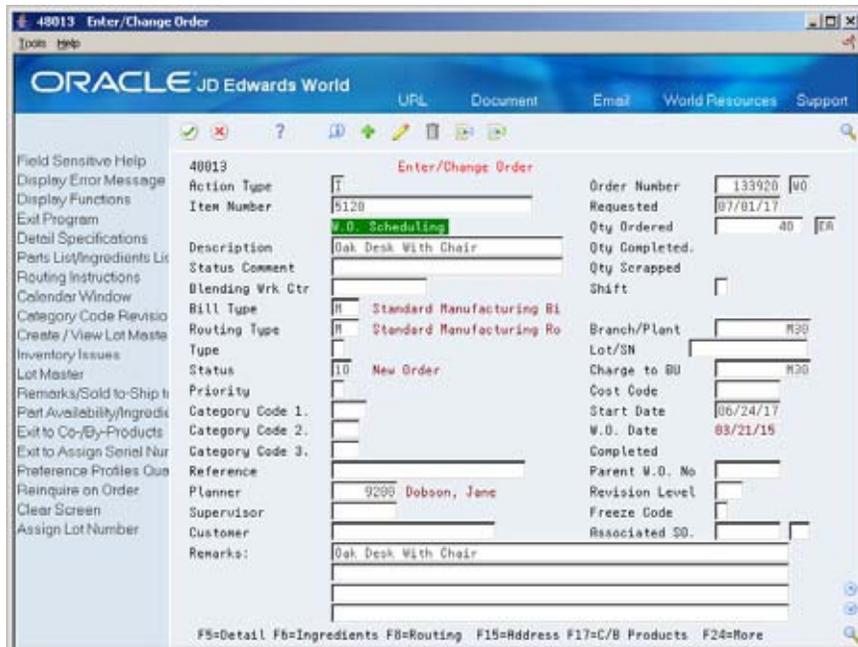
## Adding a Freeze Code to a Work Order

	From Shop Floor Control (G31), choose Discrete - Daily Order Preparation From Daily Order Preparation - Discrete (G3111), choose Enter/Change Order
---	--

You can freeze the time and quantity values in the work order so that DRP/MPS does not generate any action messages to change the order. You freeze work orders when the order is within the freeze time fence.

### To add a freeze code to a work order

On Enter/Change Order



1. To locate the work order, complete the following field:
  - Work Order Number
2. To identify the work order as frozen, complete the following field:
  - Freeze Code



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# Validate Master Schedules

## Validating Master Schedules

After you create the master schedule, validate it to ensure that you have sufficient work center capacity. Use the Rough Cut Capacity Planning (RCCP) batch program to generate capacity planning information.

In the JD Edwards World software, the same batch program generates capacity planning information for both RCCP and Capacity Requirements Planning (CRP). The only difference is in the work centers that you identified in the data selection.

The system uses the following inputs to RCCP:

- Firm MPS work orders and routing instructions
- Planned MPS work orders and routing instructions

If critical work centers appear in the routings of component work orders that are generated by Material Requirements Planning (MRP), then the system can also include MRP orders in RCCP, because both RCCP and CRP use the same batch program.

The system generates the following outputs from RCCP:

- Over-capacity and under-capacity messages
- Work center load
- Work center load graph
- Period summary

Rough Cut Capacity Planning consists of:

- Identifying critical work centers
- Identifying the pacing resource for critical work centers
- Calculating the rated capacity for critical work centers
- Calculating the MPS load for critical work centers

The pacing resource for critical work centers is either labor or machine, depending on which one would increase the work centers' capacity. A work center is paced by labor if adding additional employees to the work center increases capacity. A work center is paced by machine if adding machines adds capacity.

Validating the master schedule consists of the following tasks:

- [Generating Rough Cut Capacity Plans](#)
- [Reviewing Work Schedules on Production Status](#)
- [Reviewing Rate Schedule and Work Center Loads](#)

## What You Should Know About

<b>Revising resource units</b>	The resource units indicate the hours that are associated with a work center for each workday on the Work Day Calendar. The system uses this information to backschedule work orders in the Shop Floor Control system and to calculate available hours for capacity planning. You can manually enter or revise resource unit information for each work center and for each workday using the Enter/Change Resource Units program.
<b>Recalculating work center hours</b>	Use the Refresh Resource Units program to recalculate the work center hours. You can use this program only for processing data. It does not produce a printed report. However, you can view the results of the most recent refresh operation on Work Center Resource Units.

## Generating Rough Cut Capacity Plans

	From Resource & Capacity Planning (G33), choose <b>Periodic Rough Cut Capacity</b> From Periodic Resource/Capacity Planning (G3321), choose <b>Rough Cut Capacity Planning</b>
---	---

Use the Rough Cut Capacity Plan (RCCP) to compare prospective MPS resource requirements to the capacity available in critical work centers. RCCP indicates if you should revise the master schedule to create feasible work loads or improve use of limited resources.

## Before You Begin

- Report hours and quantities for operations that are complete or partially complete to ensure that the figures for Released Load remaining for existing work orders are correct. See *Working with Hours and Quantities* in the *Shop Floor Control Discrete Manufacturing Guide*.
- Verify that resource units exist for all critical work centers in your generation. See *Setting Up Resource Units* in the *Shop Floor Control Discrete Manufacturing Guide*.
- Set up supply and demand inclusion rules for RCCP. See *Setting Up Supply and Demand Inclusion Rules*.
- Run Master Production Schedule. See *Generating Supplier Schedules*.

## What You Should Know About

<b>Reviewing RCCP</b>	After you generate RCCP, you can review the capacity load to determine if you need to change capacity or the scheduled load.
<b>Reviewing work center load</b>	<p>Use Review Work Center Load to display the loads and capacity information for the work center that you select. The information is dependent on the Prime Load code that you entered for the work center on Work Center Revisions.</p> <p>Use the Work Center Load Graph program to view the load versus rated capacity (percent) bar chart for a work center. The numbers across the top are the percent of the rated capacity consumed by load during that period. The information is dependent on the Prime Load code that you entered for the work center on Work Center Revisions.</p>
<b>Reviewing period summary</b>	<p>Use Review Period Summary to review specific items that make up the capacity load for a defined period for a work center. You can view the detail of all current and future orders that have been scheduled to enter a work center.</p> <p>The system summarizes the load by period using the unit of measure that you select. The system also displays the percent of total load planned for that period for an item on an order.</p>
<b>Calculating rated capacity</b>	<p>To calculate rated capacity for critical work centers, the system uses the following standard formula:</p> <ul style="list-style-type: none"> <li>▪ Number of employees (or machines) x hours per day x efficiency factor x utilization factor</li> </ul> <p>You can manually calculate efficiency by dividing standard hours by actual hours. For example, if it takes a crew 10 hours to complete a job that has standard hours established at 8 hours, the crew is working at 80% efficiency (<math>8 / 10 = .80</math>).</p> <p>For reference, the inverse (actual hours / standard hours) is called realization. The goal is to approach 1.0 realization.</p> <p>Utilization is calculated by finding the number of hours in a day that the work center is actually available for working load to standards. Therefore, 100% use is an unrealistic goal because preventative maintenance, employee breaks, and other typical needs affect utilization.</p>

**Calculating MPS load**

You calculate the MPS load for critical work centers by using either the routing table for planned work orders (+PLO) or the routing instruction table for firm work orders (+WO) with a routing attached. If the work order is firm (header created) but does not have a routing instruction attached, the system uses the routing table. The formulas for calculating MPS load are:

- Planned orders x pacing hours from the routing table
- Firm orders x pacing hours from the routing instruction table

The entry in the Prime Load Code field in the Work Center Master table determines the type of pacing at the work center.

Operations are backscheduled using the same logic in the Shop Floor Control system. This operation schedule places load into the proper time frame. You must enter the time basis code and order quantity into the equation for load calculation.

The system uses the following formula to calculate the load for an operation:

- Work order quantity x number of packing hours on routing/time basis code

The system generates messages that indicate if your load is either over- or under-capacity.

**See Also**

- *Entering Resource Units Manually (P3007)*
- *Reviewing Dispatch Groups for Resource Requirements Planning (P3301)*
- *Reviewing Period Summaries (P3312)*
- *Reviewing Message Detail (P3311)*
- *Reviewing Work Schedules (P31220)*
- *Reviewing Work Center Loads (P3313)*
- *Reviewing Rate Schedule and Work Center Loads (P31224)*

**Processing Options**

See [Planning \(P3382\)](#).

**Reviewing Work Schedules on Production Status**

	From Resource & Capacity Planning (G33), choose <b>Daily Rough Cut Capacity</b> From Daily Rough Cut Capacity Planning (G3312), choose <b>Production Status</b>
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Use Production Status to locate and update work center scheduling information. This workbench environment serves as a starting point for work center scheduling and the release of work to the floor. Use this program to:

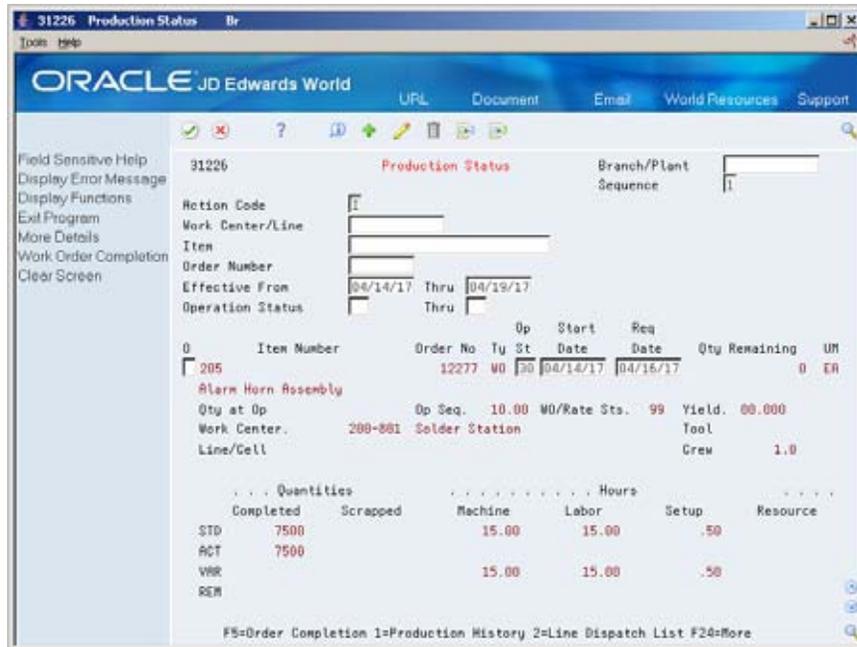
- Access work order information, including the header, the parts list, and the routing instructions
- Display work order information, such as work center, remaining labor, and machine and setup hours
- Sort work orders by start date, requested date, or operations status codes
- Change the work order status code, start date, or requested date

## To review work schedules on production status

### On Production Status

Item Number	Order No	Ty	St	Op	Start Date	Req Date	Qty Remaining	UN
205	12277	WO	30		04/14/17	04/16/17	0	EA
205	84531	EN			04/15/17	05/01/17	0	
205	84531	EN			04/15/17	05/01/17	0	
100	12273	WO			04/15/17	04/16/17	6,400	EA
205	12276	WO	30		04/15/17	04/16/17	0	EA
205	12277	WO	30		04/16/17	04/17/17	0	EA
206	12280	WO			04/16/17	04/17/17	0	EA
206	12281	WO			04/16/17	04/20/17	0	EA
FORKLIFT-A	129787	WO			04/16/17	04/30/17	2	EA
FORKLIFT-A	129787	WO			04/16/17	04/30/17	2	EA
FORKLIFT-A	129787	WO			04/16/17	04/30/17	2	EA
FORKLIFT-A	129787	WO			04/16/17	04/30/17	2	EA

1. Complete the following fields:
  - Work Center
  - Operation Status
2. Complete the following optional field:
  - Sequence
3. For additional information for a work order, access the detail area (F4).



Field	Explanation
Thru Operation Status	A user defined code (system 31, type OS) used as an end point to select work order information to display.
Sequence	A code that determines the sequence in which transactions are displayed. You use the From and Thru Date ranges to select transactions according to the sequence. Valid codes are: <ol style="list-style-type: none"> <li>1 Display work orders in start date order.</li> <li>2 Display work orders in requested date order.</li> </ol>
Machine	This is the actual machine time in hours recorded against the work order.
Setup	The standard setup hours you expect to incur in the normal completion of this item.
Qty Remaining	This is the remaining quantity for an operation. The remaining quantity is calculated by subtracting the quantity completed from the standard quantity.

## Processing Options

See [Production Status \(P31226\)](#).

## Reviewing Rate Schedule and Work Center Loads



From Resource & Capacity Planning (G33), choose **Daily Rough Cut Capacity**  
 From Daily Rough Cut Capacity Planning (G3312), choose **Work Center Schedule Review**

Use **Work Center Schedule Review** to review the work scheduled at either a work center or line for a day, week, or month. You can also select a specific date range for which to view the load for the work center. If you need to adjust the scheduled load at the work center, you can access several different screens to make adjustments.

You can use **Work Center Schedule Review** for rate scheduled items and as an alternative for viewing load on a work center. A processing option allows you to include work order-generated loads before or after rate loads.

### To review rate schedule and work center loads

#### On Work Center Schedule Review

Item Number	Date	Capacity Percentage
2954	12/21/14	50
2954	12/26/14	50
2954	12/28/14	50
2954	02/01/15	50
2954	02/05/15	50
2954	02/07/15	50
2954	02/20/15	50
2954	02/22/15	50
2954	02/26/15	50
2954	03/29/15	50
2954	04/02/15	50
2954	04/04/15	50
2954	04/26/15	50
2954	04/30/15	50
2954	05/02/15	50

To locate your work center schedule, complete the following fields:

- Branch/Plant
- Line/Cell
- Date From
- Thru

### Processing Options

See [Work Center Schedule Review \(P31224\)](#).



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# Set Up DRP, MPS, and RCCP

## Setting Up DRP, MPS and RCCP

Before you can successfully generate DRP, MPS, and RCCP output, you must define the information to use during processing. The system uses setup information to determine how to select and display data.

You must set up some of this information in other systems, such as Shop Floor Control and Inventory Management.

Complete the following tasks:

- [Setting Up Supply and Demand Inclusion Rules](#)
- [Setting Up Message Types for DRP, MPS and RCCP](#)
- [Setting Up Time Fence Rules for DRP, MPS and RCCP](#)
- [Setting Up Forecast Consumption Periods](#)
- [Setting Up a Rough Cut Capacity Display](#)

## Setting Up Supply and Demand Inclusion Rules

	From Material Planning Operations (G34), enter <b>29</b> From Material Planning Setup (G3440), choose <b>Requirements Planning Setup</b> From Material Planning Setup (G3442), choose <b>Supply/Demand Inclusion Rules</b>
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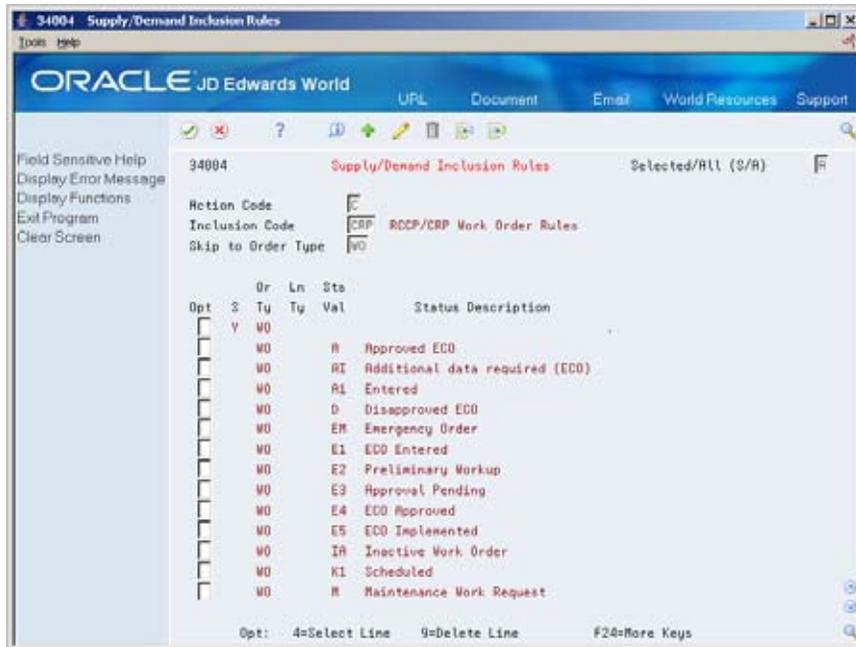
You set up supply and demand inclusion rules to display the supply, demand, and available quantities for an item. The source of these quantities in supply and demand equations are as follows:

Quantity Source	Description
On-hand inventory	Quantity on hand - Hard commits - Quantity on sales orders - Quantity on work orders
Purchase orders	+ Open quantity on purchase orders
Manufacturing work orders	+ Quantity entered on work order - Quantity shipped
Safety stock	+ Safety stock

Quantity Source	Description
Sales orders	+ Quantity entered on sales order - Quantity shipped - Quantity canceled
Work order requirements	+ Quantity required + Quantity issued
Co-/by-products supply from work orders	+ Quantity ordered - Quantity completed
Co-/by-products supply from rates	+ Quantity Ordered - Quantity completed

## To set up supply and demand inclusion rules

### On Supply/Demand Inclusion Rules



- To locate the status values for your inclusion code, complete the following fields:
  - Inclusion Code
  - Skip to Order Type
- Choose the work order statuses to include in supply and demand calculations.

Field	Explanation
Inclusion Code	This identifies a group of items that the system can process together, such as reports, business units or subledgers.
Skip to Order Type	<p>A user-defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. JD Edwards World has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.)</p> <p>The following document types are defined by JD Edwards World and should not be changed:</p> <p>P   Accounts Payable documents  R   Accounts Receivable documents  T   Payroll documents  I   Inventory documents  O   Purchase Order Processing documents  J   General Accounting/Joint Interest Billing documents  S   Sales Order Processing documents</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>If you are using the Skip to Order Type field, you can enter an order type code and press Enter to display only rules about that order type. To see the whole set of order types included in the resource rules, leave this field blank and use the Roll keys.</p>
Sts Val	The helps behind the program state that the program uses the document type, line type and NEXT status. However the program actually reads and uses the LAST status (TRTY). TRTY is also the field displayed in the screen.

## Processing Options

See [Supply/Demand Inclusion Rules \(P34004\)](#).

## Setting Up Message Types for DRP, MPS and RCCP



From Material Planning Operations (G34), enter 29  
 From Material Planning Setup (G3440), choose Requirements Planning Setup  
 From Material Planning Setup (G3442), choose Action Messages

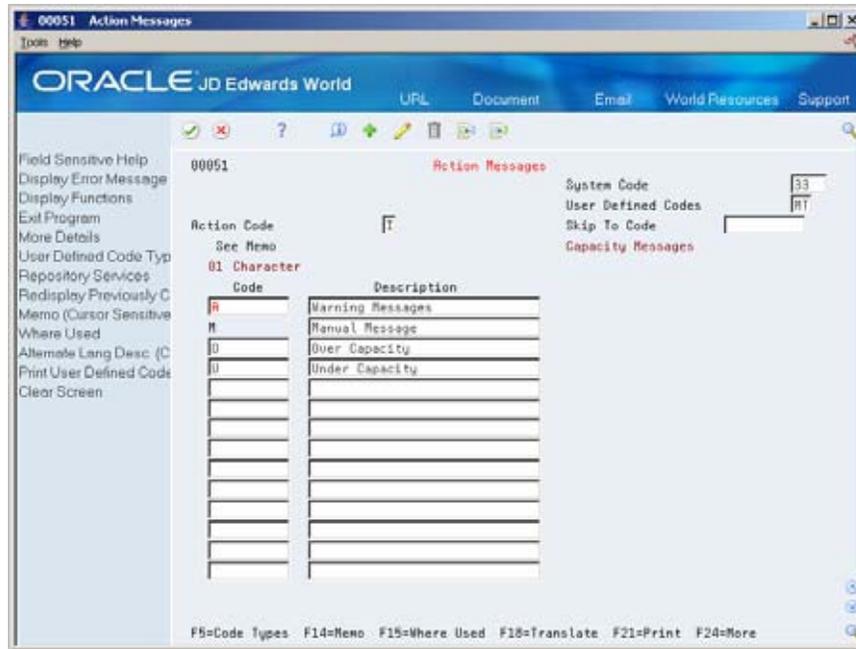
Message types are already defined for all the messages that the system can create when you generate DRP, MPS, and so on. Because the character code is hard coded, you can change the description, but not the function of the message type.

### To set up message types for DRP, MPS and RCCP

#### On Action Messages

Code	Description	Description-2
R	Warning Messages	
B	Order Expedite	
C	Cancel	
D	Defer	
E	Expedite	
F	Frozen Order	
G	Increase Order Quantity to	
H	Decrease Rate Quantity to	
I	Increase Rate Quantity to	
L	Decrease Order Quantity to	
M	Manual Reminder	
N	Create Rate	
O	Order	
P	Firm Order	

- Complete the following fields:
  - Code
  - Description
- To locate the action messages for RCCP, enter 33 in the following field:
  - System Code



Field	Explanation
System Code	A user-defined code (98/SY) that identifies a JD Edwards World system.

## Setting Up Time Fence Rules for DRP, MPS and RCCP

	From Material Planning Operations (G34), enter 29 From Material Planning Setup (G3440), choose Requirements Planning Setup From Material Planning Setup (G3442), choose Time Fence Rules
---	--

Time fences are points of time at which you can make changes to either policy or operating procedures. The system supports three time fences:

Fence Type	Description
Freeze Fence (F)	Within this time period, orders are neither created nor replanned.
Planning Fence (P)	Within this time period, the system uses demand from the forecast and customer orders to calculate ending available product.
Message Display Fence (D)	After this time period, messages are neither created nor displayed.

## To set up time fence rules for DRP, MPS and RCCP

On User Defined Code Revisions/Time Fence Rules

Complete the following fields:

- Code
- Description
- Description-2

## Setting Up Forecast Consumption Periods

	<p>From Material Planning Operations (G34), enter 29          From Material Planning Setup (G3440), choose <b>Requirements Planning Setup</b>          From Material Planning Setup (G3442), choose <b>Forecast Consumption Periods</b></p>
--	---

You define the end date for each forecast consumption period on Forecast Consumption Periods. The system stores this information in the Forecast Consumption Periods table. The periods apply system-wide. You cannot have different forecast consumption periods for different locations or branch/plants.

The system adds the forecast consumption time periods to the number of time series periods that you specified in the processing options for the DRP/MPS generation program. The total for all time periods cannot exceed 52.

## Before You Begin

- Verify that the following information has been set up:
  - Planning fence rule H in user-defined code table 34/TF
  - The order types in user-defined code list 40/CF, to include in shipped order calculations
  - The -SHIP quantity type in user-defined code list 34/QT, to calculate shipped orders quantity
  - The order types in user-defined code list 40/IU, to update inventory (includes order type SO)
  - The Planning Fence Rule field on Plant Manufacturing Data, with a value of H
  - The Planning Fence field on Plant Manufacturing Data, with a value beyond the end of the planning horizon
  - The appropriate processing options in the DRP/MPS generation program

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**Note:** You must set up the planning fence field on Plant Manufacturing Data with a value beyond the end of the planning horizon. (JD Edwards World recommends a planning fence of 999). If you do not set the planning fence beyond the planning horizon, the batch programs (DRP/MPS/MRP Regeneration and Net Change) will not work properly.

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## To set up forecast consumption periods

### On Forecast Consumption Periods

Period	End Date	Type	Period	End Date	Type	Period	End Date	Type
04/30/07	04/30/07	FC	07/31/08	07/31/08	FC	10/30/09	10/30/09	FC
05/31/07	05/31/07	FC	08/29/08	08/29/08	FC	11/30/09	11/30/09	FC
06/29/07	06/29/07	FC	09/28/08	09/28/08	FC	12/31/09	12/31/09	FC
07/31/07	07/31/07	FC	10/31/08	10/31/08	FC	01/29/10	01/29/10	FC
08/31/07	08/31/07	FC	11/30/08	11/30/08	FC	02/26/10	02/26/10	FC
09/28/07	09/28/07	FC	12/31/08	12/31/08	FC	03/31/10	03/31/10	FC
10/31/07	10/31/07	FC	01/30/09	01/30/09	FC	04/30/10	04/30/10	FC
11/30/07	11/30/07	FC	02/27/09	02/27/09	FC	05/31/10	05/31/10	FC
12/31/07	12/31/07	FC	03/31/09	03/31/09	FC	06/30/10	06/30/10	FC
01/31/08	01/31/08	FC	04/30/09	04/30/09	FC	07/30/10	07/30/10	FC
02/29/08	02/29/08	FC	05/29/09	05/29/09	FC	08/31/10	08/31/10	FC
03/31/08	03/31/08	FC	06/30/09	06/30/09	FC	09/30/10	09/30/10	FC
04/30/08	04/30/08	FC	07/31/09	07/31/09	FC	10/29/10	10/29/10	FC
05/30/08	05/30/08	FC	08/31/09	08/31/09	FC	11/30/10	11/30/10	FC
06/29/08	06/29/08	FC	09/30/09	09/30/09	FC	12/31/10	12/31/10	FC

Complete the following fields:

- Period End Date
- Period Type

Field	Explanation
End Date	A date on which the defined period ends.
Period Type	A type of record to be used in conjunction with Forecast Consumption. Valid values are: FC Forecast consumption period TS Time series bucket

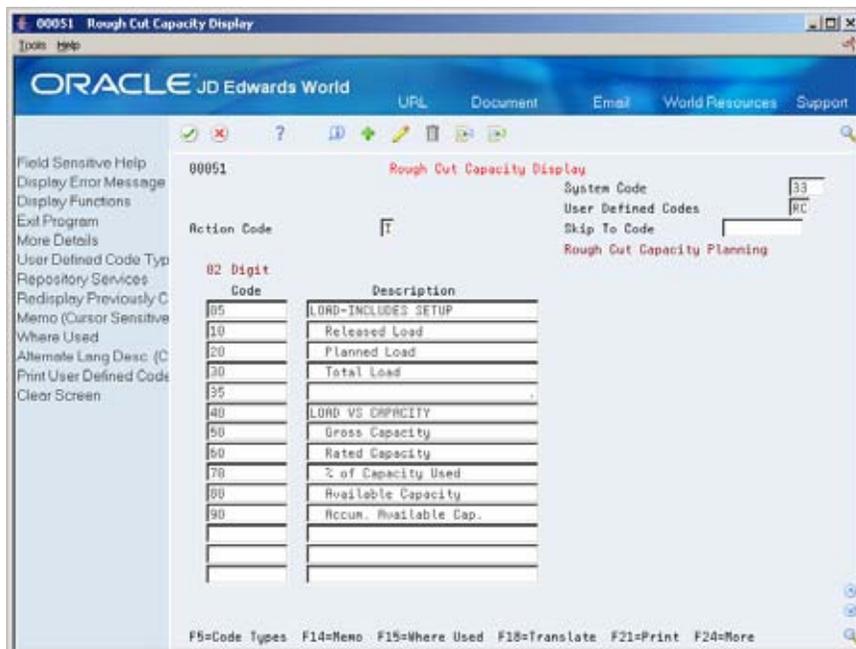
## Setting Up a Rough Cut Capacity Display

	From Resource & Capacity Planning (G33), enter 29 From Resource/Capacity Planning Setup (G3341), choose <b>Rough Cut Capacity Display</b>
---	--

Use Rough Cut Capacity Display to specify row descriptions for RCCP displays and reports. The digit code is hard-coded.

### To set up a rough cut capacity display

On Rough Cut Capacity Display



Complete the following fields:

- Code
- Description

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# Process Orders

## Processing Orders



From Shop Floor Control (G31), choose **Daily Order Preparation**  
From Daily Order Preparation - Discrete (G3111), choose **Order Processing**

After you run MPS Regeneration or MPS Net Change, use Order Processing to process multiple work orders. The program:

- Attaches the parts list
- Attaches the routing instructions
- Sets an initial order status
- Generates the shop packet, including:
  - Parts list
  - Routing instructions
  - Shop packet summary
  - Component shortages

### Before You Begin

- Verify that work orders have been entered manually or have been processed using the MPS Planning Messages program. See *Generating Supplier Schedules*.

### See Also

- Processing Work Orders (P31410) in the Shop Floor Control Discrete Manufacturing Guide

### Processing Options

See [Generate and Print Work Orders \(P31410\)](#).



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# Plan Bills in the MPS/DRP System

## Purpose

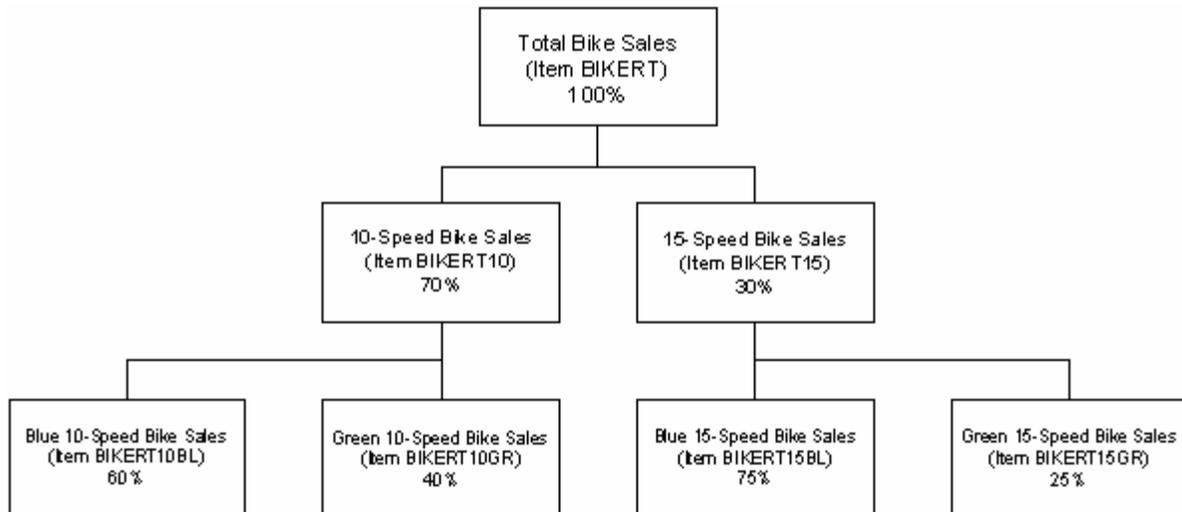
The purpose for planning bills is to generate forecasts for saleable end items. Planning bills are commonly used in a manufacturing environment where the saleable end items have a large number of features and/or options. The forecasts for these saleable end items are based on percentages of the features and options offered that you expect to sell.

Planning bills consist of groups of pseudo items that reflect how an item is sold. They are entered into the system in a bill of material format, and represent the variety of possible options and features that might be included as a saleable end item.

Planning bills are typically used to “explode” a forecast for the total number of products down to the level of the specific combination of options and features included in each saleable end item.

## Demand Structure

In the following diagram, the demand for item BIKERT (top level) represents the total demand for all bicycles.



The demand for items BIKERT10 and BIKERT15 (middle level) represents the demand for 10-speed and 15-speed bicycles, which in this case is 70% of the total demand of BIKERT for the 10-speeds (BIKERT10) and 30% of the total demand of BIKERT for the 15-speeds (BIKERT15).

The demand for items BIKERT10GR, BIKERT10BL, BIKERT15GR, and BIKERT15BL (bottom level) represents the demand for green 10-speed bicycles, blue 10-speed bicycles, green 15-speed bicycles, and blue 15-speed bicycles, respectively. Their demand is expressed as a percentage of the demand for items BIKERT10 and BIKERT15.

### Component Item Master/Item Branch Plant Information

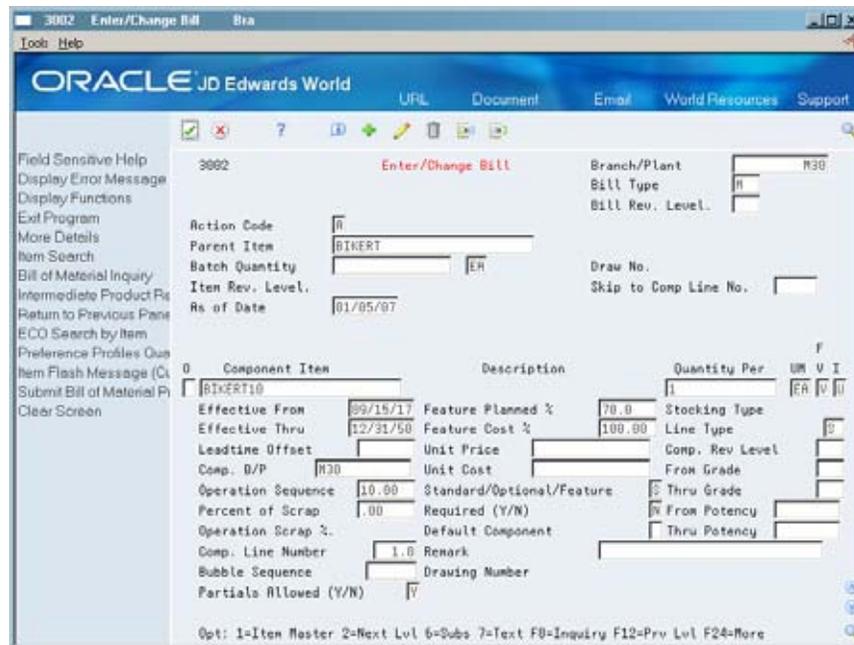
Each level of the item hierarchy above the end item (in this example items BIKERT, BIKERT10, and BIKERT15) should be coded as phantom items in the Item Master and Branch/Plant (stocking type zero).

Each level of the item hierarchy above the end item should also be coded as a Planning Code 4 in the Plant Manufacturing Data (P41027 – F10 from the Branch/Plant).

Each item on the end item level (items BIKERT10GR, BIKERT10BL, BIKERT15GR, BIKERT15BL) should be coded as Planning Code 5 in the Plant Manufacturing Data.

### Bill of Material Record

Each level of the item hierarchy above the end item will have a record in the F3002. The field Feature Planned Percentage in the detail area of the BOM is where the user specifies what percentage of the sales of the parent item that this group of features represents. In this example, item BIKERT10 represents 70% of item BIKERT, and item BIKERT15 represents 30%. For each parent item BIKERT, two component items are created for BIKERT10 and BIKERT15 on Enter/Change Bill.



3002 Enter/Change Bill

ORACLE JD Edwards World

3002 Enter/Change Bill

Branch/Plant: R30  
Bill Type: B  
Bill Rev. Level: 1

Action Code: B  
Parent Item: BIKERT  
Batch Quantity: EH  
Item Rev. Level:  
As of Date: 01/05/07

Component Item	Description	Quantity Per	UM	V	I
BIKERT15		1	EA	V	I

Effective From: 09/15/17 Feature Planned %: 30.00 Stocking Type:  
Effective Thru: 12/31/50 Feature Cost %: 100.00 Line Type: B  
Leadtime Offset: Unit Price: Unit Cost: From Grade:  
Comp. B/P: R30 Unit Cost: From Grade:  
Operation Sequence: 10.00 Standard/Optional/Feature: Thru Grade:  
Percent of Scrap: .00 Required (Y/N): From Potency:  
Operation Scrap %: 2.0 Default Component: Thru Potency:  
Comp. Line Number: 2.0 Remark: Drawing Number:  
Bubble Sequence: 1 Drawing Number:  
Partials Allowed (Y/N): Y

Opt: 1=Item Master 2=Next Lvl 6=Subs 7=Text F8=Inquiry F12=Prv Lvl F24=More

In a similar manner, items BIKERT15 and BIKERT10 are then divided by color into items BIKERT15BL, BIKERT15GR, BIKERT10BL, and BIKERT10GR.

To sum up our example, if total bicycle sales (parent item BIKERT) last year was 1000:

- The forecast for 10-speed bikes would be 700 (1000 x .70)
- The forecast for 15-speed bikes would be 300 (1000 x .30)
- Demand for green 10-speed bikes would be 280 (700 x .40)
- Demand for blue 10-speed bikes would be 420 (700 x .60)
- Demand for green 15-speed bikes would be 75 (300 x .25)
- Demand for blue 15-speed bikes would be 225 (300 x .75)

## Gross Regeneration

After you add the component items with their planned percentages, you run the Gross Regeneration program (P3482) to regenerate a forecast based on the existing forecast for the parent item and the numbers for each component item.

Before you run the Gross Regeneration, be sure that:

- Planning bill logic is turned on (a 2 in processing option 5)
- Processing option 15 references the forecast type created for Planning Bills. The system will write quantities for this forecast type for all of the lower levels of the hierarchy (including the saleable end item) based on the feature planned percentage in the BOM.
- Processing option 14 references the forecast type in the F3460 for the parent item at the top of the hierarchy. This is the forecast for which all the calculations for the lower levels quantities are based on.

Processing option 14 should also reference the forecast type that you designate as the forecast to create when using planning bills (same one as entered in processing option 15). The system will first calculate the forecast for the lower levels based on the parent levels forecast and write those quantities to the F3460 (for forecast type referenced in processing option 15). You designate the forecast type created by the planning bills (processing option 15) as the second forecast type to be read as input so the system will read the forecast for the second level, which it will then apply to the saleable end items.

After you successfully run the Gross Regeneration, you should have the following:

- Records in the F3460 for all levels (except the very top level) of the hierarchy for the forecast type designated in processing option 15 of the P3482. These forecasts will be based on the Feature Planned Percentage Of values in the parent item's BOM.
- A Time Series (P3413) and messages in the F3411 for all of the saleable end items (in this case items BIKERT10BL, BIKERT10GR, BIKERT15BL, and BIKERT15GR) in the quantities that match the RT forecast.

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## 6 Multi-Level Master Scheduling



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# Overview to Multi-Level Master Scheduling

## Objectives

- To understand planning bills
- To set up order policy rules for reordering inventory
- To classify the types of items that you stock
- To define the percentage of demand for a specified feature based on projected sales
- To generate a multi-level master schedule

## About Multi-Level Master Scheduling

You set up and generate multi-level master schedules to:

- Define demand information on a family basis and make changes as needed
- Define planning bills to acquire the options and features you expect to sell
- Update a product plan with a change in customer demand or design specifications
- Customize your schedule generation to include only the information you require
- Explode planned orders down to component items

Multi-level master schedules support assemble-to-order production and delivery.

When several different material purchasing options are available, your planners can make informed decisions within the available time frame. The system uses planning bills to notify planners when special attention is needed.

Multi-level master scheduling consists of the following tasks:

- Setting up multi-level master schedules
- Generating multi-level master schedules

The system records multi-level master schedule information in the following tables:

Table	Description
Bill of Materials Master (F3002)	Contains warehouse or plant level information about bills of materials, such as costs and quantities of components, features and options, and levels of detail for each bill.
Item Master (F4101)	Contains basic information about each item defined to inventory, such as item numbers, description, alpha description, category codes, and units of measure.
Item Branch (F4102)	Contains warehouse or plant level information, such as costs, quantities, physical location, and branch level category codes.

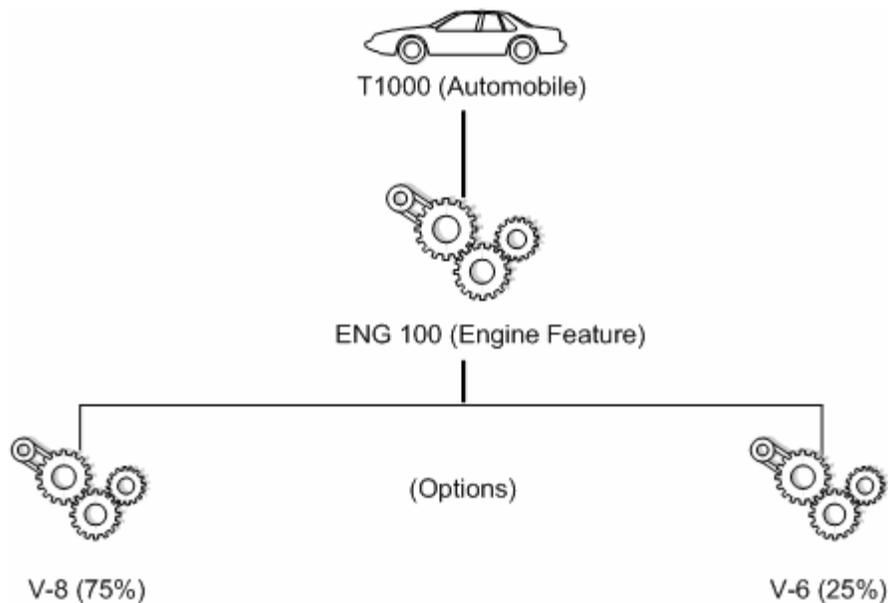
## What Are Planning Bills?

Planning bills are groups of items in a bill of material format that reflect how an item is sold. Planning bills help you manage the acquisition of a variety of options and features that might be included in a saleable end item.

