JD Edwards World

Manufacturing and Distribution Planning Guide Release A9.3

E21770-02

April 2013



JD Edwards World Manufacturing and Distribution Planning Guide, Release A9.3

E21770-02

Copyright © 2013, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Pr	eface		xvii
	Audie	nce	xvii
	Docun	nentation Accessibility	xvii
	Documentation Accessibility Related Documents Conventions 1 Overview to Manufacturing and Distribution Planning 1.1 Resource and Capacity Planning 1.2 Material Planning Operations 1.3 System Integration 1.4 Terms and Concepts 1.5 Planning and Production Environments 1.6 Planning a Total Business Solution 1.6.1 People 1.6.2 Process 1.6.3 Technology 1.7 Tables for Manufacturing and Distribution Planning 1.8 Menu Overview 1.8.1 Fast Path Commands for Resource and Capacity Planning 1.8.2 Fast Path Commands for Material Planning Operations Part I Item Master and Branch/Plant Review 2.1 Objectives 2.2 About Item Entry 2.2.1 Before You Begin.		xvii
	Conve	entions	xvii
1	Overv	iew to Manufacturing and Distribution Planning	
	1.1	Resource and Capacity Planning	1-1
	1.2	Material Planning Operations	1-2
	1.3	System Integration	1-2
	1.4	Terms and Concepts	1-5
	1.5	Planning and Production Environments	1-6
	1.6	Planning a Total Business Solution	1-7
	1.6.1	People	1-8
	1.6.2	Process	1-8
	1.6.3	Technology	1-9
	1.7	Tables for Manufacturing and Distribution Planning	1-9
	1.8	Menu Overview	1-9
	1.8.1	Fast Path Commands for Resource and Capacity Planning	1-9
	1.8.2	Fast Path Commands for Material Planning Operations	1-10
Pa	rt I Ite	em Master and Branch/Plant Review	
2	Overv	iou to Itam Master and Prench/Diant Paviou	
_			
		,	
		•	
	2.2.1	Before You Begin	2-3
3	Enter	Item Master Information	
	3.1	Entering Item Master Information	3-1
	3.1.1	What You Should Know About	3-2
	3.2	Entering Basic Item Information	3-3
	3.2.1	What You Should Know About	3-3
	3.3	Entering Item Text	3-7

3-9
3-10
3-14
3-19
3-23
3-25
3-25
0 20
4-1
4-2
4-3
4-4
4-4
4-7
4-8
4-8
4-9
4-10
4-11
4-15
4-15
4-16
4-16
5-1
5-2
5-4
5-5
5-8
5-9
5-10
5-10
5-11
5-12
5-12 5-12
5-12
6-1
6-1

	6.3	Reviewing Detail Forecasts	6-2
	6.3.1	Processing Options	
	6.4	Revising Detail Forecasts	
	6.4.1	Example: Revising a Detail Forecast	6-5
	6.4.2	Processing Options	6-7
Ра	rt III F	Resource Requirements Planning	
7	Overv	iew to Resource Requirements Planning	
	7.1	Objectives	7-1
	7.2	About Resource Requirements Planning	7-2
	7.2.1	How Do You Use Demand Forecasting?	7-2
	7.2.2	What Factors Should You Consider?	
	7.2.3	How Do You Determine Long-Range Capacity Plans?	7-3
8	Enter	Work Centers	
	8.1	Entering Work Centers for Resource Requirements Planning	8-1
	8.1.1	Before You Begin	8-1
9	Deterr	nine Available Capacity	
	9.1	Determining Available Capacity	9-1
	9.1.1	Before You Begin	9-1
	9.1.2	What You Should Know About	9-1
	9.2	Entering Resource Units Manually	9-2
	9.2.1	What You Should Know About	9-3
	9.2.2	Processing Options	9-3
	9.3	Generating Resource Units	9-3
	9.3.1	Before You Begin	9-4
	9.3.2	What You Should Know About	
	9.3.3	Processing Options	9-4
10	Dete	rmine Long-Range Load	
	10.1	Determining Long-Range Load	10-1
	10.2	Defining Resource Profiles Manually	10-1
	10.2.1	Before You Begin	10-2
	10.3	Generating Resource Profiles	10-4
	10.3.1	Before You Begin	10-5
	10.3.2	Processing Options	10-5
11	Gene	erate Resource Requirements Plans	
	11.1	Generating Resource Requirements Plans	11-1
	11.1.1	Before You Begin	11-2
	11.1.2	Processing Options	11-2
	11.1.3	Data Selection for Critical Work Centers	11-2
	11.1.4	Data Selection for Branch/Plant and Dispatch Group	11-2

12	Revie	ew Resource Requirements Plans	
	12.1	Reviewing Resource Requirements Plans	12-1
	12.2	Reviewing Dispatch Groups for Resource Requirements Planning	12-1
	12.2.1	Processing Options	12-3
	12.3	Reviewing Work Center Load for Resource Requirements Planning	12-3
	12.3.1	Before You Begin	12-4
	12.3.2	What You Should Know About	12-5
	12.3.3	Processing Options	
	12.3.4	What You Should Know About	
	12.3.5	Processing Options	
	12.4	Reviewing Period Summaries	
	12.4.1	Processing Options	
	12.5	Reviewing Message Detail	
	12.5.1	What You Should Know About	12-10
	12.5.2	Processing Options	12-10
	12.6	Validating Resource Requirements Plans	12-10
13	Set U	p Resource Requirements Plans	
	13.1	Setting Up Resource Requirements Plans	13-1
	13.2	Setting Up Resource Requirements Display	
	13.3	Setting Up Unit Types	13-2
14	Set U	p Resource Requirements Planning	
	14.1	Setting Up Resource Requirements Planning	14-1
	14.2	Resource Profile	
	14.2.1	Overview	
	14.2.2	Calculating the Resource Profile	14-3
	14.2.3	Using the Resource Profile	
Par	t IV	Single Level Master Scheduling	
15	Over	view to Single Level Meeter Schoduling	
15		view to Single Level Master Scheduling	
	15.1	Objectives	
	15.2	About Single Level Master Scheduling	
	15.2.1	Master Scheduling Applications	15-2
16	Unde	rstand Time Fences and System Messages	
	16.1	About Time Fences	16-1
	16.1.1	What Are Time Fence Rules?	16-2
	16.1.2	What Are the Time Series Calculations?	16-3
	16.2	About System Messages	16-5
17	Gene	rate Single Level Master Schedules	
	17.1	Generating Single Level Master Schedules	17-1
	17.1.1	Before You Begin	
		<u> </u>	

	17.1.2	Net Change Flag Update	17-1
	17.1.3	Net Change Flag Control	17-2
	17.2	Generating a Master Schedule for All Items	
	17.2.1	Data Selection	17-3
	17.2.2	Data Sequence	
	17.2.3	Processing Options	
	17.3	Reviewing Items for Master Schedule Selection	
	17.3.1	Processing Options	
	17.4	Generating a Master Schedule for Selected Items	
	17.4.1	Data Selection Values	
18	Work	ing with Forecast Consumption	
	18.1	About Forecast Consumption	18-1
	18.2	Setting Up Forecast Consumption	18-1
	18.2.1	Adding Planning Fence Information	
	18.2.2	Adding Sales Order Document Type	18-3
	18.2.3	Defining Monthly Forecast Consumption Periods	
	18.2.4	Processing Options - Planning Generation	
	18.2.5	Processing Options - Time Series	
	18.3	Forecast Consumption Example	
19	Work	with Master Schedules	
	19.1	Working with Master Schedules	19-1
	19.2	Reviewing DRP/MPS Time Series	
	19.2.1	Quantity Types for DRP and MPS	
	19.2.2	What You Should Know About	
	19.2.3	Processing Options	
	19.3	Reviewing Planning Families	
	19.3.1	Processing Options	
	19.4	Working with Messages	
	19.4.1	What You Should Know About	
	19.4.2	Reviewing Detail Messages	
	19.4.3	Processing Work Order Messages	
	19.4.3.	· · · · · · · · · · · · · · · · · · ·	19-10
	19.4.4	Processing Purchase Order Messages	19-11
	19.4.4.		19-11
	19.4.5	Processing Options	19-16
	19.5	Adding a Freeze Code to a Purchase Order	19-16
	19.6	Adding a Freeze Code to a Work Order	19-17
20	Valid	ate Master Schedules	
	20.1	Validating Master Schedules	20-1
	20.1.1	What You Should Know About	
	20.2	Generating Rough Cut Capacity Plans	
	20.2.1	Before You Begin	
	20.2.2	What You Should Know About	

	20.2.3	Processing Options	20-4
	20.3	Reviewing Work Schedules on Production Status	20-4
	20.3.1	Processing Options	20-6
	20.4	Reviewing Rate Schedule and Work Center Loads	20-6
	20.4.1	Processing Options	20-7
21	Set U	p DRP, MPS, and RCCP	
	21.1	Setting Up DRP, MPS and RCCP	21-1
	21.2	Setting Up Supply and Demand Inclusion Rules	21-1
	21.2.1	Processing Options	21-3
	21.3	Setting Up Message Types for DRP, MPS and RCCP	21-3
	21.4	Setting Up Time Fence Rules for DRP, MPS and RCCP	21-5
	21.5	Setting Up Forecast Consumption Periods	21-6
	21.5.1	Before You Begin	21-6
	21.6	Setting Up a Rough Cut Capacity Display	21-7
22	Proce	ess Orders	
	22.1	Processing Orders	22-1
	22.1.1	Before You Begin	22-1
	22.1.2	Processing Options	22-1
23	Plan	Bills in the MPS/DRP System	
	23.1	Purpose	23-1
	23.2	Demand Structure	23-1
	23.2.1	Component Item Master/Item Branch Plant Information	23-2
	23.2.2	Bill of Material Record	23-2
	23.3	Gross Regeneration	23-4
Par	t V N	Iulti-Level Master Scheduling	
		iana 2010. master consaamig	
24	Over	view to Multi-Level Master Scheduling	
	24.1	Objectives	24-1
	24.2	About Multi-Level Master Scheduling	24-1
	24.2.1	What Are Planning Bills?	24-2
	24.2.2	Example: Exploding Planned Orders	24-3
25	Set U	p Multi-Level Master Schedules	
	25.1	Setting Up Multi-Level Master Schedules	25-1
	25.1.1	Before You Begin	25-1
	25.2	Setting Up Order Policy Rules	25-2
	25.2.1	What You Should Know About	25-2
	25.3	Setting Up Stocking Types	25-4
	25.4	Setting Up Feature Planned Percents	25-5

26	Gene	erate Multi-Level Master Schedules	
	26.1	Generating Multi-Level Master Schedules	26-1
	26.1.1	Before You Begin	26-1
	26.1.2	What You Should Know About Processing Options	26-2
Par	t VI N	Manufacturing and Distribution Environments	
27	Over	view to Manufacturing and Distribution Environments	
	27.1	Objectives	27-1
	27.2	About Manufacturing and Distribution Environments	27-1
	27.2.1	Discrete Manufacturing	27-2
	27.2.2	Batch Manufacturing	27-2
	27.2.3	Rate-Based Manufacturing	27-2
	27.2.4	Process Manufacturing	27-2
	27.2.5	Distribution	27-3
	27.2.6	What You Should Know About	27-3
28	Work	with Batch Manufacturing	
	28.1	Working with Batch Manufacturing	28-1
	28.2	Creating Batch Bills of Material	28-2
	28.2.1	Before You Begin	28-2
	28.2.2	Processing Options	28-4
	28.3	Creating Batch Routings	28-4
	28.3.1	Before You Begin	28-4
	28.3.2	Processing Options	28-6
	28.4	Processing Batch Work Orders	28-6
	28.5	Generating MPS for Batch Bills	28-7
	28.6	Reviewing Batch Output from the MPS Generation	
	28.6.1	Example: Reviewing the Time Series for Batch Output	28-9
	28.6.2	What You Should Know About	28-9
29	Work	with Repetitive Manufacturing	
	29.1	Working with Repetitive Manufacturing	29-1
	29.2	Defining Order Policy for Repetitive Items	29-2
	29.3	Creating Repetitive Routings	29-4
	29.4	Creating Line/Item Relationships	29-5
	29.5	Creating Rate Schedules	29-7
	29.5.1	Before You Begin	29-7
	29.5.2	What You Should Know About	29-10
	29.6	Generating MPS for Repetitive Items	29-10
	29.6.1	What You Should Know About	29-10
	29.7	Reviewing Repetitive Rate Scheduled Output from MPS Generation	29-10
	29.7.1	What You Should Know About	29-12
	29.7.2	What You Should Know About	29-14
	29.8	Validating Load on Lines or Cells	29-14