Planning bills allow you to configure a “pseudo” end item. With a pseudo item you don’t have to assign a unique part number or maintain a bill of materials for every combination of options and features that might be included in the end product.

You define planning bills to acquire the options and features in the proportion that you expect to sell. A final assembly schedule coordinates the material selection and assembly after you order the product options.

An example of this is an automobile with engine options:



A part number can be assigned to the engine feature for planning purposes. Obviously, the two engine options cannot be assembled together, so the engine feature never actually exists in inventory. It is a pseudo item.

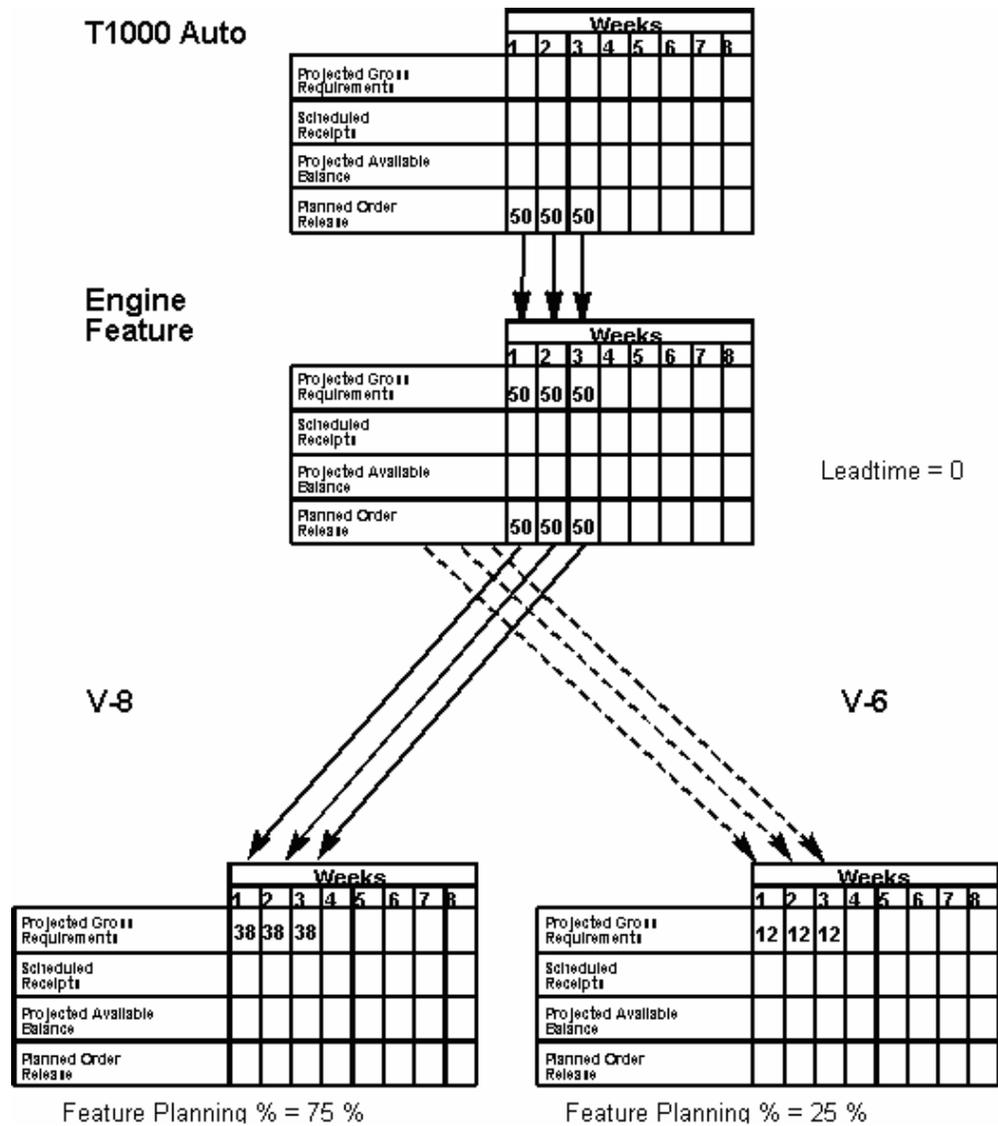
The planner does not know which automobile will ship with which engine next month, but the ratio of engines consumed is fairly constant. The above planning bill of material identifies the percentages of each type of engine that you expect to ship.

By exploding this bill against the master schedule for the T1000 family of automobiles, the system can calculate the total requirements for each type of engine.

### **Example: Exploding Planned Orders**

You use a planning bill to configure a pseudo parent item that represents the engine feature. The engine feature includes both V-8 and V-6 engines, and can never actually exist in inventory. It is a pseudo item. The stocking type, however, identifies the engine feature in the planning bill of material as a phantom. Phantoms call for a special type of processing where the leadtime is zero and the order policy is lot-for-lot.

In this example, the system uses phantom processing to pass planned order releases from the parent (T1000 automobile) directly through to the planned order releases of the engine feature. The system uses the feature planning percentages to explode the planned order releases for the engine feature down to the gross requirements for V-8 and V-6 engines.



MRP acquires the required engine components, such as pistons, blocks, and so on, in order to build these engines. When you receive an order for a T1000 automobile with a specific combination of options, the desired engine is committed to the saleable end item after you attach the parts list to the final assembly work order.

### See Also

- *Single Level Master Scheduling* for an overview of master scheduling concepts and terms
- *Setting Up Planning Bills (P3002)* in the *Forecasting Guide*

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# Set Up Multi-Level Master Schedules

## Setting Up Multi-Level Master Schedules

You must set up planning data for a multi-level master schedule to:

- Develop rules and procedures for ordering
- Classify the types of items that you stock
- Identify the features that you expect to sell

The system uses the planning data to generate and maintain a multi-level master schedule for the hypothetical parent item. It explodes the parent item to the component level.

Setting up multi-level master scheduling consists of the following tasks:

- [Setting Up Order Policy Rules](#)
- [Setting Up Stocking Types](#)
- [Setting Up Feature Planned Percents](#)

### Before You Begin

- Verify that DRP, MPS, or RCCP has been set up
- Understand the concepts and terms described in *Single Level Master Scheduling*.

### See Also

- *Setting Up DRP, MPS, and RCCP (P34004)* for information on how to define distribution or production and rough cut capacity data that you want the system to use during processing
- *Single Level Master Scheduling* for more information on the master scheduling process

## Setting Up Order Policy Rules



From Inventory Management (G41), choose **Inventory Master/Transactions**  
From Inventory Master/Transactions (G4111), choose **Item Branch/Plant Information**

You must set up order policy rules to control how multi-level master scheduling calculates dates and quantities. The order policy rules that you set up are:

- Planning code - Include the item in the DRP, MRP, or MPS planning runs.

- Order policy code - Designate several different rules for reordering inventories, including fixed order quantity, lot for lot, or number of days supplied. For example, purchasing a 90-day supply of V-8 engines.
- Leadtime level for phantom items - Indicate the transfer or purchase leadtime for an item to ensure that you have it in stock on time.

## What You Should Know About

**Assigning a planning code** The system uses planning codes to process the item. Use planning codes 1, 2, or 3 for multi-level master scheduling. Use planning codes 4 and 5 for forecasting with a planning bill.

**Assigning leadtime level for a phantom item** You must set the leadtime of the phantom to zero so that the parent planned orders are recorded directly to the options as a gross requirement without being offset by the leadtime. The system multiplies the planned orders by the feature planning percentage before placing the planned orders as component gross requirements.

## To set up order policy rules

### On Item/Branch Plant Information

1. To locate the item for which you want to plan orders, complete the following fields:
  - Branch/Plant
  - Item Number

2. Choose Manufacturing Values.
3. To control how multi-level master scheduling calculates dates and quantities, complete the following fields:
  - Order Policy Code
  - Planning Code
  - Level Leadtime

Field	Explanation
Order Policy Code	<p>A code that designates the rules for inventory reordering in the MPS/MRP/DRP systems. Valid codes are:</p> <ul style="list-style-type: none"> <li>0 Reorder point (not planned by MPS/MRP/DRP)</li> <li>1 Lot-for-lot or as required</li> <li>2 Fixed order quantity</li> <li>3 Economic order quantity (EOQ)</li> <li>4 Periods of supply</li> <li>5 Rate scheduled item</li> </ul> <p>The codes above are hard-coded.</p>
Planning Code	<p>A code that indicates how Master Production Schedule (MPS), Material Requirements Planning (MRP), or Distribution Requirements Planning (DRP) processes this item. Valid codes are:</p> <ul style="list-style-type: none"> <li>0 Not Planned by MPS, MRP, or DRP</li> <li>1 Planned by MPS or DRP</li> <li>2 Planned by MRP</li> <li>3 Planned by MRP with additional independent forecast</li> <li>4 Planned by MPS, Parent in Planning Bill</li> <li>5 Planned by MPS, Component in Planning Bill</li> </ul> <p>These codes are hard-coded.</p>
Level Leadtime	<p>A value that represents the lead time for an item at its assigned level in the production process, as defined on Plant Manufacturing Data. The system uses this value to calculate the start dates for work orders using fixed lead times. Level lead time is different for purchased and manufactured items:</p> <p>You can enter level lead time manually on Manufacturing Values Entry, or you can use the Leadtime Rollup program calculate it. To calculate level lead time using the Leadtime Rollup program, you must first enter a quantity in the Manufacturing Leadtime Quantity field in the Item Branch table (F4102).</p>

## Setting Up Stocking Types



From Inventory Management (G41), choose **Inventory Master/Transactions**  
 From Inventory Master/Transactions (G4111), choose **Item Master Information**

Set up a stocking type to identify how you stock an item (for example, as finished goods or raw materials).

### To set up a stocking type

On Item Master Information

1. To locate the item for which you want to plan orders, complete the following field:
  - Item Number
2. To indicate how you stock the item for which you want to plan orders, complete the following field:
  - Stocking Type

Field	Explanation
Stocking Type	A user-defined code (41/I) that indicates how you stock an item (for example, as finished goods, or as raw materials). The following stocking types are hard-coded and you should not change them:
B	Bulk floor stock
C	Configured item
F	Feature
K	Kit parent item
N	Non-stock

## Setting Up Feature Planned Percents

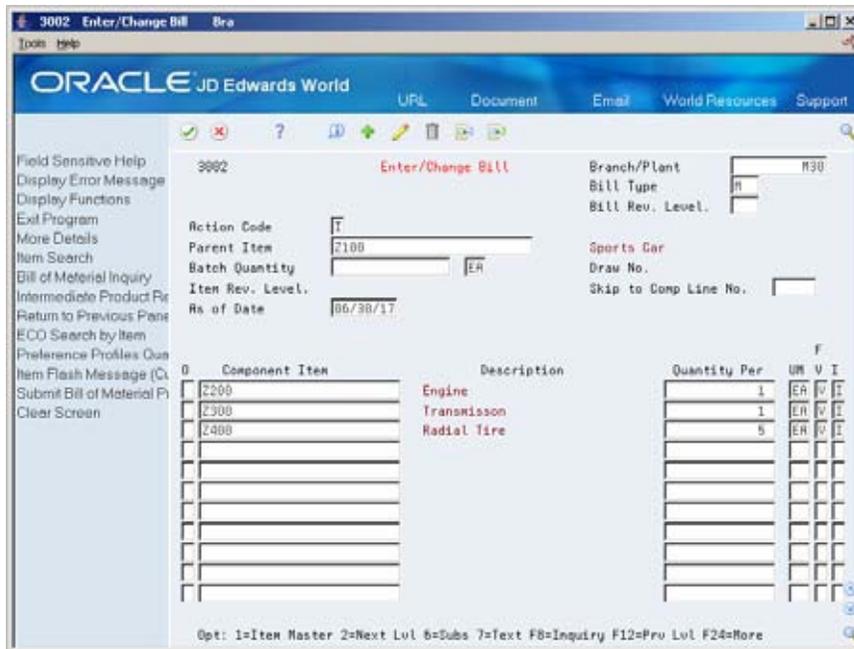
 From Product Data Management (G30), choose **Daily PDM Discrete**  
From Daily PDM Discrete (G3011), choose **Enter/Change Bill**

Set up a feature planned percent to define the percentage of demand for a specified feature based on projected sales.

When you set up a feature planned percent, you can change the percentages on which the hypothetical parent item is based. This allows you to account for any planning variations on which you might base planned orders.

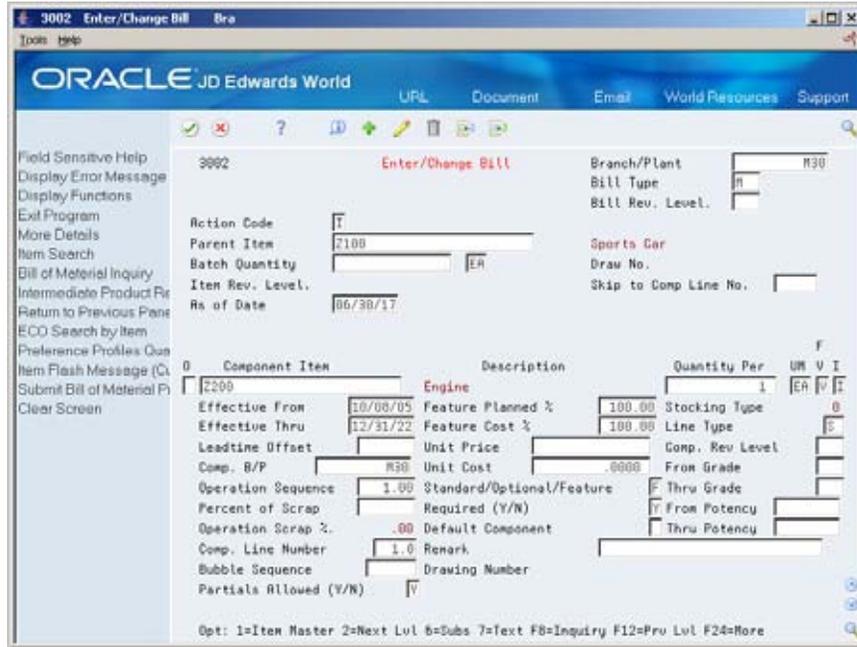
### To set up a feature planned percent

#### On Enter/Change Bill



Component Item	Description	Quantity Per	UM	V	I
2200	Engine	1	ER	V	I
2300	Transmission	1	ER	V	I
2400	Radial Tire	5	ER	V	I

1. To locate the item for which you want to plan orders, complete the following fields:
  - Branch/Plant
  - Parent Item
2. Access the detail area (F4).



3. Complete the following field:
  - Feature Planned Percent

Field	Explanation
Parent Item	<p>A number that the system assigns to an item. It can be in short, long, or 3rd item number format.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>Header - The Parent field contains the item number of the parent item.</p> <p>Detail - The Component Item field contains the item number of the component item.</p>
Feature Planned %	<p>The percentage of demand for a specified feature based on projected sales. For example, a company might sell 35% of their computers with a standard keyboard and 65% of them with an extended keyboard, based on customer demand.</p> <p>The Material Planning system uses this percentage to accurately plan for a feature's component items. Enter percents as whole numbers: 5% as 5.0. The default value is 100%.</p>

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# Generate Multi-Level Master Schedules

## Generating Multi-Level Master Schedules



From Material Planning Operations (G34), choose **Single Site Planning**  
From Single Site Periodic Planning Operations (G3422), choose **MPS Regeneration**

When you run the MPS Regeneration program, the system compiles a master schedule. Choose the MPS Net Change program when you want to include only those items that have changed since the last generation. You can create a version of the MPS Net Change program specifically for multi-level master scheduling.

When you generate a multi-level master schedule, the system explodes planned orders to the bill of material components. This generation program identifies the percentages of all component items. By exploding the bill of material against the total number of expected sales of a parent item, you can obtain the total requirements for each item at each level in the bill of material.

When you generate a master schedule, the system evaluates selected information, performs calculations, and recommends a time-phased planning schedule for all selected items.

### Before You Begin

- Set up multi-level master scheduling.

### See Also

- *Setting Up Multi-Level Master Schedules (P3482)*
- *Generating Single Level Master Schedules (P3482)* for more information on generating master schedules and to review the processing options
- *Working with Master Schedules (P3482)* for information on how to review time series and action messages that are an output of generating a multi-level master schedule
- *Validating Master Schedules (P3482)* for information on how to validate the master schedule, to ensure that you have sufficient work center capacity

## What You Should Know About Processing Options

**Generation definition**

You must set the processing option to specify the type of schedule you want to generate. You must use generation type 3 to process multi-level MPS items. If there is a forecast for the product family, you must also define this forecast in the appropriate processing option.

**Phantom items**

Set the appropriate processing option to generate messages and time series records for phantom items.

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## **7 Manufacturing and Distribution Environments**



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# Overview to Manufacturing and Distribution Environments

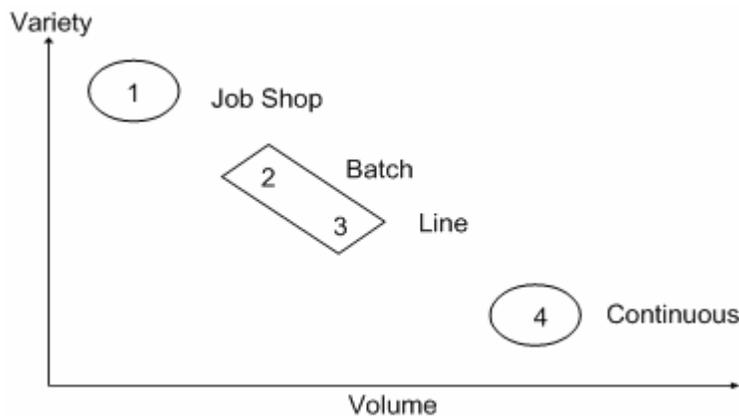
## Objectives

- To use the Manufacturing and Distribution Planning (MDP) system to manage a variety of manufacturing and distribution environments

## About Manufacturing and Distribution Environments

Today's customer-driven manufacturing strategies require flexible manufacturing and distribution systems.

The following graphic shows manufacturing and distribution environments that vary along a continuum from discrete, low-volume production of customized designs to process, high-volume production of commodities.



Depending on the products manufactured, companies tend to create manufacturing and distribution environments along the diagonal of the graph. Competitive advantages occur when a company can move upward and to the right (that is, manufacture more volume along with more variety).

Sometimes a firm can gain a competitive advantage by creating a mixed-mode manufacturing environment. In mixed mode, some high-volume products and some high-variety products are made within the same company, but in different manufacturing and distribution environments.

The Manufacturing and Distribution Planning system's shared database provides mixed-mode capability. Manufacturing and Distribution Planning can simultaneously manage discrete items for a job shop, rate based items for a flow shop, and continuous items for a process industry.

Working with manufacturing and distribution environments includes the following tasks:

- Working with batch manufacturing
- Working with rate based manufacturing
- Working with process manufacturing

## Discrete Manufacturing

Discrete manufacturing uses bills of material and routings. The bill of material contains individual parts or components, such as a nut, bolt, wire, or a plastic or metal part of a fixed or variable quantity. Products are further divided into subassemblies that are used in various larger assemblies.

Typical examples of products of discrete manufacturing are:

- Cars
- Furniture
- Electronics
- Airplanes

Discrete manufacturing is usually further characterized by the strategy used, such as:

- Make-to-stock, using either a highly repetitive or process order based system
- Any of the “to-orders,” such as make-to-order, assemble-to-order, or engineer-to-order
- The “one-off” or job shop environment

## Batch Manufacturing

With batch manufacturing, you produce products from formulas or recipes in a standard run or lot size that is determined by vessel size or standard run length.

## Rate-Based Manufacturing

Use rate-based manufacturing for highly repetitive production for which you do not need to account for each work order’s labor and inventory in detail.

## Process Manufacturing

Process manufacturing uses recipes or formulas and resources or ingredients. The manufacturing process either consumes or produces these resources. Many processes create co-products and by-products. In a process or discrete formula, the quantity of a component can vary according to its grade or potency.

Unique features of process manufacturing are:

- Pacing co-products
- Planned co-products (by-products are unplanned)

- Additional processing options in MPS/MRP

## Distribution

Distribution systems work together with manufacturing systems to ensure that the right item is in the right place at the right time to meet customer demand. Supply and demand components must balance to ensure that this can occur. For example, the Inventory Management system does the following:

- Stores item information for the manufacturing systems
- Stores sales and purchasing costs and quantities available by location
- Tracks holds for locations from which you should not sell
- Updates the inventory account balances in the general ledger with any change in inventory valuation, count variances, or movement

## What You Should Know About

### MRP

MRP does not recognize configured (string) differences for a given configured item.



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# Work with Batch Manufacturing

## Working with Batch Manufacturing

With batch manufacturing, a product is made from a formula or recipe in a standard run or lot size determined by vessel size or standard run length. Typical products for batch manufacturing include:

- Pharmaceuticals
- Foods
- Glues
- Fermented beverages
- Paints

The objective for batch manufacturing is to process work orders with a batch quantity that corresponds to a batch bill of material and to use these orders for MRP processing. Just as the bill type uniquely defines a bill of material, you can use the batch quantity with bill type to further define a unique bill.

With this manufacturing method, some restrictions on capacity determine the size of the batch produced. For example, you might need to fill the vats to a certain level for the process to perform properly.

In addition, the system specifically defines the component quantities for the batch. For example, a 50-gallon vat requires a given quantity of one component, but the system does not necessarily double the component for a 100-gallon vat. Such components are often enzymes or catalysts.

Vats are often physically located close to a more repetitive downstream process. For example, in the making of bread, the process mixes the dough in a batch and leaves it to rise before forming individual loaves and sending it for baking and packaging.

You often express units of measure for batches in terms of volume or weight, such as:

- Liters or gallons
- Kilograms or pounds

After you create a batch bill of material and batch routing for the work order header, process the batch work order to attach the parts list and routing instructions to the work order header. Then, generate a master schedule of batch work orders and review the output.

Working with batch manufacturing consists of the following tasks:

- [Creating Batch Bills of Material](#)
- [Creating Batch Routings](#)
- [Processing Batch Work Orders](#)
- [Generating MPS for Batch Bills](#)
- [Reviewing Batch Output from the MPS Generation](#)

## Creating Batch Bills of Material



From Product Data Management (G30), choose **Daily PDM Discrete**  
From Daily PDM Discrete (G3011), choose **Enter/Change Bill**

You use batch bills of material to accommodate physical constraints. For example, some industries, such as the pharmaceutical or food industries, use ovens or vats to make products in fixed quantities or batches. You can enter many combinations of batch sizes and bill types.

### Before You Begin

- Set the appropriate processing option to display the Batch Quantity field.

### To create a batch bill of material

#### On Enter/Change Bill

Component Item	Description	Quantity Per	U	M	I
12706	Vitamin A	250	GR	F	I
12731	Vitamin B1	500	GR	F	I
12749	Vitamin B2	500	GR	F	I
12757	Vitamin B6	6000	GR	F	I
12765	Vitamin B12	1320	GR	F	I
12773	Vitamin C	3000	GR	F	I
12781	Minerals, complex	60	GR	F	I
12885	Buffer, inert	13180	GR	F	I
12844	Magnesium Stearate	500	GR	F	I
12741	Microcrystalline Cellulose	500	GR	F	I

1. To locate the bill of material for the parent item, complete the following fields:

- Parent Item
- Branch/Plant
- Bill Type

If more than one type of batch bill exists, the system prompts you to make the proper selection from the following:

- Bill type
- Batch quantity
- Unit of measure

2. To create a new batch bill of material for the parent item, complete the following fields:

- Batch Quantity
- Batch Unit of Measure

3. To view additional information, access the detail area (F4).

The screenshot shows the 'Enter/Change Bill' form in Oracle JD Edwards World. The form is titled '3002 Enter/Change Bill' and includes a menu bar with options like 'URL', 'Document', 'Email', 'World Resources', and 'Support'. The main area contains several input fields and a table of component items.

Fields shown include:

- Action Code: T
- Parent Item: 1261
- Branch/Plant: R30
- Bill Type: R
- Bill Rev. Level: RB
- Batch Quantity: 10000
- Unit of Measure: PC
- Item Rev. Level: (blank)
- Rs of Date: 11/14/17
- Multi-vitamin Tablets
- Draw No. (blank)
- Skip to Comp Line No. (blank)

The component item table shows:

Component Item	Description	Quantity Per	UM	V	I
12706	Vitamin A	250	GH	F	I
Effective From	Feature Planned %	100.00	Stocking Type		
Effective Thru	Feature Cost %	100.00	Line Type		
Leadtime Offset	Unit Price		Comp. Rev Level		
Comp. B/P	Unit Cost	.0000	From Grade		
Operation Sequence	Standard/Optional/Feature		Thru Grade		
Percent of Scrap	Required (Y/N)		From Potency		
Operation Scrap %	Default Component		Thru Potency		
Comp. Line Number	Remark				
Bubble Sequence	Drawing Number				
Partials Allowed (Y/N)					

Opt: 1=Item Master 2=Next Lvl 6=Subs 7=Text F8=Inquiry F12=Prv Lvl F24=More

Field	Explanation
Parent Item	A number that the system assigns to an item. It can be in short, long, or 3rd item number format.

## See Also

- *Working with Bills of Material in the Product Data Management Process Manufacturing Guide* for more information about batch bills of material

## Processing Options

See [Bill of Material Revisions \(P3002\)](#).

## Creating Batch Routings

From Product Data Management (G30), choose **Daily PDM Discrete**  
From Daily PDM Discrete (G3011), choose **Enter/Change Routing**

Batch routings are useful in industries, such as pharmaceuticals or foods, where products are manufactured in fixed quantities or batches. Each batch bill, as defined by the batch quantity, has its own routing.

You can create different routings for the same item by branch, type, batch quantity produced, or a combination.

## Before You Begin

- Set the appropriate processing option to activate routing batch and type functions.

## To create batch routings

### On Enter/Change Routing

Work	Center	Seq No	Description	Mach	Labor	Hours	Setup	C
	200-204	10.00	Blend vitamins A through D	0.75	2.50	1.50		C
	200-204	20.00	Chelate minerals	3.50		1.25		
	200-204	30.00	Blend vitamins and minerals	6.00	.75	2.00		
	200-204	40.00	Blend with inert buffer	2.00	1.00	.50		
	200-204	50.00	Form Tablets	16.00	2.50	1.25		

1. To locate the routing for the item, complete the following fields:

- Item Number
- Batch Quantity

- Branch/Plant
  - Routing Type
2. To create a new batch routing for the item, complete the following fields:
    - Batch Quantity
    - Batch Unit of Measure

If the bill type and quantity on the work order do not match a batch bill, the system generates an error and creates the work order header for the amount specified.

3. To view additional information, access the detail area (F4).

Work Center	Oper Seq No	Description	Mach	Labor	Setup Hours
200-204	10.00	Blend vitamins A through C	0.75	2.50	1.50

4. Complete the following optional fields:
  - Resource Units Consumed
  - Replenishment Location
  - UOM

## See Also

- *Working with Routings* in the *Product Data Management Process Manufacturing Guide* for more information about batch routings

## Processing Options

See [Routing Master Revisions \(P3003\)](#).

## Processing Batch Work Orders

	From Shop Floor Control (G31), choose <b>Process - Daily Order Preparation</b> From Daily Order Preparation - Process (G3113), choose <b>Enter/Change Order</b> or <b>Order Processing</b>
---	---

Use either **Enter/Change Order** or **Order Processing** to attach a parts list or routing instructions to the work order header. Because the bill or routing must exist for the associated type on the work order header, the attachment process will fail if the system cannot validate the bill or routing types.

If a batch quantity exists on the bill or routing, the quantity on the work order header and the type must match the bill or routing. Otherwise, the copy function will fail for the bill, routing, or both.

### See Also

- *Creating Work Orders (P48013)* in the *Shop Floor Control Process Manufacturing Guide* for information about attaching parts lists and routing instructions interactively
- *Processing Work Orders (P31410)* in the *Shop Floor Control Process Manufacturing Guide* for information about attaching parts lists and routing instructions using the batch program

## Generating MPS for Batch Bills

	From Material Planning Operations (G34), choose <b>Single Site Planning</b> From Single Site Periodic Planning Operations (G3422), choose <b>MPS Regeneration</b>
---	--

Use **MPS Regeneration** to generate a master schedule for all items or for selected items. These programs function differently depending on whether more than one batch bill exists.

If only one batch bill exists, MPS uses the batch quantity as follows:

- As a multiple, if the net requirements are greater than the batch quantity
- As a minimum, if the net requirements are less than the batch quantity

In either case, the program generates a separate planned order for each batch quantity. For example:

Batch Quantity	MPS Requirement	Resulting MPS Planned Order
1000	1500	1000
1000	967	1000

If one batch bill is greater than all of the batch quantities, the program uses the largest batch quantity in combination with any of the other quantities to most accurately satisfy the requirement. For example:

Batch Quantity	MPS Requirement	Resulting MPS Planned Order
400	1500	1000
600	600	
800		
1000		
400	3000	1000
600	1000	
800	1000	
1000		

If multiple batch bills exist and the net requirement is less than the largest batch quantity, the program uses the next highest batch quantity to satisfy the requirement. For example:

Batch Quantity	MPS Requirement	Resulting MPS Planned Order
400	780	800
600		
800		
1000		

## See Also

- *Generating Single Level Master Schedules (P3482)* for the processing options for this program

## Reviewing Batch Output from the MPS Generation



From Material Planning Operations (G34), choose **MPS**  
From MPS Daily Operations (G3412), choose **MPS Time Series** or **MPS Detail Message Review**

After you generate a master schedule, use **MPS Time Series Inquiry** and **MPS Detail Message Review** to review the time series and messages from the MPS generation.

The time series is a record of time-phased supply and demand netting for selected items. The messages reflect how the system used batches to generate order quantities for net requirements for each time period.

Reviewing batch output consists of the following:

- Reviewing the time series for batch output
- Reviewing action messages for batch output

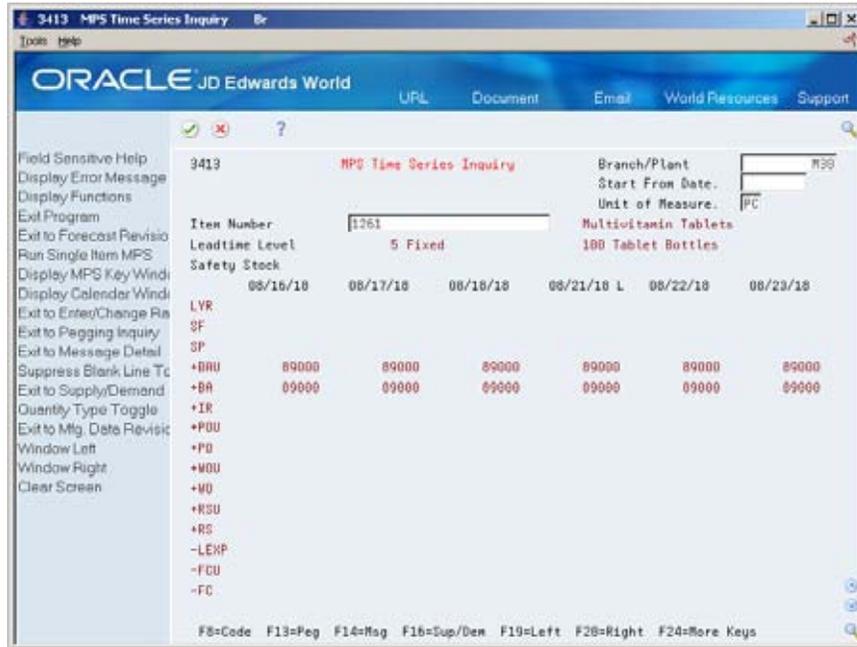
## See Also

- *Reviewing DRP/MPS Time Series (P3413)* for more information on **MPS Time Series Inquiry**, and for the processing options

- *Working with Messages (P3411)* for the processing options for MPS Detail Message Review

To review the time series for batch output

On MPS Time Series Inquiry



To locate the time series for your item, complete the following fields:

- Branch/Plant
- Item Number

### Example: Reviewing the Time Series for Batch Output

Review the net quantities for planned orders (+PLO) for the item during the 01/09/17 and 01/16/17 time periods. Planned orders (+PLO) are based on batch sizes of:

- 01/09/17: 3000 and 1000 = 4000
- 01/16/17: 3000 and 3000 = 6000

### What You Should Know About

#### Suppressing blank lines

You can use the function key F15 to suppress the quantity types that have no quantity in the time series.





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# Work with Repetitive Manufacturing

## Working with Repetitive Manufacturing

Use repetitive manufacturing for highly repetitive production that relies on a production “rate.” Repetitive manufacturing enables you to specify a rate schedule by effective date in daily, weekly, or monthly quantities.

Repetitive manufacturing reflects the following characteristics:

- Production volume is stable and predictable.
- Lead time is short.
- Factory layout is product oriented and often characterized as cellular manufacturing: Dissimilar operations are physically grouped so that the product flows rapidly from one operation to the next.
- Setups are short, so that switching between products does not impact the time available for production.
- Group technology is often incorporated into the design engineering and manufacturing engineering to accommodate some variety with low impact on cost or production speed.
- Unit of measure is often “each.” However, it can also be volume- or weight-related when it is used in an environment that is similar to process manufacturing as opposed to discrete.

Some examples of repetitive products are:

- Electronic goods
- Automobiles
- Durable consumer goods (washing machines, refrigerators, and so on)

To plan for repetitive items, you:

- Identify the item as a rate scheduled item for a specific branch/plant
- Create a routing for the item
- Attach the rate scheduled item to a line

After you process the repetitive items, generate a master schedule and output that you can review. This output consists of time series and messages. You can then validate the load on lines or cells by viewing the effects of a rate schedule on a given work center and adjusting the priorities of the schedule.

Working with repetitive manufacturing consists of the following tasks:

- [Defining Order Policy for Repetitive Items](#)
- [Creating Repetitive Routings](#)
- [Creating Line/Item Relationships](#)
- [Creating Rate Schedules](#)
- [Generating MPS for Repetitive Items](#)
- [Reviewing Repetitive Rate Scheduled Output from MPS Generation](#)
- [Validating Load on Lines or Cells](#)

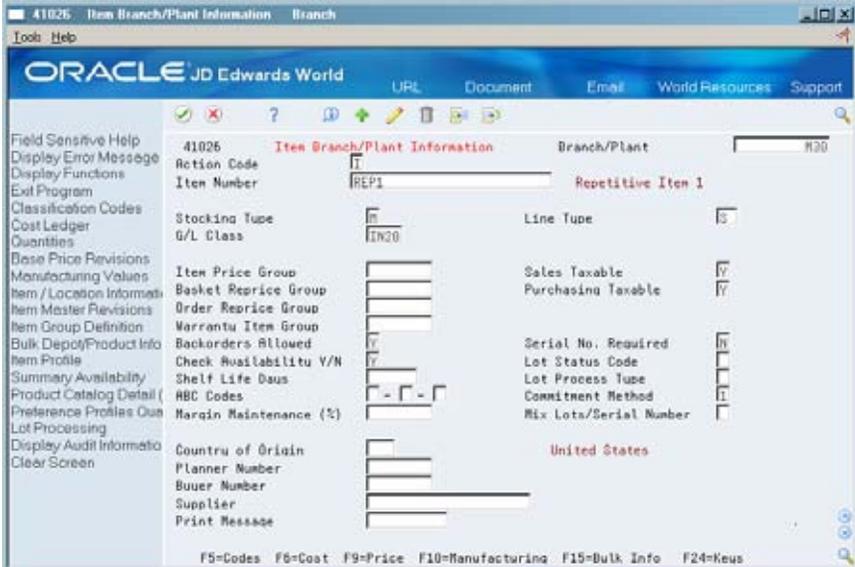
## Defining Order Policy for Repetitive Items

	<p>From Inventory Management (G41), choose <b>Inventory Master/Transactions</b>          From Inventory Master/Transactions (G4111), choose <b>Item Branch/Plant Information</b></p>
---	--

You must identify the item as a repetitive item for a specific branch/plant for the MPS/MRP/DRP system to process the item as repetitive.

### To define order policy for repetitive items

#### On Item Branch/Plant Information



The screenshot shows the 'Item Branch/Plant Information' form in Oracle JD Edwards World. The form is titled '41026 Item Branch/Plant Information Branch'. The 'Item Number' field contains 'REP1' and is labeled 'Repetitive Item 1'. The 'Branch/Plant' field contains 'R30'. The 'Country of Origin' is set to 'United States'. Other fields include 'Action Code', 'Stocking Type', 'G/L Class', 'Item Price Group', 'Basket Reprice Group', 'Order Reprice Group', 'Warranty Item Group', 'Backorders Allowed', 'Check Availability Y/N', 'Shelf Life Days', 'ABC Codes', 'Margin Maintenance (%)', 'Sales Taxable', 'Purchasing Taxable', 'Serial No. Required', 'Lot Status Code', 'Lot Process Type', 'Commitment Method', and 'Mix Lots/Serial Number'. The form also includes a 'Field Sensitive Help' menu on the left and a footer with function keys: F5=Codes, F6=Cost, F9=Price, F10=Manufacturing, F15=Bulk Info, F24=Keys.

1. To locate the item record, complete the following fields:

- Branch/Plant
- Item Number

2. Choose Manufacturing Values (F10).

The screenshot shows the Oracle JD Edwards World interface for 'Plant Manufacturing Data'. The window title is '41027 Plant Manufacturing Data Branch'. The form contains the following fields:

Action Code	[C]	Repetitive Item 1
Item Number	REP1	
Order Policy Code	[S]	Issue Type Code
Value Order policu		Planning Code
MFG Leadtime Quantitu.		Planning Fence Rule
Accounting Cost Qty	1	Fixed/Variable
Planning Fence		Level Leadtime
Freeze Fence		Manufacturing Leadtime
Message Display Fence.		Cumulative Leadtime
Time Basis	[U]	Leadtime Per Unit
Total Queue/Route Hours		Replenishment Leadtime
Setup Labor		Shrink Factor
Issue and Receipt	[0]	Shrink Factor Method
ECO Reason		Drawing Rev. Level
ECO Number		Item Revision Level
ECO Date		
Potency Control	[N]	Grade Control
Standard Potencu		Standard Grade
From - Thru Potencu		From - Thru Grade

Navigation keys: F3=Exit, F12=Previous, F24=More Keys

3. On Plant Manufacturing Data, identify the item as a rate scheduled item in the following field:
  - Order Policy Code

## Creating Repetitive Routings



From Product Data Management (G30), choose Daily PDM Discrete  
From Daily PDM Discrete (G3011), choose Enter/Change Routing

A routing is a list of the operations and resources that are required to complete a process. The repetitive routing includes line and cell information in the header as well for each operation.

## To create repetitive routings

### On Enter/Change Routing

1. To locate the routing for your item, complete the following fields:

- Branch/Plant
- Line/Cell
- Item Number

2. Access the detail area (F4).

### 3. Review the information for each operation sequence:

- Line/Cell
- Resource Units Consumed
- Replenishment Location

Field	Explanation
Line/Cell	Defines a production line or cell. Detailed work center operations can be defined inside the line or cell. For rate based manufacturing to use this value for reporting, this value must match the line cell in the header.
Resource Units Consumed	Indicates how many of the line's resource units are needed to produce one item.
Replenishment Location	A code that identifies inventory locations in a branch/plant. You define the format of the location identifier by branch/plant.

## Creating Line/Item Relationships



From Shop Floor Control (G31), choose **Shop Floor Control Setup**  
From Shop Floor Control Setup (G3141), choose **Line/Item Relationships**

To define the schedule data for the rate, choose Line/Item Relationships. Line/Item Relationships defines on which production line the product will be assembled. It also defines shift and period information for that line.

### To create a line/item relationship

On Line/Item Relationships

31093 Line/Item Relationships

Oracle JD Edwards World

31093 Line/Item Relationships Branch/Plant R00

Action Code F

Item Number REP1 EA Repetitive Item 1

Line/Cell LINE1 Repetitive line 1

Capacity Consumed 2.00 EA

Use as Default (0/1) 1

Default Shift No Shift

Default Period Weekly

F24=More Keys

Complete the following fields:

- Branch/Plant
- Item Number
- Line/Cell
- Capacity Units
- Shift
- Period

Field	Explanation								
Capacity Units	Indicates how many of the line's resource units are needed to produce one item.								
Shift	<p>A user defined code (07/SH) that identifies daily work shifts. In payroll systems, you can use a shift code to add a percent or amount to the hourly rate on a timecard.</p> <p>For payroll and time entry:</p> <p>If an employee always works a shift for which a shift rate differential is applicable, enter that shift code on the employee's master record. When you enter the shift on the employee's master record, you do not need to enter the code on the timecard when you enter time.</p> <p>If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default.</p>								
Period	<p>A code that determines the frequency of the schedule. Valid codes are:</p> <table style="margin-left: 20px;"> <tr> <td>1</td> <td>Monthly</td> </tr> <tr> <td>2</td> <td>Weekly</td> </tr> <tr> <td>3</td> <td>Daily</td> </tr> <tr> <td>4</td> <td>Per Shift</td> </tr> </table>	1	Monthly	2	Weekly	3	Daily	4	Per Shift
1	Monthly								
2	Weekly								
3	Daily								
4	Per Shift								

## Creating Rate Schedules

	<p>From Shop Floor Control (G31), choose <b>Repetitive</b></p> <p>From Repetitive Daily Processing (G3141), choose <b>Enter/Change Rate Schedule</b></p>
---	--

A rate schedule is a request to produce a certain quantity of items on a specified periodic basis for a given length of time. Rate schedules eliminate the need to create multiple work orders for items you want to produce monthly, weekly, or daily in regular quantities. You generally use rate schedules in repetitive manufacturing.