	29.8.1	Processing Options	29-15
30	Work	with Process Manufacturing	
	30.1	Working with Process Manufacturing	30-1
	30.2	Defining the Stocking Types for Processes	30-3
	30.3	Defining Co- and By-Products	30-4
	30.4	Generating MPS for the Process Industry	30-6
	30.4.1	What You Should Know About	30-7
	30.5	Reviewing Process Output from MPS Generation	30-7
	30.5.1	What You Should Know About	30-8
	30.5.2	Example: Reviewing Time Series for Pacing Co-Products	30-8
	30.5.2.	.1 What You Should Know About	30-11
	30.5.3	Processing Options	30-11
Par 31		DRP/MPS Multi-Facility Scheduling view to DRP/MPS Multi-Facility Scheduling	
31		, c	01.1
	31.1 31.2	Objectives	
	31.2.1	About DRP/MPS Multi-Facility Scheduling	
	31.2.1	What Are the Different Types of Multi-Facility Scheduling?	31-2
32	Set U	Jp Multi-Facility Schedules	
	32.1	Setting Up Multi-Facility Schedules	32-1
	32.1.1	Before You Begin	32-1
	32.2	Setting Up Supply and Demand Relationships	32-1
	32.2.1	What You Should Know About	32-8
	32.2.2	Processing Options	32-8
	32.3	Reviewing Branch Relationships on the Relationships Chart	32-8
	32.3.1	Processing Options	32-10
33	Gene	erate Multi-Facility Schedules	
	33.1	Generating Multi-Facility Schedules	33-1
	33.1.1	Before You Begin	
	33.1.2	Processing Options	
34	Work	with Multi-Facility Planning Output	
	34.1	Working with Multi-Facility Planning Output	34-1
	34.1.1	Before You Begin	
	34.2	Reviewing Multi-Facility Time Series	34-1
	34.3	Processing Multi-Facility Transfer Order Messages	
	34.4	Reviewing Transfer Messages	
	34.4.1	Processing Options	34-4
	34.4.2	Batch Process to Create Transfer Orders	

Part VIII Single Facility Material Requirements Planning

35	Overv	view to Single Facility Material Requirements Planning	
	35.1	Objectives	35-
	35.2	About Single Facility MRP	35-
	35.2.1	How Do You Use Bills of Material in MRP?	35-
	35.2.2	What Are the Differences Between MRP and MPS?	35-
	35.2.3	How Do You Run MRP Effectively?	35-
36	Gene	rate Material Requirements Plans	
	36.1	Generating Material Requirements Plans	36-
	36.1.1	Before You Begin	36-
	36.1.2	What You Should Know About	36-
37	Work	with Material Requirements Plans	
	37.1	Working with Material Requirements Plans	37-
	37.2	Reviewing MRP Time Series	37-
	37.2.1	Before You Begin	37-2
	37.3	Reviewing Planning Families for MRP	37-
	37.4	Working with Messages for MRP	37-
	37.4.1	Reviewing MRP Detail Messages	37-
	37.4.1.	1 What You Should Know About	37-
	37.4.2	Reviewing Quantity Types for MRP	37-
	37.4.3	Processing Work Order Messages for MRP	37-
	37.4.4	Processing Purchase Order Messages for MRP	37-
	37.5	Working with Scheduling Information	37-0
	37.5.1	Reviewing MRP Pegging Demand	37-0
	37.5.1.	1 Processing Options	37-
	37.5.2	Reviewing MRP Supply and Demand	
	37.5.2.	1 Processing Options	37-9
	37.5.3	Reviewing Shop Floor Workbench for MRP	37-
	37.5.3.	1 What You Should Know About	37-1
	37.5.3.2	Processing Options	37-1
	37.5.4	Reviewing Leadtime for MRP	37-1
	37.5.4.	1 Processing Options	37-1
38	Valida	ate Material Requirements Plans	
	38.1	Validating Material Requirements Plans	38-
	38.1.1	What You Should Know About	38-2
	38.2	Generating Capacity Requirements Plans	38-2
	38.2.1	Before You Begin	38-2
	38.3	Reviewing Capacity Requirements Plans	38-
	38.3.1	Reviewing Dispatch Groups for Capacity Requirements Planning	
	38.3.2	Reviewing Work Center Load for Capacity Requirements Planning	38-
	38.3.2.	1 Before You Begin	38-4
	38.3.3	Reviewing Period Summaries for Capacity Requirements Planning	38-4
	38.3.3.	1 Processing Options	38-

45.1	Objectives	45-1
44.3	Processing MRP Transfer Order Messages	44-2
44.2	•	
44.1.1	Before You Begin	44-1
44.1	Working with MRP Multi-Facility Planning Output	44-1
Work	with MRP Multi-Facility Planning Output	
43.1.2	What You Should Know About	43-1
43.1 43.1.1	Generating Multi-Facility Requirements Plans	43-1 43-1
42.3	Reviewing with dranch relationships on the relationships Chart	42-2
		42-2 42-2
42.1.1	ě	
42.1	Setting Up Multi-Facility Requirements Plans	42-1
Set U	p Multi-Facility Requirements Plans	
41.2	About MRP Multi-Facility Scheduling	41-1
41.1		41-1
Over	view to MRP Multi-Facility Scheduling	
t IX N	IRP Multi-Facility Scheduling	
40.1	Processing Orders for MRP	40-1
Proce	ess Orders for MRP	
39.6	Setting Up the Capacity Requirements Display	39-4
39.5.1	Before You Begin	
39.5	v ·	
	0 1 0 11	
	0 1 11 7	39-2 39-2
39.1		
Set U	p Material & Capacity Requirements Planning	
30.3.0	validating Capacity Requirements Flans	30-7
38.3.4	Reviewing MRP Work Schedules on the Dispatch List	38-6
	38.3.4. 38.3.5 38.3.6 Set U 39.1 39.2 39.3 39.4 39.5 39.5.1 39.6 Proce 40.1 t IX N Overv 41.1 41.2 Set U 42.1 42.1 42.2 42.3 Gene 43.1 43.1.1 43.1.2 Work 44.1 44.1.1 44.2 44.3 t X S Overv	38.3.4.1 What You Should Know About 38.3.5 Reviewing MRP Rate Schedule and Work Order Loads 38.3.6 Validating Capacity Requirements Plans Set Up Material & Capacity Requirements Planning 39.1 Setting Up Material and Capacity Requirements Planning. 39.2 Setting Up Material and Capacity Requirements Planning. 39.3 Setting Up MRP Supply and Demand Inclusion Rules. 39.4 Setting Up Time Fence Rules for MRP. 39.5 Selting Up Forecast Consumption Periods for MRP. 39.5 Setting Up the Capacity Requirements Display. Process Orders for MRP. 40.1 Processing Orders for MRP. 41.1 Objectives 41.2 About MRP Multi-Facility Scheduling Overview to MRP Multi-Facility Scheduling Set Up Multi-Facility Requirements Plans 42.1 Setting Up Multi-Facility Requirements Plans 42.1 Setting Up Multi-Facility Requirements Plans 42.1 Setting Up MRP Supply and Demand Relationships. 42.2 Setting Up MRP Supply and Demand Relationships Chart 42.3 Reviewing MRP Branch Relationships on the Relationships Chart 43.1 Generating Multi-Facility Requirements Plans 43.1.1 Before You Begin 43.1.2 What You Should Know About Work with MRP Multi-Facility Planning Output 44.1 Norking with MRP Multi-Facility Planning Output 44.1 Before You Begin 44.2 Reviewing the Time Series for MRP Multi-Facility 44.3 Processing MRP Transfer Order Messages 45 X Supplier Scheduling Overview to Supplier Scheduling

	45.2	About Supplier Scheduling	45-1
	45.2.1	What Is the Effective Date Range?	45-2
	45.2.2	What Is a Blanket Purchase Order?	45-2
	45.2.3	What Is a Blanket Order Release?	45-2
	45.2.4	What Are the Steps for Creating a Supplier Schedule?	45-3
46	Defin	ne Supplier Contracts	
	46.1	Defining Supplier Contracts	46-1
	46.2	Defining Supplier Contract Information	
	46.2.1	Before You Begin	46-2
	46.2.2	What You Should Know About	46-3
	46.2.3	Processing Options	46-4
	46.3	Generating and Revising Shipment Dates	
	46.4	Defining Supplier Split Percentages	
	46.4.1	Processing Options	46-7
47	Gene	erate Supplier Schedules	
	47.1	Generating Supplier Schedules	47-1
	47.1.1	Before You Begin	47-1
	47.1.2	What You Should Know About	47-2
	47.1.3	Processing Options	47-2
48	Revis	se Supplier Schedules	
	48.1	Revising Supplier Schedules	48-1
	48.1.1	What You Should Know About	48-4
	48.1.2	Processing Options	48-4
49	Relea	ase Supplier Schedules	
	49.1	Releasing Supplier Schedules	49-1
	49.1.1	Before You Begin	49-1
	49.1.2	What You Should Know About	49-2
	49.1.3	Processing Options	49-2
50	Print	Supplier Schedules	
	50.1	Printing Supplier Schedules	50-1
	50.1.1	Before You Begin	50-1
	50.1.2	Processing Options	50-1
Par	t XI F	Processing Options	
51	Item	Master and Item/Branch Review Processing Options	
	51.1	Item Master Revisions (P4101)	51-1
	51.2	Branch/Plant Item Information (P41026)	
	51.3	Item / Branch Duplication (P41015)	

52	Fore	casting Review Processing Options	
	52.1	Forecast Generation (P34650)	52-1
	52.2	Forecast Review (P34201)	52-3
	52.3	Forecast Revisions (P3460)	52-3
53	Reso	urce Requirements Planning Processing Options	
	53.1	Work Center Resource Units (P3007)	53-1
	53.2	Work Center Resource Units Refresh (P3007G)	53-1
	53.3	Resource Profile Regeneration (P3365)	53-2
	53.4	Resource Requirements Planning (P3380)	53-2
	53.5	Message Inquiry (P3301)	53-3
	53.6	Load (P3313)	53-3
	53.7	Load Bar Graph (P3313B)	53-3
	53.8	Period Summary (P3312)	53-4
	53.9	Message Detail (P3311)	53-4
54	Singl	e Level Master Scheduling Processing Options	
	54.1	Master Planning Schedule - Plant Maintenance (P3482)	54-1
	54.2	Net Change Review (P3402)	54-4
	54.3	Time Series (P3413)	54-4
	54.4	Master Planning Schedule - Plant Maintenance (P3482)	
	54.5	Multi-Facility - Gross Regeneration (P3483)	54-8
	54.6	Planning (P3382)	54-12
	54.7		54-12
	54.8	Production Status (P31226)	54-13
	54.9	Supply/Demand Inclusion Rules (P34004)	54-13
	54.10	Review Planning Family (P3401)	54-13
	54.11	Generate and Print Work Orders (P31410)	54-14
55	Manu	Ifacturing and Distribution Environments Processing Options	
	55.1	Bill of Material Revisions (P3002)	55-1
	55.2	Routing Master Revisions (P3003)	
	55.3	Schedule Review (P3152)	
	55.4	Message Detail (P3411)	
56	DRP/	MPS Multi-Facility Scheduling Processing Options	
	56.1	Branch Relationship Revisions (P3403)	56-1
	56.2	Branch Relationships Chart (P34031)	56-1
	56.3	Multi-Facility - Gross Regeneration (P3483)	56-2
	56.4	Transfer Order Review (P3421)	
57	Singl	e Facility Material Requirements Planning Processing Options	
	57.1	Pegging (P3412)	57-1
	57.2	Supply & Demand (P4021)	
	57.3	Manufacturing Scheduling Workbench (P31225)	57-4

	57.4	Lead Time Inquiry (P30207)	57-5
	57.5	Period Summary (P3352)	57-6
58	Supp	lier Scheduling Processing Options	
	58.1	Supplier/Blanket Information (P4321)	58-1
	58.2	Supplier Split Percentages (P43211)	58-1
	58.3	Generate Supplier Schedule (P34400)	58-2
	58.4	Supplier Schedule Revisions (P34301)	58-2
	58.5	Release Supplier Schedule (P34410)	58-3
	58.6	Print Supplier Schedule (P34450)	58-3
A	Action	n Messages	
	A.1	About Action Messages	A-1
В	Funct	ional Servers	
	B.1	About Functional Servers	B-1
	B.1.1	Example: Voucher Processing Functional Server	B-2
С	Time	Series Quantity Types	
	C.1	About Time Series Quantity Types	C-1
Inc	lex		

Preface

Welcome to the JD Edwards World Manufacturing and Distribution Planning Guide.

Audience

This document is intended for implementers and end users of JD Edwards World Manufacturing and Distribution Planning system.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

You can access related documents from the JD Edwards World Release Documentation Overview pages on My Oracle Support. Access the main documentation overview page by searching for the document ID, which is 1362397.1, or by using this link:

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=1362397.1

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Overview to Manufacturing and Distribution **Planning**

This chapter contains these topics:

- Section 1.1, "Resource and Capacity Planning,"
- Section 1.2, "Material Planning Operations,"
- Section 1.3, "System Integration,"
- Section 1.4, "Terms and Concepts,"
- Section 1.5, "Planning and Production Environments,"
- Section 1.6, "Planning a Total Business Solution,"
- Section 1.7, "Tables for Manufacturing and Distribution Planning,"
- Section 1.8, "Menu Overview."

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 (ERPx). ERPx 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. ERPx formalizes the activities of company and operations planning.

1.1 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.

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

1.2 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:

Component	Description
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.

1.3 System Integration

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

System	Description
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.

System	Description
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.

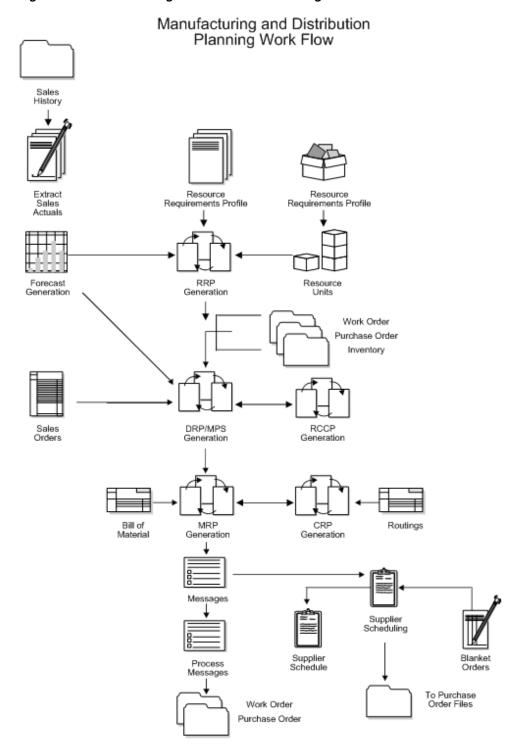


Figure 1–1 Manufacturing and Distribution Planning Work Flow

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

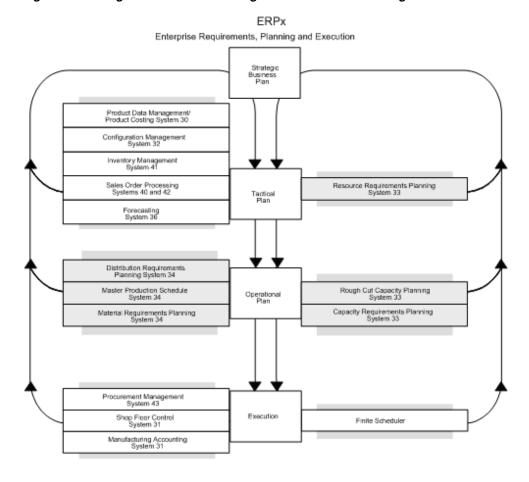


Figure 1–2 Integration of Manufacturing and Distribution Planning

1.4 Terms and Concepts

Manufacturing and Distribution Planning encompasses:

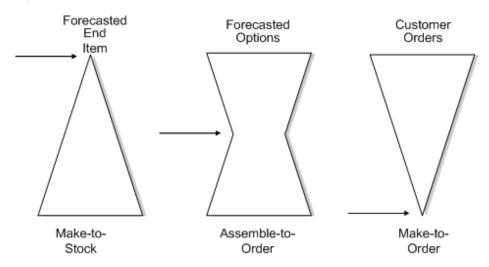
Component	Description
Bills of material	The components and relationships required to produce a parent item. Use bills of material to:
	 Maintain many configurations for an item without creating additional part numbers
	 Define quantities of intermediate products in any unit of measure as they progress through the manufacturing process
	 Enter similar items by copying bills of material, routings, and processes
Routings	The operations required to produce the parent item. Use routings to:
	 Define each step of the manufacturing process with allowances for anticipated yield and scrap
	 Add alternate operations to routings

Component	Description
Work centers	The facilities on the shop floor where the routing operations occur. Use work centers to:
	 Define work center number and description
	 Define the number of operators or machines
	 Define setup, labor, machine, and overhead rates
	 Define information for Capacity Planning
Engineering change orders (ECOs)	The document that you use to define and implement changes to your products structure. Use engineering change orders to:
	 Control item changes from a single source
	 Incorporate approved changes to bills of material

1.5 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.

Figure 1-3 Customer Impact on Product Development



Option	Description
Make-to-stock	You meet your customer after the product is completed. This environment generally involves retail items. Forecasting of end items is a crucial factor.
Assemble-to-order	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:
	 Items are configured according to formally set rules
	 Items are forecasted and master schedules are created at the option level

Option	Description
Make-to-order	You meet your customer before you begin production at any level in the product structure. This includes the following factors:
	 Products are customized for specific needs
	 Capacity needs are forecasted
	 Production requires longer lead times
Engineer-to-order	You add engineering design time into the lead time. This might use a job cost business solution.

1.6 Planning a Total Business Solution

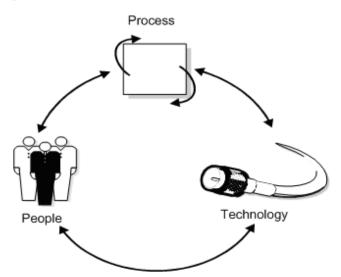


Figure 1–4 Elements of a Total Business Solution

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.
Process	To develop the policies and practices to manage effectively, you can employ:
	 Business process re-engineering
	 Best manufacturing practices
	 Formal documentation of the process that is approved by management
Technology	To acquire the best tools to do the job, you should use:
	 JD Edwards World software
	 Complementary products
	 AS/400 or open systems platforms

1.6.1 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:
	 Committing the time and financial resources to do it right the first time
	 Empowering the implementation team with the authority, responsibility, and accountability to do the job
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.
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.

1.6.2 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.

1.6.3 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.

1.7 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.
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.

1.8 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**

1.8.1 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

Fast Path	Menu	Title
DCRP	G3313	Daily Capacity Requirements Planning
PCAP	G3321	Periodic Resource/Capacity Planning
CAPS	G3341	Resource/Capacity Planning Setup

1.8.2 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
SMP	G3443	Set Up Multi-Plant Material Planning

Part I

Item Master and Branch/Plant Review

This part contains these chapters:

- Chapter 2, "Overview to Item Master and Branch/Plant Review,"
- Chapter 3, "Enter Item Master Information,"
- Chapter 4, "Enter Branch/Plant Information."

Overview to Item Master and Branch/Plant Review

This chapter contains these topics:

- Section 2.1, "Objectives,"
- Section 2.2, "About Item Entry."

2.1 Objectives

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

2.2 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.

Inventory Management Purchase Sales Orders Orders Shipping Warehousing Manufacturing **Bulk Products** Item Information

Figure 2–1 Inventory Information to Process in Distribution and Manufacturing

Entering an item includes two steps:

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

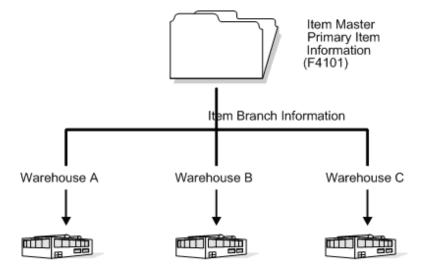


Figure 2-2 Customizing Item Master Information

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).

Figure 2-3 Item Branch Master and Item Location Information Tables



Item Branch Master

Item information that appies throughout the branch, such

- * 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

2.2.1 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

Enter Item Master Information

This chapter contains these topics:

- Section 3.1, "Entering Item Master Information,"
- Section 3.2, "Entering Basic Item Information,"
- Section 3.3, "Entering Item Text,"
- Section 3.4, "Assigning Item Responsibility,"
- Section 3.5, "Entering Item Classification Codes,"
- Section 3.6, "Entering Item Unit of Measure Information,"
- Section 3.7, "Entering Item Manufacturing Information,"
- Section 3.8, "Entering Item Grade and Potency Information."

3.1 Entering Item Master Information

Navigation

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).

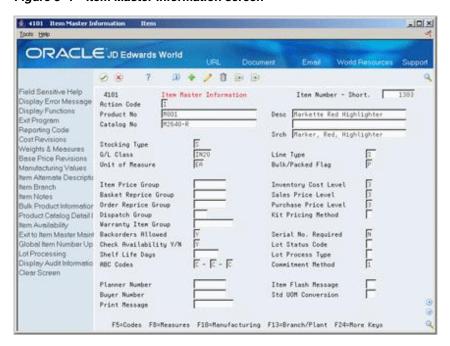


Figure 3-1 Item Master Information screen

3.1.1 What You Should Know About

Topic	Description	
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 Set Up UCC 128 Processing in the <i>JD Edwards World Sales Order Management Guide</i> .	

See Also:

- Entering Item Cost Information in the JD Edwards World Inventory Management Guide for information about entering master information that pertains to item costs,
- Entering Sales Price Information in the JD Edwards World Inventory Management Guide for information about entering master information that pertains to item prices.

3.2 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.

3.2.1 What You Should Know About

Topic	Description
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 in the JD Edwards World Inventory Management Guide for more information about specifying the primary item identifier.

To enter item identifiers

On Item Master Information

Complete the following fields:

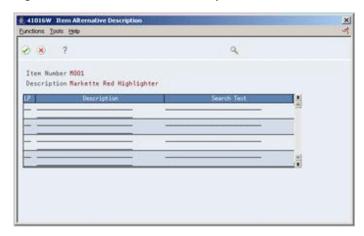
- Item Number-Short
- Product No (Product Number)
- Catalog No (Catalog Number)

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)
- To enter descriptions and search text in alternate languages, access Item Alternative Description.

Figure 3–2 Item Alternative Description screen



- 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**

Field	Explanation
Item Number - Short	An identifier for an item.
	Form-specific information
	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.
	If you leave the other two item identifier fields blank, the system copies this number to those fields.
Product No	An identifier for an item.
	Form-specific information
	The second of three identifiers that you can assign to an item. This field is alphanumeric.
	If you leave the third identifier field blank, the system copies this number to that field.
Catalog No	An identifier for an item.
	Form-specific information
	The third of three identifiers you can assign to an item. This field is alphanumeric.
	If you leave the second identifier field blank, the system copies that number to this field.
Description:	A brief description of an item, a remark, or an explanation.
Srch:	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.
	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.
	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).
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
G/L Class	A user-defined code (system 41/type 9) that controls which general ledger accounts receive the dollar amount of inventory transactions for this item.

Field	Explanation
Line Type	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:
	S – Stock item
	J – Job cost
	N – Non-stock item
	F – Freight
	T – Text information
	M – Miscellaneous charges and credits
	W – Work order
Bulk/Packed Flag	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 – Packaged
	B – Bulk liquid
	If you leave this field blank, the system uses P.
Backorders Allowed	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).
	Y – Yes, allow backorders for this item.
	N – No, do not allow backorders for this item, regardless of the backorders code assigned to the customer.
	Note: 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.
Unit of Measure	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.
	Form-specific information
	The default for this field is the primary unit of measure you specify in processing options.
Check Availability Y/N	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:
	Y – Check availability
	N – Do not check availability

Field	Explanation
ABC Codes	A code that specifies this item's ABC ranking by sales amount.
	Valid values are:
	A – Assign this item to the first (largest) amount ranking.
	B – Assign this item to the second (intermediate) amount ranking.
	C – Assign this item to the third (smallest) amount ranking.
	D – Do not include this item when you run ABC Analysis.
	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.
	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.
	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:
	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.
	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.
	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.