To create a rate schedule, you:

- Specify engineering information, such as schedule types and effective dates.

- Specify production information, such as the item and quantities on which the rate is based.

You can use processing options to define a default schedule type, schedule period, and spread value. You can also choose to display only active schedules. In addition, you can access associated screens by indicating the version of these screens in the processing options. You can use these screens to view and modify information for routing, work center, MPS/MRP/DRP time series, rate generation, and scheduling.

## Before You Begin

- Set up your work centers. See *Setting Up Work Centers in the Shop Floor Control Discrete Manufacturing Guide*.
- Set up your routing instructions. See *Creating Work Orders in the Shop Floor Control Discrete Manufacturing Guide*.
- Set up your line/item relationships. See *Creating Line Item Relationships*.

## To create rate schedules

### On Enter/Change Rate Schedule

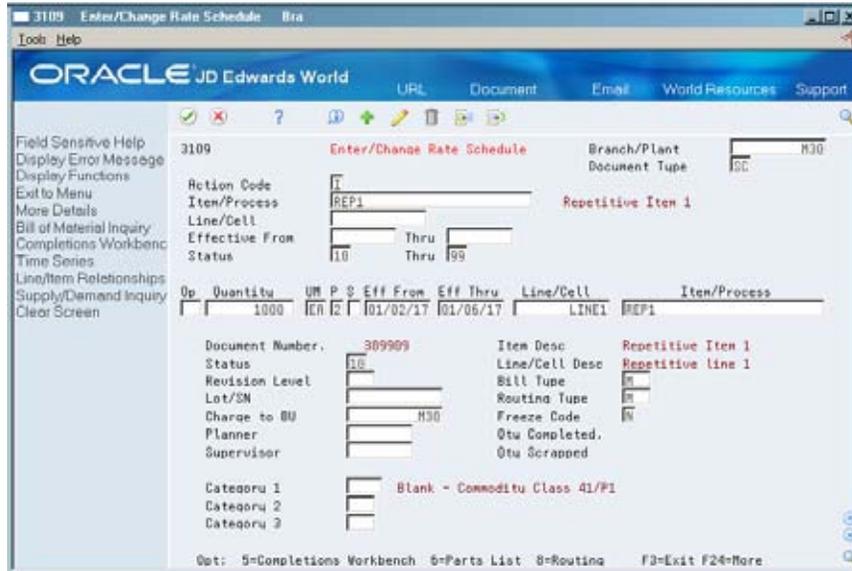
Op	Quantity	UM	P	S	Eff From	Eff Thru	Line/Cell	Item/Process
	1000	ER	2		01/02/17	01/06/17	LINE1	REP1
	1000	ER	2		01/09/17	01/13/17	LINE1	REP1
	1000	ER	2		01/16/17	01/20/17	LINE1	REP1
	1000	ER	2		01/23/17	01/27/17	LINE1	REP1
	1000	ER	2		01/30/17	02/03/17	LINE1	REP1

#### 1. Complete the following fields:

- Branch/Plant
- Schedule Type
- Item Number
- Line/Cell
- Effective From
- Effective To
- Quantity

- Unit of Measure

2. Access the detail area (F4).



3. Review the following default information:

- Period
- Shift
- Category 1
- Category 2
- Category 3
- Quantity Completed
- Quantity Scrapped

Field	Explanation
Schedule Type	A user defined code (system 31, type ST) that identifies the type of schedule, for example, AC for actual schedule and PL for planned schedule.
Quantity	The quantity of units affected by this transaction.
Category 1	A user defined code (00/W1) that indicates the current stage or phase of development for a work order. You can assign a work order to only one phase code at a time.  <b>Note:</b> Certain screens contain a processing option that allows you to enter a default value for this field. If you enter a default value on a screen for which you have set this processing option, the system displays the value in the appropriate fields on any work orders that you create. The system also displays the value on the Project Setup screen. You can either accept or override the default value.

Field	Explanation
Category 2	<p>User defined code system 00, type W2, which indicates the type or category of a work order.</p> <p><b>Note:</b> A processing option for some screens lets you enter a default value for this field. The value then displays automatically in the appropriate fields on any work orders you create on those screens and on the Project Setup screen. (You can either accept or override the default value.)</p>
Category 3	<p>User defined code system 00, type W3, which indicates the type or category of a work order.</p> <p><b>Note:</b> A processing option for some screens lets you enter a default value for this field. The value then displays automatically in the appropriate fields on any work orders you create on those screens and on the Project Setup screen. (You can either accept or override the default value.)</p>
Qty Scrapped	<p>The number of units canceled in Sales Order or Work Order Processing, using either the entered or the primary unit of measure defined for this item.</p> <p>In manufacturing, this can also be the number of units scrapped to date.</p>
Qty Completed	<p>The number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item.</p> <p>In the Manufacturing system and Work Order Time Entry, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.</p>

## What You Should Know About

<b>Deleting a rate schedule</b>	You can only delete a rate schedule if it has never been used. Active rate schedules cannot be deleted. You must close out the schedule.
<b>Duplicating schedules</b>	You can enter duplicate rate schedules.
<b>Creating rates automatically</b>	You automatically create a rate when you process a Create Rate message in Detail Message Review.

## See Also

- *Creating Rate Schedules in the Shop Floor Control Process Manufacturing Guide* for more information on processing options

## Generating MPS for Repetitive Items

	From Material Planning Operations (G34), choose <b>Single Site Planning</b> From Single Site Periodic Planning Operations (G3422), choose <b>MPS Regeneration</b>
---	--

When you run the MPS Net Change or Regeneration program, the system:

- Evaluates selected information
- Performs calculations
- Generates a time series and messages for the selected items

### What You Should Know About

#### Rate Scheduling Information

You must set the processing options to generate the master production schedule.

Enter the type of rate schedule that you want to use for processing.

You can also set a processing option to extend rate adjustments to lower-level items.

### See Also

- *Generating Master Schedules for All Items (P3482)* for the processing options for this program
- *Generating Master Schedules for Selected Items (P3482)*

## Reviewing Repetitive Rate Scheduled Output from MPS Generation

	From Material Planning Operations (G34), choose <b>MPS</b> From MPS Daily Operations (G3412), choose <b>MPS Time Series Inquiry</b> or <b>MPS Detail Message Review</b>
---	--

After you generate a master production schedule, use MPS Time Series Inquiry and MPS Detail Message Review to review the time series and messages that the system has generated.

The time series is a record of time-phased supply and demand netting for selected items. The system links the planned order releases for the parent item to the gross requirements of component items.

If a component does not have its own rate schedule, the system applies the demand from the parent item. The demand from the rate scheduled parent follows the same logic as regular work orders. When a rate schedule is added for a component of a rate based parent, the calculation includes the information for the component in both the rate schedule (+RS) and unadjusted rate schedule (-RS) lines of data. The component is processed as supply, and regular MRP logic applies.

The messages reflect how the system used rate scheduled items to generate quantities for net requirements for each time period. The MPS/MRP program produces three main action messages that pertain to repetitive items:

Action	Description
I = Increase rate to	Updates an existing rate to the increased quantity.
H = Decrease rate to	Updates an existing rate to the decreased quantity.
N = Create rate	Treats messages as a group from the MPS/MRP Detail Message Review screen. You may answer more than one message at a time. The system creates one rate that averages the total of all Create Rate messages processed.

When the system processes messages to create and update rates, it does not check the validity of the dates received. The MPS/MRP regeneration produces messages with valid dates. However, you can change these dates before processing the message. To avoid creating invalid rates, ensure the validity of the dates you enter whenever you change message dates before processing.

Reviewing repetitive rate scheduled output consists of the following tasks:

- Reviewing the time series for rate scheduled output
- Reviewing action messages for rate scheduled output

## To review the time series for rate scheduled output

On MPS Time Series Inquiry

Item Number	01/02/17	01/03/17	01/04/17	01/05/17	01/06/17	01/13/17
LVR						
SF						
BRU		900-	700-	500-	300-	100-
BR		000-	600-	400-	200-	
IR						
PDU						
PO						
M0U						
M0						
RSU	200	200	200	200	200	1000
KS	220	220	220	220	220	1100
LEXP						
FDU	1100					1100
FC	1100					1100

To locate the time series for your item, complete the following fields:

- Branch/Plant
- Item Number

## What You Should Know About

### Suppressing blank lines

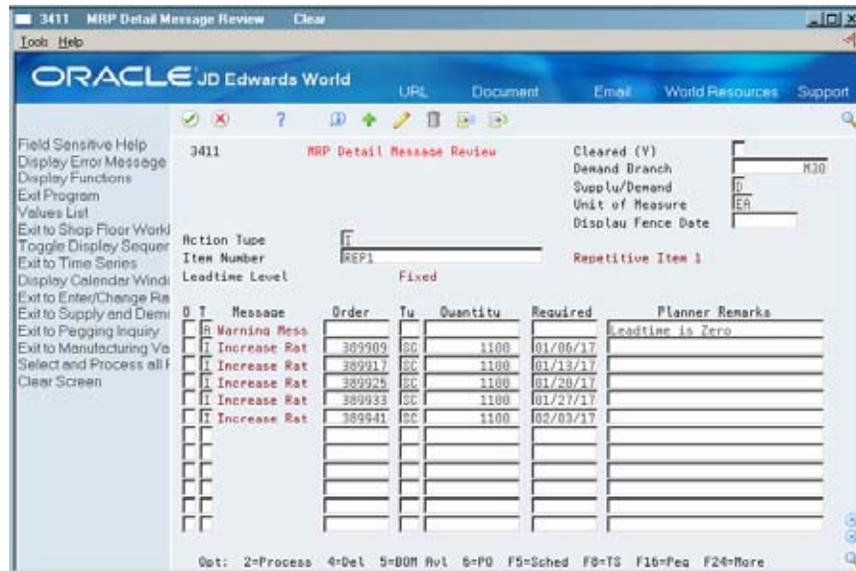
You can use the function key F15 to suppress the quantity types that have no data in the time series.

### Creating Rates

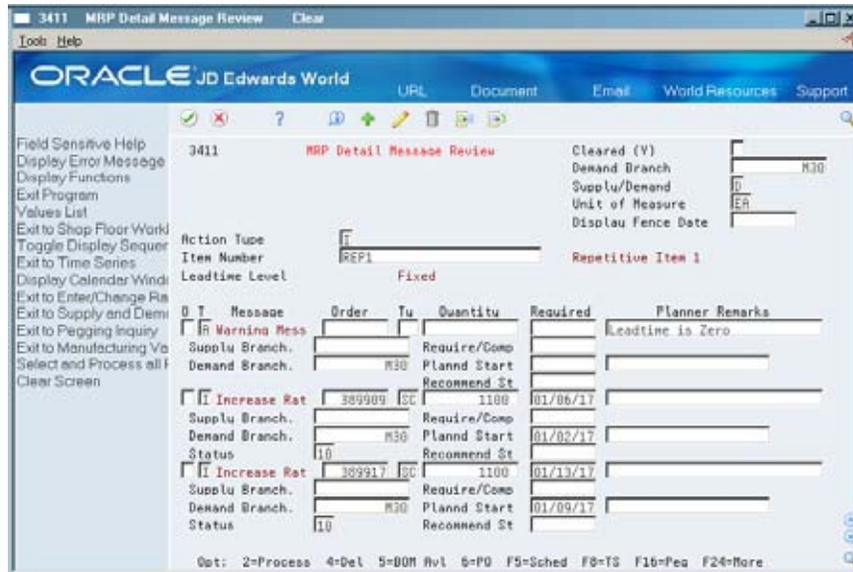
Instead of creating a single rate for a given schedule period type over a date range, the system creates a series of rates to cover the entire period. For instance, instead of having one weekly rate in effect for four weeks, the system creates four weekly rates, each in effect for a week.

## To review action messages for rate scheduled output

On MPS Detail Message Review



- To locate the messages for your item, complete the following fields:
  - Demand Branch
  - Item Number
- To view additional message information, access the detail area (F4).



## What You Should Know About

### Creating Rates

Instead of creating a single rate for a given schedule period type over a date range, the system creates a series of rates to cover the entire period. For instance, instead of having one weekly rate in effect for four weeks, the system creates four weekly rates, each in effect for a week.

When you process a Create Rate message, the system can attach the parts list and routing automatically.

## See Also

- *Working with Messages (P3411)* for the processing options for this program

## Validating Load on Lines or Cells

	From Shop Floor Control (G31), choose <b>Repetitive</b> From Repetitive Daily Processing (G3115), choose <b>Schedule Review</b>
---	--

Use Schedule Review to validate the load on lines or cells. You can view the effects of a rate schedule on a given work center and adjust the priorities of the schedule.

You can also:

- View rate schedule load for:
  - A specific work center by day, week, or month
  - A specific date range
- Revise rate schedules
- Revise resource units

- Review rate based load only, or rate based load and work order load together

## To validate load on lines or cells

### On Schedule Review

Item Number	Date	Load	Capacity	Avail
REP1	01/02/17	250	50	100
REP1	01/03/17	250	50	100
REP1	01/04/17	250	50	100
REP1	01/05/17	250	50	100
REP1	01/06/17	250	50	100
REP1	01/07/17	250	50	100
REP1	01/08/17	250	50	100
REP1	01/09/17	250	50	100
REP1	01/10/17	250	50	100
REP1	01/11/17	250	50	100
REP1	01/12/17	250	50	100
REP1	01/13/17	250	50	100
REP1	01/16/17	250	50	100
REP1	01/17/17	250	50	100
REP1	01/18/17	250	50	100
REP1	01/19/17	250	50	100

To locate the schedule, complete the following fields:

- Branch/Plant
- Line/Cell or Work Center
- Effective From
- Effective To

## Processing Options

See [Schedule Review \(P3152\)](#).

## See Also

- *Reviewing Rate Schedule and Work Center Loads* for the processing options for this program

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# Work with Process Manufacturing

## Working with Process Manufacturing

Process manufacturing produces products such as liquids, fibers, powders, or gasses. Pharmaceuticals, foodstuffs, and beverages are typical examples of process products and represent a significant share of the manufacturing market. Products such as these are usually manufactured by a two-step process:

- Mixing or blending
- Filling or packaging

There might also be intermediate steps, such as curing, baking, or preparation.

Process manufacturing uses recipes or formulas and resources or ingredients. These resources can be either consumed or produced during the manufacturing process. In a process recipe or formula, the quantity of a component can vary according to its grade or potency.

The process produces co-products and by-products. A co-product is a saleable end item that results from a process. A by-product is a material that is produced incidental to or as a residual of the process.

The different types of processing in process manufacturing are:

- Batch
- Continuous

In batch processing, you usually produce a product in a standard run or lot size determined by vessel size, line rates, or standard run length. Because of the life cycle of the product after its completion, you typically schedule items made this way in short production runs. Co-products and by-products can be generated during batch processing. Typical items produced with batch processing include:

- Pharmaceuticals
- Foods
- Inks and paints
- Glues
- Oil or chemical products

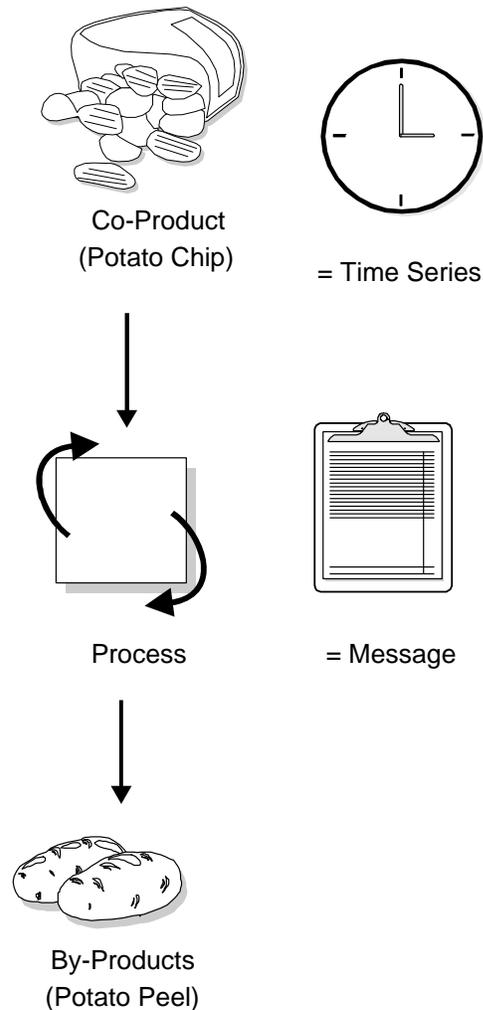
In the continuous flow environment, production runs typically continue for an extended duration. Equipment is dedicated to one product or product line. This method of manufacturing is characterized by difficulty in matching output volume with demand and varying yield from process operations. Examples are petroleum-based products and water purification. Co-products and by-products are generally more prevalent in continuous processing than in batch processing.

Usually, both batch and continuous processing methods require extensive record keeping, recording of quality and tolerance values during the process, and strict adherence to lot tracing and tracking.

Working with process manufacturing consists of the following tasks:

- [Defining the Stocking Types for Processes](#)
- [Defining Co- and By-Products](#)
- [Generating MPS for the Process Industry](#)
- [Reviewing Process Output from MPS Generation](#)

The following illustration shows that MPS calculates the time series for co-products. Demand for the co-product generates MPS order messages to drive the production process. Co-products that are 100% planned by the process do not receive order messages. The figure shows that the process also makes a by-product. This by-product might have some value, but it is not the central purpose of the process. For example, potatoes would not be processed primarily to obtain potato peels.



To identify items for process manufacturing, you must define the item's stocking type to distinguish process items from co-products or discrete items. You must then

specify both the percentage of the demand for co-products that is satisfied from process work orders and the percentage that is satisfied from work orders for the co-products. You can then generate and review a master schedule of all process work orders and output. This output consists of time series and messages for the co- and by-products.

## Defining the Stocking Types for Processes



From Inventory Management (G41), choose **Inventory Master/Transactions**  
From Inventory Master/Transactions (G411), choose **Item Master Information**

You define the stocking type to distinguish the process from its co-products or discrete items.

### To define the stocking type for the process

On Item Master Information

The screenshot shows the 'Item Master Information' window for item 4181. The window title is '4101 Item Master Information Item'. The Oracle JD Edwards World logo is at the top. The window is divided into several sections:

- Item Information:** Item Number - Short. 85761, Desc: Potato Chip Process, Srch: Process, Chip.
- Stocking Type:** Stocking Type: P, G/L Class: TN40, Unit of Measure: LR.
- Price Groups:** Item Price Group, Basket Reprice Group, Order Reprice Group, Dispatch Group, Warranty Item Group.
- Availability:** Backorders Allowed: Y, Check Availability Y/N: Y, Shelf Life Days.
- Other Fields:** Line Type: P, Bulk/Packed Flag: P, Inventory Cost Level: 2, Sales Price Level: 2, Purchase Price Level: 3, Kit Pricing Method, Serial No. Required: N, Lot Status Code, Lot Process Type: 1, Commitment Method: 1, Item Flash Message, Std UOM Conversion.
- Planner and Buyer Information:** Planner Number: 6002, Buyer Number: 6001, Print Message.

At the bottom, there are function key shortcuts: F5-Codes, F8-Measures, F10-Manufacturing, F13-Branch/Plant, F24-More Keys.

- To locate your item record, complete the following field:
  - Product Number
- Complete the following field:
  - Stocking Type

## Defining Co- and By-Products



From Product Data Management (G30), enter 29  
 From Product Data Management (G3041), choose **Product Costing Setup**  
 From Product Costing Setup (G3042), choose **Co/By-Products Planning Table**

Use the Co-/By-Products Planning Table to set up co- and by-product processes for MPS and MRP. This table specifies the percentage of the demand for co-products that is satisfied from process work orders and the percentage that is satisfied from the work orders for the co-products.

You can also specify special circumstances. For example, by entering 75% in the table, you specify that 75% of demand is satisfied from process work orders and 25% from co-product work orders. The system automatically satisfies the remainder by planning co-product work orders.

If a co-product can be produced by more than one process, both processes appear in the table when you locate the co-product. For example, a 75% - 25% relationship can exist between the two processes.

### To define co- and by-products

On Co-/By-Products Planning Table

Process/Item	Description	Pro	Plan %	Cost %
777	Potato Chip Process	Y	100.00	100.00

1. To locate the co-/by-product table, complete the following fields:

- Co-/By-Product
- Branch/Plant

2. Complete the following fields:
  - Process/Item
  - Process
  - Plan Percentage
  - Cost Percentage
3. Access the detail area (F4).

4. Complete the following fields:
  - Effective From
  - Effective Thru Date

Field	Explanation
Co/By-Product	A number that the system assigns to an item. It can be in short, long, or 3rd item number format.

## Generating MPS for the Process Industry

	From Material Planning Operations (G34), choose <b>Single Site Planning</b> From Single Site Periodic Planning Operations (G3422), choose <b>MPS Regeneration</b>
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When you choose MPS Regeneration, the system:

- Evaluates selected information
- Performs calculations

- Generates a time series and messages for the selected items

## See Also

- *Generating Master Schedules for Selected Items (P3482)* for the processing options for this program

## What You Should Know About

<b>Process Planning</b>	<p>Set the process planning processing option for the net change versions you use for MRP and MPS planning.</p> <p>Set this option to create the resource list records for co-/by-products when the system creates the process work order. If you leave this field blank, the system creates the resource list records for the co-/by-products when it creates the ingredients list.</p>
<b>Forecast Consumption</b>	<p>Forecast consumption does not apply to process manufacturing. Leave this processing option blank for the net change versions for MRP and MPS and when you run the regeneration programs.</p>

## Reviewing Process Output from MPS Generation

	<p>From Material Planning Operations (G34), choose <b>MPS</b></p> <p>From MPS Daily Operations (G3412), choose <b>Time Series Inquiry</b> or <b>MPS Detail Message Review</b></p>
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After you generate a master schedule, use **MPS Time Series Inquiry** and **MPS Detail Message Review** to review the time series and messages that the system has generated.

Many processes produce multiple co-products. In these cases, one co-product might have a higher demand than other co-products. This is the **pacing co-product**. For example, a process might produce both plastic and ethylene glycol (anti-freeze). Producing to meet demand for plastic might result in excess anti-freeze production, forcing a decrease in the price of anti-freeze in order to sell it. The **pacing co-product** requires the greater amount of the process to be produced in a given time period (based on demand) to obtain the co-product quantity required.

The time series is a record of time-phased supply and demand netting for selected co- and by-products. Co-products that are 100% planned by the process do not receive order messages. Instead, the system creates warning messages for co-products that are planned by a process.

Reviewing process output from the MPS generation includes the following tasks:

- Reviewing time series for co- and by-products
- Reviewing messages for processes

## To review time series for co- and by-products

### On MPS Time Series Inquiry

Past Due	01/05/18	01/12/18	01/19/18	01/26/18	02/02/18
+BRU 14792	14792	1100	12416-	26020-	34556-
+BR 14792	14792	1100	2	6	10
+WOU				5060	
+MO		12418			
-FCU	13604	13604	13604	13604	13604
-FC	13604	13604	13604	13604	13604
-ERU 14792	1188	12416-	26020-	34556-	48160-
-ER 14792	1188	2	6	10	
+PLO			13600	13600	13594
ATPU	14792		13600	10676	13594
ATP	14792	12418	13600	13600	13594
CRTPU	14792	14792	28400	47076	66670
CRTP	14792	27210	40010	54426	66020

To locate the time series for your co- or by-product, complete the following fields:

- Branch/Plant
- Item Number

## What You Should Know About

**Process item numbers** Process item numbers do not have a time series.

**Suppressing blank lines** You can use a function key to suppress the quantity types that have no data in the time series.

## Example: Reviewing Time Series for Pacing Co-Products

In the potato chip example, there is a peeling process (888). This process produces the following co-products:

- Potato slices
- Peelings

View the MPS Time Series Inquiry for the pacing co-product. Notice that the planned orders (+PLO) satisfy the demand requirements and that the Ending Available (=EA) is balanced by 01/26/18.

3413 MPS Time Series Inquiry Br

Item Number: 3459  
Leadtime Per Unit: Variable  
Safety Stock: Variable  
Branch/Plant: [Blank]  
Start From Date: [Blank]  
Unit of Measure: 02  
Potato Slices

	Past Due	01/05/18 L	01/12/18	01/19/18	01/26/18	02/02/18
+RAU	15960	15960	15960	15960	2230-	27195-
+BA	15960	15960	15960	0	10	
-FMOU					6775	
-FWD			16600			
-PWO				10190	10190	10171
+ERU	15960	19960	19960	2230-	27195-	45366-
+EA	15960	15960	0	10		9
+PLO			608	10192	10180	10180
ATPU		15960	608	10192	4638	10180
ATP		15960	608	10192	4630	10180
CRTPU		15960	16600	34800	39430	57610
CRTP		15960	16600	34800	39430	57610

F8=Code F13=Peg F14=Msg F16=Sup/Dem F19=Left F20=Right F24=More Keys

View the time series for the product which is not the pacing co-product. Review the quantities in period 01/12/18.

3413 MPS Time Series Inquiry Br

Item Number: 3455  
Leadtime Per Unit: Variable  
Safety Stock: Variable  
Branch/Plant: [Blank]  
Start From Date: [Blank]  
Unit of Measure: 02  
Peelings

	Past Due	01/05/18	01/12/18	01/19/18	01/26/18	02/02/18
+RAU	300939	300939	300939	300939	300939	300939
+BA	300939	300939	300939	301155	307219	313279
+ERU	300939	300939	300939	300439	300939	300939
+EA	300939	300939	301155	307219	313279	319339
+PLO			216	6064	6060	6060
ATPU		300939	216	6064	6060	6060
ATP		300939	216	6064	6060	6060
CRTPU		300939	301155	307219	313279	319339
CRTP		300939	301155	307219	313279	319339

F8=Code F13=Peg F14=Msg F16=Sup/Dem F19=Left F20=Right F24=More Keys

In this example, you continually build ending available (EA) inventory. To get enough potato slices to cover demand, you continue to accumulate peelings, even though you have no demand for it.

## To review messages for processes

### On MPS Detail Message Review

- To locate the messages for your item, complete the following fields:

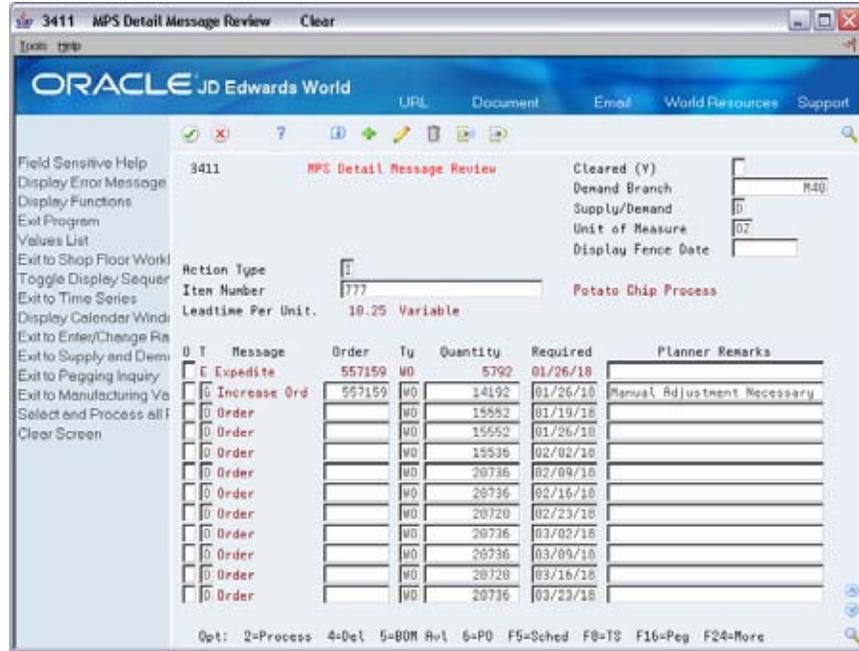
- Demand Branch
- Item Number

Review the detail messages for the co-product 7771. Co-products that are 100% planned by the process do not receive order messages. Warning messages are typical for co-products planned by a process.

- To locate the messages for process 777, complete the following field:

- Item Number

The net requirement for the co-products act as requirements for the process. The +PLO for potato chips is ordered on the potato chip process.



## What You Should Know About

### Co-product messages

Co-products that are 100% planned by the process do not receive order messages.

## Processing Options

See [Message Detail \(P3411\)](#).

## See Also

- *Working with Master Schedules (P3413)* for the processing options for MPS Time Message Inquiry
- *Working with Messages (P3411)* for the processing options for Detail Message Review

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## **8   DRP/MPS Multi-Facility Scheduling**



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# Overview to DRP/MPS Multi-Facility Scheduling

## Objectives

- To understand multi-facility scheduling concepts
- To define supply and demand relationships between your branch/plants
- To use the branch relationships chart to review your supply and demand relationships in a graphical hierarchical format
- To generate a multi-facility schedule
- To review the time series for the multi-facility schedule
- To review and process transfer messages for the multi-facility schedule

## About DRP/MPS Multi-Facility Scheduling

In a multi-facility operation, planned orders at the demand facility are the source of demand at the supply facility. You set up and maintain multi-facility schedules to:

- Manage the movement of material through distribution networks and multiple production facilities
- Formalize the process of transferring items among your facilities
- Create internal transfer orders to help ensure traceability of material and their costs between facilities
- Ensure that the branch from which you are ordering has enough inventory in stock to fill the order
- Schedule production according to realistic time frames

Multi-facility schedules allow greater control of your enterprise. You can define facility relationships at any level of detail for an entire facility, a product group, master planning family, or an individual item number. In addition, you can incorporate all your facilities into a single planning schedule.

DRP/MPS multi-facility scheduling consists of the following tasks:

- Setting up multi-facility schedules
- Generating multi-facility schedules
- Working with multi-facility planning output

The system records multi-facility information in the following tables:

<b>Table</b>	<b>Description</b>
Bill of Materials Master (F3002)	Contains warehouse or facility level information about bills of material, such as: <ul style="list-style-type: none"><li>▪ Costs and quantities of components</li><li>▪ Features and options</li><li>▪ Levels of detail for each bill</li></ul>
Branch Relationships Master (F3403)	Contains the supply/demand relationship among the branches.
MPS/MRP/DRP Lower Level Requirements (F3412)	Contains the source of gross requirements that are posted to items from parent items.
MPS/MRP/DRP Detail Message Review (F3411)	Contains the action messages generated by an MPS or MRP scheduling run.
MPS/MRP/DRP Summary (F3413)	Contains the time series data for forms and reports.
Item Master (F4101)	Contains basic information about each item that has been defined in inventory, such as: <ul style="list-style-type: none"><li>▪ Item numbers and descriptions</li><li>▪ Category codes</li><li>▪ Units of measure</li></ul>
Item Branch (F4102)	Contains warehouse or plant level information, such as: <ul style="list-style-type: none"><li>▪ Costs</li><li>▪ Quantities</li><li>▪ Location</li><li>▪ Branch level category codes</li></ul>

## What Are the Different Types of Multi-Facility Scheduling?

Two types of multi-facility scheduling are available:

- Consolidation
- Branch relationships

Consolidation multi-facility scheduling allows you to:

- Combine all planning activity under one specific facility
- View total requirements throughout your network for an overall corporate projection
- View individual facilities' contribution to supply and demand, item availability, and sales

- Select processing options that generate planning for non-consolidated branches
- Consolidate all planning requirements at a selected branch
- Create schedules for each of your individual facilities as well as an overall plan for the parent company

Branch relationships multi-facility scheduling allows you to:

- Use the branch/plant relationships to explode demand through the supply network
- Provide a manufacturing or transfer facility code for a component item within a bill of material
- Pick or manufacture a part at another nearby facility without creating an inter-facility transfer order
- Specify any number of different supply facilities for each component
- Pass all or part of the demand from the demand plant to the supply plant



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# Set Up Multi-Facility Schedules

## Setting Up Multi-Facility Schedules

You set up multi-facility schedules to track supply, demand, and movement of material among the individual facilities of your enterprise. Multi-facility scheduling provides a flexible method for planning supply and resupply activities.

In multi-facility scheduling you must set up a table of supply and demand relationships among your facilities. The system uses these relationships to generate and maintain multi-facility schedules.

Setting up multi-facility schedules consists of the following tasks:

- [Setting Up Supply and Demand Relationships](#)
- [Reviewing Branch Relationships on the Relationships Chart](#)

The following describes how to set up multi-facility schedules using bill of material components.

### Before You Begin

- Verify that DRP, MPS, or RCCP has been set up
- Understand the concepts and terms described in *Single Level Master Scheduling*

### See Also

- *Setting Up DRP, MPS, and RCCP (P00051)* for information on how to define DRP, MPS, or RCCP data to use during processing
- *Single-Level Master Scheduling* for more information on the master scheduling process

## Setting Up Supply and Demand Relationships

	From Material Planning Operations (G34), choose [Menu Selection] From Multi-Facility Periodic Planning Operations (G3423), enter 29 From Multi-Facility Setup (G3443), choose Branch Relationships Revisions
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Use Branch Relationships Revisions to set up supply and demand relationships for any level of detail you choose, including:

- Branch/plant
- Product group

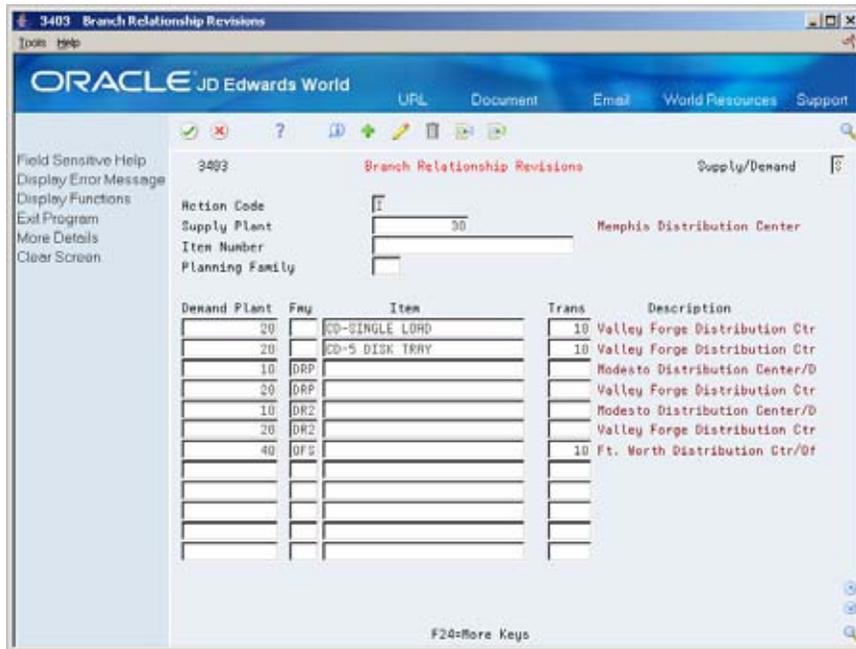
- Master planning family
- Individual item number

This approach allows you to maintain your supply and demand relationships in one central location and reduce inventory errors caused by complex facility relationships. In addition, when you set up your supply and demand relationships, you can include the following optional features:

Feature	Description
Mark up	You can have the system automatically mark up the cost of an item when you create a transfer order. The system can adjust the cost by a fixed amount or percentage.
Availability Checking	You can ensure that the branch from which you are ordering has enough inventory in stock to fill the order. If the required quantity is not available, the system checks subsequent facilities in the sequence that you define. <b>Note:</b> To allow the system to generate transfer order messages, you must activate availability checking.
Effective dates	Use effectivity dates to control the demands that are placed on your supply branches. If an effective date that was assigned to a supply branch has expired, the system checks for another facility.

## To set up supply and demand relationships

### On Branch Relationship Revisions



1. Complete the following field:

- Supply Plant
2. Complete the following optional fields:
    - Supply/Demand
    - Family
    - Item
    - Transit Leadtime
  3. Access the detail area (F4).

Demand Plant	Fwy	Item	Trans	Description
20		00-SINGLE LOAD	10	Valley Forge Distribution Ctr
		Effective From. 02/09/00	Source Percent. 100.00	Branch Level <input type="checkbox"/> Inc/Exc <input type="checkbox"/>
		Thru. 12/31/22	Percent to Fill .00	Branch Priority <input type="checkbox"/> Avl Chk <input type="checkbox"/>
20		00-5 DISH TRAY	10	Valley Forge Distribution Ctr
		Effective From. 02/09/00	Source Percent. 100.00	Branch Level <input type="checkbox"/> Inc/Exc <input type="checkbox"/>
		Thru. 12/31/22	Percent to Fill .00	Branch Priority <input type="checkbox"/> Avl Chk <input type="checkbox"/>
10	DRP			Modesto Distribution Center/0
		Effective From. 11/05/05	Source Percent. 100.00	Branch Level <input type="checkbox"/> 1 Inc/Exc <input type="checkbox"/>
		Thru. 12/31/22	Percent to Fill .00	Branch Priority <input type="checkbox"/> Avl Chk <input type="checkbox"/>
20	DRP			Valley Forge Distribution Ctr
		Effective From. 11/05/05	Source Percent. 100.00	Branch Level <input type="checkbox"/> 1 Inc/Exc <input type="checkbox"/>
		Thru. 12/31/22	Percent to Fill .00	Branch Priority <input type="checkbox"/> Avl Chk <input type="checkbox"/>

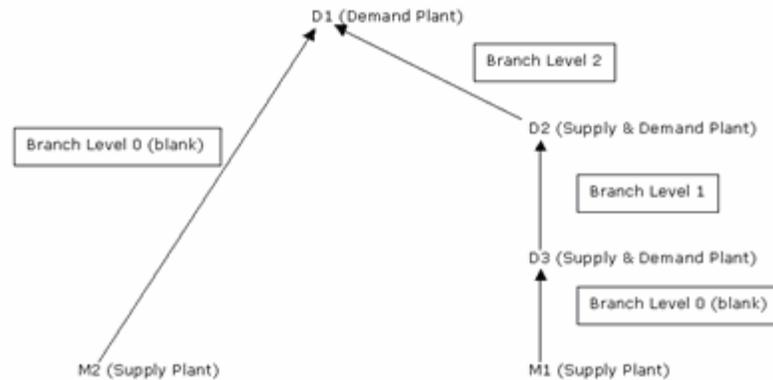
4. Complete the following optional fields:
  - Branch Level
  - Branch Priority
  - Availability Check
5. Allow the system to enter defaults or complete the following fields:
  - Effective From
  - Effective Thru
  - Source Percent
  - Percent to Fill
  - Markup Percent
  - Fixed
  - Include/Exclude
  - Unit Extended

Field	Explanation
Supply/Demand	<p>This field allows you to view messages from the viewpoint of either the supply or demand branch. Changing this field from S to D also changes the Supply Plant field immediately below the Action Code field to Demand Plant.</p> <p>S    Supply branch/plant D    Demand branch/plant</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>If you are viewing messages for the supply branch/plant, the fold area shows branch/plants generating demand for each resupply order.</p> <p>If you are viewing messages for the demand branch/plant, the fold area shows branch/plants to which each resupply order is directed.</p>
Fmy	<p>A code (table 41/P4) that represents an item property type or classification, such as commodity type, planning family, or so forth. The system uses this code to sort and process like items.</p> <p>This field is one of six classification categories available primarily for purchasing purposes.</p> <p>In order to tell the system which UDC table to edit against, the data dictionary for PRPX is set to use the UDC table of the purchasing class code the system uses for the relationships. Typically, the system uses the master planning family (PRP4), so PRPX is set up to use PRP4's UDC table (41/P4) in the Data Dictionary.</p> <p>When you establish relationships based on a planning family, the planning family needs to be consistent across all branch plants in the supply chain. A common misconception is that just the planning family from the demand plant is used – that the planning family does not have to be consistent. With this set up (planning family not the same across the supply chain), transfer messages will only be received for the highest level branch plants (see Branch Level below) - in order to generate transfer messages for the rest of the supply chain, P3483 has to be run again and again (without clearing files) until you get to the end (lowest level) of the supply chain. So, there may be simple branch relationships situations where expected results will be achieved in spite of inconsistent planning families, but this is not recommended. Just think of planning family level processing exactly the same as item number level processing. During item number processing, each branch plant's item branch record has a part number that is consistent throughout each branch plant in the supply chain with branch relationships setup accordingly. The planning family is just another 'key' field, and should be consistent for those items that are being grouped this way.</p>

Field	Explanation
Item Number	You use this field to establish item number specific relationships or exclusions.
Trans	<p>The transit leadtime is the amount of time it will take to transfer the order from one plant to another. The requirement in the demand plant is back scheduled by the transit time to give the start date for the transfer order in the supply plant. Any work orders or purchase orders for this item in the supply plant are then back scheduled from this date. Transit leadtime is in calendar days.</p> <p>You define this value on Plant Manufacturing Data. The system uses this value to calculate the start dates for work orders using fixed leadtimes. Level leadtime is different for purchased and manufactured items.</p> <p>You can enter level leadtime manually on Manufacturing Values Entry, or you can use the Leadtime Rollup program calculate it. To calculate level leadtime using the Leadtime Rollup program, you must first enter a quantity in the Manufacturing Leadtime Quantity field in the Item Branch table (F4102).</p>
Branch Level	<p>Determines the level at which a component branch should be processed in multi-plant processing. The lowest level branches (which are assigned a higher numerical value) are processed first, followed by the higher level branches (which are assigned a lower numerical value).</p> <p><b>Note:</b> Assign branch levels carefully so that the planning system generates all demand before allocating supply. See diagram below.</p>
Branch Priority	Determines the sequence within a level that the branches are processed in multi-plant DRP/MPS/MRP. Use this field along with the Branch Level field to check inventory availability first in one branch, and then another.
Avl Chk	Indicates if the planning system will check availability of the item or family at the supply branch/plant. If you enable availability checking on the item or family being demanded, the available inventory at the branch/plant will be committed until there is a zero balance. If you disable availability checking, the inventory balance in the supplying branch/plant can be negative.