3.3 Entering Item Text

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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.

3.3.1 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

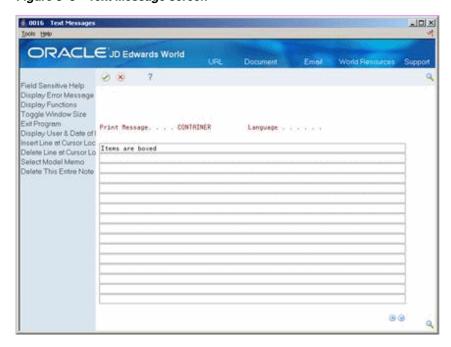
Complete the following fields:

- Print Message
- Item Flash Message

To enter notes for an item

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

Figure 3-3 Text Message screen



- On Text Messages, enter the appropriate text.
- 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.

Field	Explanation
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.

3.4 Assigning Item Responsibility

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

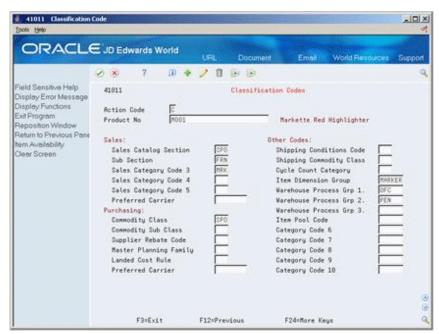
When you enter master information for an item, you can specify those persons or businesses that are responsible for the item, including the buyer, planner, and preferred carriers.

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

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

Figure 3-4 Classification Code screen



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 JD Edwards World Address Book and Electronic Mail Guide for more information about adding address numbers.

3.5 Entering Item Classification Codes

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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

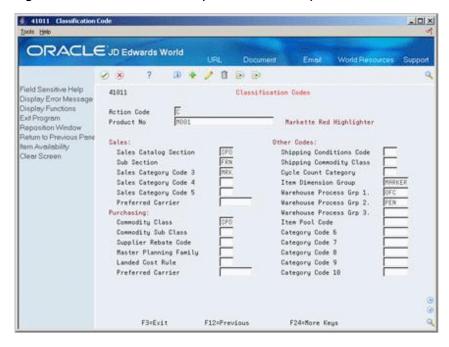
Enter warehouse classification codes

To enter sales classification codes

On Item Master Information

Access Classification Code (F5).

Figure 3–5 Classification Code (Enter Sales Codes) screen



- 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

- Access Classification Code (F5).
- 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

- Access Classification Code (F5).
- 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

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.
Category Code 6	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.
	This field is one of ten classification categories available primarily for sales purposes.

Field	Explanation
Commodity Class	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.
	This field is one of six classification categories available primarily for purchasing purposes.
Commodity Sub Class	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.
	This field is one of six classification categories available primarily for purchasing purposes.
Supplier Rebate Code	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.
	This field is one of six classification categories available primarily for purchasing purposes.
Master Planning Family	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.
	This field is one of six classification categories available primarily for purchasing purposes.
Landed Cost Rule	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.
	Form-specific information
	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.
	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.
Shipping Conditions Code	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.
	This field is one of three classification categories available primarily for inventory and shipping purposes.
Shipping Commodity Class	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.
	This field is one of three classification categories available primarily for inventory and shipping purposes.
Cycle Count Category	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.
	Form-specific information
	This inventory classification category is hard coded. You can use it for cycle count codes only.

Field	Explanation
Item Dimension Group	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.
Warehouse Process Grp 1	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.
	Form-specific information
	You must define at least one process group for each item to have warehouse processes take place.
	You use Process Selection to define putaway, picking, and replenishment instructions for warehouse process groups.

3.6 Entering Item Unit of Measure Information

Navigation

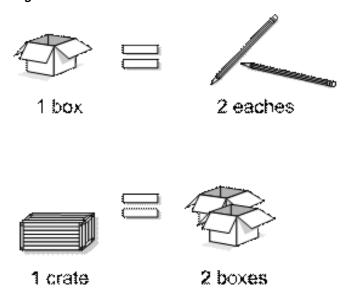
From Inventory Management (G41), choose Inventory Master/Transactions

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

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.

Figure 3-6 Item Unit of Measure Information



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 in the JD Edwards World Inventory Management Guide.

To enter default units of measure for items

On Item Master Information

Choose Weights & Measures (F8).

41012 Default Units of Meas - O X ORACLE JD Edwards World 0 8 7 D + 1 B B Field Sensitive Help 41812 Default Units of Measure Display Error Message Display Functions Action Code Exit Program Item Number Reposition Window Markette Red Highlighter Exit to Unit of Measure Unit of Reasure: Return to Previous Pane ER Each Primaru Exit to Item Availability Secondary Case 02 Dozen 02 Dozen Clear Screen Purchasing Pricing Shipping Production Each Component Each Weight Pounds FC Cubic Feet Volume F12=Previous F24=More

Figure 3–7 Default Units of Measure screen

- On Default Units of Measure, complete the following field to locate the item:
 - Item Number
- Complete the following fields:
 - Primary

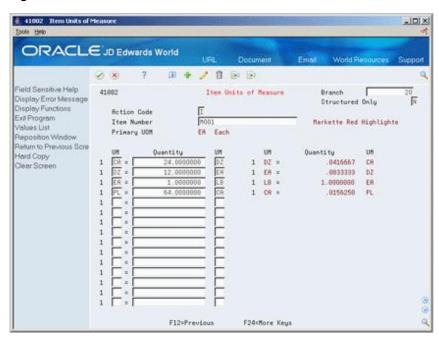
- Secondary
- Purchasing
- Pricing
- Shipping
- Production
- Component
- Weight
- Volume

To define item unit of measure conversions

On Item Master Information

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

Figure 3-8 Item Units of Measure screen



- 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.

- 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	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.
	Form-specific information
	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.
	The default for this field is the unit of measure that you specify for the item on Item Master Information.
Secondary	A code that indicates an alternate unit of measure for the item. See the User Defined Code table for system 00, record type UM.
	Form-specific information
	The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.
Purchasing	A user-defined code (00/UM) that identifies the unit of measure in which you usually purchase the item.
	Form-specific information
	The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.
Pricing	A code (system 00/type UM) that indicates the unit of measure in which you usually price the item.
	Form-specific information
	The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.
Shipping	A code (table 00/UM) that indicates the unit of measure in which you usually ship the item.
	Form-specific information
	The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.
Production	A code (table 00/UM) that indicates the unit of measure in which you produce the item.
	Form-specific information
	The default for this field is the primary unit of measure that you specify in processing options for Item Master Information.
	This code serves as the default for:
	 The order quantity when you create a work order
	 The batch quantity when you create a new bill of material or routing
	■ The rate schedule quantity in Rate Schedule Revision

Field	Explanation
Component	A code (table $00/UM$) that indicates the unit of measure for an item when it serves as a component.
	Form-specific information
	The default for this field is the primary unit of measure that you specify in the processing options for Item Master Information.
	This code serves as the default value for:
	 The quantity per parent when you add the component item to a bill of material or work order parts list
	 The quantity in the assembly inclusion rules in Configuration Management
Weight	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.
	Form-specific information
	The default for this field is the weight unit of measure you specify in processing options for Item Master Information.
Volume	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.
Structured Only	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.
	Form-specific information
	If you use the Advanced Warehouse Management system, you must structure conversions from large to small. For example:
	 1 Pallet (24 Cases) - Structure Code 1
	■ 1 Case (36 Boxes) - Structure Code 2
	 1 Box (6 Eaches) - Structure Code 3
	You assign structure code 1 to the largest unit of measure and codes 2, 3, and so on, to the smaller units of measure.
	Note: You do not have to define the primary unit of measure within a structure. This value is always the default for the lowest level.
UM	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.
	Form-specific information
	This unit of measure to which you are converting.
Quantity	The factor that the system uses to convert one unit of measure to another unit of measure.
	Form-specific information
	The quantity and the unit of measure from which you are converting must equal the unit of measure to which you are converting.

3.7 Entering Item Manufacturing Information

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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:

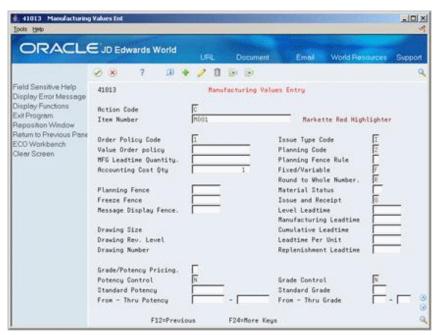
- Enter requirements planning information
- Enter leadtime information
- Enter engineering information

To enter requirements planning information

On Item Master Information

Access Manufacturing Values (F10).

Figure 3-9 Manufacturing Values Entry screen



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

- Access Manufacturing Values (F10).
- 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

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

Field	Explanation
Value Order policy	A field that the system uses in conjunction with the order policy code. It can show three types of data:
	 The value of the fixed order quantity when you select order policy code 2 (fixed order quantity).
	 The number of additional days of supply after demand is encountered when you select order policy code 4 (periods of supply).
	■ 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.

Field	Explanation
Planning Code	A code that indicates how Master Production Schedule (MPS), Material Requirements Planning (MRP), or Distribution Requirements Planning (DRP) processes this item. Valid codes are:
	0 – Not Planned by MPS, MRP, or DRP
	1 – Planned by MPS or DRP
	2 – Planned by MRP
	3 – Planned by MRP with additional independent forecast
	4 – Planned by MPS, Parent in Planning Bill
	5 – Planned by MPS, Component in Planning Bill
	These codes are hard-coded.
Planning Fence Rule	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.
	For example:
	S – Use customer demand before the time fence and forecast after the time fence
	F – Use forecast before the time fence and forecast plus customer demand after the time fence
	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.
	Valid codes are:
	C – Customer demand before, greater of forecast or customer demand after
	F – Forecast before, forecast plus customer demand after
	G – Greater of forecast or customer demand before, forecast after
	S- Customer demand before, forecast after
	1- Zero before, forecast after
	3 – Zero before, forecast plus customer demand after
Accounting Cost Qty	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.
Round to Whole Number	A code that determines if an item should be rounded to the closest whole number for planning purposes. Valid codes are:
	R – Round to the closest whole number.
	Blank – Do not round.
	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.

Field	Explanation
Planning Fence	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.
	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.
Freeze Fence	The number of days from the generation start date within which the system should not generate order messages.
	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 $01/07/99$.
Message Display Fence	The number of days after the generation start date that the system should not generate order messages.
	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.
MFG Leadtime Quantity	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.
Fixed/Variable	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:
	F – Fixed lead time - The system calculates work order start dates using the value from the Leadtime Level field.
	V – Variable lead time - The system calculates work order start dates using the value from the Leadtime Per Unit field.
Level Leadtime	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:
	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).
Manufacturing Leadtime	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.
	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.
	You can enter the manufacturing lead time manually or you can have the system calculate it when you run the Leadtime Rollup program.

Field	Explanation
Cumulative Leadtime	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.
	Manufactured - The total of all level lead times for all manufactured items, plus the highest cumulative lead time of all its components.
	Purchased - The item's level lead time. Purchased item lead times are included in the calculation of cumulative lead times.
	You can enter this value manually or you can have the system calculate it when you run the Leadtime Rollup program.
Leadtime Per Unit	The total number of hours required to build one unit as specified on the routing. This value is factored by the time basis code.
	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.
	The system uses this field to calculate start dates for work orders when you use variable lead times.
Issue Type Code	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. Valid codes are:
	I – Manual issue (default)
	F – Floor stock (no issue)
	B- Backflush (when part is reported as complete)
	P – Preflush (when parts list is generated)
	U – Super backflush (at pay-point operation)
	S – Sub-contract item (send to supplier)
	Blank – Shippable end item
	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.
Drawing Size	A code that represents the engineering drawing size. For example:
	A – A-size drawing
	D – D-size drawing
Drawing Rev. Level	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.
Drawing Number	An engineering drawing number that might be the same as the part or item number.

3.8 Entering Item Grade and Potency Information

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions From Inventory Master/Transactions (G4111), choose Item Master Information 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 in the JD Edwards World Inventory Management Guide for information about specifying grade and potency values for lots.

To enter item grade and potency information

- Access Manufacturing Values (F10).
- 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	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:
	Blank – No potency or grade pricing
	1 – Potency pricing
	2 – Grade pricing
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.

Field	Explanation
From Potency	A number that indicates the minimum potency, or percentage of active ingredients, acceptable for an item.
	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.
Thru Potency	A number that indicates the maximum potency, or percentage of active ingredients, that is acceptable for an item.
	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.
Grade Control	A code that indicates whether you control the item by grade.
Standard Grade	A code (table $40/LG$) that represents the normal grade for an item.
From Grade	A code (system 40, type LG) that indicates the minimum grade that is acceptable for an item.
	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.
Thru Grade	A code (system 40, type LG) that indicates the maximum grade that is acceptable for an item.
	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.

3.8.1 What You Should Know About

Торіс	Description
Lots	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.
Grade and potency ranges for sales purposes	You can specify an acceptable grade or potency range for each of your customers using preference profiles.
	For more information, see Work with the Preference Master and Hierarchy in the <i>JD Edwards World Sales Order Management Guide</i> .

See Also:

Entering Information for Lots in the JD Edwards World Inventory Management Guide for information about specifying grade and potency values for lots.

3.8.2 Processing Options

See Section 51.1, "Item Master Revisions (P4101)."

Enter Branch/Plant Information

This chapter contains these topics:

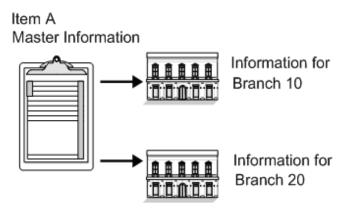
- Section 4.1, "Entering Branch/Plant Information,"
- Section 4.2, "Assigning an Item to a Branch/Plant,"
- Section 4.3, "Working with Item Locations,"
- Section 4.4, "Entering Item Tax Information,"
- Section 4.5, "Locating Item Sources,"
- Section 4.6, "Entering Item Reorder Quantities,"
- Section 4.7, "Entering Item Branch/Plant Manufacturing Information,"
- Section 4.8, "Duplicating Item Information for Multiple Branch/Plants."

4.1 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.

Figure 4-1 Customizing Item Information for a Branch/Plant

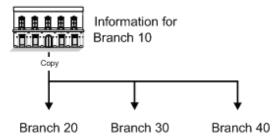


Every JD Edwards World system that retrieves item information searches for an item's branch/plant information before using an item's master information.

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

Figure 4–2 Entering Item Information for a Single Branch/Plant

Item A Information



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).

4.1.1 What You Should Know About

Торіс	Description
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.

4.2 Assigning an Item to a Branch/Plant

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

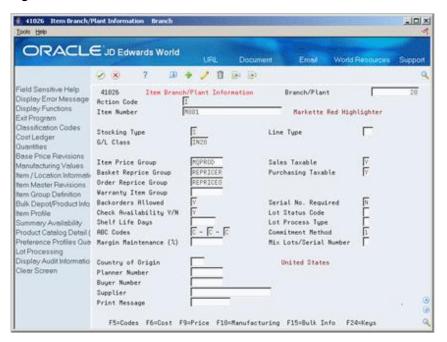
From Inventory Master/Transactions (G4111), choose Item Branch/Plant Information

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

Figure 4-3 Item Branch/Plant Information screen



Complete the following fields:

- Branch/Plant
- Item Number

Field	Explanation
Branch/Plant	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.
	Form-specific information
	This is the branch/plant or warehouse to which this item information is applicable.

4.3 Working with Item Locations

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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

4.3.1 What You Should Know About

Topic	Description
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 in the <i>JD Edwards World Sales Order Management Guide</i> .

See Also:

- Entering Information for Lots JD Edwards World Inventory Management Guide for information about defining lot details,
- Working with Lot Statuses JD Edwards World Inventory Management Guide for information about putting lots and locations on hold.

To assign a primary location to an item

On Item Branch/Plant Information

Assign a branch/plant to an item.

Figure 4–4 Primary Location screen



- On Primary Location, complete the following fields:
 - Location
 - Lot/SN (Lot/Serial Number)

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.

To assign a secondary location to an item

On Item Branch/Plant Information

Access Item/Location Information.

41024 Rem / Location Information ORACLE JD Edwards World D + / B B B 41824 Item / Location Information Branch/Plant Display Error Message Valley Forge Distribution Ctr Displey Functions Action Code Exit Program Item Number Markette Red Highlighter Location Master Primary Location Revisi Lot Mester Count tem Availability Clear Screen F18=Change Primary F17=Rvailability

Figure 4–5 Item/Location Information screen

- Enter S in the following field to identify the secondary (S) locations for an item:
 - P/S (Primary/Secondary Location)
- 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

- Access Item/Location Information.
- On Item/Location Information, enter P in the following field to identify the primary (P) location for the item:
 - P/S (Primary/Secondary Location)
- Access Primary Location.
- On Primary Location, complete the following fields:
 - Location
 - Lot
- Return to Item/Location Information.
- 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	A code that identifies inventory locations in a branch/plant. You define the format of the location identifier by branch/plant.
	Form-specific information
	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.
Lot/SN	A number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.
PS	A value that indicates if this is the primary or secondary location for this item within this stocking location. Valid values are:
	P – Primary storage location
	S – Secondary storage location
	Note: 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.
Lot Status	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.
	You can assign a different status code to each location in which a lot resides on Item/Location Information or Location Lot Status Change.
	Form-specific information
	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.
	The code that you enter here serves as the lot status default when you assign an item to a secondary location.

4.3.2 What You Should Know About

Торіс	Description
Effects on quantities	If you change an item's primary location and any of the following quantities exist, the quantities transfer to the new primary location:
	 Quantity on backorder
	 Quantity on purchase order
	 Quantity on work order
	 Other purchasing 1
	 Quantity on soft commit
Deleting a primary location	To delete a primary location, you must first change it to a secondary location. No quantities can exist in the locations that you delete.

Торіс	Description
Reviewing lot information	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.
	For more information, see Viewing Lot Availability <i>JD Edwards</i> World Inventory Management Guide.

4.4 Entering Item Tax Information

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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.

4.5 Locating Item Sources

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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.
Supplier	The address book number of the preferred provider of this item.
	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.

4.6 Entering Item Reorder Quantities

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

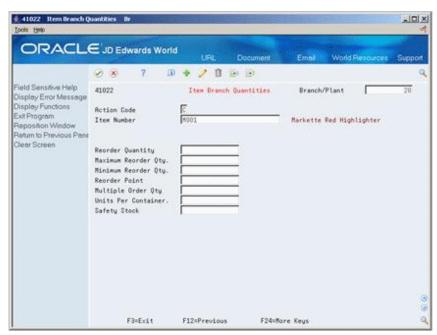
You can specify the minimum, maximum, and normal reorder quantities for an item during your entry of branch/plant information. You can also specify the level of stock at which reordering takes place. The system uses these values for the Enterprise Requirements Planning and Execution system.

To enter item reorder quantities

On Item Branch/Plant Information

Access Quantities.

Figure 4-6 Item Branch Quantities screen



- **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	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.
	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.
	Form-specific information
	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.
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.

4.7 Entering Item Branch/Plant Manufacturing Information

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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

4.7.1 What You Should Know About

Торіс	Description
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).

41027 Plant Manufacturing Data Branch -IDIX ORACLE JD Edwards World 即 中 / 日 日 日 41827 Plant Hanufacturing Data Branch/Plant Display Error Message Display Functions Action Code Exit Program Item Number Markette Red Highlighter Reposition Window Branch/Plant Item Inform Order Policy Code Issue Type Code Return to Previous Pene Value Order policy Planning Code ECO Workbench MFG Leadtime Quantity. Planning Fence Rule Clear Screen Accounting Cost Qty Fixed/Variable Planning Fence Freeze Fence Level Leadtime Message Display Fence. Manufacturing Leadtime Time Basis Total Queue/Move Hours Leadtime Per Unit Setup Labor Replenishment Leadtime Issue and Receipt Shrink Factor ECO Reason Shrink Factor Method ECO Number Drawing Rev. Level ECO Date Item Revision Level Potency Control Grade Control Standard Potency Standard Grade From - Thru Grade From - Thru Potency F3=Exit F12=Previous F24=More Keys

Figure 4–7 Plant Manufacturing Data screen

- On Plant Manufacturing Data, complete the following fields:
 - Shrink Factor
 - Shrink Factor Method

To enter leadtime information

On Item Branch/Plant Information

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

To enter engineering information

On Item Branch/Plant Information

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

Field	Explanation
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.

Field	Explanation	
Shrink Factor	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.	
	If you are entering a percentage, enter 5% as 5.00 and 50% as 50.00 .	
Shrink Factor Method	A value that determines whether the shrink factor you enter for this item is a percentage or a fixed quantity. Valid values are:	
	% – Percentage of order or requested quantity	
	F – Fixed amount to be added to quantity	
Time Basis	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.	
	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.	
Total Queue/Move Hours	The total time (in hours) that an order is expected to be in queue at work centers and moving between work centers.	
	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.	
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	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.

Code	Description
1	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.
2	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.
	Example: demand for period 1 is 25, FOQ = 10, then three different PLOs for a quantity of 10 each will be created.
3	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:
	EOQ = Division of [2(POCS)/(INCS)] * [(SQ01+SQ02+SQ12)/(CSTA)]
	 POCS = Cost to issue a purchase order from the value entered in the Branch Plant Constants. (P41024)
	 SQ01 through SQ12 = Monthly sales, in units, calculated form data contained in the Item History File (F4115). These fields are added together to get the annual sales.
	 CSTA = Average Cost of the item, from the Cost Ledger File (F4105) field UNCS.
	 INCS = Cost of carrying inventory form the value entered in the Branch Plant Constants (P41001).
	If demand for any given period is greater than the EOQ then the system will only generate PLO's in multiples of the EOQ.
	Example: demand in period 1 is 100 , EOQ = 75 , then the system creates two different PLOs for a quantity of 75 each.
4	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.
	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.
	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.
	The system does not create decrease messages for an item with this order policy code.

Code	Description
5	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 parent rate-scheduled items only - 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.

4.7.2 Processing Options

See Section 4.1, "Entering Branch/Plant Information."

4.8 Duplicating Item Information for Multiple Branch/Plants

Navigation

From Inventory Management (G41), enter 27

From Inventory Advanced and Technical Operations (G4131), choose Item/Branch **Duplication**

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



Figure 4-8 Item/Branch Duplication screen

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

4.8.1 What You Should Know About

Торіс	Description	
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 JD Edwards World Inventory Management Guide.	

4.8.2 Processing Options

See Section 51.3, "Item / Branch Duplication (P41015)."

Part II

Forecasting Review

This part contains these chapters:

- Chapter 5, "Overview to Forecasting Review,"
- Chapter 6, "Work with Detail Forecasts."

Overview to Forecasting Review

This chapter contains these topics:

- Section 5.1, "Overview,"
- Section 5.2, "System Integration,"
- Section 5.3, "Features,"
- Section 5.4, "Forecast Considerations,"
- Section 5.5, "Forecasting Process,"
- Section 5.6, "Major Tables,"
- Section 5.7, "Supporting Tables,"
- Section 5.8, "Menu Overview."

5.1 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.

5.2 System Integration

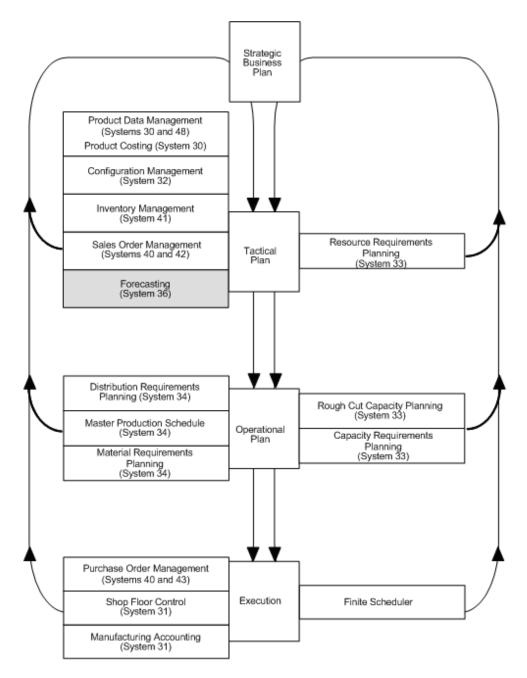
Forecasting is one of many systems that make up the Enterprise Requirements Planning and Execution (ERPx) system. Use the ERPx system to coordinate your inventory, raw material, and labor resources to deliver products according to a managed schedule. ERPx is fully integrated and ensures that information 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.