Field	Explanation
Source Percent	<p>The system uses source percent to determine what percent of the planned order should be supplied by the source branch.</p> <p>For example:</p> <p>Demand Branch — ATL</p> <p>Supply Branch — DEN source percent = 40%, CHI source percent = 60%</p> <p>If ATL needs 100 parts, the system generates a message to transfer 40 parts from DEN and 60 parts from CHI.</p> <p>A source percent of 100 transfers the entire supply from that Branch/Plant.</p>
Percent to Fill	<p>A field used during multi-plant processing to determine what percent of an order should be filled to place a transfer order message. For example:</p> <ul style="list-style-type: none"> <li>▪ Percent to Fill - 75%</li> <li>▪ Demand - 200</li> <li>▪ If the supply branch has 150 (75 percent of 200) or more available, then the planning system places the transfer order message.</li> </ul> <p>The system generates the transfer order message when the percent to fill is zero.</p> <p><b>Note:</b> In order to allow the system to generate transfer order messages, you must activate availability checking.</p>
Markup Percent	<p>The percent markup is the percent of the cost that the system uses as mark up when the item is transferred from one branch to another.</p>
Fixed	<p>The amount to use to mark up the cost when the item is transferred from one branch to another.</p>
Inc/Exclude	<p>A code that indicates whether the system includes or excludes the item/category code in the Branch Relationships Master table (F3403) when generating a multi-plant schedule. If an item/category code is excluded, then that item/category code will be purchased or manufactured at the demand branch.</p>
Unt/Ext	<p>This code determines if the fixed cost markup is to be added to the unit cost or the extended cost. Valid values are:</p> <ul style="list-style-type: none"> <li>U Add markup to the unit cost</li> <li>E Add markup to the extended cost</li> </ul>

## Branch Level Diagram



The diagram above graphically displays the purpose of the branch level. In order for the system to properly calculate the aggregate demand from branches D1, D2, and D3 to be satisfied by M1, the system sums up the demand from the highest branch level value down (this is similar to the way the system uses low level codes in the F4102 to determine the lowest level that a component item exists).

In this scenario, D3 is at the end of two supply chains; the system would look first in D2 because the branch level of 2 would put it before M2 with a branch level of 0 (blank). If the branch levels were equal, then the branch with the first ascending alphanumeric value would be used (also D2 in this example).

Processing option 3 behind Branch Relationship Revisions states: Enter a '1' to automatically update the Branch Level field. However, at the present time, the following limitation exists: the only time the system populates the branch levels is when the relationships you enter from the end of the supply chain backwards. For example, for the system to properly populate the branch level field automatically for the relationships above, you must enter the D2-D3 relationship first, then the D3-D2 and finally the M1-D3. If you enter the relationships in any other order, the system will not correctly/completely populate the branch level fields. It is necessary to verify that branch levels are properly populated. As you can see from the previous paragraph, even if the system were always correctly populating this field, manual changes would sometimes be required to achieve the desired result.

## What You Should Know About

### Deleting supply and demand relationships

When you delete a supply and demand relationship, the system deletes the entire record.

### Locating existing supply and demand relationships

When locating a relationship, you can narrow your search by entering either an item number or planning family. Enter an item number to display all plants that either supply or demand a certain part. Enter the planning family to display all plants that either supply or demand parts that belong to a specific master planning family.

**Defining the branch level** You must set the appropriate processing option to determine the level of the component branch to be one level higher than the header for the source branch.

The branch level, along with the branch priority, determines the sequence in which the system processes supply and demand plants. The system processes the branches with the highest numerical branch level first.

## Processing Options

See [Branch Relationship Revisions \(P3403\)](#).

## Reviewing Branch Relationships on the Relationships Chart

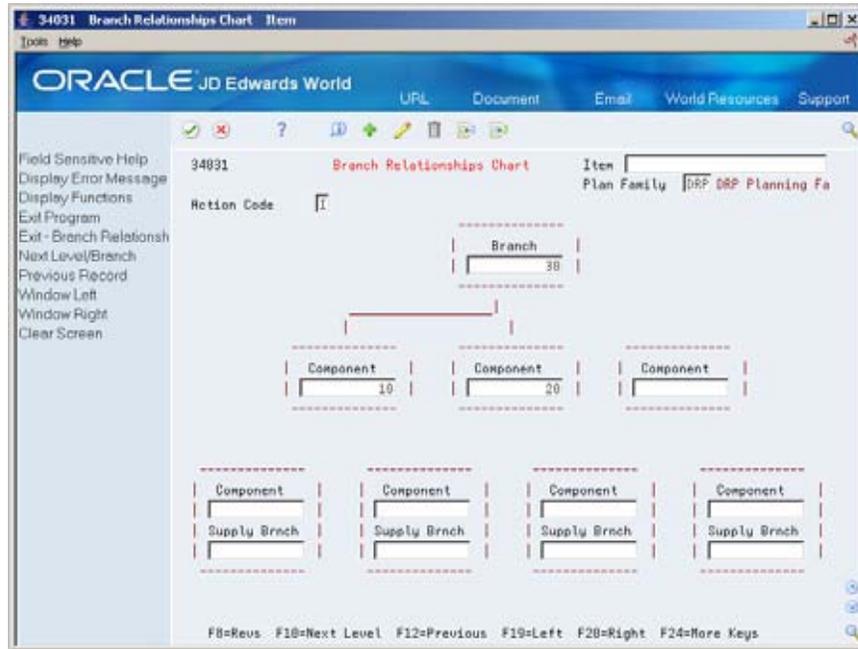
	From Material Planning Operations (G34), choose <b>Multi-Facility Planning</b> From Multi-Facility Periodic Planning Operations (G3423), enter <b>29</b> From Multi-Facility Setup (G3443), choose <b>Branch Relationships Chart</b>
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Use the Branch Relationships Chart to review your supply and demand relationships in a graphical, hierarchical format. The Branch Relationships Chart displays the:

- Branch
- Level of the branch
- Supply branches for the corresponding demand branch

## To review branch relationships on the relationships chart

### On Branch Relationships Chart



1. To locate the branch/plant for which you want to display supply and demand relationships, complete the following field:
  - Branch
2. To narrow your search to a specific level of detail, complete one of the following optional fields:
  - Item
  - Plan Family

Field	Explanation
Branch	<p>A code that represents a high-level business unit. It can be used to reference a branch or plant that might have departments or jobs, which represent lower-level business units (data item MCU), subordinate to it. For example:</p> <ul style="list-style-type: none"><li>▪ Branch/Plant (MMCU)</li><li>▪ Dept A (MCU)</li><li>▪ Dept B (MCU)</li><li>▪ Job 123 (MCU)</li></ul> <p>Business unit security is based on the higher-level business unit.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>On this form, the business units are arranged with the lowest level supply branch/plants at the top, and each successive demand branch/plant below.</p>
Plan Family	<p>A user defined code (system 41, type P4) under which you can organize logically related items.</p> <p>You can simplify the master planning process by concentrating on only the top 10% of the inventory value. This is similar to using the ABC Analysis, except that you can use this code to allow exceptions to ABC rules.</p> <p>Generally, you should only include items with high inventory investment in Master Planning. Excess stock can be carried for inventory items with little financial impact.</p>

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## Processing Options

See [Branch Relationships Chart \(P34031\)](#).

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# Generate Multi-Facility Schedules

## Generating Multi-Facility Schedules



From Material Planning Operations (G34), choose **Periodic Multi-Facility Planning**  
From Multi-Facility Periodic Planning Operations (G3423), choose **MPS Regeneration**

After you have set up the supply and demand relationships among your branch/plants, you can use MPS Regeneration to generate a multi-facility schedule. Alternatively, you can use MPS Net Change to generate a multi-facility schedule.

When you generate a multi-facility schedule, the system evaluates selected information, performs calculations, and recommends a time-phased planning schedule for all selected items.

### Before You Begin

- Set up DRP/MPS multi-facility scheduling. See *Setting Up Multi-Facility Schedules*.

### Processing Options

See [Multi-Facility - Gross Regeneration \(P3483\)](#).



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# Work with Multi-Facility Planning Output

## Working with Multi-Facility Planning Output

Multi-facility planning output consists of information in the time series and transfer order messages. Use the time series information to either accept the planning that is suggested by the system or to override it. You should review the transfer order messages for individual item numbers to determine which action, if any, you need to take.

Working with multi-facility planning output consists of the following tasks:

- [Reviewing Multi-Facility Time Series](#)
- [Processing Multi-Facility Transfer Order Messages](#)
- [Reviewing Transfer Messages](#)
- [Batch Process to Create Transfer Orders](#)

### Before You Begin

- Generate a current multi-facility schedule. See *Generating Multi-Facility Schedules*.

## Reviewing Multi-Facility Time Series



From Material Planning Operations (G34), choose **Daily Multi-Facility Planning**  
From Multi-Facility Planning Daily Operations (G3414), choose **Time Series Inquiry**

Use Time Series Inquiry to review the times series for the multi-facility schedule. The multi-facility schedule is a record of time-phased supply and demand for selected items.

This data is derived from the most recent regeneration or net change run. Processing options in the DRP/MPS regeneration program enable you to set up daily, weekly, or monthly time periods (buckets).

The time series for multi-facility items uses quantity type ID (inter-plant demand) to indicate the net demand that the system transfers to the supply branch/plant for all demand branch/plants.

## To review the multi-facility time series

### On Time Series Inquiry

Item Number	Leadtime Level	Safety Stock	Past Due	01/31/18	02/28/18	03/30/18	04/30/18	05/31/18
+BRU	50	50				160-	330-	510-
+BR	50	50						
+BU	40	40						
+WU	40	40						
-IU				160	170	190	190	190
-FIDU	90	90						
-FID	90	90						
-ERU	50	50		160-	330-	510-	700-	700-
-ER	50	50						
+FLU				160	170	190	190	190
ATPU	50	50						
ATP	50	50						
CATPU	650-	650-		650-	650-	650-	650-	650-
CHTP	50	50		50	50	50	50	50

To locate the time series for your item, complete the following fields:

- Branch/Plant
- Item Number

### See Also

- *Reviewing DRP/MPS Time Series (P3413)*

## Processing Multi-Facility Transfer Order Messages



From Material Planning Operations (G34), choose **Daily Multi-Facility Planning**  
From Multi-Facility Planning Daily Operations (G3414), choose **Detail Message Review**

Use Detail Message Review to review the transfer order messages for the multi-facility schedule. Multi-facility scheduling creates messages that are appropriate to the demand and supply facilities. If you choose to process the messages, the system automatically creates transfer orders. You can transfer items between facilities either at cost or at a fixed or percent markup.

## To process multi-facility transfer order messages

### On Detail Message Review

Order	Ty	Quantity	Required	Planner Remarks
01	OT	160	02/28/18	
	MS0	Require/Comp	02/28/18	Supplier Number
	30	Plannd Start	02/27/18	
		Recommend St	02/27/18	
02	OT	170	03/30/18	
	MS0	Require/Comp	03/30/18	Supplier Number
	30	Plannd Start	03/29/18	
		Recommend St	03/29/18	
03	OT	180	04/30/18	
	MS0	Require/Comp	04/30/18	Supplier Number
	30	Plannd Start	04/27/18	
		Recommend St	04/27/18	

- To locate the transfer order messages for your item, complete the following fields:
  - Demand Branch
  - Item Number
- Choose Process Message for those transfer order messages that you want to process.

## Reviewing Transfer Messages

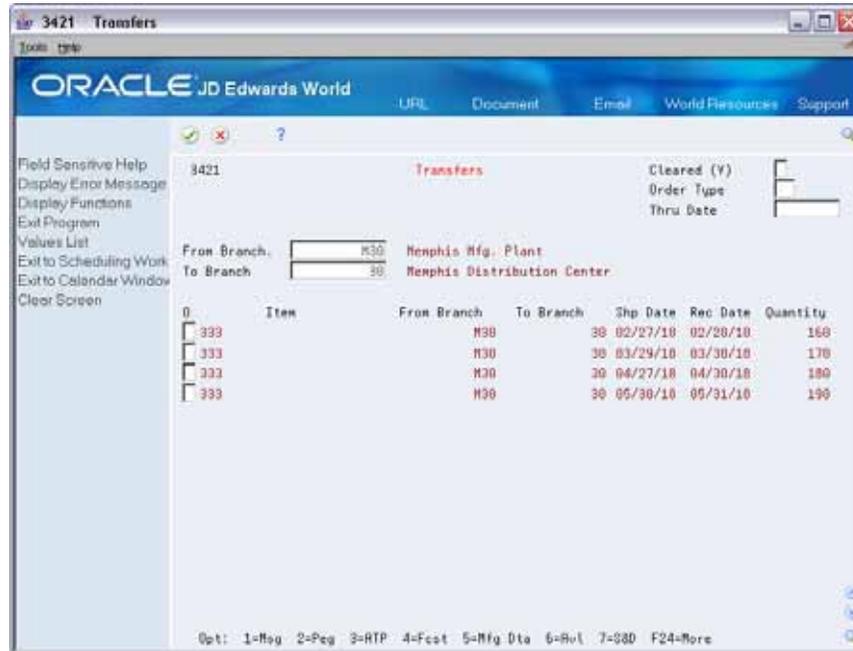

 From Material Planning Operations (G34), choose Multi-Facility Planning  
 From Multi-Facility Planning (G3414), choose Transfers

Use Transfers as a convenient utility to analyze planned transfer orders created during a multi-plant DRP/MPS/MRP generation. You can also use Transfers to view other activity associated with branches or plants, such as:

- Pegging
- ATP
- Forecast
- Manufacturing data
- Available capacity
- Supply and demand

## To review transfer messages

### On Transfers



#### 1. Complete the following fields:

- From Branch
- To Branch

The system displays the planned transfer orders created during the multi-plant generation.

#### 2. To review the messages for a transfer order, enter a 1 in the following field:

- Option

## Processing Options

See [Transfer Order Review \(P3421\)](#).

## Batch Process to Create Transfer Orders

The process of using a planner to answer planning messages for one item at a time using an interactive can be time-consuming. You can streamline the transfer process by enabling batch consolidations of transfer orders. Once you establish the Master Production Schedule, planners can automatically create transfer orders without any direct intervention, which greatly reduces the time required to complete their tasks.

## See Also

- *Working with Messages (P3411)*

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# 9 Single Facility Material Requirements Planning



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# Overview to Single Facility Material Requirements Planning

## Objectives

- To generate Material Requirements Planning (MRP)
- To validate the material requirements plan
- To review MRP action messages
- To set up Capacity Requirements Planning (CRP)
- To set up MRP and capacity requirements display
- To generate and process work orders

## About Single Facility MRP

Material Requirements Planning (MRP) uses information from the bill of material and inventory records to calculate the time-phased net material requirements for every component item and subassembly. MRP suggests a replenishment plan to support the production of the quantities that are specified in the Master Production Schedule.

A single facility requirements plan critically impacts lower-level components or resources, such as skilled labor or revenues. Single facility implies material requirements planning at the component level.

The MRP process consists of:

- Determining what you need (forecast, customer orders, and interplant demands)
- Subtracting what you have (inventory, purchase orders, and work orders)
- Calculating what you need and when you need it

You can process a material requirements plan in one of two ways:

- Freeze the MPS and generate MRP
- Validate the MPS and then generate a combination of MPS and MRP

When you process a material requirements plan, the system summarizes gross material requirements for each assembly, component, and raw material part number. The requirements plan supports the MPS for each time period in the planning horizon.

You can generate a material requirements plan for all items or for a net change generation, which includes only the items that have changed since the last generation. After you generate MRP output, you can review and respond to messages.

The system uses the following inputs to MRP:

- Demand
  - Service part's forecast and sales orders
  - Parent's planned and firm work order demand
- Supply
  - Firm work orders
  - Rate schedules
  - Purchase orders
  - Inventory
  - In-receipt routing
- Product data
  - Item Branch (F4102)
  - Bill of Materials Master (F3002)

The system generates the following outputs from MRP:

- Messages
  - Action
  - Warning
- Time series with calculated quantities for:
  - Ending Available (EA)
  - Available to Promise (ATP)
  - Cumulative Available To Promise (CATP)
  - Planned orders

Material requirements planning consists of the following tasks:

- Generating material requirements plans
- Working with material requirements plans
- Validating material requirements plans
- Setting up material and capacity requirements planning
- Processing orders for MRP

The system records material planning information in the following tables:

<b>Table</b>	<b>Description</b>
Bill of Materials Master (F3002)	Contains warehouse or facility level information about bills of material, such as: <ul style="list-style-type: none"> <li>▪ Costs and quantities of components</li> <li>▪ Features and options</li> <li>▪ Levels of detail for each bill</li> </ul>
Work Order Master (F4801)	Contains supply rate information and work orders.
Branch Relationships Master (F3403)	Contains the supply and demand relationship among the branches.
Forecast Consumption Periods (F3405)	Contains the forecast consumption periods that you defined on Forecast Consumption Periods.
MPS/MRP/DRP Detail Message Review (F3411)	Contains the action messages that were generated by an MPS or MRP scheduling run.
MPS/MRP/DRP Lower Level Requirements (F3412)	Contains the source of gross requirements that are posted to items from parent items.
MPS/MRP/DRP Summary (F3413)	Contains the time series data for screens and reports.
Forecast (F3460)	Contains the forecast data that MRP uses for calculations.
Item Master (F4101)	Contains basic information about each item that has been defined in inventory, such as: <ul style="list-style-type: none"> <li>▪ Item numbers and descriptions</li> <li>▪ Category codes</li> <li>▪ Units of measure</li> </ul>
Item Branch (F4102)	Contains warehouse or plant-level information, such as: <ul style="list-style-type: none"> <li>▪ Costs</li> <li>▪ Quantities</li> <li>▪ Location</li> <li>▪ Branch level category codes</li> </ul>

## How Do You Use Bills of Material in MRP?

The bill of material provides product structure information that MRP uses to explode the master production schedule to all component items. If a parts list does not exist for a work order, MRP generation uses the standard bill of material to explode demand.

The following features determine which components explode, how to modify the quantity, and how the system calculates schedule dates:

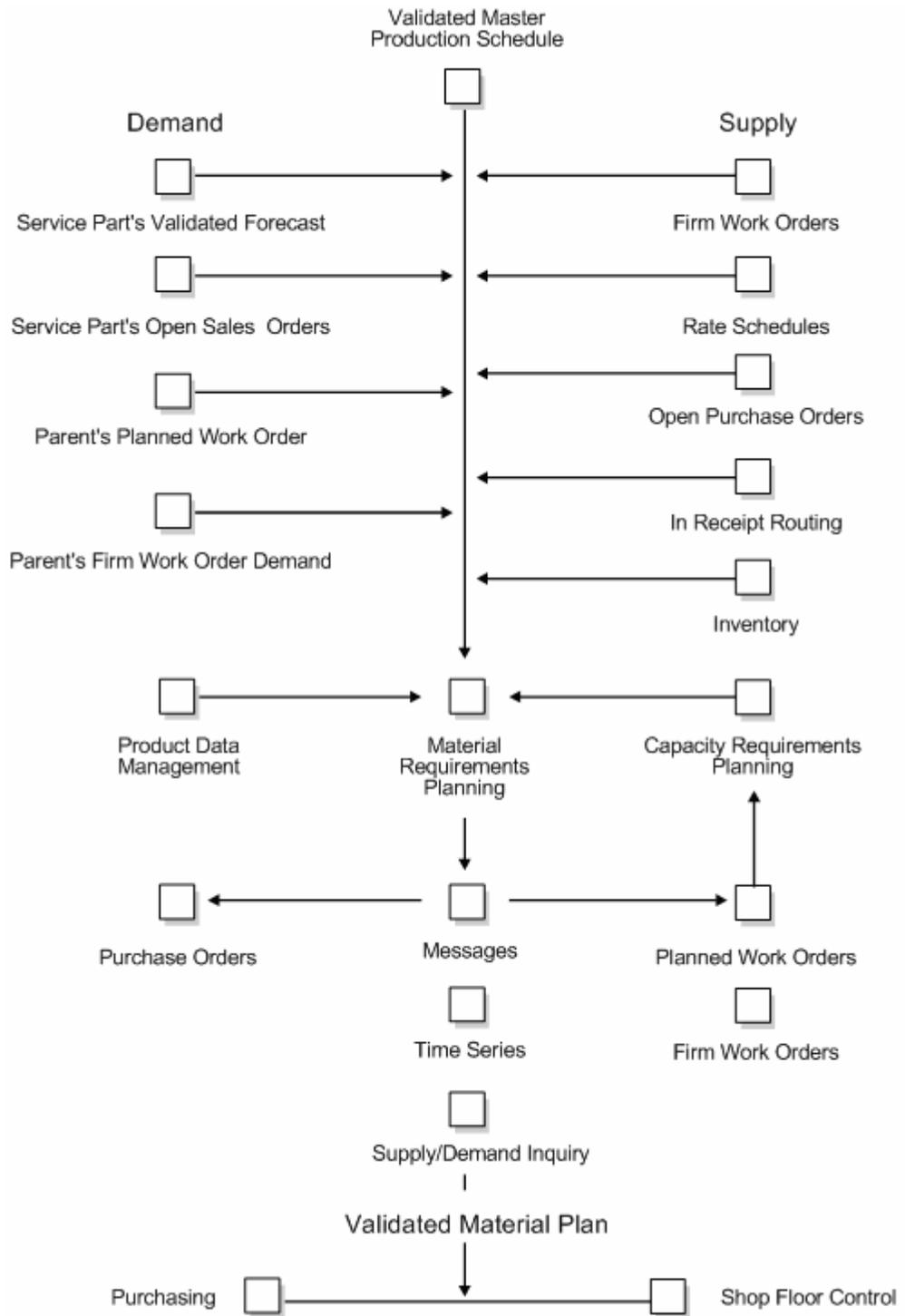
- Effectivity checking
- Feature planning percentage
- Quantity per
- Bill of material scrap factor
- Leadtime offset
- Operation scrap
- Fixed or variable quantity per assembly

### **What Are the Differences Between MRP and MPS?**

MPS generally has independent demand, while MRP has dependent demand. Independent demand is demand for an item that is unrelated to the demand for other items, such as demand for finished goods. Dependent demand is demand that is directly related to or derived from the bill of material structure for other items or end products. MRP might also include forecast and sales orders if items are sold as service (spare) parts. The majority of demand, however, is demand from parent orders. The demands on MRP include:

- Parent's firm work orders
- Parent's planned work orders
- Interplant demands
- Service part forecast
- Service part sales orders

The following illustration compares the flow of MRP to that of MPS.



### How Do You Run MRP Effectively?

MRP runs most effectively when you ensure the accuracy and validity of the following items:

<b>Item</b>	<b>Description</b>
Master schedule	Ensure that the master schedule is at least 95% accurate. Accuracy is measured by comparing the creation of an end product to the performance of the schedule.
Bill of material	Ensure that the bill of material is at least 98% accurate and contains the correct components and quantities. Accuracy is measured by comparing how the item is built in the factory to the correct components and quantities contained in the bill of material.  If you find a discrepancy between the parts list and the bill of material, you cannot count the bill of material as accurate.
Inventory	Ensure that your inventory count is at least 95% accurate. You can achieve this accuracy through the cycle count process.
Lead times	Ensure that your lead times are valid.  Note that the system gives you planned lead times. In execution, the actual time it takes to complete an order can vary.

## See Also

- *About Time Fences and System Messages (P3413)*

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# Generate Material Requirements Plans

## Generating Material Requirements Plans



From Material Planning Operations (G34), choose **Single Site Planning**  
From Single Site Periodic Planning Operations (G3422), choose **MRP Regeneration**

Use MRP Regeneration to produce a single facility MRP planning schedule for the items that you select. Alternatively, you can use MRP Net Change to produce a single facility MRP planning schedule. You can generate a material requirements plan for:

- A single item
- All items
- Only items that are affected by transactions since the last generation

When you generate a material requirements plan, the system evaluates selected information, performs calculations, and recommends a time-phased replenishment plan for all selected items.

MRP regeneration uses the same programs as DRP/MPS regeneration. The following summarizes these programs:

Function	Description
MRP Regeneration	<p>MRP Regeneration is a batch program that produces an MRP schedule for all items that are selected in the data selection criteria. When you run MRP Regeneration, the system:</p> <ul style="list-style-type: none"><li>▪ Reads the selected forecast</li><li>▪ Uses data from the MRP inclusion rules to calculate requirements for master planned items</li><li>▪ Generates a time series and messages for the selected items and components of selected items</li></ul>
MRP Net Change	<p>MRP Net Change is the same batch program as MRP Regeneration. The data selection is further defined to include only the items that you selected on Net Change Review. When you run MRP Net Change, the system:</p> <ul style="list-style-type: none"><li>▪ Evaluates selected information</li><li>▪ Performs calculations</li><li>▪ Generates a time series and messages for the selected items and components of selected items</li></ul>

## Before You Begin

- Verify that MRP/CRP has been set up.
- Understand the concepts and terms described in Single Level Master Scheduling. See *Single Level Master Scheduling*.
- Generate a forecast for independent demand items. See *Generating Detail Forecasts* in the *Forecasting Guide*.

## What You Should Know About

<b>Bill of material</b>	<p>MRP uses the bill of material to explode demand to all component items. If a parts list does not exist for a work order, MRP generation uses the standard bill of material to explode demand.</p> <p>You should define a bill of material type M (standard manufacturing bill) for work order headers without a parts lists and for parent planned orders. The MRP generation uses bill type M to sequence items according to how the product is built.</p>
<b>Low level code</b>	<p>The system uses the low level code to determine when to generate a time series for an item. MRP generation explodes lower level demand only for manufactured items. The system does not explode demand to levels below a purchased item, even if that item has a bill of material.</p>
<b>Generation type</b>	<p>You must use generation types 4 and 5 to generate a master planning schedule for MRP items. If the status of MPS is frozen, generation type 5 explodes only the component items of the master scheduled item. Select generation type 4 to explode MPS items and component items.</p>
<b>Frozen orders</b>	<p>If you identify work orders or purchase orders for an item as frozen, the program does not replan any orders for the item. Instead, you receive a frozen order message for that item.</p>
<b>Data selection</b>	<p>To run MRP regeneration, base your selection on branch/plant, category codes, and planning code. The system can process any selection from based-on table fields.</p> <p>To run a net change generation, set the net change flag to 1 to select items that have changed since the last generation of the program.</p>

## See Also

- *Setting Up MRP and Capacity Planning (P0005A)* for information on how to define MRP/CRP data to use during processing
- *Reviewing Items for Master Schedule Selection (P3402)* for information on how to use the Net Change Review program to review items that have changed, either through planned or unplanned activities
- *Processing Options for Master Planning Schedule*



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# Work with Material Requirements Plans

## Working with Material Requirements Plans

MRP output consists of information in the time series and action messages. Use the time series information to decide whether to accept the planning suggested by the system or to override it. You should review the action messages for individual item numbers to determine which action, if any, that you need to take.

Working with the material requirements plan consists of the following tasks:

- [Reviewing MRP Time Series](#)
- [Reviewing Planning Families for MRP](#)
- [Working with Messages for MRP](#)
- [Working with Scheduling Information](#)

## Reviewing MRP Time Series

	From Material Planning Operations (G34), choose <b>MRP</b> From Manual Receipts Processing Daily operations (G3414), choose <b>Time Series Inquiry</b>
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Use the MRP Time Series Inquiry program to review the item series for the material requirements plan. The time series is a record of time-phased supply and demand netting for selected items. The system retrieves this data from the most recent generation or net change run. Use processing options to set up daily, weekly, or monthly time periods (buckets).

MRP Time Series Inquiry uses the same program as DRP/MPS Time Series/ATP Inquiry. You can vary the settings in the processing options to accommodate the different requirements for MRP.

### Before You Begin

- Generate a current material requirements plan that includes the start and end dates for the planning periods that you want to review. See *Generating Material Requirements Plans*.

### See Also

- *Reviewing DRP/MPS Time Series (P3413)*

## Reviewing Planning Families for MRP

	From Material Planning Operations (G34), choose <b>MRP</b> From Manual Receipts Processing Daily Operations (G3413), choose <b>MRP Planning Family Review</b>
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After you generate MRP, you can review all item numbers that have messages. You can display the list of items with messages by using the following filters:

- Branch/Plant
- Thru Date
- Planning Code
- Message and Stocking Type
- Planner Number
- Buyer Number
- Master Planning Family

MRP Planning Family Review uses the same program as DRP/MPS Planning Family Review. You can vary the settings in the processing options to accommodate the different requirements for MRP.

### See Also

- *Reviewing Planning Families (P3401)*

## Working with Messages for MRP

	From Material Planning Operations (G34), choose <b>MRP</b> From MRP Daily Operations (G4313), choose <b>Detail Message Review</b>
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Access the messages directly using the Detail Message Review program. Complete the following tasks:

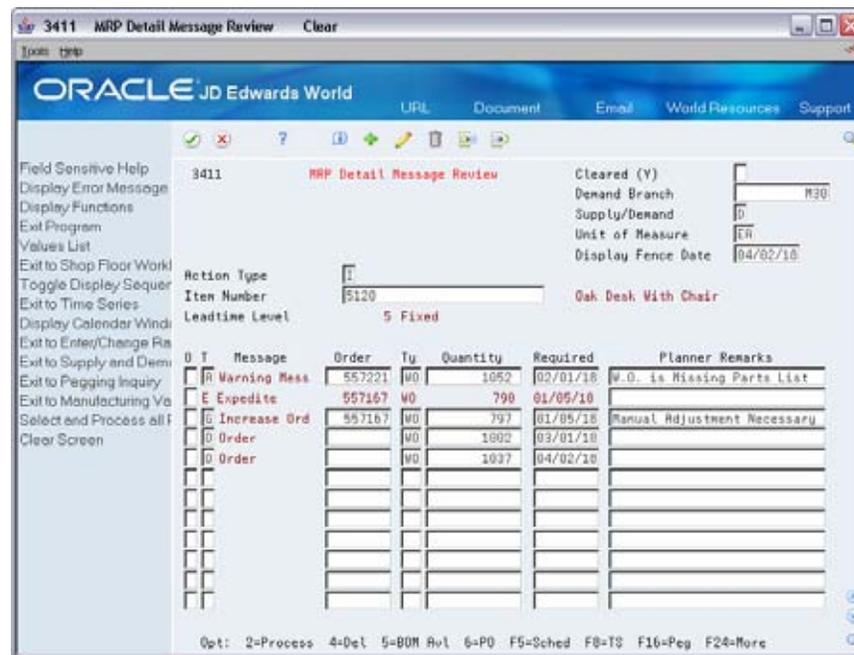
- Review MRP detail messages
- Review quantity types for MRP
- Process work order messages for MRP
- Process purchase order messages for MRP

Each time that you run a generation for MRP, the system produces action messages to identify situations in which demand requires one of the following:

- Changing the existing supply orders
- Placing new orders

Use MRP Detail Message Review to review exception messages from the latest planning generation. These messages might help you evaluate planned and existing orders. You can review the most critical messages first and review other items in the order that you will process them.

MRP Detail Message Review uses the same program as DRP Detail Message Review. You can vary the settings in the processing options to accommodate the different requirements for MRP.



## See Also

- *Working with Messages (P3411)* for information on the Detail Message Review processing options

## Reviewing MRP Detail Messages

Detail messages include all of the messages on Detail Message Review. After you generate MRP, you review the action messages for the individual item numbers. After you review the message, you can place the message on hold, or clear, delete, or process the message.

## What You Should Know About

### Component warning messages

Based on the messages for the parent item, the direct components also receive warning messages.

At the component level, there are special S messages that are similar to warning messages (A). Both types of messages originate from the parent. The S messages, however, indicate that the parent demand is firm planned.

## See Also

- *Working with Messages (P3411)*

## Reviewing Quantity Types for MRP

Use MRP Detail Message Review to review the quantity types that are generated for the material requirements plan. These quantity types include:

Quantity Type	Description
Planned order (+PLO)	Represents recommended replenishment orders for an item.
Planned work order (-PWO)	Represents demand for components that will be consumed when you manufacture the parent's planned work order.
Work order (+WO)	Represents a manufacturing order that is currently in process or that has been authorized to be worked on.
Firm work order (-FWO)	Represents demand for components that will be consumed while manufacturing the parent's released work order.
Firm planned order (+FPO)	Processed similarly to planned orders, but allows the planner to firm up requirements at the next level. The system does not allow the component items to assume the action messages from the parent level. A status code of 41 for document type WO indicates a firm planned order.

The following describes how the system uses document types, quantity types, and work order codes during the MRP generation process. Status codes are user-defined.

Order Type	Description
Planned orders (+PLO)	<p>MRP automatically changes schedule dates and quantity for each planning generation.</p> <p>The status code for document type +PLO is P.</p> <p>The component demand is -PWO.</p>
Firm orders (WO)	<p>MRP creates messages that require the planner to balance supply and demand.</p> <p>+WO does not always equal +WOU in schedule dates or quantities.</p> <p>A status code for document type WO of 10 indicates that the system has released the work order.</p> <p>The component demand is -FWO and -FWOU. Message type A warns of parent supply and demand imbalances. A firm work order does not always equal a firm work order unadjusted in schedule dates or quantity.</p>

Order Type	Description
Firm orders (WO)	<p>These orders contain parts lists and routing instructions. MRP creates messages that require the planner to balance supply and demand.</p> <p>+WO does not always equal +WOU in schedule dates or quantities.</p> <p>A status code for document type WO of 40 indicates that the system has committed inventory to the order and has attached a parts list and routing instructions.</p> <p>The component demand is -FWO and -FWOU. Message type A warns of parent supply and demand imbalances. A firm work order does not always equal a firm work order unadjusted in schedule dates or quantity.</p>
Firm orders (WO)	<p>The system plans these orders when you run the MRP planning generation. MRP creates messages that require the planner to balance supply and demand. The messages contain FPO planner remarks.</p> <p>+WO does not always equal +WOU in schedule dates or quantities.</p> <p>The component demand is -FWO and -FWOU. Message type S warns of firm planned order parent supply and demand imbalances. A firm work order always equals a firm work order unadjusted in schedule dates or quantity.</p>
Work orders (WO)	<p>The system creates the work order based on the requested date and the date set by the freeze fence on Plant Manufacturing Data. MRP does not create action message types inside the freeze fence. Supply and demand imbalance inside the freeze fence is satisfied by order message type O immediately outside the freeze fence.</p> <p>+WO does not always equal +WOU in schedule dates or quantities.</p> <p>Any status code for document type WO inside the freeze fence.</p> <p>The component demand is -FWO and -FWOU. The system does not create any messages from the parent demand.</p>
Work orders (WO)	<p>Frozen orders. MRP does not create action messages for this work order. It creates warning message types (A) and frozen order message types (F). New order message type O is created to satisfy additional demand.</p> <p>Any status code for document type WO indicates a freeze code on the work order header.</p> <p>The component demand is -FWO and -FWOU. The system does not create any messages from the parent demand.</p>

## Processing Work Order Messages for MRP

Work order messages appear on Detail Message Review with an order type of WO. When you process work order messages, the master schedule becomes firm through the date of the processed orders. These firm orders will not be automatically replanned in subsequent MPS generations.

## Processing Purchase Order Messages for MRP

Purchase order messages appear on Detail Message Review with an order type of OP. When you process a purchase order message, you can:

- Process a single action message without blanket order checking or consolidation.
- Process one or more action messages with blanket order checking.
- Process messages using purchase order consolidation to place more than one item on a purchase order.
- Process purchase order messages using a planning family.
- Process messages using the Supplier Scheduling system.

### See Also

- *Processing Work Order Messages (P3411)*
- *Processing Purchase Order Messages (P3411)*
- *Reviewing Planning Families (P3401)*

## Working with Scheduling Information

In daily operations, you might need to identify detail information about items, work centers, or planning families. Use the MRP inquiry programs to determine the status of items or work centers.

Complete the following tasks:

- Review MRP pegging demand
- Review MRP supply and demand
- Review shop floor workbench for MRP
- Review leadtime for MRP

## Reviewing MRP Pegging Demand



From Material Planning Operations (G34), choose **MRP**  
From MRP Daily Operations (G3413), choose **Pegging Inquiry**

Use Pegging Inquiry to determine the source of demand for dependent requirements. Pegging Inquiry displays only those parents that contain planned or open orders. Pegging Inquiry allows you to:

- Display the work orders for a particular item
- Trace the source of demand for each item
- Display the different levels in a bill of material, so that you can peg demand from the beginning level through the parent item

You can trace the path of dependent requirements up through parent items to the final assembled item and even to the sales order or forecast. You can use this information to determine if you need to reschedule or change orders.

### To review MRP pegging demand

#### On Pegging Inquiry

Request	Quantity	Parent	Ty	Description
12/29/17	790	5120	PO	Fire Work Order W/Parts List
01/25/18	1857	5120	WO	Real (Fire) Work Orders
02/22/18	1002	5120	UP	Planning Work Orders
03/26/18	1837	5120	UP	Planning Work Orders
04/24/18	1993	5120	UP	Planning Work Orders
05/25/18	1101	5120	UP	Planning Work Orders
06/25/18	1504	5120	UP	Planning Work Orders
07/25/18	1476	5120	UP	Planning Work Orders
08/27/18	1578	5120	UP	Planning Work Orders
09/24/18	1799	5120	UP	Planning Work Orders
10/25/18	1733	5120	UP	Planning Work Orders

1. To locate the item for which you want to review pegging demand, complete the following fields:
  - Item Number
  - Branch/Plant

2. To narrow your search to a specific date, complete the following optional field:
- Requested

Field	Explanation
Requested	<p>The date that an item is to arrive or that an action is to be complete.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>As of date for pegging.</p>
Parent	<p>The system provides for three separate item numbers.</p> <ol style="list-style-type: none"> <li>1. Item Number (short) - An eight-digit, computer assigned, completely non-significant item number.</li> <li>2. 2nd Item Number - The 25-digit, free form, user defined alphanumeric item number.</li> <li>3. 3rd Item Number - Another 25-digit, free form, user defined alphanumeric item number.</li> </ol> <p style="text-align: center;"><i>Form-specific information</i></p> <p>On this screen, you see the item number for the parent of this component part.</p>

## Processing Options

See [Pegging \(P3412\)](#).

## Reviewing MRP Supply and Demand

	<p>From Material Planning Operations (G34), choose <b>MRP</b></p> <p>From MRP Daily Operations (G3413), choose <b>Supply/Demand Inquiry</b></p>
---	---

Use Supply and Demand Inquiry to review the current demand for a selected item. Supply and Demand Inquiry allows you to:

- Display the current inventory position, including all scheduled supply and demand.
- Review item quantity supply, demand, and order availability in date order.

## To review MRP supply and demand

### On Supply/Demand Inquiry



- To locate the item for which you want to review supply and demand, complete the following fields:
  - Item Number
  - Branch/Plant
- To narrow your search to a specific order date, complete the following optional field:
  - Thru Date

Field	Explanation
Demand	The quantity subtracted from the available balance as a result of the record processed. Typically, the sources of demand are safety stock, sales orders, or work order parts lists. When using system forecasting, you can set up a processing option to include quantities used for forecast demands.
Supply	The quantity added to the available balance as a result of the record processed on each line. Sources of supply are typically on-hand inventory, purchase order receipts, or manufacturing work orders. A processing option allows for the inclusion of planned order receipts when using MPS/MRP/DRP.
Available	The quantity available can be the on-hand balance minus commitments, reservations, and backorders. Availability is user defined and can be set up in branch/plant constants.

## Processing Options

See [Supply & Demand \(P4021\)](#).