Figure 5-1 Systems in the JD Edwards World ERPxE Product Group

ERPxE

Enterprise Requirements, Planning and Execution



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.

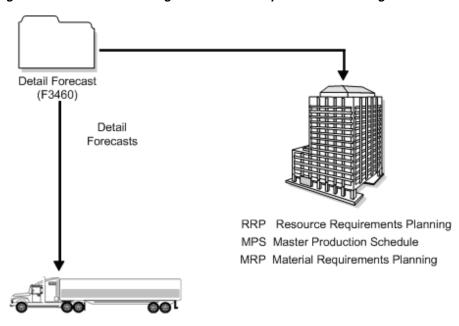


Figure 5–2 Detail Forecasting for Resource Requirements Planning

DRP Distribution Requirements Planning

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.

5.3 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.

5.3.1 Forecasting Levels and Methods

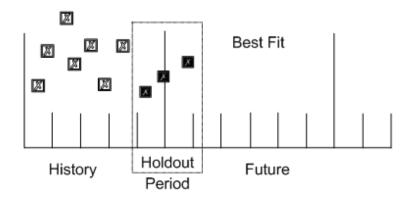
You can generate both single-item (detail) forecasts and product line (summary) forecasts that reflect product demand patterns. Select from 12 forecasting methods, and the system analyzes past sales to calculate the forecast. The forecast includes detail information at the item level and higher-level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

Figure 5-3 Best Fit Forecast

Demand



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.
- Compares actual sales to the simulated forecasts for the holdout period.
- 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.
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	Description
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	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.
	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.
Method 6 - Least Square Regression (LSR)	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.
	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.
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 8 - Flexible Method (Percent Over n Months Prior)	This method allows you to select the periods best fit block of sales order history starting n 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.
	Depending on what you select as n, 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.
Method 9 - Weighted Moving Average	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.
	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.

Method	Description
Method 10 - Linear Smoothing	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.
	This method requires the months best fit plus the number of periods of sales order history from the processing option.
Method 11 - Exponential Smoothing	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.
	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.
Method 12 - Exponential Smoothing with Trend and Seasonality	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.

See Also:

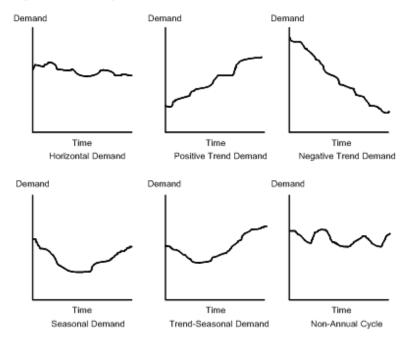
Forecast Calculation Examples in the JD Edwards World Fixed Assets Guide.

5.3.2 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

Figure 5-4 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
Assemble-to-order	Subassemblies to meet customers' option selections
Make-to-order	Raw materials and components stocked in order to reduce lead time

5.3.3 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.

5.4 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:

Forecast Calculation Examples in the JD Edwards World Fixed Assets Guide.

5.5 Forecasting Process

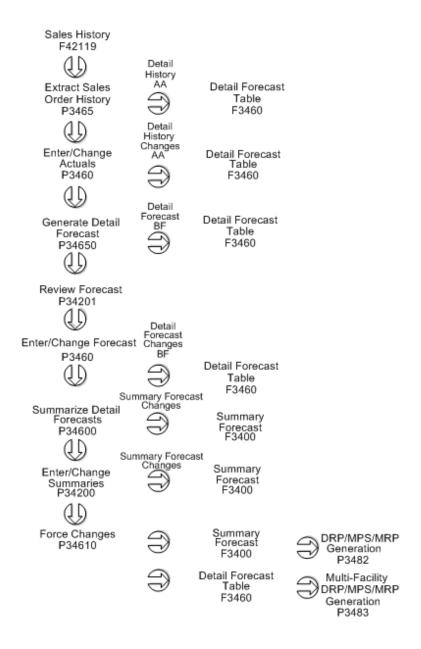
You use Extract Sales Order History to copy data from the Sales History table (F42119) into either the Detail Forecast table (F3460) or possibly the Summary Forecast (F3400) table, depending on the kind of forecast you plan to generate.

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.

Figure 5-5 Detail Forecasting Sequences

Detail Forecasts



5.6 Major Tables

Table	Description
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.

Table	Description
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.

5.7 Supporting Tables

Table	Description
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).

5.8 Menu Overview

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

Figure 5-6 Periodic and Setup Processes Menus



Periodic Processes

* Periodic Forecasting Operations G3421



Setup Processes

* Forecasting Setup G3441

5.8.1 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

Fast Path Command	Menu	Title
SFOR	G3441	Forecasting Setup

Work with Detail Forecasts

This chapter contains these topics:

- Section 6.1, "Working with Detail Forecasts,"
- Section 6.2, "Creating Detail Forecasts,"
- Section 6.3, "Reviewing Detail Forecasts,"
- Section 6.4, "Revising Detail Forecasts."

6.1 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**

6.2 Creating Detail Forecasts

Navigation

From Material Planning Operations (G34), choose Forecasting

From Periodic Forecasting Operations (G3421), choose Create Detail Forecast

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

6.2.1 Processing Options

See Section 52.1, "Forecast Generation (P34650)."

6.3 Reviewing Detail Forecasts

Navigation

From Material Planning Operations (G34), choose Forecasting

From Periodic Forecasting Operations (G3421), choose Review Forecast

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

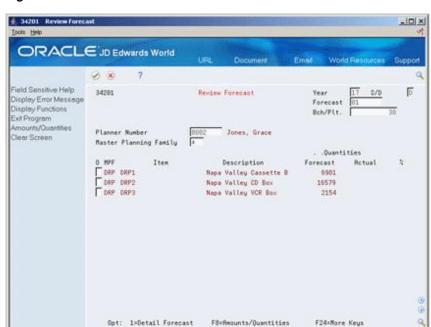


Figure 6-1 Review Forecast screen

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

Field	Explanation	
Year	The calendar year.	
Forecast Type	A code from the user defined code table 34/DF that indicates either:	
	 The forecasting method used to calculate the numbers displayed about the item 	
	 The actual historical information about the item 	

Field	Explanation		
Bch/Plt	Identifies a branch or plant.		
	Note: 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.		
	Form-specific information		
	On this form, this is the branch/plant for which you review and revise a forecast.		
Master Planning Family	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.		
	This field is one of six classification categories available primarily for purchasing purposes.		
Planner Number	The address number of the material planner for this item.		
	Form-specific information		
	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.		
Quantities Forecast	The quantity of units affected by this transaction.		
	Form-specific information		
	The quantity of units in the sales order history on which a forecast is based.		

6.3.1 Processing Options

See Section 52.2, "Forecast Review (P34201)."

6.4 Revising Detail Forecasts

Navigation

From Material Planning Operations (G34), choose Forecasting

From Periodic Forecasting Operations (G3421), choose Enter/Change Forecast

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 supports import/export functionality. See the *JD Edwards World Technical* Tools Guide for more information.

6.4.1 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.

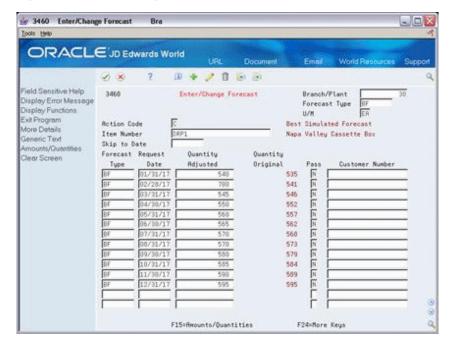


Figure 6-2 Enter/Change Forecast screen

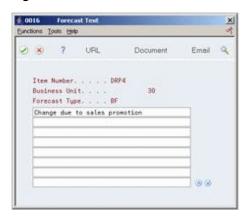
To revise detail forecasts

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.

Figure 6-3 Forecast Text screen



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

Field	Explanation		
Bch/Plt	Identifies a branch or plant.		
	Note: 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.		
	Form-specific information		
	On this form, this is the branch/plant for which you are reviewing and revising a sales order history or forecast.		
Forecast Type	A code from the user defined code table 34/DF that indicates either:		
	 The forecasting method used to calculate the numbers displayed about the item 		
	 The actual historical information about the item 		
U/M	A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).		
	Form-specific information		
	The Material Requirements Planning system converts this to the primary unit of measure for planning purposes.		
Item Number	A number that the system assigns to an item. It can be in short, long, or 3rd item number format.		
Original Adjusted	The quantity of units affected by this transaction.		
	Form-specific information		
	The original quantity of units forecasted for production during a planning period.		
Amount Adjusted	The current amount of the forecasted units for a planning period.		

See Also:

Work with Import/Export in the JD Edwards World Technical Tools Guide.

6.4.2 Processing Options

See Section 52.3, "Forecast Revisions (P3460)."

Part III

Resource Requirements Planning

This part contains these chapters:

- Chapter 7, "Overview to Resource Requirements Planning,"
- Chapter 8, "Enter Work Centers,"
- Chapter 9, "Determine Available Capacity,"
- Chapter 10, "Determine Long-Range Load,"
- Chapter 11, "Generate Resource Requirements Plans,"
- Chapter 12, "Review Resource Requirements Plans,"
- Chapter 13, "Set Up Resource Requirements Plans,"
- Chapter 14, "Set Up Resource Requirements Planning."

Overview to Resource Requirements Planning

This chapter contains these topics:

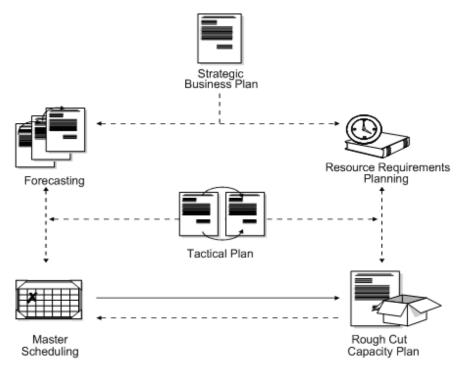
- Section 7.1, "Objectives,"
- Section 7.2, "About Resource Requirements Planning."

7.1 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)

7.2 About Resource Requirements Planning

Figure 7–1 Elements of 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

7.2.1 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

7.2.2 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

7.2.3 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.

Enter Work Centers

This chapter contains the topic:

Section 8.1, "Entering Work Centers for Resource Requirements Planning."

8.1 Entering Work Centers for Resource Requirements Planning

Navigation

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

8.1.1 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 JD Edwards World General Accounting I Guide.

To enter work centers for Resource Requirements Planning

On Enter/Change Work Centers

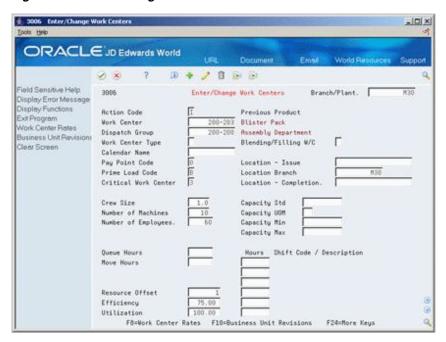


Figure 8-1 Enter/Change Work Centers screen

- Complete the following field:
 - Work Center
- 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	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.	
	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.	
	Security for this field can prevent you from locating business units for which you have no authority.	
	Note: The system uses this value for Journal Entries if you do not enter a value in the AAI table.	