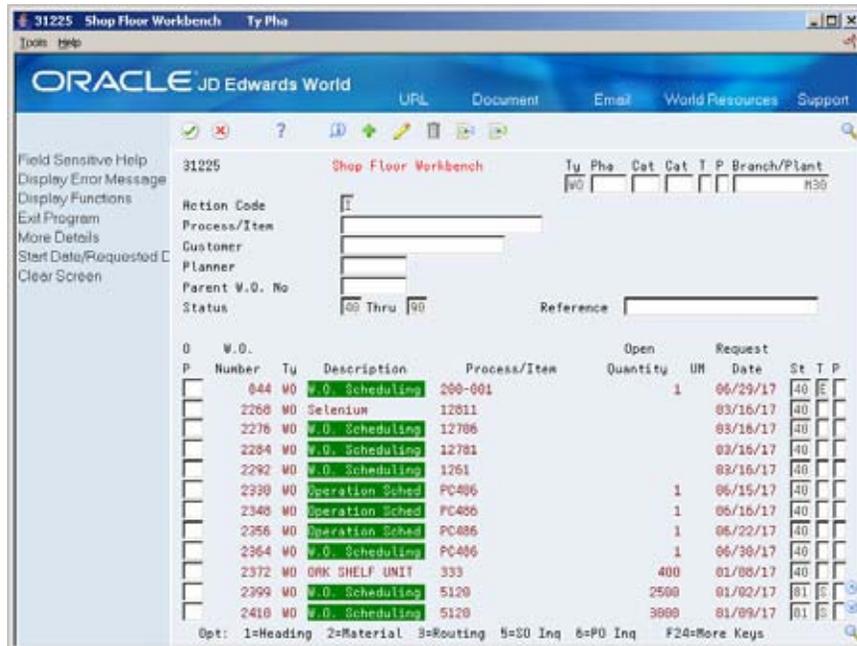
## Reviewing Shop Floor Workbench for MRP

	From Material Planning Operations (G34), choose <b>MRP</b> From MRP Daily Operations (G3413), choose <b>Shop Floor Workbench</b>
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After a work order is on the shop floor, you must review the order and check capacity at the planned production line. You might need to change a schedule to keep the Material Requirements Planning schedule valid.

### To review shop floor workbench for MRP

On Shop Floor Workbench



W.O. Number	Ty	Description	Process/Item	Open Quantity	UN	Request Date	St T P
044	WO	W.O. Scheduling	200-001		1	06/29/17	40 E
2268	WO	Selenium	12811			03/16/17	40
2276	WO	W.O. Scheduling	12786			03/16/17	40
2284	WO	W.O. Scheduling	12781			03/16/17	40
2292	WO	W.O. Scheduling	1261			03/16/17	40
2330	WO	Operation Sched	PC486	1		06/15/17	40
2348	WO	Operation Sched	PC486	1		06/16/17	40
2356	WO	Operation Sched	PC486	1		06/22/17	40
2364	WO	W.O. Scheduling	PC486	1		06/30/17	40
2372	WO	DRK SHELF UNIT	333	400		01/08/17	40
2399	WO	W.O. Scheduling	5120	2500		01/02/17	81 E
2418	WO	W.O. Scheduling	5120	3800		01/09/17	81 E

- To locate the branch/plant for which you want to display the shop floor workbench, complete the following field:
  - Branch/Plant
- To narrow your search to a specific work order, complete the following fields:
  - Process/Item
  - Customer
  - Planner
  - Parent Work Order Number

- Status
- Search Cross-Reference

Field	Explanation
Process/Item	<p>A number that the system assigns to an item. It can be in short, long, or 3rd item number format.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>Header - Enter an item number in the header to see all work orders for the item entered. You can further define and restrict your search by entering values in any of the other header fields. Leave the header Item Number field blank to see work order information about all items.</p> <p>Detail - The Item Number field in the detail section of the screen indicates what item the work order on that line is for.</p>
Customer	<p>A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other Address Book members.</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>Header - Enter a customer number in this field to see all work orders for that customer. You can use this field with other fields in the header to define more specific search criteria.</p> <p>Fold Area - The Customer field in the fold area contains the Address Book number of the customer who ordered the items on the work order listed. The system automatically enters the customer number if you create a work order was created from a sales order.</p>
Planner	<p>The address book number of a manager or planner.</p> <p><b>Note:</b> A processing option for some screens lets you enter a default value for this field based on values for Category Codes 1 (Phase), 2, and 3. Set up the default values on the Default Managers and Supervisors screen. After you set up the default values and the processing option, the information displays automatically on any work orders you create if the category code criterion is met. (You can either accept or override the default value.)</p> <p style="text-align: center;"><i>Form-specific information</i></p> <p>Header - Enter a planner number in this field to see all work orders scheduled by that planner. You can use this field with other fields in the header to define more specific search criteria.</p> <p>Fold Area - The Planner field in the fold area contains the planner number for the planner who scheduled the work order listed.</p>

Field	Explanation
Parent W.O. No	<p>This is the parent work order number. You can use this number to:</p> <ol style="list-style-type: none"> <li>1. Enter default values for newly added work orders, for example, Type, Priority, Status, or Manager.</li> <li>2. Group work orders for project setup and reporting</li> </ol> <p><i>Form-specific information</i></p> <p>Enter the number of a parent work order in this field to see all work orders organized under that parent order. You can use this field with other fields in the header to define more specific search criteria.</p>
Status	<p>A user defined code (00/SS) that describes the status of a work order or engineering change order. Any status change from 90 thru 99 automatically updates the date completed.</p> <p><i>Form-specific information</i></p> <p>You can update the status for the work order on this screen without accessing the work order header.</p>
Search X-Ref	<p>An alphanumeric value used as a cross-reference or secondary reference number. Typically, this is the customer number, supplier number, or job number.</p> <p><i>Form-specific information</i></p> <p>Header - Enter a reference number in this field to see all work orders with that reference number. You can use this field with other fields in the header to define more specific search criteria.</p> <p>Fold Area - The Refer (Reference) field in the fold area contains a reference number for the work order listed. The system automatically enters the sales order number here if the work order was created from a sales order.</p>

## What You Should Know About

<b>Rate scheduled items</b>	<p>You can review rate scheduled items on the Line Scheduling Workbench.</p> <p>See <i>Repetitive Manufacturing in the Shop Floor Control Guide</i>.</p>
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## Processing Options

See [Manufacturing Scheduling Workbench \(P31225\)](#).

## Reviewing Leadtime for MRP

	<p>From Material Planning Operations (G34), choose <b>MRP</b></p> <p>From MRP Daily Operations (G3413), choose <b>Leadtime Inquiry</b></p>
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Use Leadtime Inquiry to review leadtimes for a component or ingredient.

To review leadtime for MRP

On Leadtime Inquiry

Level	Component/Ingredient	Description	Level	Manufacturing	Cumulative	Actual	Cum.
0					14		28
1	4277	FRAMING KIT, 30x60 DESK	15		15		15
1	4133	SIDE ASSY, 30x30 OAK DES	4	6	11		11
2	3390	LEG OAK, 1.5x1.5x30	2	2	7		7
3	2417	LEG CAP, 1.5x1.5x1.5, BR	5		5		5
3	2611	OAK BOARD, 2x2x10	5		5		5
2	3306	SIDE PANEL, OAK, 20.5x20	2	2	5		5
3	1899	OAK PLYWOOD 60x60x.75 AC	3		3		3
1	3999	BACK, OAK, 30x60, DESK	3	3	6		6
2	1899	OAK PLYWOOD 60x60x.75 AC	3		3		3
1	3001	DRAWER SLIDES & HARDWARE	20		20		20
1	3980	CENTER DRAWER FOR 30x60	5	8	22		22
2	3621	BOTTOM, CENTER DRAWER	2	2	9		9
3	1808	PLYWOOD, 30x60x.50, ACA	7		7		7
3	1808A	Drawer Labels	7		7		7

- To locate the item for which you want to display leadtimes, complete the following fields:
  - Branch/Plant
  - Parent Item
- To display specific types of bills of material, complete the following optional field:
  - Mode
- Review the information in the following fields:
  - Parent Leadtime Level
  - Level
  - Manufacturing
  - Cumulative

Field	Explanation
Mode	<p>Indicates the display mode for the bill of material.</p> <ol style="list-style-type: none"> <li data-bbox="719 310 1349 369">1 Single Level Bill of Material. Shows level one (direct) components only.</li> <li data-bbox="719 384 1349 470">2 Multi-Level Bill of Material. Shows all levels of components, with proximity to the parent item indicated by level 1, 2, 3, and so forth.</li> <li data-bbox="719 485 1349 543">3 Indented Bill of Material. The multi-level bill of material with each level indented for differentiation.</li> </ol> <p>You can also set this value in the processing options.</p>
Level	<p>A value that represents the lead time for an item at its assigned level in the production process, as defined on Plant Manufacturing Data. The system uses this value to calculate the start dates for work orders using fixed leadtimes. Level leadtime is different for purchased and manufactured items:</p> <p>You can enter level lead time manually on Manufacturing Values Entry, or you can use the Leadtime Rollup program calculate it. To calculate level lead time using the Leadtime Rollup program, you must first enter a quantity in the Manufacturing Leadtime Quantity field in the Item Branch table (F4102).</p>
Manufacturing	<p>The total number of days required to build an item from its lowest level components to the final assembly. This value is the total of the level lead times for all manufactured items, plus the highest manufacturing lead time for all its components.</p> <p>If all components are purchased, the manufacturing lead time equals the item's level lead time. Purchased item lead times are not included in the calculation of manufacturing lead times.</p> <p>You can enter the manufacturing lead time manually or you can have the system calculate it when you run the Leadtime Rollup program.</p>
Cumulative	<p>The total number of days required to build an item from its lowest level components to the final assembly. The system calculates the value differently for manufactured and purchased items.</p> <p>Manufactured - The total of all level lead times for all manufactured items, plus the highest cumulative lead time of all its components.</p> <p>Purchased - The item's level lead time. Purchased item lead times are included in the calculation of cumulative lead times.</p> <p>You can enter this value manually or you can have the system calculate it when you run the Leadtime Rollup program.</p>

## Processing Options

See [Lead Time Inquiry \(P30207\)](#).



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# Validate Material Requirements Plans

## Validating Material Requirements Plans

After you generate the material requirements plan, you must validate it to ensure that you have sufficient work center capacity. Use Capacity Requirements Planning (CRP) to determine whether the material plan can be executed with the resources that are available.

You also use CRP to:

- Analyze all active work centers
- Identify the pacing resource for work centers, which is either labor or machine, depending on which one would increase the work centers' capacity
- Calculate the rated capacity for work centers
- Calculate the MRP load for work centers

In the JD Edwards World software, the same batch program generates capacity planning information for both CRP and Rough Cut Capacity Planning (RCCP). You can vary the settings in the processing options to accommodate the different requirements for CRP.

The primary differences between CRP and RCCP are:

- CRP analyzes all active work centers instead of only the critical work centers.
- CRP offers more alternatives to level an overloaded time frame.

The system uses the following inputs to CRP:

- Firm MRP work orders and routing instructions
- Planned MRP work orders and routings
- Service parts' forecast
- Service parts' sales orders
- Inter-plant demands

The system generates the following outputs from CRP:

- Over-capacity and under-capacity messages
- Work center load
- Work center load graph
- Period summary

Validating the material requirements plan consists of the following tasks:

- [Generating Capacity Requirements Plans](#)
- [Reviewing Capacity Requirements Plans](#)

The programs that you use to validate the material planning schedule are the same programs that you use to validate the master schedule for DRP, MPS, and RCCP.

## What You Should Know About

### Synchronizing the MRP and CRP systems

CRP follows the same level of operational planning as MRP. You should synchronize the following items for both MRP and CRP:

- The planning horizon
- The work order document types and statuses in the supply/demand inclusion rules

## See Also

- *Validating Master Schedules (P3382)* for detailed information on these programs

## Generating Capacity Requirements Plans

	From Resource & Capacity Planning (G33), choose <b>Periodic Capacity Requirement</b> From Periodic Resource/Capacity Planning (G3321), choose <b>Capacity Requirements Plan</b>
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Use the Capacity Requirements Plan program to compare prospective MRP resource requirements to the capacity available in work centers. CRP indicates if you should revise the material requirements plan to create feasible work loads or improve use of limited resources.

## Before You Begin

- Report hours and quantities for operations that are complete or partially complete to ensure that the figures for Released Load are correct. See *Working with Hours and Quantities* in the *Shop Floor Control Discrete Manufacturing Guide*.
- Verify that resource units exist for all work centers in your generation. See *Setting Up Resource Units* in the *Shop Floor Control Discrete Manufacturing Guide*.
- Set up supply and demand inclusion rules. See *Setting Up Supply and Demand Inclusion Rules for MRP*.
- Run MRP generation. See *Generating a Material Requirements Plan*.

## See Also

- *Generating Rough Cut Capacity Plans (P3382)* for information on the processing options

- *Entering Resource Units Manually (P3007)*

## Reviewing Capacity Requirements Plans

When you generate a capacity requirements plan, the system creates a time series that shows the load during each planning period for a work center. You can view the time series as a spreadsheet or as a graphical display. If you have organized several work centers as a dispatch group according to common functions, similar operations, or steps in routing, you can view the group to see how capacity affects all of the work centers in the group.

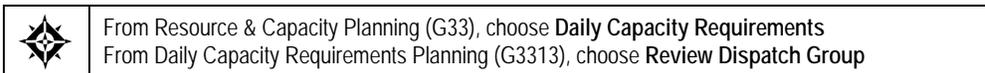
You can review summaries of each period to determine the load that is placed on a work center by each item or order. You can also review messages for each work center and delete, clear, or hold messages. If the system encounters over- or under-capacity conditions, you can review the plan and identify the periods or work centers in which the conditions occur. It might be necessary to adjust the forecast or capacity and generate CRP again.

Reviewing the capacity requirements plan includes the same programs used to review the resource requirements plan.

Complete the following tasks:

- Review dispatch groups for capacity requirements planning
- Review work center load for capacity requirements planning
- Review period summaries for capacity requirements planning
- Review MRP work schedules on the dispatch list
- Review MRP rate schedule and work order loads
- Validate capacity requirements plan

## Reviewing Dispatch Groups for Capacity Requirements Planning



If you have several work centers that are organized as a dispatch group, you can view the group to determine how capacity affects all of the work centers in the group. Dispatch groups enable you to organize work centers according to common functions, similar operations, or routing steps.

When you review dispatch groups, you can also review messages about all the work centers in the group and use that information to redistribute the load within the group.

When you review dispatch groups for CRP you use the same program as when you review dispatch groups for Resource Requirements Planning. You can vary the settings in the processing options to accommodate the different requirements for CRP.

## See Also

- *Reviewing Dispatch Groups for Resource Requirements Planning (P3301)* for information on the processing options

## Reviewing Work Center Load for Capacity Requirements Planning

	From Resource & Capacity Planning (G33), choose <b>Daily Capacity Requirements</b> From Daily Capacity Requirements Planning (G3313), choose <b>Review Work Center Load</b>
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You can review the capacity load at each work center. Use this information to determine whether to adjust capacity or the forecast. You can view the time series as a spreadsheet or as a graphical display. The spreadsheet provides a numerical breakdown, by planning period, of the load placed on a work center.

The bar graph provides the same information as Review Work Center Load. The graph uses time series information from Resource Requirements Load to generate the comparison. The system displays the capacity load at the work center for each planning period based on several calculations.

Review Work Center Load for CRP uses the same program as Review Work Center Load for Resource Requirements Planning. You can vary the settings in the processing options to accommodate the different requirements for CRP.

## Before You Begin

- Verify that your resource units and capacity requirements plan are current.

## See Also

- *Reviewing Work Center Load for Resource Requirements Planning (P3313)* for information on the processing options

## Reviewing Period Summaries for Capacity Requirements Planning

	From Resource & Capacity Planning (G33), choose <b>Periodic Capacity Requirements</b> From Periodic Resource and Capacity Planning (G3321), choose <b>Period Summary report</b>
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In addition to reviewing the capacity load of a work center, you can also evaluate the load placed on a work center by item. You can review period summaries either online or through a printed report. You can review:

- The items that are scheduled for a work center
- The number of units of an item that make up the load
- The percent of the total load on the work center that is for a specific item's forecast

You use this information to determine whether to adjust the forecast or the capacity at the work center.

When you review period summaries for CRP you use the same program as when you review period summaries for Resource Requirements Planning. You can vary the settings in the processing options to accommodate the different requirements for CRP.

To evaluate the load placed on a work center by item, you can review the Period Summary Report.

3352		JD Edwards World		Page	- 2	
Business Unit . . . . .		200-204 Final Assembly/Inspection		Efficiency . . . . .	80.00	
Dispatch Group . . . . .		200-200 Assembly Department		Utilization . . . . .	100.00	
Unit of Measure . . . . .		HR Hour		Date	- 5/31/17	
Item				Prime Load Code.	B	
Number		Item Description		Per. End	Units	UM
				Per	Per	Per
				Order	Ty	Requirement
				Number		Type
5120	Oak Desk With Chair	01/02/17	443	HR	97.15	2399 FO Firm Work Order W/Parts List
1261	Multivitamin Tablets	01/02/17	7	HR	1.54	133760 FO Firm Work Order W/Parts List
1261	Multivitamin Tablets	01/02/17	7	HR	1.54	133823 FO Firm Work Order W/Parts List
		Total for Period Ending	01/02/17	457	HR	--
5120	Oak Desk With Chair	01/09/17	654	HR	55.05	2428 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	01/09/17	531	HR	44.70	2410 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	01/09/17	3	HR	.25	2444 WO Real (firm) Work Orders
333	OAK SHELF UNIT	01/09/17	1	HR	.08	2372 WO Real (firm) Work Orders
		Total for Period Ending	01/09/17	1189	HR	--
5120	Oak Desk With Chair	01/16/17	4205	HR	94.79	2428 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	01/16/17	223	HR	5.03	2452 WO Real (firm) Work Orders
12706	Vitamin A	01/16/17	3	HR	.07	WP Planning Work Orders
12706	Vitamin A	01/16/17	3	HR	.07	WP Planning Work Orders
12706	Vitamin A	01/16/17	2	HR	.05	WP Planning Work Orders
12706	Vitamin A	01/16/17	1	HR	.02	WP Planning Work Orders
5120	Oak Desk With Chair	01/16/17		HR		2444 WO Real (firm) Work Orders
		Total for Period Ending	01/16/17	4437	HR	--
5120	Oak Desk With Chair	01/23/17	1059	HR	65.65	2479 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	01/23/17	555	HR	34.41	2452 WO Real (firm) Work Orders
		Total for Period Ending	01/23/17	1614	HR	--
5120	Oak Desk With Chair	01/30/17	531	HR	93.82	2495 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	01/30/17	9	HR	1.59	123545 WO Real (firm) Work Orders
FORKLIFT	Forklift	01/30/17	6	HR	1.06	3615 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	01/30/17	3	HR	.53	133920 FO Firm Work Order W/Parts List
12706	Vitamin A	01/30/17	3	HR	.53	WP Planning Work Orders
12706	Vitamin A	01/30/17	3	HR	.53	WP Planning Work Orders
12781	Minerals, complex	01/30/17	3	HR	.53	WP Planning Work Orders
5120	Oak Desk With Chair	01/30/17	3	HR	.53	2508 WO Real (firm) Work Orders
12706	Vitamin A	01/30/17	2	HR	.35	WP Planning Work Orders
12781	Minerals, complex	01/30/17	2	HR	.35	WP Planning Work Orders
12706	Vitamin A	01/30/17	1	HR	.18	WP Planning Work Orders
12781	Minerals, complex	01/30/17	1	HR	.18	WP Planning Work Orders
12781	Minerals, complex	01/30/17	1	HR	.18	WP Planning Work Orders
		Total for Period Ending	01/30/17	568	HR	--
5120	Oak Desk With Chair	02/06/17	487	HR	60.65	2516 FO Firm Work Order W/Parts List
5120	Oak Desk With Chair	02/06/17	310	HR	38.61	123537 WO Real (firm) Work Orders
5120	Oak Desk With Chair	02/06/17	3	HR	.37	2524 WO Real (firm) Work Orders
5120	Oak Desk With Chair	02/06/17	2	HR	.25	123545 WO Real (firm) Work Orders
333	OAK SHELF UNIT	02/06/17	1	HR	.12	141719 FO Firm Work Order W/Parts List
333	OAK SHELF UNIT	02/06/17	1	HR	.12	141735 FO Firm Work Order W/Parts List

## Processing Options

See [Period Summary \(P3352\)](#).

## Reviewing MRP Work Schedules on the Dispatch List



From Resource & Capacity Planning (G33), choose **Daily Capacity Requirements**  
From Daily Capacity Requirements Planning (G3313), choose **Dispatch List**

Use the Dispatch List to locate and update work center scheduling information. This workbench environment serves as a starting point for work center scheduling and the release of work to the floor. Use this program to:

- Access work order information, such as the header and parts list

- Display work order information, such as work center, remaining labor, machine hours, and setup hours
- Sort work orders by start date, requested date, or status code operation
- Change the work order status code, start date, or requested date

The Dispatch List for MRP uses the same program as the Dispatch List for DRP/MPS. You can vary the settings in the processing options to accommodate the different requirements for MRP.

## What You Should Know About

### Leveling an overloaded time frame

If a work center is overloaded, you might consider the following alternatives to distribute material and labor requirements to make the work center load as even as possible:

- Offering Overtime
- Changing higher-level demand level by level
- Alternating routings
- Adding shifts
- Bringing in resources from other work centers
- Outsourcing

## See Also

- *Reviewing Work Schedules on the Dispatch List (P31220)* for the processing options for this program

## Reviewing MRP Rate Schedule and Work Order Loads



From Resource & Capacity Planning (G33), choose **Daily Capacity Requirements**  
From Daily Capacity Requirements Planning (G3313), choose **Schedule Review**

Use Schedule Review to review the rate schedule load and the work order load for a work center for a day, week, or month. You can also select a specific date range to view the load for the work center. If you need to adjust the scheduled load at the work center, you can access several different forms to make adjustments.

Schedule Review is used primarily for rate based items and is an alternative for viewing load on a work center. A processing option allows you to include work order generated loads before or after rate loads.

When you review schedules for MRP you use the same program as when you review schedules for DRP and MPS. You can vary the settings in the processing options to accommodate the different requirements for MRP.

## See Also

- *Reviewing Rate Schedule and Work Center Loads (P31224)* for the processing options for this program

## Validating Capacity Requirements Plans

Validating the capacity requirements plan consists of identifying the overloaded work centers, making adjustments in forecast or resources, and generating the plan again to see if the adjustments you have made have evenly distributed the loads on the work centers.

### To validate a capacity requirements plan

1. Complete the steps for reviewing the requirements plan.  
*See Reviewing CRP.*
2. Revise the forecast.  
*See Revising Summaries of Forecasts in the Forecasting Guide.*
3. Complete the steps for generating the requirements plan.  
*See Generating Capacity Requirements Planning.*
4. Complete the steps for reviewing the revised requirements plan.  
*See Reviewing Capacity Requirements Planning.*
5. Repeat the steps until all loads at each work center are appropriate.



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# Set Up Material & Capacity Requirements Planning

## Setting Up Material and Capacity Requirements Planning

Before you can run a successful Material Requirements Planning (MRP) regeneration, you must define the information to use during processing. The system uses setup information to determine how to select and display data.

If you use other JD Edwards World software, you must set up some of this information in other systems, such as Shop Floor Control and Inventory Management.

Complete the following tasks:

- [Setting Up MRP Supply and Demand Inclusion Rules](#)
- [Setting Up Message Types for MRP](#)
- [Setting Up Time Fence Rules for MRP](#)
- [Setting Up Forecast Consumption Periods for MRP](#)
- [Setting Up the Capacity Requirements Display](#)

The programs that you use to set up MRP and CRP are the same programs that you use to set up Distribution Requirements Planning, Master Production Schedule, and Rough Cut Capacity Planning.

### See Also

- *Setting Up DRP, MPS, and RCCP (P3482)* for detailed information on these programs

## Setting Up MRP Supply and Demand Inclusion Rules



From Material Planning Operations (G34), enter **29**  
From Material Planning Setup (G3442), choose **Supply/Demand Inclusion Rules**

You set up supply and demand inclusion rules to display the supply, demand, and available quantities for an item. These quantities and their formulas are as follows:

Quantity Type	Description
On-hand inventory	Quantity on hand - hard commits - quantity on sales orders - quantity on work orders

Quantity Type	Description
Purchase orders	Open quantity on purchase orders
Manufacturing work orders	Quantity entered on work order - quantity shipped
Safety stock	Safety stock
Sales Orders	Quantity entered on sales order - quantity shipped - quantity canceled
Work order requirements	Quantity required - quantity issued
Co-/by-products supply from work orders	Quantity ordered - quantity completed
Co-/by-products supply from rates	Quantity ordered - quantity completed

## See Also

- *Setting Up Supply/Demand Inclusion Rules (P34004)*

## Setting Up Message Types for MRP

	From Material Planning Operations (G34), enter 29 From Material Planning Setup (G3442), choose <b>Action Messages</b>
---	--

Message type character codes are already defined for all the messages that the system can create when you generate a material requirements plan. Because the character code is hard coded, you can change the description, but not the function of the message type. You can change the description for clarity in your environment.

The exception to this rule is A type warning messages. A warning type message may be suppressed from displaying by performing the following procedure:

Two Methods to delete MRP warning messages

1. UDC 34/MT

Warning messages (type A) can be deleted from this table and no warning messages will be written to the F3411 file when P3482 or P3483 are run. This is an all or nothing approach to the following messages: Leadtime is Zero, BOM does not Exist for Item, Planning BOM does not Exist for Item, W.O. is Missing Parts List, Defer Parts List, Increase Parts List, Decrease Parts List, Expedite Parts List, Cancel Parts List, Lot quantity expired, No BOM, Co/By product item.

2. Vocabulary Overrides for R3482 & R3483

Go to Vocabulary Overrides and inquire on R3482 or R3483 - all 32 messages are displayed including the warning messages listed above. With a

C in the action code, you can blank out a line if you do not want that particular warning message to appear on the message detail video.

Note: In order to easily recover original warning messages we suggest the following:

Before any modifications are made to the R3482/3483 Vocabulary Overrides, they should be copied to a new, user defined report (for example, the X3482/3483). The R3482/3483 overrides can then be modified as necessary. To revert back to the original R3482/3483 overrides, simply delete the Vocabulary Overrides for the X3482/3483 and re-add them, copying from the X3482/3483 to the R3482/3483.

## See Also

- *Setting Up Message Types for DRP, MPS, and RCCP (P00051)* for information on how to change the message type descriptions

## Setting Up Time Fence Rules for MRP

	From Material Planning Operations (G34), enter <b>29</b> From Material Planning Setup (G3442), choose <b>Time Fence Rules</b>
--	--

Time fences are points in time at which you can make changes to either policy or operating procedures. The Manufacturing and Distribution Planning system supports three time fences:

Fence Type	Description
F (Freeze Fence)	Within this time period, orders are neither created nor replanned.
P (Planning Fence)	Within this time period, the system uses the demand from the forecast and customer orders to calculate the ending available product.
D (Message Display Fence)	After this time period, messages are neither created nor displayed.

## See Also

- *Setting Up Time Fence Rules for DRP, MPS, and RCCP (P00051)* for information on how to specify time fence rules

## Setting Up Forecast Consumption Periods for MRP

	From Material Planning Operations (G34), enter 29 From Material Planning Setup (G3442), choose Forecast Consumption Periods
---	--

You define forecast consumption periods to identify a period of time in which forecasts are consumed by sales orders. The system stores this information in the Forecast Consumption Periods table (F3405).

### Before You Begin

- Verify that the following information has been set up:
  - Planning fence rule H in user defined code table 34/TF
  - The order types in user defined code table 40/CF, to include in shipped order calculations
  - The -SHIP quantity type in user defined code table 34/QT, to calculate shipped orders quantity
  - The Planning Fence Rule field on the Plant Manufacturing Data screen, with a value of H
  - The order types in user defined code list 40/IU, to update inventory (includes order type SO)
  - The Planning Fence field on Plant Manufacturing Data, with a value beyond the end of the planning horizon
  - The appropriate processing options in the DRP/MPS generation program

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**Note:** You must set up the planning fence field on Plant Manufacturing Data with a value beyond the end of the planning horizon (JD Edwards World recommends a planning fence of 999). If you do not set the planning fence beyond the planning horizon, the batch programs (DRP/MPS/MRP Regeneration and Net Change) will not work properly.

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### See Also

- *Setting Up Forecast Consumption Periods* for more detailed information on this program

## Setting Up the Capacity Requirements Display

	From Resource & Capacity Planning (G33), enter 29 From Resource/Capacity Planning Setup (G3341), choose Capacity Requirements Display
---	--

Use Capacity Requirements Display to specify row descriptions for CRP on all screens and reports. The digit code is hard-coded.

## To set up the capacity requirements display

### On Capacity Requirements Display

00051 Capacity Requirements Display

Tools Help

ORACLE JD Edwards World UPL Document Email World Resources Support

Field Sensitive Help  
 Display Error Message  
 Display Functions  
 Exit Program  
 More Details  
 User Defined Code Typ  
 Repository Services  
 Redisplay Previously C  
 Memo (Cursor Sensitive  
 Where Used  
 Alternate Lang Desc (C  
 Print User Defined Code  
 Clear Screen

00051 Capacity Requirements Display

Action Code [T]

System Code 33  
 User Defined Codes CR  
 Skip To Code  
 Capacity Requirements Planning

02 Digit Code	Description
05	LOAD-INCLUDES SETUP
10	Released Load
20	Planned Load
30	Total Load
35	
40	LOAD VS CAPACITY
50	Gross Capacity
60	Rated Capacity
70	% of Capacity Used
80	Available Capacity
90	Accum. Available Cap.

F5=Code Types F14=Memo F15=Where Used F18=Translate F21=Print F24=More

Complete the following fields:

- Code
- Description



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# Process Orders for MRP

## Processing Orders for MRP



From Shop Floor Control (G31), choose <b>Discrete Daily Order Preparation</b> From Daily Order Preparation - Discrete (G3111), choose <b>Order Processing</b>
--

After you run MRP Regeneration or MRP Net Change, use the Order Processing batch program to process multiple work orders. The system:

- Attaches the parts list
- Attaches the routing instructions
- Sets an initial order status
- Generates the shop packet, including:
  - Parts list
  - Routing instructions
  - Shop packet summary
  - Component shortages

The program that you use to process orders for MRP is the same program that you use to process orders for Distribution Requirements Planning, Master Production Schedule, and Rough Cut Capacity Display.

### See Also

- *Processing Work Orders (P31410) in the Shop Floor Control Discrete Manufacturing Guide*



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## 10 MRP Multi-Facility Scheduling



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# Overview to MRP Multi-Facility Scheduling

## Objectives

- To understand key MRP multi-facility scheduling concepts
- To define supply and demand relationships among your branch/plants
- To use the branch relationships chart to review your supply and demand relationships in a graphical hierarchical format
- To generate a multi-facility requirements plan
- To review the time series for the multi-facility requirements plan
- To review and process transfer messages for the multi-facility requirements plan

## About MRP Multi-Facility Scheduling

In an MRP multi-facility operation, planned orders at the demand facility are the source of demand at the supply facility. You set up and maintain multi-facility schedules to:

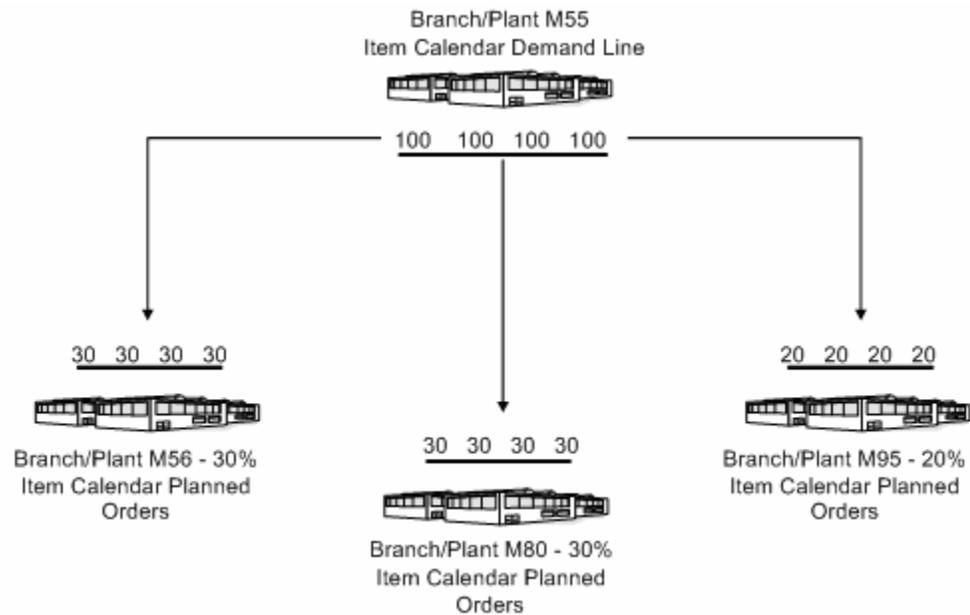
- Manage the movement of component material through multiple production facilities
- Use assembly lines at one plant to begin the assembly of a product and a different plant for final assembly
- Handle all resupply movements throughout the manufacturing network
- Formalize the processing of transfer items among your manufacturing plants
- Create internal transfer orders to help ensure traceability of material and their costs between facilities
- Ensure that the branch from which you are ordering has enough inventory in stock to fill the order, or schedule the supply plant to produce it
- Schedule production according to realistic time frames

You can define facility relationships at any level of detail for an entire facility, a product group, master planning family, or an individual item number. In addition, you can incorporate all your facilities into a single planning schedule.

In MRP, the system transfers items among your manufacturing plants at the component level. The system transfers component items by:

- Generating a purchase order at the demand plant for the supply plant
- Generating a sales order from the demand plant at the supply plant

In the following example, the demand plant (M55) receives components from three different supply plants. Supply plants can also manufacture the end deliverable item.



A breakdown of the percent received from each supply branch/plant indicates that M55 satisfies 80 percent of its required demands from the three supply branch/plants. In this case, the demand plant assembly also supplies the remaining 20 percent of the end item.

MRP multi-facility scheduling consists of the following tasks:

- Setting up multi-facility requirements plans
- Generating multi-facility requirements plans
- Working with MRP multi-facility planning output

The system records MRP multi-facility information in the following tables:

Table	Description
Bill of Materials Master (F3002)	Contains warehouse or plant level information about bills of material, such as costs and quantities of components, features and options, and levels of detail for each bill.
Branch Relationships Master (F3403)	Contains the supply and demand relationships among the branches.
Forecast Consumption Periods (F3405)	Contains the periods that you defined on the Forecast Consumption Periods screen.
MPS/MRP/DRP Lower Level Requirements (F3412)	Contains the source of gross requirements that are required to build parent items.

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<b>Table</b>	<b>Description</b>
Item Master (F4101)	Contains basic information about each item that has been defined in inventory, such as item numbers, description, alpha description, category codes, and units of measure.
Item Branch (F4102)	Contains warehouse or plant level information, such as costs, quantities, physical location, and branch level category codes.
MPS/MRP/DRP Detail Message Review (F3411)	Contains the action messages generated when you run a Master Production Schedule, Material Requirements Plan or Distribution Requirements Plan.

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# Set Up Multi-Facility Requirements Plans

## Setting Up Multi-Facility Requirements Plans

You set up a multi-facility material requirements plan to track supply, demand, and movement of material among the individual facilities in your company. MRP multi-facility scheduling provides a flexible method for planning supply and resupply activities.

You must set up a table of the supply and demand relationships among your facilities. The system uses these relationships to generate and maintain multi-facility requirements planning schedules.

Setting up MRP multi-facility scheduling consists of the following tasks:

- [Setting Up MRP Supply and Demand Relationships](#)
- [Reviewing MRP Branch Relationships on the Relationships Chart](#)

MRP multi-facility scheduling uses the same programs as DRP/MPS multi-facility scheduling. The programs are summarized here.

### Before You Begin

- Verify that MRP and CRP have been set up.
- Understand the concepts and terms described in Single Facility Material Requirements Planning. See *Generating Material Requirements Plans*.

### See Also

- *Setting Up MRP and Capacity Planning (P00051)* for information on how to define MRP and CRP data to use during processing
- *Setting Up Multi-Facility Schedules (P3403)* for additional information on multi-facility scheduling

## Setting Up MRP Supply and Demand Relationships



From Material Planning Operations (G34), enter 29  
From Material Planning Setup (G3440), choose **Multi-Plant Setup**  
From Multi-Plant Setup (G3443), choose **Branch Relationships Revisions**

Use **Branch Relationships Revisions** to set up MRP supply and demand relationships for any level of detail you choose, including:

- Branch/plant

- Product group
- Master planning family
- Individual item number

The MRP Branch Relationship Revisions program and the DRP/MPS Branch Relationship Revisions program use the same processing options. You can vary the settings in the processing options to accommodate the different requirements for a material requirements plan.

## See Also

- *Setting Up Supply and Demand Relationships (P3403)* for the processing options for this program

## Reviewing MRP Branch Relationships on the Relationships Chart

	From Material Planning Operations (G34), enter 29 From Material Planning Setup (G3440), choose <b>Multi-Plant Setup</b> From Multi-Plant Setup (G3443), choose <b>Branch Relationships Chart</b>
---	--

Use the Branch Relationships Chart to review your MRP supply and demand relationships in a graphical, hierarchical format. The Branch Relationships Chart displays the:

- Branch
- Level of the branch
- Supply branches for the corresponding demand branch

The MRP Branch Relationships Chart program and the DRP/MPS Branch Relationships Chart program use the same processing options. You can vary the settings in the processing options to accommodate the different requirements for a material requirements plan.

## See Also

- *Reviewing Branch Relationships on the Relationships Chart (P34031)* for detailed information on this program

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# Generate Multi-Facility Requirements Plans

## Generating Multi-Facility Requirements Plans



From Material Planning Operations (G34), choose **Periodic Multi-Facility Planning**  
From Multi-Facility Periodic Planning Operations (G3423), choose **MRP regeneration**

After you have set up the MRP supply and demand relationships among your branch/plants, you can use MRP regeneration to generate a multi-facility requirements planning schedule.

When you generate a multi-facility requirements planning schedule, the system evaluates selected information, performs calculations, and recommends a time-phased planning schedule for all selected items.

The Multi-facility MRP Regeneration program uses the same set of processing options as multi-facility DRP regeneration. You can vary the settings in the processing options to accommodate the different requirements for a material requirements plan.

### Before You Begin

- Set up MRP multi-facility scheduling. See *Setting Up Multi-Facility Schedules*.

### See Also

- *Generating Multi-Facility Schedules (P3483)* for detailed information on the regeneration program

### What You Should Know About

#### Generation definition

You must specify in the processing option the type of generation to use to process multi-facility MRP items. Depending on the type of requirements plan you need, you can use generation type 4 or 5.

**Multi-plant consolidation**

You must set the appropriate processing option to control whether you run a consolidated or a full multi-facility MRP Regeneration.

Consolidation is the process of adding the item's time series data in the same time buckets for selected branch/plants and consolidating it into a Consolidation Branch/Plant.

The system combines the supply and demand data for selected branches and consolidates it to a consolidation branch. The system generates a new time series only for the consolidation branch and not the branches that were combined.

**Transfer orders**

Transfer order messages are an output of multi-facility scheduling. You must set the appropriate processing option to identify the document type to use for transfer orders.

When the system processes a transfer order, it creates a sales order at the supply plant and a purchase order at the demand plant.

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# Work with MRP Multi-Facility Planning Output

## Working with MRP Multi-Facility Planning Output

MRP multi-facility planning output consists of information in the time series and transfer order messages. Use the time series information to accept the planning that is suggested by the system or to override it. You should review the transfer order messages for individual item numbers to determine which action, if any, you need to take.

Reviewing MRP multi-facility planning output consists of the following tasks:

- [Reviewing the Time Series for MRP Multi-Facility](#)
- [Processing MRP Transfer Order Messages](#)

### Before You Begin

- Generate a current multi-facility material planning schedule. See *Generating Multi-Facility Requirements Plans*.

## Reviewing the Time Series for MRP Multi-Facility

	From Material Planning Operations (G34), choose <b>MRP</b> From MRP Daily Operations (G3413), choose <b>Time Series Inquiry</b>
---	--

Use the MRP Time Series program to review the item series for the multi-facility requirements plan. The time series is a record of time-phased supply and demand netting for selected items. The system retrieves this data from the most recent generation or net change run. Use the processing options to set up daily, weekly, or monthly time periods (buckets).

The MRP Time Series program uses the same set of processing options as the DRP/MPS Time Series. You can vary the settings in the processing options to accommodate the different requirements for a material requirements plan.

## See Also

- *Reviewing the Time Series (P3413)* for the processing options for this program
- *Reviewing MRP Time Series (P3413)*
- *Reviewing DRP/MPS Time Series (P3413)*

## Processing MRP Transfer Order Messages



From Material Planning Operations (G34), choose **MRP**  
From MRP Daily Operations (G3413), choose **Detail Message Review**

Use Detail Message Review to review the transfer order messages for the multi-facility material planning schedule. MRP multi-facility scheduling creates messages that relate to the demand and supply plants. If you choose to process the messages, the system automatically creates transfer orders. You can transfer items between plants at cost or at a fixed or percent markup.

The MRP Detail Message Review program uses the same set of processing options as the DRP/MPS Detail Message Review program. You can vary the settings in the processing options to accommodate the different requirements for a material requirements plan.

## See Also

- *Reviewing MRP Detail Messages (P3411)* for additional information on messages generated for MRP
- *Processing Multi-Facility Transfer Order Messages (P3411)* for information on processing transfer order messages
- *Working with Messages (P3411)* for the processing options for this program

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## 11 **Supplier Scheduling**



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# Overview to Supplier Scheduling

## Objectives

- To understand the key supplier scheduling concepts
- To identify the steps you use to create a supplier schedule
- To enter supplier information that is related to anticipated shipment quantities and the dates that you expect the supplier to meet
- To generate a supplier schedule and create a purchase order
- To update planned ship quantities in the supplier schedule
- To review and release the current supplier schedule

## About Supplier Scheduling

You set up and maintain supplier schedules to:

- Support item-specific relationships for scheduled shipments at the supplier's site
- Set up blanket purchase orders and material shipping arrangements with each supplier
- Generate a shipping schedule for all supplier scheduled demand within your release horizon
- Generate multiple supplier schedules for a single item
- Adjust the shipping schedule for unplanned events and create blanket purchase order releases

Working with supplier schedules consists of the following tasks:

- Defining supplier contracts
- Generating supplier schedules
- Revising supplier schedules
- Releasing supplier schedules
- Printing supplier schedules (optional)

Setting up supplier schedules provides your suppliers with consistent shipping information and advanced demand profiles to support your goal of just-in-time production and delivery. Using supplier schedules enables you to convert your DRP/MPS/MRP plans into a realistic shipping schedule.

Your buyers maintain timely information to monitor contract terms against your current needs. The supplier schedule identifies both short- and long-term needs for purchased items at your facility. Suppliers can then use your supplier schedule to plan their production and shipping schedules.

The system records supplier schedule information in the following tables:

Table	Description
Supplier Schedule Master (F4321)	<p>Contains most of the data that controls scheduling arrangements with the supplier. This table also contains information required for creating and maintaining the schedule, including:</p> <ul style="list-style-type: none"> <li>▪ Ship lead time</li> <li>▪ Schedule days</li> <li>▪ Ship pattern</li> <li>▪ Shipment quantity</li> <li>▪ Delivery location</li> </ul> <p>The system uses information from the Supplier Schedule Master table for each line item on a blanket order that you use in the supplier scheduling process.</p>
Supplier Split Percentages (F43211)	Contains the data that identifies predetermined split percentages between suppliers, by item.

## What Is the Effective Date Range?

The effective date range for a blanket purchase order is specified by the beginning order entry date and the expiration requested date.

## What Is a Blanket Purchase Order?

A blanket purchase order is a standing order that you issue to a supplier for a large quantity of goods with no specific delivery date.

The process of scheduling supplier items begins in JD Edwards World Purchase Management system with the creation of a blanket purchase order. You must create a blanket purchase order for every item that you want to schedule for supplier delivery.

Use Enter Blanket Order in the Purchasing Management system to enter blanket orders for items. You can review all blanket orders for a single item when you set up a supplier schedule.

Supplier release scheduling allows you to set up multiple blanket orders for the same supplier. The system uses a technique similar to effectivity dates to determine the active order. The system uses the blanket order date as the start date and the requested date as the end date.

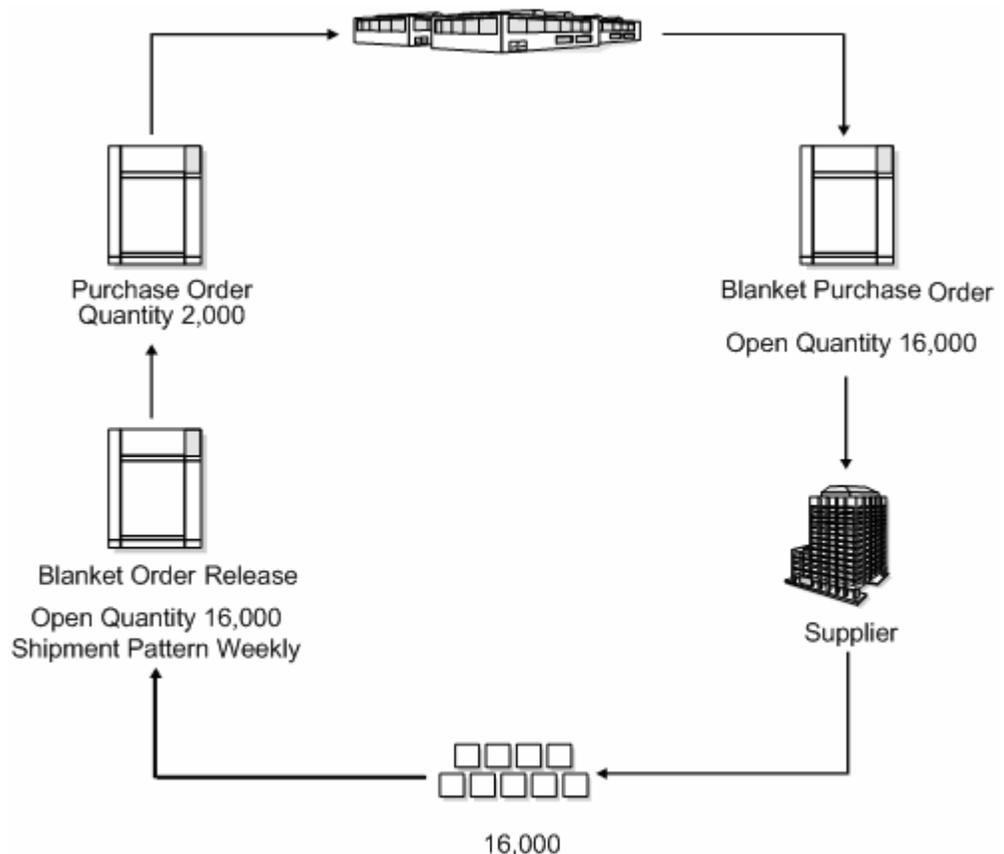
## What Is a Blanket Order Release?

You use a blanket order release for suppliers to whom you periodically release orders for delivery of some, but not all, of the goods on a purchase order.

For example, you might issue a blanket order release for 16,000 items from a supplier. In addition, you might have an agreement to take delivery of up to 2,000 units of the item each month until the order is filled.

When Supplier Scheduling processes the order suggestions, the system creates a purchase order against the blanket order. Receipts for the generated orders reduce the total quantity open on the blanket purchase order.

The following illustrates how the system uses blanket purchase orders and blanket order releases.

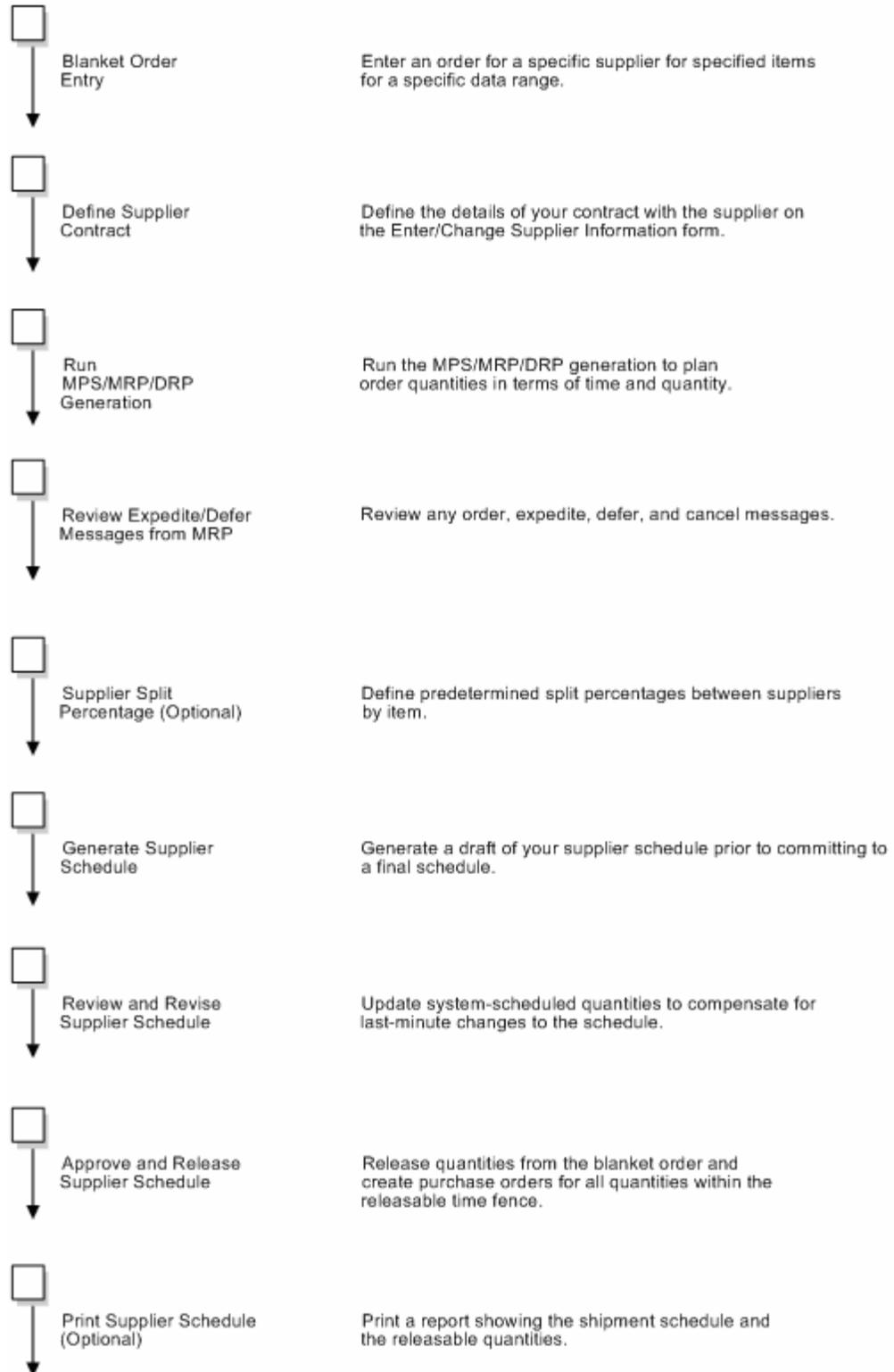


## See Also

- *Entering Blanket Orders in the Procurement Guide*

## What Are the Steps for Creating a Supplier Schedule?

The following graphic illustrates the steps you follow to create a supplier schedule.



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# Define Supplier Contracts

## Defining Supplier Contracts

You must enter the terms of your contract with each of your suppliers. The system uses these contract terms to generate and maintain supplier schedules.

In addition, if you want to generate multiple supplier schedules for a single item, you must define predetermined split percentages between the suppliers, by item.

Complete the following tasks:

- [Defining Supplier Contract Information](#)
- [Generating and Revising Shipment Dates](#)
- [Defining Supplier Split Percentages](#)

## Defining Supplier Contract Information



From Material Planning Operations (G34), choose **MRP**  
From MRP Daily Operations (G3413), choose **Enter/Change Supplier Info**

When you define a supplier contract, you can also define time fence periods for freezing delivery quantities, releasable schedule days, and future requirements. The rules for defining time fences are described below:

Period	Description
Frozen days	Specify the time frame from the generation start date within which deliveries are frozen.
Release days	Determine the period of time from the generation start date that purchase orders will be created for orders. Any quantities that are scheduled outside this period are still considered in planning status and do not produce actual purchase orders.
Fabrication days	Determine the time period from the generation start date, within which the customer guarantees fabrication costs for the quantities they ordered on the schedule, even if the order is canceled. This rule is optional.
Raw material days	Determine the time period from the generation start date, within which raw material costs are guaranteed by the customer, even if the order is canceled. This rule is optional.

## Before You Begin

- Create a blanket purchase order for every item that you want to schedule through supplier scheduling. See *Entering Blanket Orders* in the *Procurement Guide*.

## To define supplier contract information

On Enter/Change Supplier Info

4321 Enter/Change Supplier Info B

Tools: help

ORACLE JD Edwards World

Field Sensitive Help  
 Display Error Message  
 Display Functions  
 Exit Program  
 Shipment Date Revisor  
 Blanket Order Inquiry  
 Blanket Order Detail  
 Purchasing Instructions  
 Supplier Schedule Revis  
 Supplier Split Percentag  
 Shipment Pattern Revis  
 Clear Screen

4321 Enter/Change Supplier Info

Branch/Plant R38  
 Status 10 Planning  
 Expiration Date 12/31/18  
 First Release  
 Last Release  
 Last Release P0

Action Code  
 Order Number 0.006  
 Line Number 1.000

Item Number 111 1x10x6 ORK 345  
 Supplier 4343 Vector Manufacturing Co  
 Ship To 5995 Manufacturing Plant, Memphis  
 Deliver to Loc H30 Memphis Mfg. Plant  
 Shipment Quantit 1000  
 Ship Units/Cont. 10 Unit of Measure ER

Ship Leadtime 3 Blanket Order 400000  
 Frozen Days 10 Currently Overridden Cum Received  
 Releasable Days 20 Cum Frozen 4990  
 Fabrication Days 25 Cum Fabricated 25070  
 Raw Mater'l Days 40 Cum Raw Material 48590  
 Schedule D/W/M 45 / 10 / 5 Past Due  
 Early Receipt

F13=Open Orders F14=P0 Detail F15=Purchasing Instr F17=Percent F24=More

1. To set up schedule information for each line on the blanket order, complete the following fields:
  - Order Number
  - Line Number
  - Releasable Days
2. Complete the following optional fields:
  - Deliver to Location
  - Shipment Quantity
  - Shipping Units/Container
  - Shipment Leadtime
  - Frozen Days
  - Fabrication Days
  - Raw Material Days

<b>Field</b>	<b>Explanation</b>
Order Number	The number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Line Number	A number that identifies multiple occurrences, such as line numbers on a purchase order or other document. Generally, the system assigns this number, but in some cases, you can override it.
Releasable Days	A time fence that indicates the number of workdays from the generation start date to use when identifying the cutoff date for actual blanket order releases. The system uses the time fence when the supplier schedule release generation program is run.
Schedule D/W/M	The number of workdays, weeks and months that will be displayed on the supplier schedule.
Deliver to Loc	The location a shipment should be delivered to, such as a particular receiving dock or work center.
Shipment Quantity	This is the quantity the supplier is willing to ship as a minimum.
Ship Units/Cont	The standard quantity of containers that you use in the manufacturing process (typically, in a repetitive manufacturing environment). The quantity that you enter determines the number of bar code labels that you will need for shipping. It also modifies order release quantities.
Ship Leadtime	The time it takes a shipment to move from the supplier's dock to the customer's dock. The system uses this value to offset the required date to determine the actual date that the shipment should take place. Also known as Transit Time.
Frozen Days	The number of workdays from the generation start date that the quantity buckets will be frozen with no changes and releases possible. This value is also used to calculate the cumulative frozen quantity (see CFRO).
Fabrication Days	The number of workdays, from the generation start date, that the customer guarantees the fabrication costs for the quantity ordered.
Raw Mater'l Days	The number of workdays, from the generation start date, that the customer guarantees the raw material costs for the quantity ordered.

## What You Should Know About

### **Deleting supplier information**

When you delete supplier information, the system deletes the entire record, including the history.

<b>Shipment lead time</b>	<p>Shipment lead time determines the number of days that are required for the items on the scheduled blanket order release to leave the supplier's dock and arrive at your delivery location.</p> <p>Depending on where the supplier is located, the shipment leadtime might be zero, or as many days as it takes for the supplier to transport the released shipment to your facility.</p>
<b>Level leadtime</b>	The level leadtime for a purchased item should include the shipment leadtime.
<b>Shipping units per container</b>	The Shipping Units Per Container field identifies the container requirements of the supplier. When the system generates the supplier schedule, it calculates the shipping units per container as a multiple and adjusts the planned quantities as needed.
<b>Shipment quantity</b>	The Shipment Quantity field identifies the minimum shipment quantity that the supplier is willing to accept.
<b>Processing early and past due receipts</b>	<p>When you generate a schedule, the system sorts outstanding blanket order releases into appropriate time periods. The system accumulates past due quantities and quantities that you received prior to the requested date.</p> <p>When you regenerate the schedule, the system displays the quantities in the Past Due and Early Receipt fields on Enter/Change Supplier Information.</p> <p>The system expresses past due amounts as positive numbers in the Past Due field and adds the amounts to the cumulative received quantity. The system expresses early receipt amounts in the Early Receipt field.</p>

## Processing Options

See [Supplier-Blanket Information \(P4321\)](#).

## Generating and Revising Shipment Dates

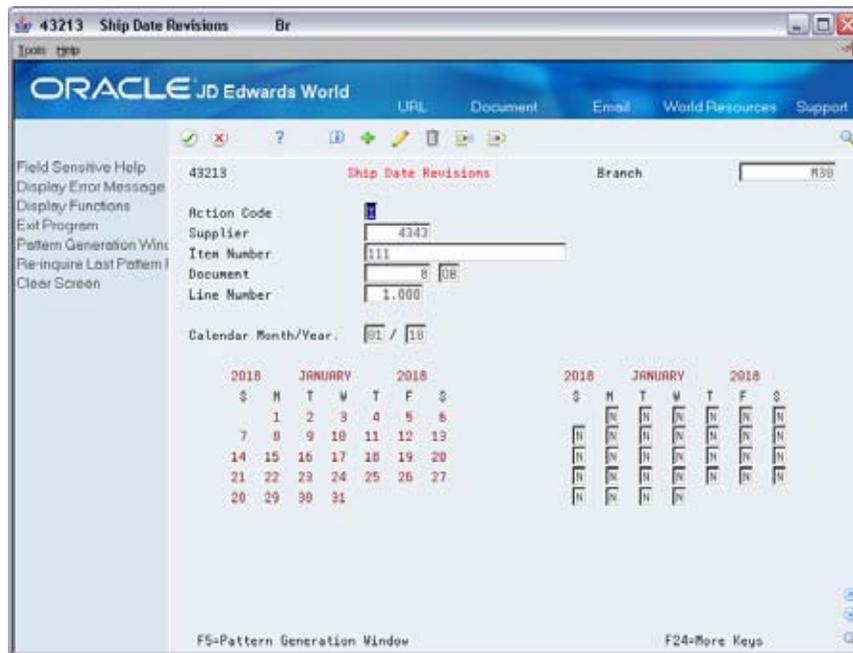
	<p>From Material Planning Operations (G34), choose <b>MRP</b></p> <p>From MRP Daily Operations (G3413), choose <b>Ship Date Revisions</b></p>
---	---

After you set up supplier contract information, you must set up a shipment schedule for the items that the supplier provides.

You can also access Ship Date Revisions from Enter/Change Supplier Info in the previous section by pressing F6. This allows you to do both as a single process.

## To generate a shipment date

### On Ship Date Revisions

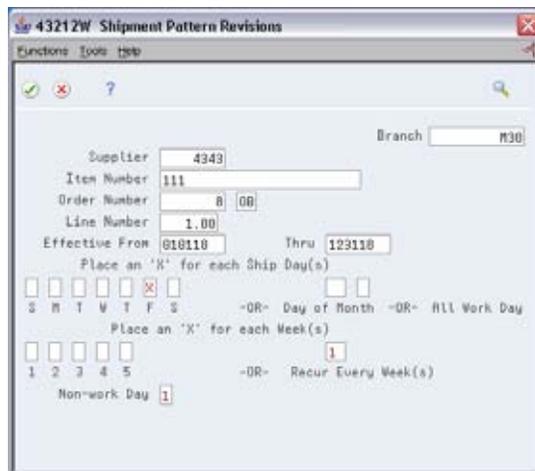


#### 1. Complete the following fields to locate the supplier and item:

- Branch
- Supplier
- Item Number
- Document and Type
- Line Number

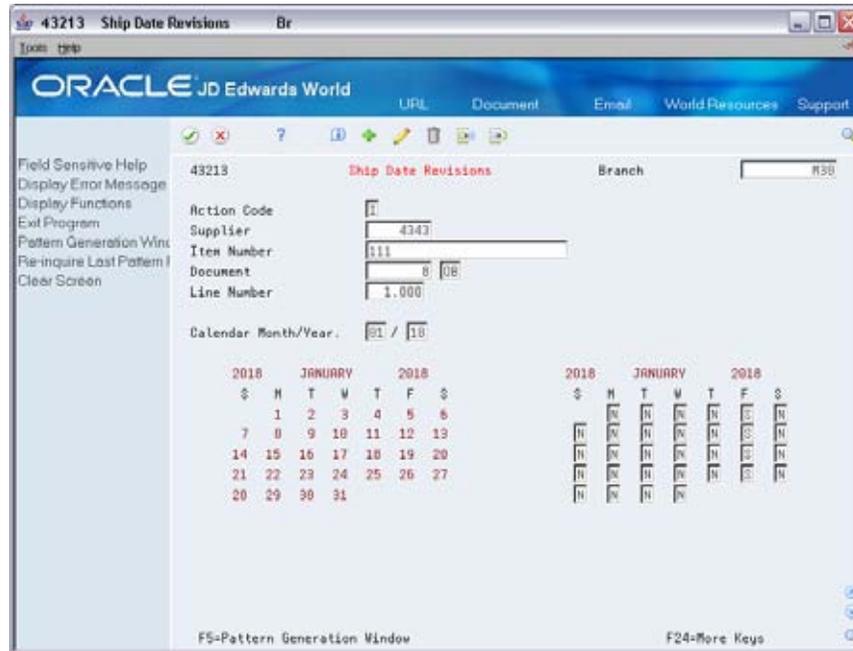
If you access Ship Date Revisions from Enter/Change Supplier Info, the information should appear by default.

#### 2. Access Shipment Pattern Revisions (F5)



**Note:** You can also access Shipment Pattern Revisions directly from Enter/Change Supplier Info by pressing F18.

3. Enter Effective From and Effective Thru dates.
4. Enter the following to specify shipment day(s):
  - Day of the week
  - Day of the Month
5. Enter the following to specify shipment week(s):
  - Week in the Month
  - Recur Every Week(s)
6. Accept the dates to return to the Ship Date Revisions screen.  
The dates now appear in the shipment calendar.



## Defining Supplier Split Percentages

 From Material Planning Operations (G34), choose **MRP**  
From MRP Daily Operations (G3413), choose **Supplier Split Percentages**

Buyers often order from multiple suppliers for the same item to avoid relying on a single supplier. Supplier scheduling allows multiple suppliers to supply a single item based on a predetermined split percentage. Use Supplier Split Percentages to define the predetermined split percentages among the suppliers, by item.





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# Generate Supplier Schedules

## Generating Supplier Schedules



From Material Planning Operations (G34), choose **Single Site Planning**  
From Single Site Planning Operations (G3422), choose **Generate Supplier Schedule**

Use **Generate Supplier Schedule** to generate a draft of your supplier schedule prior to committing to a final schedule. You can review the draft of your supplier schedule using **Enter/Change Schedule**.

When you generate the supplier schedule, the system uses the messages from the most recent MRP generation, blanket orders, and the information defined in the **Supplier Schedule Master** table to create a supplier schedule. The system determines demand from the MRP messages.

In addition, the system creates multiple supplier schedules for a single item. It does this by splitting the MRP messages by the predetermined percentages that you defined in the **Supplier Split Percentages** table.

### Before You Begin

- Verify that the following information has been set up:
  - The DRP or MPS system
  - An active blanket order for the item
  - Associated supplier information for the order
  - The blanket order, order type, line type, and status in the version of supply/demand inclusion rules that are used during supplier schedule generation
- Run the MPS/MRP/DRP generation so that the system can:
  - Create order messages for supplier scheduled items
  - Produce a time-series material plan so you can analyze the impact of choosing to accept or reject planning suggestions
- Review and act on any messages on the **Message Detail Review** form

## What You Should Know About

### MRP messages

Supplier scheduling uses the messages generated from the most recent MRP generation to determine schedules. Use Detail Message Review to review these messages and change them as you see fit.

In addition, you can set the appropriate processing option to clear these messages after schedule generation. The system clears only those messages inside the releasable time fence.

After you clear the MRP messages, supplier scheduling creates a purchase order for every message that is included in the releasable time fence.

### Multiple supplier scheduling

Supplier Scheduling uses the information in the Supplier Split Percentages table (F43211) to create quantity records for multiple suppliers. The system calculates these quantities by multiplying the MRP message quantity by the percentage defined in the Supplier Split Percentages table.

## See Also

- *Setting Up DRP, MPS, and RCCP (P00051)*
- *Generating Single Level Master Schedules (P3482)*
- *Working with Messages (P3411)*
- *Reviewing MRP Time Series (P3413)*
- *Revising Supplier Schedules (P34301)*

When you run Generate Supplier Schedule, the system prints a Schedule Generation Exception report that details any possible discrepancies that might make your supplier schedule ineffective.

34400	JD Edwards World	Page	-	3
		Date	-	5/31/17
The Following Report Distributions were Entered:				
** None Selected **				
Item	Item Description	T	Branch/Plant	Exception Description
111	1x10x6' OAK S4S	0	M30	*Messages exist that were not processed. No Supplier Schedule Master was found.

## Processing Options

See [Generate Supplier Schedule \(P34400\)](#).

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# Revise Supplier Schedules

## Revising Supplier Schedules



From Material Planning Operations (G34), choose **MRP**  
From MRP Daily Operations (G3413), choose **Enter/Change Schedule**

Use Enter/Change Schedule to review and revise the supplier schedule that you generated. You might need to override system-scheduled quantities to compensate for last-minute changes to the schedule.

After you review the schedule and make any necessary revisions, you must accept the information on Enter/Change Schedule to commit to a final schedule.

Enter/Change Schedule allows you to:

- Review planned, released, and historical quantity information
- Display the current supplier schedule
- Review cumulative quantity information
- Update planned quantities in the schedule before you release them
- Finalize the supplier schedule

## To revise a supplier schedule for a single item

On Enter/Change Schedule

- To display one or more blanket orders that exist for the selected item, complete the following fields:

- Item Number
- Branch/Plant

The system displays Blanket Order Selection.

Order	Planned	Released	Historical
8	250260		
9	107250		

- On Blanket Order Selection, choose the blanket order with the supplier information that you want to display.

The system closes Blanket Order Selection and populates the Enter/Change Schedule screen with supplier scheduling information.

The screenshot shows the 'Enter/Change Schedule' screen in Oracle JD Edwards World. The window title is '34301 Enter/Change Schedule'. The screen displays various fields for scheduling information, including Action Code (I), Item Number (111), Order Number (1x10x6 ORK S4S), Supplier Nr (4343 Vector Mfg), Carrier, Deliver to (M30 Memphis Mfg. Plant), and Ship Pattern (WA Weekly - Monday thru Friday). It also shows a table of dates and quantities for Released, Planned, Cumulative, and Net Change.

	Past Due	01/02/17	01/05/17	01/06/17	01/07/17	01/08/17
Released				1200		
Planned						
Cumulative				1200	1200	1200
Net Change				1200		

	01/09/17	01/12/17	01/13/17 F	01/14/17	01/15/17	01/16/17
Released						
Planned	3710					5720
Cumulative	4990	4990	4990	4990	4990	10710
Net Change	3710					5720

F11=Schedule Master F13=Pegging Inq F14=Supply/Demand Inq F24=More Keys

- On Enter/Change Schedule, review the following information:

- Status
- Last Release Purchase Order
- Last Receipt
- Receipt Quantity
- Cumulative Receipt
- Cumulative Frozen
- Cumulative Fabricated
- Cumulative Raw Material
- Past Due

- Accept the record or complete the following field to update planned quantities in the schedule:

- Planned

Field	Explanation
Status	The current status of the supplier schedule. This is updated as the schedule moves through the system. <i>Form-specific information</i> This field is display only.

<b>Field</b>	<b>Explanation</b>
Last Receipt	The date that the last shipment of the item was received.
Receipt Qty	The quantity received on the most recent shipment.
Cum Receipt	The quantity received to date against a blanket purchase order.
Cum Frozen	The quantity inside the Frozen Time Fence that the customer is planning to release or has already released to the supplier.
Cum Fabricate	The running total of the item for which you could be exposed to fabrication costs by the supplier. This is calculated as the quantity planned for release up to the fabrication time fence.
Cum Raw Matrl	The quantity for which you could be exposed to raw material costs by the supplier. This is calculated as the quantity planned for release up to the raw material time fence.
Planned	A description of the information contained on the supplier schedule row.

## What You Should Know About

### **Changing supplier information**

The Planned field is the only field that you can change on the Enter/Change Schedule screen. The system recalculates the quantities in the Cumulative Frozen, Fabricate, and Raw Material fields when a change is made.

Any changes that you make to the schedule will not affect the most recent MPS, MRP, or DRP generation. After you release the supplier schedule and create purchase orders for the blanket order releases, the next MPS, MRP, or DRP generation treats the purchase orders as available supply items.

## Processing Options

See [Supplier Schedule Revisions \(P34301\)](#).

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# Release Supplier Schedules

## Releasing Supplier Schedules



From Material Planning Operations (G34), choose **Single Site Planning**  
From Single Site Periodic Planning Operations (G3422), choose **Release Supplier Schedule**

After you finalize a schedule using Enter/Change Schedule, you can release the current supplier schedule. After the schedule is processed, the system updates the planned quantities inside the time fence.

Release Supplier Schedule uses the following:

- Outstanding purchase orders
- Existing blanket purchase orders
- Supplier release information that is specific to each blanket order

The program uses this information to create:

- Purchase orders for all quantities that are needed inside the time fence
- Blanket orders that are scheduled for a specific item within a branch/plant
- A shipping schedule based on when you need the items, the shipping leadtime, and other defined variables
- A single purchase order with multiple lines for each different release date and multiple lines for each item released for the supplier

## Before You Begin

- Generate a current supplier schedule. See *Generating Supplier Schedules*.

## What You Should Know About

### Clearing MRP messages

Supplier scheduling uses the messages from the most recent MRP generation to determine demand.

You can set the appropriate processing option to clear these messages after you release the supplier schedule. The system clears only those messages inside the releasable time fence.

## Processing Options

See [Release Supplier Schedule \(P34410\)](#).



# Print Supplier Schedules

## Printing Supplier Schedules



From Material Planning Operations (G34), choose **Single Site Planning**  
 From Single Site Planning Periodic Operations (G3422), choose **Print Supplier Release**

You can use Print Supplier Release to print the supplier schedule. This report shows the shipment schedule, releasable quantities, and all blanket orders that are scheduled for a specific item within a branch/plant.

The system uses the information that you have entered on the other forms along with the version of supply/demand inclusion rules that you select to create the report.

### Before You Begin

- Run the Release Supplier Schedule batch process. See *Releasing Supplier Schedules*.

34450	JD Edwards World							Page . . . . .	1
	Supplier Schedule Print							Date . . . . .	10/28/17
								Branch/Plt . . .	CHI
Item No. 111								Blanket Order	104 OB
Desc . 1x10x6' Oak 84S								Purchase Order	OP
Vendor . Mr.Raymond Allen	Buyer. . . . . Teague and Associates							Release Number . .	92102701
410 17th Avenue	F.O.B. . . . . Pickup with our Truck							LastReceipt Date..	09/21/17
Fairfax VA 22040	Carrier . . . . .							LastReceived Qt	11
	Deliver to . . . .CHI							Cum Receipt.	10
	Chicago Warehouse							Cum Frozen .	2000
								Cum Fabricat	2000
								Cum Raw Matl	2000
								Units. . . . .	EA Each
Past Due	09/14/17 F	09/15/17 R	09/16/17 L	09/17/17 M	09/18/17	9/21/17	09/22/17		
Released . . . . .	500								
Planned. . . . .									
Cum Receipt. . . .	510	510	510	510	510	510	510	510	
Net Change . . . .								4600-	
	09/23/17	09/24/17	09/25/17	09/28/17	09/29/17	09/30/17	10/01/17	10/02/17	
Released . . . . .									
Planned. . . . .									
Cum Receipt. . . .	510	510	510	510	510	510	510	510	
Net Change . . . .									

### Processing Options

See [Print Supplier Schedule \(P34450\)](#).



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## **12 Resource Requirements Planning**



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# Set Up Resource Requirements Planning

## Setting Up Resource Requirements Planning



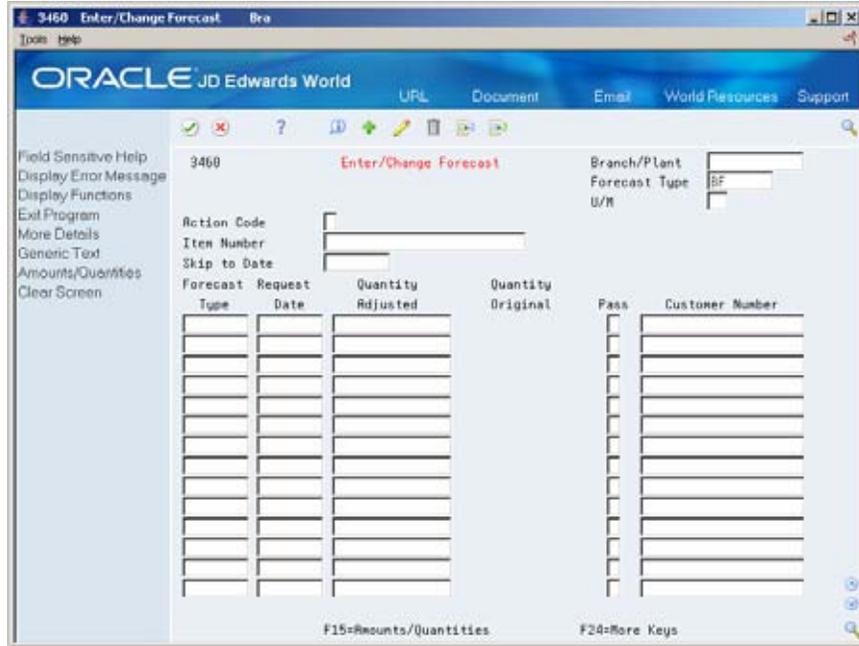
From Product Data Management (G30), choose **Daily PDM Discrete**  
From Daily PDM Discrete (G3011), choose **Enter/Change Work Center**

The resource requirements plan is generated after your long term forecast, but before you run your master schedule program. The Resource Requirements Planning program generates a capacity plan by critical work center. You need to know your current capacity and the requirements to support the workload planned by the forecast.

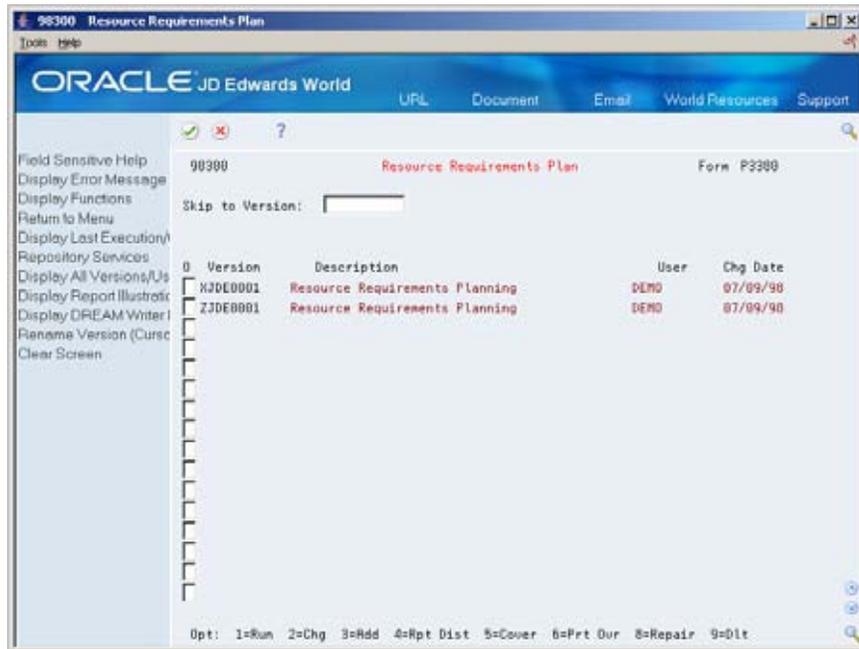
### To set up Resource Requirements Planning

#### On Enter/Change Work Center

1. Enter Work Center information.
2. Determine available capacity using Enter/Change Resource Units (P3007), or Refresh Resource Units (P3007G). Recommend that you use the system generated Refresh Resource Units so that resource units will go out as far as the forecast.



3. Enter Detail Forecast (P3460).
4. Create Resource Profile (P3003). You can enter this manually, or if BOMs and Routings exist, the system can generate the profile.



5. Generate a Resource Requirements Plan (P3380).
6. Review Resource Requirements Plan.
7. Review Dispatch Group (P3301)
8. Review Work Center Load (P3313)

9. Work Center Load Graph (P3313B)
10. Review Period Summary (P3312)

## Resource Profile

### Overview

The Resource Profile – sometimes called a Bill of Labor – is the total labor, machine, and setup time for each work center required to manufacture a finished product. It includes the times from all of the routings of all of the components in the finished products *multi-level* bill of material as well as the finished product itself.

You use it in Resource Requirements Planning to calculate the load on critical work centers based on future forecast requirements from the Forecasting System for those items that are produced in those critical work centers.

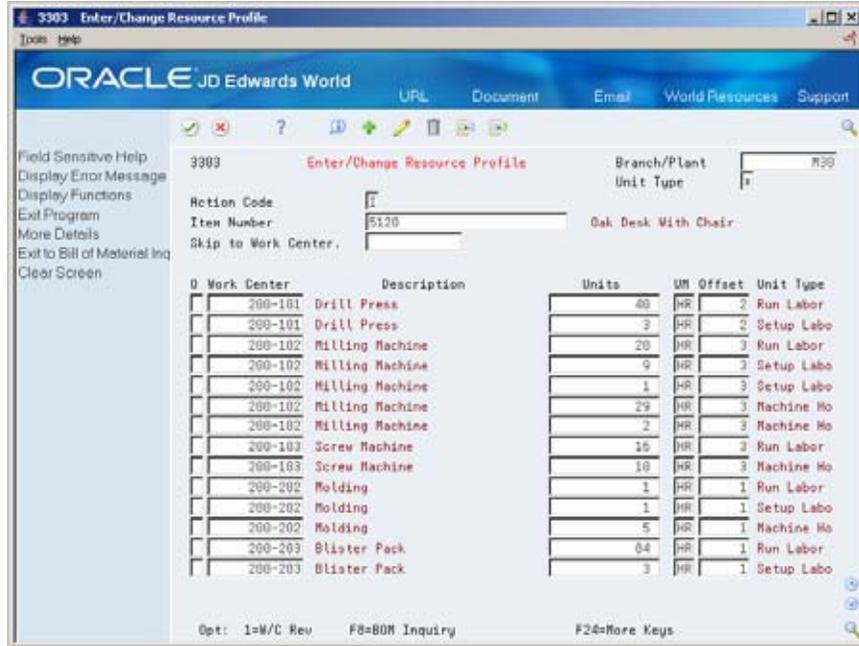
The load on the work centers is normally used by executive management to make long range decisions such as capital equipment purchases, staffing requirements and facilities planning.

### Calculating the Resource Profile

There is a program in the JD Edwards World World Capacity Management System that is run to calculate the Resource Profile (P3365, R3365). Normally, a Resource Profile is calculated for finished products since those are the item numbers that are forecasted. The completed Resource Profile is stored in file F3303.

The basic logic in the program is as follows:

- The products multi-level bill of material is retrieved.
- As each component is obtained, its corresponding Routing is retrieved from the Routing File.
- Totals are kept for Labor, Machine, and Setup time by Work Center AND Time Basis Code.
- The hours are extended by the quantity per assembly in the bill of material.



## Using the Resource Profile

Once the Resource Profile is calculated, you use it in the Resource Requirements Plan generation program (P3380).

This program calculates the load on each work center selected by extending the Resource Profile by the forecast quantities. For either a week or month period, the formula is:

$$\frac{\text{Resource profile units (Based on Prime load code)} \times \text{Forecast for each period}}{\text{Time Basis Code}}$$

This information is then added up for each work center.