Field	Explanation
Dispatch Group	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.
Work Center Type	Defines the type of work center. Possible values are:
	Blank – Stand alone work center
	1 – Production line in a repetitive environment
	2 – Reporting work station within a production line
	Form-specific information
	For repetitive manufacturing, the system verifies the value is not valid as a work center for an operation from the routing.
Calendar Name	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.
Critical Work Center	A code that identifies the work center as critical or not critical when the system calculates capacity. Valid values are:
	N – Not a critical work center
	1 – A critical work center in calculating resource requirement planning only
	2 – A critical work center in calculating capacity requirements planning only
	3 – A critical work center in calculating resource requirements planning and capacity requirements planning
	4 – Not a capacity work center (will not be generated in capacity planning)
	Note: The system displays Type 3 work centers whenever type 1 or type 2 is selected in this field.
Branch/Plant	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:
	Branch/Plant (MMCU)
	Dept A (MCU)
	Dept B (MCU)
	Job 123 (MCU)
	Business unit security is based on the higher-level business unit.
Resource 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.

Field	Explanation
Efficiency	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.
	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).
	Enter percents as whole numbers, for example, enter 80% as 80.00 .
Utilization	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.
	Enter percents as whole numbers, for example, enter 80% as 80.00 .

Determine Available Capacity

This chapter contains these topics:

- Section 9.1, "Determining Available Capacity,"
- Section 9.2, "Entering Resource Units Manually,"
- Section 9.3, "Generating Resource Units."

9.1 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

9.1.1 Before You Begin

- Verify that work centers exist for all resource units that you enter. See Section 8.1, "Entering Work Centers for Resource Requirements Planning."
- Set a default unit of measure in the processing options.

9.1.2 What You Should Know About

Торіс	Description
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.

9.2 Entering Resource Units Manually

Navigation

From Resource & Capacity Planning (G33), choose Periodic Resource Planning

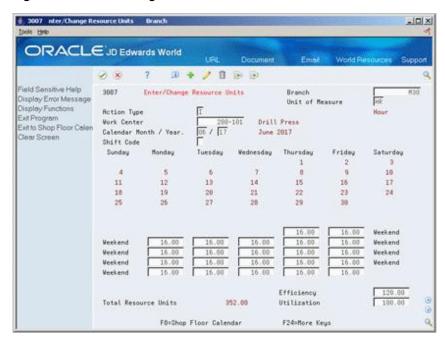
From Periodic Resource/Capacity Planning (G3321), choose Enter/Change Resource Units

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

Figure 9-1 Enter/Change Resource Units screen



- Complete the following required field:
 - Work Center
- Complete the following optional fields:
 - Unit of Measure
 - Shift Code
 - Efficiency
 - Utilization
 - Daily Resource Units
- 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	A user-defined code (00/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.
	For payroll and time entry:
	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.
	If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default.
	Form-specific information
	You can view the total resources available for a given day by entering an asterisk (*) in this field.
	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.
Total Resource Units	The total resource units for the month.

9.2.1 What You Should Know About

Topic	Description
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).

9.2.2 Processing Options

See Section 53.1, "Work Center Resource Units (P3007)."

9.3 Generating Resource Units

Navigation

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.

9.3.1 Before You Begin

- Set up manufacturing constants.
- 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.

9.3.2 What You Should Know About

Торіс	Description
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

9.3.3 Processing Options

See Section 53.2, "Work Center Resource Units Refresh (P3007G)."

Determine Long-Range Load

This chapter contains these topics:

- Section 10.1, "Determining Long-Range Load,"
- Section 10.2, "Defining Resource Profiles Manually,"
- Section 10.3, "Generating Resource Profiles."

10.1 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

10.2 Defining Resource Profiles Manually

Navigation

From Resource & Capacity Planning (G33), choose Periodic Resource Planning

From Periodic Resource/Capacity Planning (G3321), choose Enter/Change Resource **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. If BOMs and routings are available, the system can generate the profile.

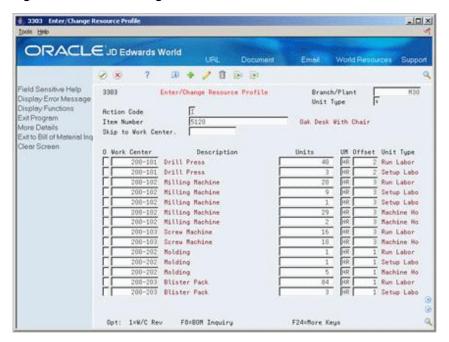
10.2.1 Before You Begin

Enter item branch/plant information. See Enter Branch/Plant Information in the JD Edwards World Inventory Management Guide.

To define a resource profile manually

On Enter/Change Resource Profile

Figure 10–1 Enter/Change Resource Profile screen



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

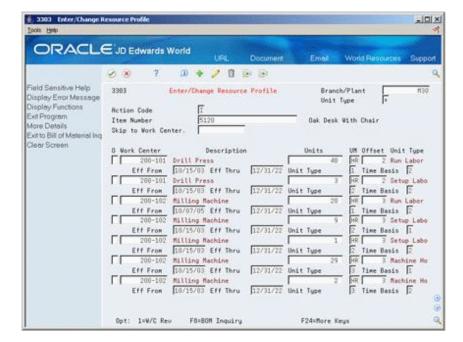


Figure 10-2 Enter/Change Resource Profile (Detail) screen

- 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	A date that indicates one of the following:
	 When a component part goes into effect on a bill of material
	 When a routing step goes into effect as a sequence on the routing for an item
	 When a rate schedule is in effect
	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.

Field	Explanation
Eff Thru	A date that indicates one of the following:
	 When a component part is no longer in effect on a bill of material
	 When a routing step is no longer in effect as a sequence on the routing for an item
	 When a rate schedule is no longer active
	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.
Unit Type	A code that indicates the type of resource unit associated with this work center. Possible types are:
	1 – Run Labor Hours
	2 – Setup Labor Hours
	3 – Machine Hours
	9 – Miscellaneous (Storage Space, and so on)
Time Basis	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.
	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.

10.3 Generating Resource Profiles

Navigation

From Resource & Capacity Planning (G33), choose Periodic Resource Planning

From Periodic Resource/Capacity Planning (G3321), choose Generate Resource **Profile**

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.

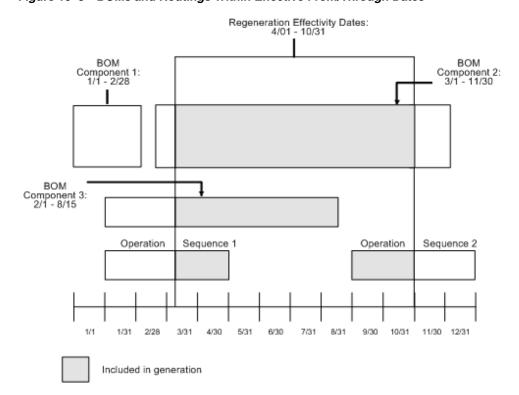


Figure 10–3 BOMs and Routings Within Effective From/Through Dates

10.3.1 Before You Begin

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

10.3.2 Processing Options

See Section 53.3, "Resource Profile Regeneration (P3365)."

Generate Resource Requirements Plans

This chapter contains the topic:

Section 11.1, "Generating Resource Requirements Plans."

11.1 Generating Resource Requirements Plans

Navigation

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

11.1.1 Before You Begin

- Verify that resource units exist for all work centers in your facility. See Section 9.1, "Determining Available Capacity."
- Verify that resource profiles exist for all master schedule items. See Section 10.1, "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 Section 10.1, "Determining Long-Range Load."
- Create a detail forecast for the master scheduled items using Enter/Change Forecasts. See Setting Up Detail Forecasts in the JD Edwards World Forecasting Guide.
- Determine which forecast types you want to use in the generation. You can use a maximum of five. See Set Up Summary Forecasts in the JD Edwards World 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 JD Edwards World Shop Floor Control - Discrete Guide.

See Also:

Section 12.1, "Reviewing Resource Requirements Plans."

11.1.2 Processing Options

See Section 53.4, "Resource Requirements Planning (P3380)."

11.1.3 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.

11.1.4 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

Review Resource Requirements Plans

This chapter contains these topics:

- Section 12.1, "Reviewing Resource Requirements Plans,"
- Section 12.2, "Reviewing Dispatch Groups for Resource Requirements Planning,"
- Section 12.3, "Reviewing Work Center Load for Resource Requirements Planning,"
- Section 12.4, "Reviewing Period Summaries,"
- Section 12.5, "Reviewing Message Detail,"
- Section 12.6, "Validating Resource Requirements Plans."

12.1 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.

12.2 Reviewing Dispatch Groups for Resource Requirements Planning

Navigation

From Resource & Capacity Planning (G33), choose Daily Resource Planning

From Daily Resource Requirements Planning (G3311), choose Review Dispatch Group

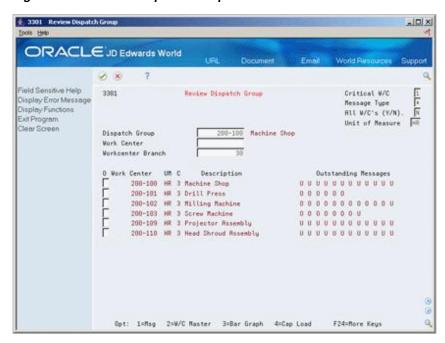
If you have several work centers that are organized as a dispatch group, you can view the group to determine how capacity affects all of the work centers in the group. Dispatch groups enable you to organize work centers according to common functions, similar operations, or steps in routing.

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

Figure 12-1 Review Dispatch Group screen



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

Field	Explanation
Message Type	A code that distinguishes different messages generated in the Distribution Requirements Planning/Master Production Schedule/Material Requirements Planning system. Valid codes are:
	A – Warning messages (user controlled)
	B – Order and expedite
	C – Cancel
	D – Defer
	E – Expedite
	F – Frozen order (user controlled)
	G – Increase order quantity to (user controlled)
	H – Decrease rate quantity to
	I – Increase rate quantity to
	L – Decrease order quantity to (user controlled)
	M – Manual reminder
	N – Create rate
	O– Order
	P – Firm order
	S – FPO adjustment suggestion
	T – Past due order
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).

12.2.1 Processing Options

See Section 53.5, "Message Inquiry (P3301)."

12.3 Reviewing Work Center Load for Resource Requirements Planning

Navigation

From Resource & Capacity Planning (G33), choose Daily Resource Planning

From Daily Resource Requirements Planning (G3311), choose Review Work Center Load

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

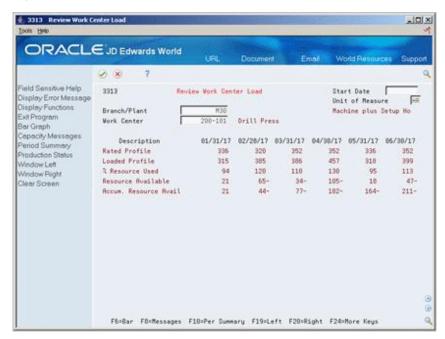
12.3.1 Before You Begin

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

Figure 12-2 Review Work Center Load screen



- Complete the following field:
 - Work Center
- Review the following fields:
 - Unit of Measure
 - Description

Field	Explanation
Work Center	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.
	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.
	Security for this field can prevent you from locating business units for which you have no authority.
	Note: The system uses this value for Journal Entries if you do not enter a value in the AAI table.
	Form-specific information
	You enter the work center for which you want to display the capacity load.

12.3.2 What You Should Know About

Topic	Description
Prime load code	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.
Resource offset	The demand is offset by the number of days set on the Resource Profile screen.
Type of load	The type of load is determined by the prime load code. Calculations for the types of load are:
	 Rated profile - The amount of capacity available for a work center.
	 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
	 Percent resource used - The loaded profile divided by rated profile.
	 Resource available - The rated profile minus the loaded profile.
	 Accumulated resource available - A running total of resource available.

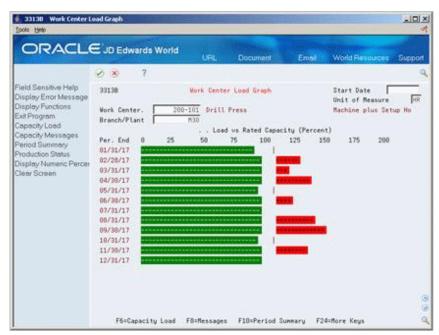
12.3.3 Processing Options

See Section 53.6, "Load (P3313)."