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## 13 Processing Options



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# Item Master and Item/Branch Review Processing Options

## Item Master Revisions (P4101)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES :</p> <ol style="list-style-type: none"> <li>1. Primary Unit of Measure (Blanks=EA)</li> <li>2. Weight Unit of Measure (Blanks=LB)</li> </ol>	
<p>PROCESS CONTROL :</p> <ol style="list-style-type: none"> <li>3. Specify the from and thru dates to be used for effective dates in the Item Notes File : From Date (Blank = System date) Thru Date (Blank = 12/31 with the year = to the default value for the data dictionary item Century Change Year (#CYR))</li> </ol>	
<ol style="list-style-type: none"> <li>4. Enter a '1' for each additional Item Master information screen to display when performing an add or change. If blank, the screen will not display. Classification Codes Cost Revisions (Conditional) Price Revisions (Conditional) Units &amp; Measures Manufacturing Values Bulk Product Information UCC Codes &amp; UOMs Lot Processing</li> </ol>	

Processing Option	Processing Options Requiring Further Description
<p>5. Enter a '1' to use the window version of the screens selected above. If left blank, the full screen versions will be displayed.</p> <p>6. Enter a '1' to automatically call the Item Branch Program (P41026) when adding a new item number and return to the Item Master Screen. Enter a '2' to call the Item Branch program automatically and remain on the Item Branch Screen. If left blank, the Item Branch Program will not be called.</p>	
<p>GLOBAL UPDATE:</p> <p>7. Enter a '1' to transfer changes made to the 2nd (LITM) and the 3rd (AITM) item numbers to the Item Branch (F4102) item records. (F19 from Item Master Revisions allows you to update other files). or Enter a '2' to transfer changes to records in the selected files (see User Defined Codes 40/IC). Press F1 to display the selected files.</p>	
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version to be used for each program. If left blank, ZJDE0001 is used.</p> <p>8. Item Availability (P41202)</p> <p>9. Item Branch (P41026)</p> <p>10. Product Catalog Detail (P41903)</p>	
<p>DRAWING INFORMATION:</p> <p>11. Enter a '1' to protect item drawing information from update.</p>	

## Branch/Plant Item Information (P41026)

Processing Option	Processing Options Requiring Further Description
<p>PROCESS CONTROL:</p> <p>1. Enter a '1' to select the Item Location information screens to automatically call when performing an add or a change. If left blank, screen will not display.</p> <p>Classification Codes Cost Revisions (conditional) Price Revisions (conditional) Unit of Measure Quantities Manufacturing Values Item Profile Bulk Product Information Lot Processing</p>	
<p>2. Enter '1' to use the window version of the screens selected above. If left blank, the full screens will display.</p>	
<p>DREAM WRITER VERSIONS:</p> <p>3. Summary Availability (P41202) 4. Item / Location Information (P41024) 5. Product Catalog Detail Information (P41903)</p>	
<p>REVISION LEVEL CONTROL:</p> <p>6. Enter '1' to protect ECO revision information from update.</p>	

## Item / Branch Duplication (P41015)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p>	

Processing Option	Processing Options Requiring Further Description
<p>1. Enter the branch/plants to which you want to duplicate the items:</p> <ul style="list-style-type: none"> <li>1)</li> <li>2)</li> <li>3)</li> <li>4)</li> <li>5)</li> <li>6)</li> <li>7)</li> <li>8)</li> <li>9)</li> <li>10)</li> </ul>	
<p>SCREEN DEFAULTS:</p> <p>2. Enter the data selection fields you want displayed on the video (Enter the data dictionary field name.):</p> <ul style="list-style-type: none"> <li>Data Item One</li> <li>Data Item Two</li> <li>Data Item Three</li> <li>Data Item Four</li> </ul> <p>3. Enter a '1' to pre-load all selection options with a '1' to duplicate those lines.</p>	
<p>FILE UPDATES:</p> <p>4. Enter a '1' next to each file to duplicate.</p> <p>If left blank, the file will not be duplicated:</p> <ul style="list-style-type: none"> <li>Cost Ledger File (F4105)</li> <li>Base Price File (F4106)</li> <li>UOM Conversion Factors (F41002)</li> <li>Bulk Depot/Product Info. (F41022)</li> <li>Warehouse Item Profile (F46010)</li> <li>Warehouse Item UOM/Profile (F46011)</li> </ul>	

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# Forecasting Review Processing Options

## Forecast Generation (P34650)

Processing Option	Processing Options Requiring Further Description
FORECASTING METHODS:	
Enter a '1' by the method(s) desired:	
<ol style="list-style-type: none"> <li>1. Percent Over Last Year               <ol style="list-style-type: none"> <li>a. Enter the percentage of change over last year. For example, use 1.10 for a 10% increase, or 0.97 for a 3% decrease.</li> </ol> </li> <li>2. Calculated Percent Over Last Year               <ol style="list-style-type: none"> <li>a. Enter the number of periods to include in the percentage.</li> </ol> </li> <li>3. Last Year to This Year</li> <li>4. Moving Average               <ol style="list-style-type: none"> <li>a. Enter the number of periods to include in the average.</li> </ol> </li> <li>5. Linear Approximation               <ol style="list-style-type: none"> <li>a. Enter the number of periods to include in the ratio.</li> </ol> </li> <li>6. Least Squares Regression               <ol style="list-style-type: none"> <li>a. Enter the number of periods to include in regression.</li> </ol> </li> <li>7. Second Degree Approximation               <ol style="list-style-type: none"> <li>a. Enter the number of periods to include.</li> </ol> </li> <li>8. Flexible Method (Percent over N periods prior.)               <ol style="list-style-type: none"> <li>a. Enter the number of periods prior.</li> <li>b. Enter the percent over the prior period.</li> </ol> </li> </ol>	

Processing Option	Processing Options Requiring Further Description
<p>9. Weighted Moving Average</p> <ul style="list-style-type: none"> <li>a. Enter the number of periods</li> <li>b. Weight for one period prior</li> <li>c. Weight for two periods prior</li> <li>d. Weight for three periods prior</li> <li>e. Weight for four periods prior</li> <li>f. Weight for five periods prior</li> <li>g. Weight for six periods prior</li> <li>h. Weight for seven periods prior</li> <li>i. Weight for eight periods prior</li> <li>j. Weight for nine periods prior</li> <li>k. Weight for ten periods prior</li> <li>l. Weight for eleven periods prior</li> <li>m. Weight for twelve periods prior</li> </ul> <p><b>Note:</b> Weights must add up to 1. If weights are entered for periods greater than the number of periods to include, they will not be used.</p> <p>If no weight is entered for a period within the number of periods to include, a zero weight will be used for that period.</p> <p>10. Linear Smoothing</p> <ul style="list-style-type: none"> <li>a. Enter the number of periods to include in smoothing average.</li> </ul> <p>11. Exponential Smoothing</p> <ul style="list-style-type: none"> <li>a. Enter the number of periods to include in smoothing average.</li> <li>b. Enter the alpha factor. If left blank, alpha will be calculated.</li> </ul> <p>12. Exponential Smoothing with Trend and Seasonality Factors</p> <ul style="list-style-type: none"> <li>a. Enter the alpha factor.</li> </ul> <p>If left blank, alpha will be calculated.</p> <ul style="list-style-type: none"> <li>b. Enter the beta factor.</li> </ul> <p>If left blank, beta will be calculated.</p> <ul style="list-style-type: none"> <li>c. Enter a '1' to include seasonality in the calculation.</li> </ul> <p>If left blank, seasonality will not be included.</p>	
RECORD TYPES TO USE:	

Processing Option	Processing Options Requiring Further Description
<p>13. Enter the 'Actual Type' in which the actual information is stored.</p> <p>14. Enter the Forecast Type to use when creating forecasts.</p>	
<p>SUMMARY RECORDS:</p> <p>15. Enter a '1' to create summary records for large customers. (ABC type = 'A'.)</p>	
<p>FORECAST TYPE AND RANGE:</p> <p>16. Enter a '1' to specify weekly forecasts. If left blank, monthly forecasts will be generated.</p> <p>17. Enter the date to start forecasts. If left blank, today's date will be used.</p> <p>18. Enter the number of periods to forecast. If left blank, three periods will be used.</p> <p>19. Enter the number of periods of actual data to be used to calculate the Best Fit forecast. If left blank, three periods of data will be used.</p> <p>20. Enter a '1' to calculate best fit using Mean Absolute Deviation. If left blank, Percent of Accuracy will be used.</p> <p>21. Enter a '1' to run the report in final mode. If left blank, the report will run in proof mode.</p> <p>22. Enter a '1' to allow negative values to be written. If left blank, negative values will be written as zeroes.</p>	
<p>FISCAL DATE PATTERN:</p> <p>23. Enter the Fiscal Date Pattern Type to use for forecast dating. If left blank, the type specified for company '00000' will be used. (See Company Names-Fiscal Patterns 'P00105' for more information).</p>	

Processing Option	Processing Options Requiring Further Description
<p>BEST FIT AMOUNTS/QUANTITIES:</p> <p>24. Enter a '1' to calculate Best Fit using amounts.</p> <p>If left blank, quantities will be used to calculate Best Fit.</p>	

## Forecast Review (P34201)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <p>1. Enter a '1' to display the Amount format first.</p> <p>If left blank, the Quantity format will be displayed.</p> <p>2. Forecast Type (Optional)</p> <p>3. Enter the default forecast type for displaying the actual quantities and amounts.</p>	

## Forecast Revisions (P3460)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <p>1. Forecast Type (Optional)</p> <p>2. Enter a '1' to default the forecast type from the heading into the detail records on an add.</p> <p>3. Enter a '1' to display the Amount format first.</p> <p>If left blank, the Quantity format will be displayed.</p>	

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# Resource Requirements Planning Processing Options

## Work Center Resource Units (P3007)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>1. Enter the Unit of Measure. If left blank, 'HR' will be used.</li> </ol>	

## Work Center Resource Units Refresh (P3007G)

Processing Option	Processing Options Requiring Further Description
<p>GENERATION INFORMATION:</p> <ol style="list-style-type: none"> <li>1. Enter the Start Date.</li> <li>2. Enter the End Date.</li> </ol> <p><b>Note:</b> The program will regenerate resource units for the entire month of the start date and the entire month of the end date.</p> <ol style="list-style-type: none"> <li>3. Enter the Branch/Plant to be processed.</li> <li>4. Enter a string of up to 6 shift codes to be processed ('123'). If left blank, all shifts will be processed.</li> </ol>	

## Resource Profile Regeneration (P3365)

Processing Option	Processing Options Requiring Further Description
PROCESSING CONTROL:  1. Enter the effectivity dates: Effective From Effective Thru	

## Resource Requirements Planning (P3380)

Processing Option	Processing Options Requiring Further Description
BUCKET INFORMATION:  1. Enter the Start Date. If left blank, the system date will be used.  2. Enter the planning horizon periods (maximum of 52 periods): Weeks (e.g. 25) Months (e.g. 6)  3. Enter the number of past due periods (0- 2). If left blank, there will be no past due periods.	
PROCESSING CONTROL:  4. Enter the percent under rated capacity to generate a message.  5. Enter the percent over rated capacity to generate a message.  6. Enter up to five forecast types: Forecast Type 1 Forecast Type 2 Forecast Type 3 Forecast Type 4 Forecast Type 5  7. Enter the branch/plant to be processed.  8. Enter the Unit of Measure. If left blank, 'HR' will be used.	

Processing Option	Processing Options Requiring Further Description
9. Enter a '1' to roll the Work Centers up to Dispatch Group.	

## Message Inquiry (P3301)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>1. Enter the Critical Work Center Code to be displayed or '*' for all work centers.</li> <li>2. Enter the Capacity Mode to use: <ul style="list-style-type: none"> <li>1 = Resource Requirements Planning</li> <li>2 = Rough Cut Capacity Planning</li> <li>3 = Capacity Requirements Planning</li> </ul> </li> <li>3. Enter the Unit of Measure. If left blank, 'HR' will be used.</li> </ol>	

## Load (P3313)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>1. Enter the Capacity Mode to use: <ul style="list-style-type: none"> <li>1 = Resource Requirements Planning</li> <li>2 = Rough Cut Capacity Planning</li> <li>3 = Capacity Requirements Planning</li> </ul> </li> <li>2. Enter UDC table to use for row descriptions.</li> <li>3. Enter the Unit of Measure. If left blank, 'HR' will be used.</li> </ol>	
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p> <ol style="list-style-type: none"> <li>4. Dispatch List (P31226)</li> </ol>	

## Load Bar Graph (P3313B)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>Enter the Capacity Mode to use:               <ul style="list-style-type: none"> <li>1 = Resource Requirements Planning</li> <li>2 = Rough Cut Capacity Planning</li> <li>3 = Capacity Requirements Planning</li> </ul> </li> <li>Enter the Unit of Measure.               <ul style="list-style-type: none"> <li>If left blank, 'HR' will be used.</li> </ul> </li> </ol>	
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p> <ol style="list-style-type: none"> <li>Dispatch List (P31226)</li> </ol>	

## Period Summary (P3312)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>Enter the Capacity Mode to use:               <ul style="list-style-type: none"> <li>1 = Resource Requirements Planning</li> <li>2 = Rough Cut Capacity Planning</li> <li>3 = Capacity Requirements Planning</li> </ul> </li> <li>Enter the Unit of Measure.               <ul style="list-style-type: none"> <li>If left blank, 'HR' will be used.</li> </ul> </li> </ol>	
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p> <ol style="list-style-type: none"> <li>Dispatch List (P31226)</li> </ol>	

## Message Detail (P3311)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"><li>1. Enter the Capacity Mode to use:<ul style="list-style-type: none"><li>1 = Resource Requirements Planning</li><li>2 = Rough Cut Capacity Planning</li><li>3 = Capacity Requirements Planning</li></ul></li><li>2. Enter the Unit of Measure. If left blank, 'HR' will be used.</li></ol>	



# Single Level Master Scheduling Processing Options

## Master Planning Schedule – Plant Maintenance (P3482)

Processing Option	Processing Options Requiring Further Description
<p>BUCKET INFORMATION:</p> <ol style="list-style-type: none"> <li>1. Enter the Start Date. If left blank, the system date will be used.</li> <li>2. Enter the number of past due periods (0-2). If left blank, there will be no past due periods.</li> <li>3. Enter the planning horizon periods (maximum of 52 periods): Days (e.g. 5 ) Weeks (e.g. 25) Months (e.g. 6 )</li> </ol>	<p>Set to 2 if using Planning Fence Rule H.</p> <p>Maximum of 52 including Past Due buckets</p>
<p>PROCESSING CONTROL:</p> <ol style="list-style-type: none"> <li>4. Enter the Generation Mode: 1 = Net Change 2 = Gross Regeneration</li> <li>5. Enter the Generation Type: 1 = Single Level MPS/DRP 2 = Planning Bill 3 = MRP 5 = MRP with Frozen MPS</li> </ol>	
<p>PHANTOM ITEMS:</p> <ol style="list-style-type: none"> <li>6. Enter a '1' to generate messages and time series records for phantoms.</li> </ol>	
<p>ON HAND ADJUSTMENTS:</p>	

Processing Option	Processing Options Requiring Further Description
<p>7. Enter a '1' to decrease beginning available by safety stock quantity.</p> <p>8. Enter the lot hold codes (up to 5) to be considered on hand, or enter an '*' to consider all held lots as on hand. If left blank, held lots will not be considered on hand.</p> <p>9. Enter a '1' by the following Receipt Routing quantities to be considered on hand.</p> <p>Quantity in Transit Quantity in Inspection User Defined Quantity 1 User Defined Quantity 2</p> <p><b>Note:</b> Any quantity not included will be placed in the On Receipt bucket.</p>	
<p>DAMPER DAYS:</p> <p>10. Enter the Defer Damper days, (no defer message if less than 'X' number of days).</p> <p>11. Enter the Expedite Damper days, (no expedite message if less than 'X' number of days).</p>	
<p>SAFETY LEADTIME:</p> <p>12. Enter the purchased item lead time days.</p> <p>13. Enter the manufactured item lead time days.</p>	
<p>FORECASTING INFORMATION:</p> <p>14. Enter up to five forecast types:</p> <p>Forecast Type 1 Forecast Type 2 Forecast Type 3 Forecast Type 4 Forecast Type 5</p> <p>15. Enter the Forecast Type for MPS to create when using Planning Bills.</p>	

Processing Option	Processing Options Requiring Further Description
<p>RATE BASED SCHEDULING INFORMATION:</p> <p>16. Enter the Schedule Type for rate based items. If left blank, 'SC' will be used.</p> <p>17. Enter a '1' to extend rate based adjustments to lower level items.</p> <p>18. Enter status code used to denote closed rates. If left blank, 99 will be used.</p> <p>19. Enter a '1' to include Past Due Rates as a supply.</p>	
<p>PURCHASE ORDER INFORMATION:</p> <p>20. Enter the Document Type for purchase orders. If left blank, 'OP' will be used.</p>	
<p>WORK ORDER INFORMATION:</p> <p>21. Enter the Document Type for work orders. If left blank, 'WO' will be used.</p> <p>22. Enter the Work Order Status at which messages will no longer be exploded to lower level items. If left blank, all messages will be exploded to lower level items.</p>	
<p>INCLUSION RULES:</p> <p>23. Enter the Version of Supply/Demand Inclusion Rules to be used.</p>	
<p>PERFORMANCE ISSUES:</p> <p>24. Enter a '1' to initialize the MPS/MRP Print Code. This code is used for selecting records during the MPS/MRP print. (See glossary for MRPD.)</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p>	

Processing Option	Processing Options Requiring Further Description
<p>25. Enter the User Defined Code Type that contains the list of quantity types to be calculated &amp; written to the Time Series file (F3413). User Defined Code 34/QT contains a master list of quantity types that can be written and will be used as the default.</p> <p>26. Enter a '1' to completely clear the material planning files (messages, pegging, and time series) prior to the generation or a '2' to retain manual remarks (type M messages) while clearing the files.</p> <p>Default of blank will not clear files.</p> <p><b>Note:</b> If a '1' or '2' is entered, files will be cleared without respect to data selection.</p> <p>Clearing the files will improve performance and clean up any bad data in the files.</p>	
<p>PROCESS PLANNING:</p> <p>27. Enter a '1' to generate planning in Process Mode.</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p>	
<p>LOT EXPIRATION:</p> <p>28A. Enter a '1' to consider lot expiration dates in calculations.</p> <p>28B. Enter optional date to be used for expiration calculations when processing option 28A = '1'.</p> <p>If left blank, Lot expiration date will be used.</p> <p>1 = Sell By Date  2 = Best Before Date  3 = User Defined Date 1  4 = User Defined Date 2  5 = User Defined Date 3  6 = User Defined Date 4  7 = User Defined Date 5  8 = Commitment Date Method from Item/Branch Master.</p>	

Processing Option	Processing Options Requiring Further Description
<p>FORECAST CONSUMPTION PROCESSING:</p> <p>29. Enter a '1' to use Forecast Consumption logic.</p>	
<p>ROUNDING:</p> <p>30. Enter a '1' to round existing Work/Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.</p> <p><b>Note:</b> If left blank, no rounding will occur.</p>	

## Net Change Review (P3402)

Processing Option	Processing Options Requiring Further Description
<p>MPS TYPE CODES:</p> <p>1. Enter the Type Code to be displayed or a '*' for all Types.</p>	

## Time Series (P3413)

Processing Option	Processing Options Requiring Further Description
<p>ITEM RECALCULATION:</p> <p>1. Enter the version to use when submitting a single item MPS/MRP/DRP recalculation.</p> <p>If left blank, version 'ZJDE0001' will be used.</p>	
<p>PAST DUE PERIODS:</p> <p>2. Enter the number of past due periods (0-2).</p> <p>If left blank, there will be no past due periods.</p>	Set to 2 if using Planning Fence Rule H.
<p>ROW DESCRIPTIONS:</p> <p>3. Enter the UDC for row descriptions.</p>	

Processing Option	Processing Options Requiring Further Description
4. Enter the UDC for alternate row descriptions.	
SUPPLY/DEMAND SUMMARY: 5. Enter a '1' to summarize the supply and demand lines into one line each.	
DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used. 6. Message File Revisions (P3411) 7. Supply/Demand Inquiry (P4021) 8. Detail Forecast Revisions (P3460) 9. Pegging (P3412) 10. Rate Schedule Revisions (P3109)	
FORECAST CONSUMPTION PROCESSING: 11. Enter '1' to process using Forecast Consumption logic.	

## Master Planning Schedule – Plant Maintenance (P3482)

Processing Option	Processing Options Requiring Further Description
BUCKET INFORMATION: 1. Enter the Start Date. If left blank, the system date will be used. 2. Enter the number of past due periods (0-2). If left blank, there will be no past due periods. 3. Enter the planning horizon periods (maximum of 52 periods): Days (e.g. 5 ) Weeks (e.g. 25) Months (e.g. 6 )	Set to 2 if using Planning Fence Rule H.  Maximum of 52 including Past Due buckets
PROCESSING CONTROL:	

Processing Option	Processing Options Requiring Further Description
<p>4. Enter the Generation Mode:  1 = Net Change  2 = Gross Regeneration</p> <p>5. Enter the Generation Type:  1 = Single Level MPS/DRP  2 = Planning Bill  3 = MRP  5 = MRP with Frozen MPS</p>	
<p>PHANTOM ITEMS:</p> <p>6. Enter a '1' to generate messages and time series records for phantoms.</p>	
<p>ON HAND ADJUSTMENTS:</p> <p>7. Enter a '1' to decrease beginning available by safety stock quantity.</p> <p>8. Enter the lot hold codes (up to 5) to be considered on hand, or enter an '*' to consider all held lots as on hand.   If left blank, held lots will not be considered on hand.</p> <p>9. Enter a '1' by the following Receipt Routing quantities to be considered on hand.   Quantity in Transit  Quantity in Inspection  User Defined Quantity 1  User Defined Quantity 2</p> <p><b>Note:</b> Any quantity not included will be placed in the On Receipt bucket.</p>	
<p>DAMPER DAYS:</p> <p>10. Enter the Defer Damper days, (no defer message if less than 'X' number of days).</p> <p>11. Enter the Expedite Damper days, (no expedite message if less than 'X' number of days).</p>	
<p>SAFETY LEADTIME:</p> <p>12. Enter the purchased item lead time days.</p> <p>13. Enter the manufactured item lead time days.</p>	

Processing Option	Processing Options Requiring Further Description
<p>FORECASTING INFORMATION:</p> <p>14. Enter up to five forecast types:</p> <p style="padding-left: 20px;">Forecast Type 1</p> <p style="padding-left: 20px;">Forecast Type 2</p> <p style="padding-left: 20px;">Forecast Type 3</p> <p style="padding-left: 20px;">Forecast Type 4</p> <p style="padding-left: 20px;">Forecast Type 5</p> <p>15. Enter the Forecast Type for MPS to create when using Planning Bills.</p>	
<p>RATE BASED SCHEDULING INFORMATION:</p> <p>16. Enter the Schedule Type for rate based items.</p> <p style="padding-left: 20px;">If left blank, 'SC' will be used.</p> <p>17. Enter a '1' to extend rate based adjustments to lower level items.</p> <p>18. Enter status code used to denote closed rates.</p> <p style="padding-left: 20px;">If left blank, 99 will be used.</p> <p>19. Enter a '1' to include Past Due Rates as a supply.</p>	
<p>PURCHASE ORDER INFORMATION:</p> <p>20. Enter the Document Type for purchase orders.</p> <p style="padding-left: 20px;">If left blank, 'OP' will be used.</p>	
<p>WORK ORDER INFORMATION:</p> <p>21. Enter the Document Type for work orders.</p> <p style="padding-left: 20px;">If left blank, 'WO' will be used.</p> <p>22. Enter the Work Order Status at which messages will no longer be exploded to lower level items.</p> <p style="padding-left: 20px;">If left blank, all messages will be exploded to lower level items.</p>	
<p>INCLUSION RULES:</p> <p>23. Enter the Version of Supply/Demand Inclusion Rules to be used.</p>	
<p>PERFORMANCE ISSUES:</p>	

Processing Option	Processing Options Requiring Further Description
<p>24. Enter a '1' to initialize the MPS/MRP Print Code. This code is used for selecting records during the MPS/MRP print.</p> <p>(See glossary for MRPD.)</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p> <p>25. Enter the User Defined Code Type that contains the list of quantity types to be calculated &amp; written to the Time Series file (F3413). User Defined Code 34/QT contains a master list of quantity types that can be written and will be used as the default.</p> <p>26. Enter a '1' to completely clear the material planning files (messages, pegging, and time series) prior to the generation or a '2' to retain manual remarks (type M messages) while clearing the files.</p> <p>Default of blank will not clear files.</p> <p><b>Note:</b> If a '1' or '2' is entered, files will be cleared without respect to data selection.</p> <p>Clearing the files will improve performance and clean up any bad data in the files.</p>	
<p>PROCESS PLANNING:</p> <p>27. Enter a '1' to generate planning in Process Mode.</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p>	

Processing Option	Processing Options Requiring Further Description
<p><b>LOT EXPIRATION:</b></p> <p>28A. Enter a '1' to consider lot expiration dates in calculations.</p> <p>28B. Enter optional date to be used for expiration calculations when processing option 28A = '1'.</p> <p>If left blank, Lot expiration date will be used.</p> <p>1 = Sell By Date  2 = Best Before Date  3 = User Defined Date 1  4 = User Defined Date 2  5 = User Defined Date 3  6 = User Defined Date 4  7 = User Defined Date 5  8 = Commitment Date Method from Item/Branch Master.</p>	
<p><b>FORECAST CONSUMPTION PROCESSING:</b></p> <p>29. Enter a '1' to use Forecast Consumption logic.</p>	
<p><b>ROUNDING:</b></p> <p>30. Enter a '1' to round existing Work/Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.</p> <p><b>Note:</b> If left blank, no rounding will occur.</p>	

## Multi-Facility - Gross Regeneration (P3483)

Processing Option	Processing Options Requiring Further Description
<p><b>BUCKET INFORMATION:</b></p> <p>1. Enter the Start Date.  If left blank, the system date will be used.</p> <p>2. Enter the number of past due periods (0-2).  If left blank, there will be no past due periods.</p>	<p>Set to 2 if using Planning Fence Rule H.</p>

Processing Option	Processing Options Requiring Further Description
3. Enter the planning horizon periods (maximum of 52 periods): Days (e.g. 5 ) Weeks (e.g. 25) Months (e.g. 6 )	Maximum of 52 periods including Past Due buckets
<b>PROCESSING CONTROL:</b> 4. Enter the Generation Mode: 1 = Net Change 2 = Gross Regeneration 5. Enter the Generation Type: 1 = Single Level MPS/DRP 3 = MRP 5 = MRP with Frozen MPS	
<b>PHANTOM ITEMS:</b> 6. Enter a '1' to generate messages and time series records for phantoms.	
<b>ON HAND ADJUSTMENTS:</b> 7. Enter a '1' to decrease beginning available by safety stock quantity. 8. Enter the lot hold codes (up to 5) to be considered on hand, or enter a '*' to consider all held lots as on hand. If left blank, held lots will not be considered on hand. 9. Enter a '1' by the following Receipt Routing quantities to be considered on hand. Quantity in Transit Quantity in Inspection User Defined Quantity 1 User Defined Quantity 2 <b>Note:</b> Any quantity not included will be placed in the On Receipt bucket.	
<b>DAMPER DAYS:</b> 10. Enter the Defer Damper days, (no defer message if less than 'X' number of days). 11. Enter the Expedite Damper days, (no expedite message if less than 'X' number of days).	

Processing Option	Processing Options Requiring Further Description
<p>SAFETY LEADTIME:</p> <p>12. Enter the purchased item lead time days.</p> <p>13. Enter the manufactured item lead time days.</p>	
<p>FORECASTING INFORMATION:</p> <p>14. Enter up to five forecast types:</p> <p>Forecast Type 1</p> <p>Forecast Type 2</p> <p>Forecast Type 3</p> <p>Forecast Type 4</p> <p>Forecast Type 5</p>	
<p>RATE-BASED SCHEDULING INFORMATION:</p> <p>15. Enter the Schedule Type for rate-based items.</p> <p>If left blank, 'SC' will be used.</p> <p>16. Enter a '1' to extend rate-based adjustments to lower level items.</p> <p>17. Enter status code used to denote closed rates.</p> <p>If left blank, 99 will be used.</p> <p>18. Enter a '1' to include Past Due Rates as a supply.</p>	
<p>PURCHASE ORDER INFORMATION:</p> <p>19. Enter the Document Type for purchase orders.</p> <p>If left blank, 'OP' will be used.</p>	
<p>WORK ORDER INFORMATION:</p> <p>20. Enter the Document Type for work orders.</p> <p>If left blank, 'WO' will be used.</p> <p>21. Enter the Work Order Status at which messages will no longer be exploded to lower level items.</p> <p>If left blank, all messages will be exploded to lower level items.</p>	
<p>INCLUSION RULES:</p>	

Processing Option	Processing Options Requiring Further Description
22. Enter the version of Supply/Demand Inclusion Rules to be used.	
<p>PERFORMANCE ISSUES:</p> <p>23. Enter a '1' to initialize the MPS/MRP Print Code. This code is used for selecting records during the MPS/MRP print.  (See glossary for MRPD.)</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p> <p>24. Enter the User Defined Code Type that contains the list of quantity types to be calculated &amp; written to the Time Series file (F3413). User Defined Code 34/QT contains a master list of quantity types that can be written and will be used as the default.</p> <p>25. Enter a '1' to completely clear the material planning files (messages, pegging, and time series) prior to the generation or a '2' to retain manual remarks (type M messages) while clearing the files.  Default of blank will not clear files.</p> <p><b>Note:</b> If a '1' or '2' is entered, files will be cleared without respect to data selection.  Clearing the files will improve performance and clean up any bad data in the files.</p> <p>26. Enter the default branch for retrieving the Shop Floor Calendar to reduce processing time.  If left blank, the calendar for each branch will be used.</p>	
MULTI-FACILITY INFORMATION:	

Processing Option	Processing Options Requiring Further Description
<p>27. Enter one of the following methods of Multi-Facility processing:</p> <p>1 = Simple Consolidation</p> <p>a. Enter a '1' to also run a regular generation on the non-consolidated branches.</p> <p>b. Enter the Branch to consolidate to.</p> <p>2 = Use Branch Relationships</p> <p>a. Enter the Category Code (1-5) to be used.</p> <p>b. Enter a '1' to make all manufactured items in the originating branch.</p> <p>28. Enter the Document Type for transfer orders.</p> <p>If left blank, 'OT' will be used.</p>	
<p>PROCESS PLANNING:</p> <p>29. Enter a '1' to generate planning in Process mode.</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p>	
<p>LOT EXPIRATION:</p> <p>30A. Enter a '1' to consider lot expiration dates in calculations.</p> <p>30B. Enter optional date to be used for expiration calculations when processing option 30A = '1'.</p> <p>If left blank, Lot expiration date will be used.</p> <p>1 = Sell By Date</p> <p>2 = Best Before Date</p> <p>3 = User Defined Date 1</p> <p>4 = User Defined Date 2</p> <p>5 = User Defined Date 3</p> <p>6 = User Defined Date 4</p> <p>7 = User Defined Date 5</p> <p>8 = Commitment Date Method from Item/Branch Master.</p>	
<p>FORECAST CONSUMPTION PROCESSING:</p> <p>31. Enter a '1' to use Forecast Consumption logic.</p>	

Processing Option	Processing Options Requiring Further Description
32. Enter a '1' to allow Interplant Demand to consume Forecast.	
<p>ROUNDING:</p> <p>33. Enter a '1' to round existing Work/Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.</p> <p><b>Note:</b> If left blank, no rounding will occur.</p>	

## Planning (P3382)

Processing Option	Processing Options Requiring Further Description
<p>PROCESSING CONTROL:</p> <p>1. Enter the percent under rated capacity to generate a message.</p> <p>2. Enter the percent over rated capacity to generate a message.</p> <p>3. Enter the Branch/Plant to be processed.</p> <p>4. Enter the code for the Supply/Demand Inclusion Rules to use.</p> <p>5. Enter the Capacity Mode to use: 2 = Rough Cut Capacity Planning 3 = Capacity Requirements Planning</p> <p>6. Enter the Unit of Measure. If left blank, 'HR' will be used.</p> <p>7. Enter a '1' to roll the Work Centers up to Dispatch Group.</p> <p>8. Enter a '1' to modify the released order quantity and dates using MRP messages.</p>	

## Work Center Schedule Review (P31224)

Processing Option	Processing Options Requiring Further Description
<p>SCREEN DEFAULTS:</p> <p>Enter the values to preload to the screen at initial inquiry.</p> <p>If left blank, no value will be preloaded.</p> <p>1. Document Type</p>	
<p>VERSIONS TO EXECUTE:</p> <p>2. Enter the version of Rate Revisions to call. Default is 'ZJDE0001'.</p>	
<p>DATE DISPLAY:</p> <p>3. Enter one of the following for the subfile dates to display:</p> <p>"1" = Monthly</p> <p>"2" = Weekly</p> <p>"3" = Daily The default is Daily ("3").</p>	
<p>WORK ORDER PROCESSING:</p> <p>4. Enter a '1' to include Work Order generated loads BEFORE Rate loads.</p> <p>Enter a '2' to include Work Order generated loads AFTER Rate loads.</p> <p>If left blank, no Work Order loads will be recognized.</p> <p>5. Enter the operation status 'from' and 'to' values to use to select active operations to include.</p> <p>From Status</p> <p>Through Status</p>	

## Production Status (P31226)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <p>1. From Status (Optional)</p> <p>2. Through Status (Optional)</p>	

Processing Option	Processing Options Requiring Further Description
3. The number of days to add to today's date for the Thru date (Optional)	

## Supply/Demand Inclusion Rules (P34004)

Processing Option	Processing Options Requiring Further Description
DOCUMENT TYPES:  1. Enter the Document Types for Work Order and Rate you want to setup Inclusion Rules for. The document types can be stacked one after the other for multiple document types.  If left blank, 'WOSC' will be used.	

## Review Planning Family (P3401)

Processing Option	Processing Options Requiring Further Description
MPS TYPE CODES:  1. Enter the Type Code to be displayed or a '*' for all Types.	
MANUFACTURING SCHEDULING WORKBENCH:  2. Enter the version of Manufacturing Scheduling Workbench to be used.  Default is ZJDE0001.	
MESSAGE FILE REVISIONS:  3. Enter the version of Message File Revisions to be used.  Default is ZJDE0001.	
ITEM AVAILABILITY:  4. Enter the version of Item Availability to be used.  Default is ZJDE0001.	
TIME SERIES:	

Processing Option	Processing Options Requiring Further Description
5. Enter the version of Time Series to be used. Default is ZJDE0001.	
DETAIL FORECAST MAINTENANCE: 6. Enter the version of Detail Forecast Maintenance to be used. Default is ZJDE0001.	
SUPPLIER SCHEDULING REVISIONS: 7. Enter the version of Supplier Schedule Revisions to be used. Default is ZJDE0001.	
SUPPLIER MASTER: 8. Enter the version of Supplier Master to be used. Default is ZJDE0001.	
PURCHASE ORDER GENERATION: 9. Enter a '1' to default the tax area from the "Ship-To" address book number. If left blank, the tax area will be defaulted from the "Supplier" address number.	
SORT KEY: 10. Enter a '1' to sort records first by supplier number. If you turn it to '1', it may take longer.	

## Generate and Print Work Orders (P31410)

Processing Option	Processing Options Requiring Further Description
GENERATION INFORMATION: 1A. Enter one of the following: 1 = Parts List only 2 = Routing only 3 = Both Parts List and Routing If left blank, neither parts list nor routing will be generated.	<b>Note:</b> If using Backflush to Work Center location in Manufacturing Constants, then routings must be attached first for commitments to be made correctly.

Processing Option	Processing Options Requiring Further Description
<p>1B. Enter a '1' to prevent the update of existing parts list and routing instructions. Commitment and substitute processing of parts lists will occur as usual. If left blank, existing parts list and/or routing will be rewritten.</p> <p>2. Enter a '1' to use the W.O. Date for effectivity checking. If left blank, the W.O. Start Date is used.</p>	<p><b>Note:</b> If transactions have occurred against the order the parts list and routing should be protected from update.</p>
<p>UPDATE INFORMATION:</p> <p>3. Enter the new Status Code for the work order/rate header. If left blank, status will not be changed.</p>	
<p>WORK ORDER PRINT INFORMATION:</p> <p>4. Enter a '1' to print work orders. If printing work orders:</p>	
<p>PARTS LIST PRINT INFORMATION:</p> <p>5. Enter a '1' to print Parts List</p> <p>6. Enter a '1' to print the 2nd line of information, which is scrap and related work center.</p> <p>7. Enter a '1' to print Parts List on a new page.</p> <p>8. Enter the version of the Parts List program (P31415). If left blank, 'ZJDE0001' will be used.</p> <p>9. Enter a '1' to print a consolidated Parts List.</p>	
<p>ROUTING PRINT INFORMATION:</p> <p>10. Enter a '1' to print the Routing.</p> <p>11. Enter a '1' to print Routing on a new page.</p> <p>12. Enter the version of the Routing Instructions program (P314151). If left blank, the operation sequence is used.</p>	
<p>BACKSCHEDULING INFORMATION:</p>	

Processing Option	Processing Options Requiring Further Description
13. Enter the Unit of Measure for backscheduling.	<b>Note:</b> Hours is the standard unit of measure for backscheduling. If this option is left blank, backscheduling will not calculate correctly.
SHOP PACKET SUMMARY INFORMATION: 14a. Enter a '1' to print the Shop Packet Summary. 14b. Enter the version of the Shop Packet Summary program (P31416). If left blank, 'ZJDE0001' will be used.	
SHORTAGE REPORT INFORMATION: 15. Enter the version of the Shortage Report program (P31418). If left blank, no shortage report will be printed.	
BAR CODE INFORMATION: 16. Enter the version of the Bar Code Print program (P31413) for the desired print overrides.	
INVENTORY ISSUE INFORMATION: 17. Enter the version of Batch Inventory Issues program (P31420). If left blank, Inventory Issues will not be called.	
PURCHASE ORDER INFORMATION: 18. Enter the version of Write Purchase Orders program (P3420). If left blank, 'ZJDE0002' will be used.	
SALES ORDER INFORMATION: 19. Enter the new Line Type for kit and configured components. This is used to avoid issuing inventory from Sales Order processing. The Line Type used should be inventory interface 'N'. If left blank, Line Type will not be changed. 20. Enter the Next Status for Sales Order kit and configured component lines. (This is used to bypass the normal flow of the order, i.e., Pick Slip.) If left blank, next status will not be changed.	

Processing Option	Processing Options Requiring Further Description
<p>21. Enter a '1' to delete the existing Work Order Text and copy the Sales Order Text to the Work Order.</p> <p>Enter a '2' to append the Sales Order Text to the end of the existing Work Order Text.</p> <p>If left blank (default) the Work Order Text will not be updated.</p>	
<p>CONFIGURED ITEM COSTS:</p> <p>22. Enter one of the following options for calculating the standard cost for configured items in the Work Order Variance file (F3102).</p> <p>1 = Always calculate the standard cost</p> <p>2 = Only calculate the standard cost if it has not already done (no variance records exist)</p> <p>If left blank, standard cost will not be calculated.</p>	
<p>BOM SUBSTITUTES:</p> <p>23. Enter '1' to allow the use of Bill of Material substitutes in case of a shortage.</p>	
<p>PURCHASING JOURNAL ENTRIES:</p> <p>24. Enter a '1' to load the Work Order Number into the Subledger field of the purchasing J/E's.</p>	
<p>BLANKET/QUOTE PROCESSING:</p> <p>25. Enter a '1' for automatic blanket order release processing.</p>	
<p>BUILD AGAINST PRIOR REVISIONS:</p> <p>26. Enter a '1' to permit building work orders against prior revision levels. The revision level in the work order header (F4801) will be used to select the parts list to attach to the work order.</p> <p>If left blank, prior revision level bills will not be selected.</p>	
<p>WAREHOUSE PROCESSING:</p>	

Processing Option	Processing Options Requiring Further Description
<p>27. Enter the request processing mode:</p> <p>1 = Generate requests only</p> <p>2 = Generate requests and process using the subsystem.</p> <p>If left blank, requests will not be generated.</p> <p>28. If processing pick requests using the subsystem, enter the version of Process Pick Requests (P46171) to call.</p> <p>If left blank, 'XJDE0002' will be used.</p> <p>29. Enter the default staging location for moving goods out of the warehouse.</p> <p>30. Enter a '1' if the default staging location should be checked for availability. If the part is available at the staging location a request will NOT be generated.</p> <p><b>Note:</b> This option only applies to parts with no work center locations.</p>	
<p>GENERIC TEXT PRINT OPTIONS:</p> <p>31. Enter a '1' to print the component's generic text on the Parts List.</p> <p>32. Enter a '1' to print the operation's generic text on the Routing.</p>	
<p>BAR CODE INFORMATION:</p> <p>34. Enter the format for bar code printing.</p> <p>1 = Code 3 of 9 (Code 39)</p> <p>2 = Code 128</p> <p>If left blank, bar codes will not print.</p>	
<p>COMMITMENT PROCESSING:</p> <p>35. Enter a '1' to bypass commitment processing when creating the Parts List.</p> <p>If left blank, commitments will be processed per Commitment Control in Manufacturing Constants (P3009).</p>	
<p>QUALITY MANAGEMENT:</p> <p>36. Enter '1' to print Manufacturing Specifications.</p>	

Processing Option	Processing Options Requiring Further Description
<p>37. Enter the version of the Manufacturing Specifications print program to call (P37470).</p> <p>If left blank, 'ZJDE0001' will be used.</p>	
<p>PHANTOM OPERATION SEQUENCE NUMBER:</p> <p>38. Enter a '1' to default the phantom's (parent) operation sequence for the components on the parts list.</p> <p>If left blank, the component's operation sequence will be used.</p>	
<p>WORK ORDER START DATE UPDATE:</p> <p>39. Enter a '1' to update the Work order Start Date with the Start Date of the first routing operation for variable lead time.</p> <p>If left blank no updating will be performed</p>	
<p>LOT EXPIRATION DATE:</p> <p>40. Select the date that will be used to determine the eligibility of lot/ /serial numbered components. Only lots with effective dates less than or equal to the date specified AND expiration dates (based on the item's commitment date method) greater than or equal to the date specified will be considered.</p> <p>' ' = Parts list required date (default)</p> <p>'1' = Work order start date</p> <p>'2' = Work order requested (completion) date</p>	
<p>AUTOMATIC LOT NUMBER GENERATION:</p> <p>41. Enter a '1' to automatically generate a lot number upon co/by products creation for items with a lot process type of 1 or 2.</p>	



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# Manufacturing and Distribution Environments Processing Options

## Bill of Material Revisions (P3002)

Processing Option	Processing Options Requiring Further Description
<p>INVENTORY VALIDATION:</p> <p>1. Enter a '1' to validate for an existing Branch/Item record.</p>	
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p> <p><b>Note:</b> Options 2 and 3 are used ONLY to set Printer Overrides.</p> <p>2. Single-Level BOM Print (P30410)</p> <p>3. Multi-Level BOM Print (P30415)</p> <p>4. ECO Workbench (P30225)</p> <p>5. Component Maintenance (P3015)</p>	
<p>DREAM WRITER VERSION FROM WINDOW:</p> <p>6. Enter the version of ECO Revisions (P48020) to call from the Revisions Window (P30BREV).  If left blank, version 'ZJDE0001' will be used.</p>	
<p>COMPONENT BRANCH:</p> <p>7. Enter a '1' to change the Component Branch (Additions Only) to that which is displayed at the top of the screen.</p>	
<p>FIELD DISPLAY:</p>	

Processing Option	Processing Options Requiring Further Description
<p>8. Enter a '1' by the following fields to activate them:</p> <p>Bill Type</p> <p>Batch Quantity</p>	
<p>DEFAULT VALUES:</p> <p>9. Bill Type (Optional)</p>	
<p>DATE EFFECTIVITY:</p> <p>10. Enter a date to default into the As of Date or '*' to display all dates.</p> <p>If left blank, the system date will be used.</p>	
<p>COMPONENT SEQUENCING:</p> <p>11. Enter the sequence to be displayed:</p> <p>1 - Component Line Number</p> <p>2 - Operation Sequence Number</p> <p><b>Note:</b> If left blank, components will be sequenced by Component Line Number.</p>	
<p>REVISION LEVEL CONTROL:</p> <p>12. Enter a '1' to protect Component Revision Level from update.</p>	

## Routing Master Revisions (P3003)

Processing Option	Processing Options Requiring Further Description
<p>FIELD DISPLAY:</p> <p>1. Enter a '1' by the following fields to activate them:</p> <p>Line/Cell</p> <p>Routing Type</p> <p>Batch Quantity</p>	
<p>DEFAULT VALUES:</p> <p>2. Routing Type (Optional)</p>	
<p>UPDATE OPTIONS:</p>	

Processing Option	Processing Options Requiring Further Description
3. Enter a '1' to update the Component Operation Scrap Percent in the Bill of Material for the components on the operation and the Cumulative Yield Percent on the Routing, when updating the operation yield percent.	
COMPONENT BRANCH:	
4. Enter a '1' to change Component Branch to that of Parent Branch when copying a routing.	
DATE EFFECTIVITY:	
5. Enter a date to default into the As of Date or '*' to display all dates. If left blank, the system date will be used.	

## Schedule Review (P3152)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Document Type (Default is 'SC')	
2. Shift (Optional)	
DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used.	
3. Rate Revisions (P3109)	
4. Work Order Entry (P48013)	

## Message Detail (P3411)

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used.	

Processing Option	Processing Options Requiring Further Description
<ol style="list-style-type: none"> <li>1. Purchase Order Entry (P4311)</li> <li>2. Open Purchase Orders (P430301)</li> <li>3. Supplier Master (P01054)</li> <li>4. Work Order Entry (P48013)</li> <li>5. Shop Floor Workbench (P31225)</li> <li>6. Blanket Order Release (P43060)</li> <li>7. Pegging Inquiry (P3412)</li> <li>8. Supply/Demand Inquiry (P4021)</li> <li>9. Enter/Change Rate Schedule (P3109)</li> <li>10. Time Series (P3413)</li> <li>11. Bill Availability (P30205)</li> <li>12. Transfer Order Entry (P4242)</li> <li>13. Manufacturing Values (P41027)</li> <li>14. Work Order Generation (X4201WO)</li> </ol>	
<p>PURCHASE ORDER INFORMATION:</p> <ol style="list-style-type: none"> <li>15. Enter a '1' to consolidate all messages for a supplier on one purchase order.</li> </ol>	<p>Selection of this processing option will result in fewer orders created. The program will create the OT Purchase, and ST Sales Orders as it does now, but instead of creating separate orders per each message it will create one ST and OT with multiple detail lines</p> <p><b>Note:</b> JD Edwards World did this enhancement in conjunction with APS Integration. The changes listed to P3411A pertain only to clients that are integrated with APS (system 34A).</p>
<p>WORK ORDER INFORMATION:</p> <ol style="list-style-type: none"> <li>16. Enter the status for cancelled orders.</li> </ol>	
<p>BLANKET ORDER INFORMATION:</p> <ol style="list-style-type: none"> <li>17. Enter the document type associated with blanket orders. If left blank, open blanket orders will not be used.</li> </ol>	

Processing Option	Processing Options Requiring Further Description
<p>SUPPLY/DEMAND DEFAULT:</p> <p>18. Enter the default mode for viewing Supply/Demand branch messages:</p> <p style="padding-left: 20px;">D = Demand branch in header</p> <p style="padding-left: 20px;">S = Supply branch in header</p> <p style="padding-left: 20px;">If left blank, the data dictionary default will be used.</p>	
<p>DISPLAY SEQUENCE DEFAULT:</p> <p>19. Enter the default sequence for viewing messages:</p> <p style="padding-left: 20px;">1 = Message Type, Recommended Complete date</p> <p style="padding-left: 20px;">2 = Recommended Complete date, Message Type</p> <p style="padding-left: 20px;">If left blank, sequence '1' will be used.</p>	
<p>TRANSFER ORDER INFORMATION:</p> <p>20. Enter a '1' to consolidate transfer order message for the same supply and demand branches on one order.</p>	



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# DRP/MPS Multi-Facility Scheduling Processing Options

## Branch Relationship Revisions (P3403)

Processing Option	Processing Options Requiring Further Description
<p>SUPPLY OR DEMAND MODE:</p> <p>1. Enter the default mode for entry of Branch Relationships.</p> <p style="padding-left: 20px;">D = Demand branch in header</p> <p style="padding-left: 20px;">S = Supply branch in header</p>	
<p>DISPLAY FORMAT:</p> <p>2. Enter a '1' to display the sales transfer format.</p> <p style="padding-left: 20px;">If left blank, the branch relationship format will be displayed.</p>	
<p>LEVEL UPDATE:</p> <p>3. Enter a '1' to automatically update the Branch Level field.</p>	

## Branch Relationships Chart (P34031)

Processing Option	Processing Options Requiring Further Description
<p>DREAM WRITER VERSIONS:</p> <p>1. Enter the version of Branch Relationship Revisions program to call.</p> <p style="padding-left: 20px;">If left blank, version 'ZJDE0001' will be used.</p>	

## Multi-Facility - Gross Regeneration (P3483)

Processing Option	Processing Options Requiring Further Description
<p>BUCKET INFORMATION:</p> <ol style="list-style-type: none"> <li>Enter the Start Date. If left blank, the system date will be used.</li> <li>Enter the number of past due periods (0-2). If left blank, there will be no past due periods.</li> <li>Enter the planning horizon periods (maximum of 52 periods): Days (e.g. 5 ) Weeks (e.g. 25) Months (e.g. 6 )</li> </ol>	<p>Set to 2 if using Planning Fence Rule H.</p> <p>Maximum of 52 periods including Past Due buckets</p>
<p>PROCESSING CONTROL:</p> <ol style="list-style-type: none"> <li>Enter the Generation Mode: 1 = Net Change 2 = Gross Regeneration</li> <li>Enter the Generation Type: 1 = Single Level MPS/DRP 3 = MRP 5 = MRP with Frozen MPS</li> </ol>	
<p>PHANTOM ITEMS:</p> <ol style="list-style-type: none"> <li>Enter a '1' to generate messages and time series records for phantoms.</li> </ol>	
<p>ON HAND ADJUSTMENTS:</p> <ol style="list-style-type: none"> <li>Enter a '1' to decrease beginning available by safety stock quantity.</li> <li>Enter the lot hold codes (up to 5) to be considered on hand, or enter a '*' to consider all held lots as on hand. If left blank, held lots will not be considered on hand.</li> </ol>	

Processing Option	Processing Options Requiring Further Description
<p>9. Enter a '1' by the following Receipt Routing quantities to be considered on hand.</p> <p>Quantity in Transit</p> <p>Quantity in Inspection</p> <p>User Defined Quantity 1</p> <p>User Defined Quantity 2</p> <p><b>Note:</b> Any quantity not included will be placed in the On Receipt bucket.</p>	
<p>DAMPER DAYS:</p> <p>10. Enter the Defer Damper days, (no defer message if less than 'X' number of days).</p> <p>11. Enter the Expedite Damper days, (no expedite message if less than 'X' number of days).</p>	
<p>SAFETY LEADTIME:</p> <p>12. Enter the purchased item lead time days.</p> <p>13. Enter the manufactured item lead time days.</p>	
<p>FORECASTING INFORMATION:</p> <p>14. Enter up to five forecast types:</p> <p>Forecast Type 1</p> <p>Forecast Type 2</p> <p>Forecast Type 3</p> <p>Forecast Type 4</p> <p>Forecast Type 5</p>	
<p>RATE-BASED SCHEDULING INFORMATION:</p> <p>15. Enter the Schedule Type for rate-based items.</p> <p>If left blank, 'SC' will be used.</p> <p>16. Enter a '1' to extend rate-based adjustments to lower level items.</p> <p>17. Enter status code used to denote closed rates.</p> <p>If left blank, 99 will be used.</p> <p>18. Enter a '1' to include Past Due Rates as a supply.</p>	

Processing Option	Processing Options Requiring Further Description
<p>PURCHASE ORDER INFORMATION:</p> <p>19. Enter the Document Type for purchase orders. If left blank, 'OP' will be used.</p>	
<p>WORK ORDER INFORMATION:</p> <p>20. Enter the Document Type for work orders. If left blank, 'WO' will be used.</p> <p>21. Enter the Work Order Status at which messages will no longer be exploded to lower level items. If left blank, all messages will be exploded to lower level items.</p>	
<p>INCLUSION RULES:</p> <p>22. Enter the version of Supply/Demand Inclusion Rules to be used.</p>	
<p>PERFORMANCE ISSUES:</p> <p>23. Enter a '1' to initialize the MPS/MRP Print Code. This code is used for selecting records during the MPS/MRP print. (See glossary for MRPD.)</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p> <p>24. Enter the User Defined Code Type that contains the list of quantity types to be calculated &amp; written to the Time Series file (F3413). User Defined Code 34/QT contains a master list of quantity types that can be written and will be used as the default.</p> <p>25. Enter a '1' to completely clear the material planning files (messages, pegging, and time series) prior to the generation or a '2' to retain manual remarks (type M messages) while clearing the files. Default of blank will not clear files.</p> <p><b>Note:</b> If a '1' or '2' is entered, files will be cleared without respect to data selection. Clearing the files will improve performance and clean up any bad data in the files.</p>	

Processing Option	Processing Options Requiring Further Description
<p>26. Enter the default branch for retrieving the Shop Floor Calendar to reduce processing time.</p> <p>If left blank, the calendar for each branch will be used.</p>	
<p>MULTI-FACILITY INFORMATION:</p> <p>27. Enter one of the following methods of Multi-Facility processing:</p> <p>1 = Simple Consolidation</p> <p>a. Enter a '1' to also run a regular generation on the non-consolidated branches.</p> <p>b. Enter the Branch to consolidate to.</p> <p>2 = Use Branch Relationships</p> <p>a. Enter the Category Code (1-5) to be used.</p> <p>b. Enter a '1' to make all manufactured items in the originating branch.</p> <p>28. Enter the Document Type for transfer orders.</p> <p>If left blank, 'OT' will be used.</p>	
<p>PROCESS PLANNING:</p> <p>29. Enter a '1' to generate planning in Process mode.</p> <p><b>Note:</b> If left blank, the run time of the generation will be reduced.</p>	

Processing Option	Processing Options Requiring Further Description
<p>LOT EXPIRATION:</p> <p>30A. Enter a '1' to consider lot expiration dates in calculations.</p> <p>30B. Enter optional date to be used for expiration calculations when processing option 30A = '1'.</p> <p>If left blank, Lot expiration date will be used.</p> <p>1 = Sell By Date</p> <p>2 = Best Before Date</p> <p>3 = User Defined Date 1</p> <p>4 = User Defined Date 2</p> <p>5 = User Defined Date 3</p> <p>6 = User Defined Date 4</p> <p>7 = User Defined Date 5</p> <p>8 = Commitment Date Method from Item/Branch Master.</p>	
<p>FORECAST CONSUMPTION PROCESSING:</p> <p>31. Enter a '1' to use Forecast Consumption logic.</p> <p>32. Enter a '1' to allow Interplant Demand to consume Forecast.</p>	
<p>ROUNDING:</p> <p>33. Enter a '1' to round existing Work/Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.</p> <p><b>Note:</b> If left blank, no rounding will occur.</p>	

## Transfer Order Review (P3421)

Processing Option	Processing Options Requiring Further Description
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version for each program.</p> <p>If left blank, 'ZJDE0001' will be used.</p> <p>1. Message Detail (P3411)</p> <p>2. Pegging (P3412)</p>	

<b>Processing Option</b>	<b>Processing Options Requiring Further Description</b>
3. Time Series (P3413)	
4. Forecast Detail (P3460)	
5. Manufacturing Data (P41027)	
6. Detail Availability (P41202)	
7. Supply/Demand Inquiry (P4021)	



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# Single Facility Material Requirements Planning Processing Options

## Pegging (P3412)

Processing Option	Processing Options Requiring Further Description
<p>DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p> <ol style="list-style-type: none"> <li>1. Message File Revisions (P3411)</li> <li>2. Time Series (P3413)</li> <li>3. Supply/Demand Inquiry (P4021)</li> </ol>	

## Supply & Demand (P4021)

Processing Option	Processing Options Requiring Further Description
<p>DISPLAY OPTIONS:</p> <ol style="list-style-type: none"> <li>1. Enter a '1' to deduct Safety Stock from Availability.</li> <li>2. Enter a '1' by the following Routing Quantities to be considered on hand.  Any quantity not included will be displayed on the appropriate date.  Quantity in Transit Quantity in Inspection User Defined Quantity 1 User Defined Quantity 2</li> <li>3. Enter a '1' to summarize all In Receipt Routing steps into one line.</li> </ol>	

Processing Option	Processing Options Requiring Further Description
<p>4. Enter a '1' to summarize Item Location records.</p> <p>5. Enter one of the following:  '' = No Available to Promise Line  '1' = Available to Promise Line  '2' = Cumulative ATP Line</p> <p>6. Enter the version of Supply/Demand Inclusion Rules to be used.</p> <p>7. Enter a '1' to display the window format if called from another program.</p>	
<p>8. Enter a '1' to use an alternate screen format which has long quantity fields.</p>	
<p>DREAM WRITER VERSIONS:  Enter the DREAM Writer version to use for each program listed.  If left blank, version ZJDE0001 will be used.</p> <p>9. Purchase Order Entry (P4311)</p> <p>10. Purchase Order Inquiry (P430301)</p> <p>11. Sales Order Entry (P4211)</p> <p>12. Sales Order Inquiry (P42045)</p> <p>13. Scheduling Workbench (P31225)</p> <p>14. MPS/MRP/DRP Pegging Inq. (P3412)</p> <p>15. MPS/MRP/DRP Time Series (P3413)</p> <p>16. MPS/MRP/DRP Message Detail(P3411)</p>	
<p>OPTIONAL RECORDS:</p> <p>17. Enter a '1' to include Planned Orders from MPS/MRP/DRP generations.  If left blank, Planned Orders will not be displayed.</p> <p>18. Enter the Forecast Type to include  Forecast Type  Forecast Type  Forecast Type  Forecast Type  Forecast Type</p>	

Processing Option	Processing Options Requiring Further Description
<p>19. Enter the number of days (+/-) from today's date that you wish to begin including Forecast records. A blank will use today's date to begin including Forecast records.</p> <p>20. Enter a '1' to omit 'Bulk' Stocking Type records from screen. If left blank, 'Bulk' items will be included.</p>	
<p>21. Enter the rate based Schedule Type to use. If left blank, no rate based schedules will be displayed.</p> <p>22. Enter a '1' to include Past Due Rates as a supply.</p>	
<p>POTENCY:</p> <p>23. Enter '1' to convert Quantities to Standard Potency.</p>	
<p>LOT EXPIRATION:</p> <p>24A. Enter '1' to reduce Quantity available due to lot expiration.</p> <p><b>Note:</b> This option will not work with ATP. If you use this option, option 5 must be set to blank or 2.</p> <p>24B. Enter optional date to be used for expiration calculation when processing option 24A='1'. If left blank, Lot Expiration Date will be used.</p> <p>1=Sell By Date 2=Best Before Date 3=User Defined Date1 4=User Defined Date2 5=User Defined Date3 6=User Defined Date4 7=User Defined Date5 8=Commitment Date Method from Item/ Branch Master.</p>	
<p>LOT HOLD CODES:</p>	

Processing Option	Processing Options Requiring Further Description
<p>25. Enter the lot hold codes (up to 5) to be considered on hand, or enter an '*' to consider all held lots as on hand.</p> <p>If left blank, held lots will not be considered on hand.</p>	
<p>WORK ORDER ENTRY:</p> <p>26. Enter the Dream Writer version to use for the Manufacturing Work Order Entry program.</p> <p>If left blank, version ZJDE0001 will be used.</p>	
<p>BILL AVAILABILITY:</p> <p>27. Enter the version of Bill Availability (P30205) to be called.</p> <p>If left blank, version ZJDE0001 will be used.</p>	
<p>OVER DUE SUPPLY CONTROL:</p> <p>28. Enter a '1' to leave past due supply out of available calculations (past due orders will be displayed but will not be included in quantity available or ATP).</p>	
<p>FORECAST DISPLAY OPTIONS:</p> <p>29. Enter a '1' to override the planning fence rule and just use actual customer demand for the available calculation.</p> <p><b>Note:</b> forecast will still appear on the screen per processing option above.</p> <p>When left blank, the available calculation will be based on the planning fence and rule established in the item's branch plant manufacturing data.</p>	

## Manufacturing Scheduling Workbench (P31225)

Processing Option	Processing Options Requiring Further Description
<p>DREAM WRITER VERSIONS:</p> <p>Enter the version for each program.</p> <p>If left blank, 'ZJDE0001' will be used.</p>	

Processing Option	Processing Options Requiring Further Description
<ol style="list-style-type: none"> <li>1. Sales Order Inquiry (P42045)</li> <li>2. Purchase Order Inquiry (P430301)</li> <li>3. a Work Order Completions (P31114)</li> <li>3. b Super Backflush (P31123)</li> <li>4. Work Order Entry (P48013)</li> <li>5. Sales Order Entry (P4211)</li> <li>6. Purchase Order Entry (P43111)</li> <li>7. Work Order Issues (P31113)</li> </ol>	
<p>DISPLAY OPTIONS:</p> <ol style="list-style-type: none"> <li>8. Enter a '1' to display Requested Date or enter a '2' to display Start Date. (Default is '1')</li> <li>9. Enter a '1' to sequence the records by Requested date. Enter a '2' to sequence the records by Start date.  If left blank, the sequence will be based on values for the Customer, Parent Work Order Number, Cross-Reference, Item or Planner fields.</li> </ol>	
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>10. Category Code 1 (Optional)</li> <li>11. Category Code 2 (Optional)</li> <li>12. Category Code 3 (Optional)</li> <li>13. Type (Optional)</li> <li>14. Priority (Optional)</li> <li>15. Planner Number (Optional)</li> <li>16. From Status (Optional)</li> <li>17. Thru Status (Optional)</li> <li>18. Item Number (Optional)</li> <li>19. Customer Number (Optional)</li> <li>20. Reference (Optional)</li> <li>21. Document Type (Optional)</li> </ol>	

Processing Option	Processing Options Requiring Further Description
<p>PROCESS MANUFACTURING PROCESSING:</p> <p>22. Enter a '1' to automatically create the WO Routing Instructions when creating the WO Parts List on-line.</p> <p>23. Enter a '1' to automatically create the WO Parts List when creating the WO Routing Instructions on-line.</p>	
<p>SUBSTITUTE PROCESSING:</p> <p>24. Enter the substitute processing method to be used when creating the Parts List on-line.</p> <p>1 = Use substitutes for shortages. (Commitment processing must be used if '1' is selected.)</p> <p>2 = Display the substitute availability window when substitute quantity available can cover shortage.</p> <p>If left blank, substitute processing will not be done.</p>	
<p>COMMITMENT PROCESSING:</p> <p>25. Enter a '1' to bypass commitment processing when creating the Parts List on-line.</p> <p>If left blank, commitments will be processed per Commitment Control in Manufacturing Constants (P3009).</p>	
<p>WORK ORDER PARTS LIST INFORMATION:</p> <p>26. Enter the version of the Work order Parts List Quantities Inquiry(P3121).</p> <p>If left blank, 'ZJDE0001' will be used.</p>	
<p>QUALITY MANAGEMENT:</p> <p>27. Enter the version of Test Results Revisions (P3711) to call.</p> <p>If left blank, 'ZJDE0002' will be used.</p>	

## Lead Time Inquiry (P30207)

Processing Option	Processing Options Requiring Further Description
<p>LEAD TIME CALCULATION:</p> <ol style="list-style-type: none"> <li>1. Enter a '1' to use the lead time values from the Item Branch File (F4102). If left blank, calculated lead times will be displayed.</li> </ol>	
<p>DISPLAY OPTIONS:</p> <ol style="list-style-type: none"> <li>2. Enter a '1' to prevent displaying the components for a Subassembly with a Stocking Type of 'P'. If left blank, the components will display on the video.</li> </ol>	

## Period Summary (P3352)

Processing Option	Processing Options Requiring Further Description
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>1. Enter the Capacity Mode to use: 1 = Resource Requirements Planning 2 = Rough Cut Capacity Planning 3 = Capacity Requirements Planning</li> <li>2. Enter the Unit of Measure. If left blank, 'HR' will be used.</li> <li>3. Enter the Start Date. If left blank, the system date will be used.</li> <li>4. Enter the End Date. If left blank, all data after the Start Date will displayed.</li> </ol>	



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# Supplier Scheduling Processing Options

## Supplier/Blanket Information (P4321)

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS: Enter the version of each program. If left blank, 'ZJDE0001' will be used. <ol style="list-style-type: none"><li>1. Purchase Order Entry (P4311)</li><li>2. Open Order Inquiry (P430301)</li><li>3. Supplier Schedule (P34301)</li><li>4. Supplier Split Percentage (P43211)</li></ol>	
DEFAULT VALUES: <ol style="list-style-type: none"><li>5. Document Type (Optional)</li></ol>	

## Supplier Split Percentages (P43211)

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used. <ol style="list-style-type: none"><li>1. Purchase Order Inquiry (P430301)</li></ol>	

## Generate Supplier Schedule (P34400)

Processing Option	Processing Options Requiring Further Description
<p>PROCESSING CONTROL:</p> <ol style="list-style-type: none"> <li>1. Enter the Beginning Date for the generation. If left blank, the system date will be used.</li> <li>2. Enter the Document Type to look for when retrieving an item's blanket order. If left blank, 'OB' will be used.</li> <li>3. Enter the version of Supply/Demand Inclusion rules to use for active blanket order selection.</li> </ol>	
<p>SUPPLIER STATUS UPDATE:</p> <ol style="list-style-type: none"> <li>4. Enter the status to use for updates to the Supplier Schedule. If left blank, the status will not be changed.</li> </ol>	
<p>MPS/MRP/DRP MESSAGES:</p> <ol style="list-style-type: none"> <li>5. Enter a '1' to change MPS/MRP/DRP Messages to a cleared status after processing. If left blank, all messages will remain uncleared after schedule generation.</li> </ol>	
<p>INITIALIZATION &amp; REGENERATION:</p> <ol style="list-style-type: none"> <li>6. Enter a '1' to rerun the generation using previously cleared MPS/MRP/ DRP messages. If left blank, only uncleared MPS/MRP/DRP messages will be used.</li> <li>7. Enter a '1' to ignore frozen time fence days and allow operations inside the normal frozen time fence (All frozen days = '0'). If left blank, no quantities will be placed inside the frozen time fence date.</li> </ol>	

## Supplier Schedule Revisions (P34301)

Processing Option	Processing Options Requiring Further Description
<p>DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p> <ol style="list-style-type: none"> <li>1. Open Order Inquiry (P430301)</li> <li>2. Supply/Demand Inquiry (P4021)</li> <li>3. Purchase Order Entry (P4311)</li> <li>4. Vendor/Blanket Information (P4321)</li> <li>5. Pegging Inquiry (P3412)</li> <li>6. Single Item Release (P34410)</li> </ol>	
<p>SUPPLY/DEMAND INCLUSION RULES:</p> <ol style="list-style-type: none"> <li>7. Enter the version of Supply/Demand Inclusion Rules to use for active blanket order selection.</li> </ol>	
<p>DEFAULT VALUES:</p> <ol style="list-style-type: none"> <li>8. Document Type (Optional)</li> </ol>	
<p>SCHEDULE STATUS UPDATE:</p> <ol style="list-style-type: none"> <li>9. Enter the status to use for updates to the Vendor Schedule. If left blank, the status will not be changed.</li> <li>10. Enter the status beyond which changes cannot be made to the Vendor Schedule. If left blank, the schedule is always open to change.</li> </ol>	

## Release Supplier Schedule (P34410)

Processing Option	Processing Options Requiring Further Description
<p>DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used.</p>	

Processing Option	Processing Options Requiring Further Description
1. Write Purchase Orders (P3420)	
SUPPLIER SCHEDULE UPDATES:	
2. Enter the status to use for updates to the Supplier Schedule. If left blank, no change will be made to the schedule's current status.	
3. Enter a '1' to clear MPS/MRP/DRP messages inside the releasable time fence.	
BLANKET/QUOTE PROCESSING:	
4. Enter a '1' for automatic blanket order release processing.	

## Print Supplier Schedule (P34450)

Processing Option	Processing Options Requiring Further Description
PROCESSING CONTROL:	
1. Enter the Document Type to use when retrieving an item's blanket order. If left blank, 'OB' will be used.	
2. Enter the version of Supply/Demand Inclusion rules to use for active blanket order selection.	
SCHEDULE STATUS UPDATE:	
3. Enter the status to use for updates to the supplier schedule. If left blank, no change will be made to the schedule's current status.	
ASSOCIATED TEXT:	
4. Enter a '1' to print associated blanket order text.	

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## 14 Appendices



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## Appendix A – Action Messages

The action messages for DRP/MPS/MRP are defined in user defined code table 34/MT. The character codes are hard-coded. Do not change the character codes in this table.

Type	Description	Planner Remarks	Action Taken on Work Orders When Message Processed	Action Taken on Purchase Orders When Message Processed
A	Warning message	See vocabulary overrides for warning messages. . G90/13. Inquire on P3482 or P3483.	N/A informational messages only.	N/A
B	Order & Expedite	Blank	Clears message and creates a firm order message. Creates work order.	Clears message and creates a firm order message. Creates purchase order.
C	Cancel	Blank	Clears message. The system deletes work order parts list if there are no outstanding issues. Changes status to 99.	Clears closed message on purchase order line item. Changes status to 999.
D	Defer	Blank	Clears message and changes work order item required date. If a D message is generated, an L (Decrease Rate) message will not be generated.	Clears message and changes purchase order line item required date.

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<b>Type</b>	<b>Description</b>	<b>Planner Remarks</b>	<b>Action Taken on Work Orders When Message Processed</b>	<b>Action Taken on Purchase Orders When Message Processed</b>
E	Expedite	Blank	Clears message and changes work order start date.	Clears message and changes purchase order line item start date.
F	Frozen order	Frozen order	No action required. The message remains until deleted or cleared.	No action required. The message remains until deleted or cleared.
G	Increase order quantity	Manual adjustment necessary	Displays work order. You must manually change the ordered quantity. The system recalculates and changes the number of required components.	Displays purchase order. You must manually change the ordered quantity.
H	Decrease rate quantity	Blank	Displays the rate schedule. You must manually change the rate quantity for the suggested date.	N/A
I	Increase rate quantity	Blank	Displays the rate schedule. You must manually change the rate quantity for the suggested date.	N/A
L	Decrease order quantity	Manual adjustment necessary	Displays work order. You must manually change the ordered quantity. The system recalculates and changes the number of required components.	Displays purchase order. You must manually change the ordered quantity.
M	Manual reminder	User entered text	No action required. The message remains until deleted or cleared.	No action required. The message remains until deleted or cleared.

<b>Type</b>	<b>Description</b>	<b>Planner Remarks</b>	<b>Action Taken on Work Orders When Message Processed</b>	<b>Action Taken on Purchase Orders When Message Processed</b>
N	Create rate	Blank	Clears message and creates the rate schedule. Displays rate schedule revisions.	N/A
O	Order	Blank	Clears message and creates a firm order message. Creates work order.	Clears message and creates a firm order message. Creates purchase order.
P	Firm order	Firm order	No action required. The message remains until deleted or cleared.	No action required. The message remains until deleted or cleared.
S	FPO adjustment suggestion	Increase Parts List Decrease Parts List Expedite Parts List Defer Parts List	No action required. The message remains until deleted or cleared. Action is taken on the parent item's message.	No action required. The message remains until deleted or cleared. Action is taken on the parent item's message.
T	Past due order	Blank	No action required. The message remains until deleted or cleared.	No action required. The message remains until deleted or cleared.



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# Appendix B – Functional Servers

## About Functional Servers

Several JD Edwards World programs access functional servers. The purpose of functional servers is to provide a central location for standard business rules about entering documents, such as vouchers, invoices, and journal entries. These business rules establish the following:

- Data dictionary default values
- Field edits and valid values
- Error processing
- Relationships between fields or applications

The advantages of a functional server are:

- It reduces maintenance of entry programs because edit rules reside in one central location.
- You can standardize documents across all applications because you create them using the same business rules.
- Generally, the user interface (appearance and interaction) of a form is now separate from how a program works.

## To set up business rules for an entry program

The steps for setting up business rules for an entry program are:

1. Create a DREAM Writer version for a specific functional server program (for example, XT0411Z1 for voucher entry).
2. Set the processing options within the version according to your company requirements.
3. Specify the version you want the entry program to use in the processing options for that entry program.

You can have all your entry programs use the same DREAM Writer version (and thus, use the same rules) or you can set up different DREAM Writer versions. JD Edwards World provides DREAM Writer version ZJDE0001 as the default functional server version for your entry programs.

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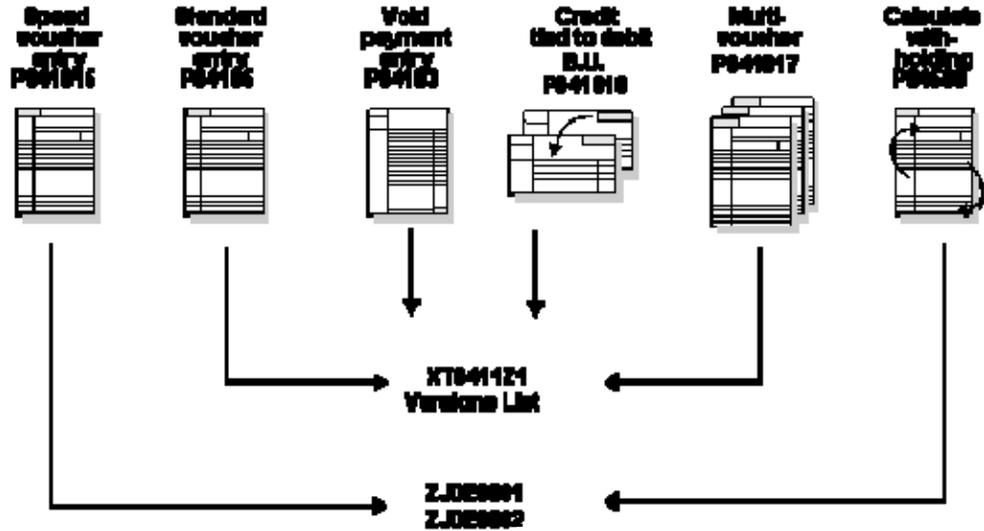
**Caution:** Only the person responsible for system-wide setup should make changes to the functional server version. For more information about how to set up DREAM Writer versions, see the *Technical Foundation Guide*.

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## Example: Voucher Processing Functional Server

The following graphic shows the programs that use the voucher processing functional server. JD Edwards World provides two demo versions of the functional server, ZJDE0001 and ZJDE0002.



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## Appendix C – Time Series Quantity Types

This document reviews the pristine quantity type table (UDC 34/QT), as provided with the software, and provides an explanation for each quantity type. While JD Edwards recommends that you run the planning programs (P3482 & P3483) using the pristine table, you may set up any number of alternate tables to view the time series according to user preference (see time series processing options).

If you choose to create alternate tables, you must base them on the pristine table so that the numeric codes will always represent the same quantity type. For example, 20 must always be adjusted purchase orders, regardless of how you modify the first and second descriptions on the table.

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**Note:** The first three quantity types are not written by the World planning programs but are available for population by a user written program. The first and second descriptions are just examples of how they might be used. If populated, the values would be for reference only, i.e. they have no affect on MRP calculations.

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Code	Label	Description	Explanation
02	LYR	Last Year Actual	
03	SF	Sales Forecast	
04	SP	Special Promotion	
05	+BAU	+ Beginning Avail (Unadjusted)	The beginning available balance without adjusting for MRP action messages.
10	+BA	+ Beginning Avail	The beginning available balance adjusted according to MRP action messages.
13	+IR	+ In Receipt Routing	PO receipts or WO completions in receipt routing. There is an MRP processing option that allows quantities in the receipt routing operations you specify to be considered on hand, otherwise they will appear in the appropriate time period on the +IR line.
15	+POU	+ Purchase Orders (Unadjusted)	Supply from pending purchase order receipts (including the purchase order side of transfer orders) without adjusting for action messages; i.e. promised delivery dates (PDDJ/F4311) and quantities at the time of the MRP run.

Code	Label	Description	Explanation
20	+PO	+ Purchase Orders	Supply from pending purchase order receipts (including the purchase order side of transfer orders) adjusted according to MRP action messages (Defer, Expedite, Increase, and Decrease).
25	+WOU	+ Work Orders (Unadjusted)	Supply from pending work order completions without adjusting for MRP action messages; i.e. requested dates (DRQJ/F4801) and quantities at the time of the MRP run.
30	+WO	+ Work Orders	Supply from pending work order completions adjusted according to MRP action messages (Defer, Expedite, Increase, and Decrease).
40	+RSU	+ Rate Schedule (Unadjusted)	Supply from pending rate schedule completions without adjusting for MRP action messages; i.e. dates (STRT, DRQJ/F4801) and quantities (spread according to rate period) at the time of the MRP run.
35	+RS	+ Rate Schedule	Supply from planned rate schedules (Create Rate messages) and pending rate schedule completions adjusted according to MRP action messages (Decrease, Increase).
42	-LEXP	- Lot Expired	A processing option determines whether lot expiration dates will be included in MRP calculations. If so, this represents lot quantities that have not been consumed by their expiration date. This line will not appear on the time series if all of the lot is consumed before the expiration date (this might include forecast demand).
45	-FCU	- MPS/Forecast (Unadjusted)	A processing option determines forecast types to be included. This is the sum of the specified forecast types from the detail forecast file unadjusted by MRP planning parameters.
50	-FC	- MPS/Forecast	This is the forecast quantity adjusted according to MRP planning parameters (planning fence and rule/forecast consumption).

Code	Label	Description	Explanation
52	-SHIP	- Shipped Quantity	This quantity is only written when using forecast consumption (planning fence rule H) and reflects sales orders quantities shipped based on the Forecast Shipment Summary (F3462). When an order is ship confirmed, if the sales order document type is set up in the 40/CF UDC table (all doc types in the inclusion rules used for MRP should be included on this table if using forecast consumption), the quantity is written to the F3462. Note that if a sales order document type is added to 40/CF after shipments are made for orders with that doc type, the orders already shipped will not be included in F3462, and therefore the -SHIP for the period in which they were shipped will not appear. -SHIP quantities continue to consume forecast until their scheduled pick date is prior to the current forecast consumption period.
55	-SOU	- Sales Orders (Unadjusted)	Demand from sales orders directly from the sales order detail file (F4211). This reflects actual dates (PDDJ) and quantities of sales orders. When running multi-facility MRP (P3483), this represents an independent sales order for the supply branch - i.e. not inter-plant demand.
60	-SO	- Sales Orders	This quantity type is only written by Single Plant MRP (P3482) and represents sales order quantities adjusted according to MRP planning parameters (planning fence and rule/forecast consumption). When using forecast consumption, this represents the sales order quantity consuming the forecast in that bucket. The -TI quantity type replaces this for Multi-Plant MRP.

The following five quantity types are only generated by multi-facility MRP (P3483) and will only appear in a supply branch.

Code	Label	Description	Explanation
65	-ID	- Inter-Plant Demand	Planned transfers; i.e. demand from another branches based on an established branch relationships. There will be corresponding planned transfers (+PLO) in the demand branches.
66	-FIDU	- Firm Inter-Plant (Unadj)	Firm Inter-Plant Demand Unadjusted. Demand from existing transfer orders unadjusted for MRP action messages.

Code	Label	Description	Explanation
67	-FID	- Firm Inter-Plant Demand	Firm Inter-Plant Demand Adjusted. Demand from existing transfer orders adjusted for MRP action messages.
68	-TIU	- Total Indep. Demand (Unadj)	Total Independent Demand Unadjusted. The calculation of this quantity type depends on how the processing option that specifies whether interplant demand should consume forecast. When the processing option is turned on (set to 1), -TIU = the sum of -SOU, -ID, and -FID. When the processing option is turned off (blank), -TIU = -SOU.
69	-TI	- Total Independent Demand	Total Independent Demand Adjusted. This quantity type takes the place of -SO when multi-facility planning is run. It is -TIU adjusted according to MRP planning parameters (planning fence and rule/forecast consumption).

Unless lead time offsets are established, the required dates for the following three dependent demand quantity types will be the start dates of the parent items work orders or planned orders.

Code	Label	Description	Explanation
70	-FWOU	- Firm Work Orders (Unadjusted)	Demand for a component created by the parent's unadjusted work orders; i.e. there will be a corresponding +WOU for the parent item.
75	-FWO	- Firm Work Orders	Demand for a component created by the parent's adjusted work orders; i.e. there will be a corresponding +WO for the parent item.
80	-PWO	- Plan Work Orders	Demand for a component created by planned work order orders; i.e. there will be a corresponding +PLO for the parent items.

Code	Label	Description	Explanation
85	=EAU	= Ending Avail (Unadjusted)	The ending available balance without adjusting for MRP action messages. This becomes the unadjusted beginning available in the following bucket.
90	=EA	= Ending Avail	The ending available balance adjusted according to MRP action messages. This becomes the adjusted beginning available in the following bucket.

Code	Label	Description	Explanation
95	+PLO	+ Planned Orders	Recommended replenishment orders for an item; can be for purchase orders, work orders, rate schedules, or transfer orders depending on stocking type, order policy code, and branch relationships. Planned orders are based on adjusted values and are generated when there is insufficient existing supply to satisfy demand.
96	ATPU	Available to Promise (Unadj)	Based on unadjusted values, the uncommitted inventory quantity (only actual demand, no forecast), calculated for each period in which a receipt is scheduled.
97	ATP	Available to Promise	Available To Promise Adjusted. Same as ATPU except that adjusted values are used.
98	CATP U	Cumulative Avail to (Unadj)	Cumulative Available To Promise Unadjusted. This is a running total of the ATPU
99	CATP	Cumulative Avail to Promise	Cumulative Available To Promise Adjusted. This is a running total of ATP.



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