To review the work center load as a graph

On Work Center Load Graph

Figure 12–3 Work Center Load Graph screen



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

12.3.4 What You Should Know About

Торіс	Description	
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%.	

12.3.5 Processing Options

See Section 53.7, "Load Bar Graph (P3313B)."

12.4 Reviewing Period Summaries

Navigation

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

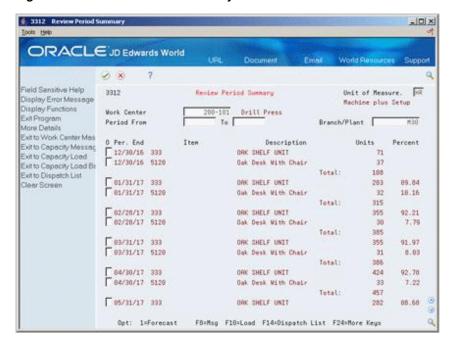


Figure 12-4 Review Period Summary screen

- 1. Complete the following field:
 - Work Center
- Complete the following optional fields: 2.
 - Unit of Measure
 - Period From To
- Review the following fields:
 - Period End
 - Item
 - Units
 - Percent Completed
 - Total
- Access the detail area (F4).

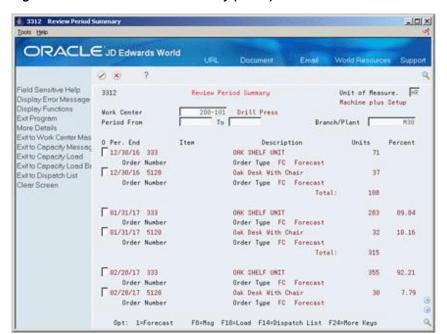


Figure 12-5 Review Period Summary (Detail) screen

- 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.	
То	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.	
	Form-specific information	
	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.	

12.4.1 Processing Options

See Section 53.8, "Period Summary (P3312)."

12.5 Reviewing Message Detail

Navigation

From Resource & Capacity Planning (G33), choose Daily Resource Planning

From Daily Resource Requirements Planning (G3311), choose Review Message Detail

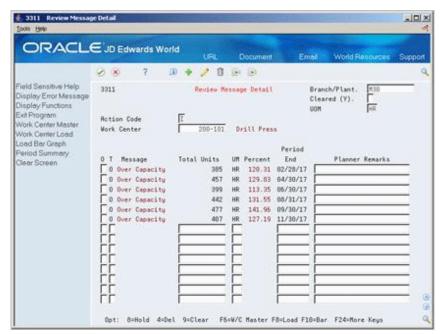
Each time you generate a resource requirements plan, the system creates messages to identify work centers whose loads are in conflict with planned capacity. Review Message Detail indicates whether you have over-load or under-load conditions. It displays messages for each work center alphabetically by 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

Figure 12-6 Review Message Detail screen



- Complete the following field:
 - Work Center
- 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.		
	Form-specific information		
	You can use this field to enter a brief note or comment about each message.		

12.5.1 What You Should Know About

Topic	Description 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.		
Retrieving cleared messages			
Held messages	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.		
Deleted messages	You can generate a plan more than once. When you regenerate a resource requirements plan, the system will not delete the following messages:		
	 Manually entered messages 		
	 Messages that you have placed on hold 		

12.5.2 Processing Options

See Section 53.9, "Message Detail (P3311)."

12.6 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 Section 12.1, "Reviewing Resource Requirements Plans."
- **2.** Revise the forecast.
 - See Revising a Summary of Forecast in the *JD Edwards World Forecasting Guide*.
- **3.** Complete the steps for generating the requirements plan. See Section 11.1, "Generating Resource Requirements Plans."
- **4.** Complete the steps for reviewing the revised requirements plan. See Section 12.1, "Reviewing Resource Requirements Plans."

5. Repeat the steps until all loads at each work center are appropriate.

Set Up Resource Requirements Plans

This chapter contains these topics:

- Section 13.1, "Setting Up Resource Requirements Plans,"
- Section 13.2, "Setting Up Resource Requirements Display,"
- Section 13.3, "Setting Up Unit Types."

13.1 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

13.2 Setting Up Resource Requirements Display

Navigation

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 Section 12.3, "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

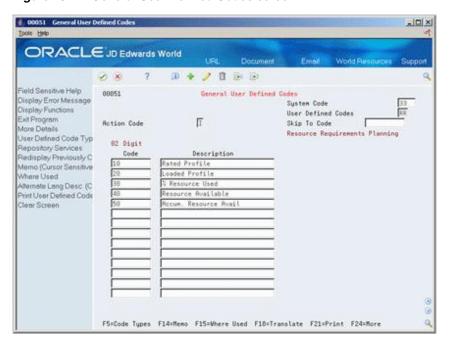


Figure 13-1 General User Defined Codes screen

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.

13.3 Setting Up Unit Types

Navigation

From Resource & Capacity Planning (G33), enter 29

From Resource & Capacity Planning Setup (G3341), choose Unit Types

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

00051 Unit Types -IOIX ORACLE JD Edwards World D + / B B B 00051 Unit Types Display Error Message System Code User Defined Codes Display Functions Exit Program More Details F Skip To Code Action Code Unit Types User Defined Code Typ Repository Services Redispley Previously C 81 Character Code Description Memo (Cursor Sensitive Where Used Setup Labor Hours Machine Hours Alternate Lang Desc (C Print User Defined Code Misc. Units Clear Screen F5=Code Types F14=Memo F15=Where Used F18=Translate F21=Print F24=More

Figure 13–2 Unit Types screen

Complete the following fields:

- Code
- Description

Set Up Resource Requirements Planning

This chapter contains these topics:

- Section 14.1, "Setting Up Resource Requirements Planning,"
- Section 14.2, "Resource Profile."

14.1 Setting Up Resource Requirements Planning

Navigation

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

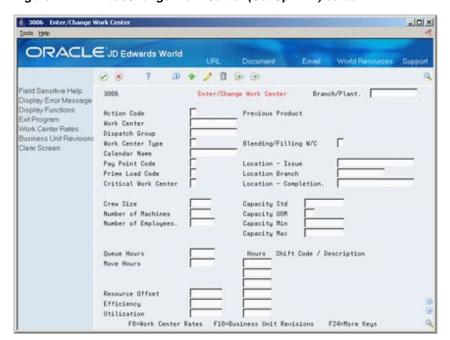


Figure 14-1 Enter/Change Work Center (Set Up RRP) screen

- 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.

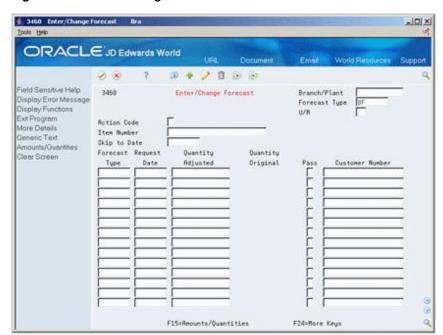


Figure 14–2 Enter/Change Forecast screen

- Enter Detail Forecast (P3460).
- Create Resource Profile (P3003). You can enter this manually, or if BOMs and Routings exist, the system can generate the profile.

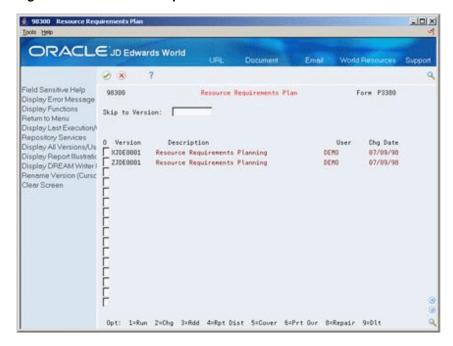


Figure 14–3 Resource Requirements Plan screen

- 5. Generate a Resource Requirements Plan (P3380).
- Review Resource Requirements Plan. 6.
- Review Dispatch Group (P3301)
- Review Work Center Load (P3313)
- Work Center Load Graph (P3313B)
- **10.** Review Period Summary (P3312)

14.2 Resource Profile

14.2.1 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.

14.2.2 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.

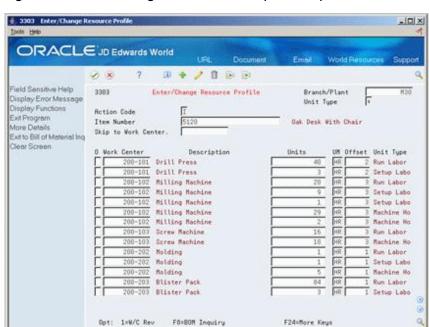


Figure 14–4 Enter/Change Resource Profile (Calculate) screen

14.2.3 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:

This information is then added up for each work center.

Part IV

Single Level Master Scheduling

This part contains these chapters:

- Chapter 15, "Overview to Single Level Master Scheduling,"
- Chapter 16, "Understand Time Fences and System Messages,"
- Chapter 17, "Generate Single Level Master Schedules,"
- Chapter 18, "Working with Forecast Consumption,"
- Chapter 19, "Work with Master Schedules,"
- Chapter 20, "Validate Master Schedules,"
- Chapter 21, "Set Up DRP, MPS, and RCCP,"
- Chapter 22, "Process Orders,"
- Chapter 23, "Plan Bills in the MPS/DRP System."

Overview to Single Level Master Scheduling

This chapter contains these topics:

- Section 15.1, "Objectives,"
- Section 15.2, "About Single Level Master Scheduling."

15.1 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

15.2 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:

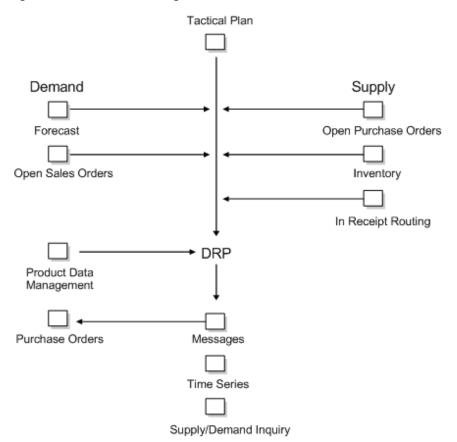
- Understanding time fences and system messages
- Generating single level master schedules
- Understanding forecast consumption
- Working with master schedules
- Validating master schedules
- Setting up DRP, MPS, and RCCP
- Processing orders

15.2.1 Master Scheduling Applications

DRP and Purchased Items

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

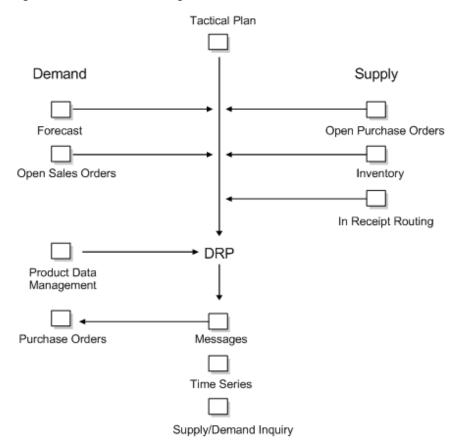
Figure 15-1 DRP Scheduling



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.

Figure 15-2 MPS Scheduling



Understand Time Fences and System Messages

This chapter contains these topics:

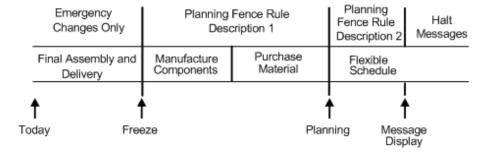
- Section 16.1, "About Time Fences,"
- Section 16.2, "About System Messages."

16.1 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

Figure 16-1 Time Fences



Fence	Description	
Freeze Fence (F)	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."	
	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.	
	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.	
Planning Fence (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."	
	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.	
Message Display Fence (D)	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.	
	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.	

16.1.1 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	Description 1
	Customer demand
	Description 2
	Whichever is greater, forecast or customer demand
Rule F	Description 1
	Forecast
	Description 2
	Forecast plus customer demand

Rule	Description
Rule G	Description 1
	Whichever is greater, forecast or customer demand
	Description 2
	Forecast
Rule H	Description 1
	Whichever is greater, forecast or customer demand
	Note: 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

16.1.2 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.

Figure 16–2 Product Available at Period End

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					25.0	157		
=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.

16.2 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
В	Order and Expedite
С	Cancel
D	Defer
E	Expedite
F	Frozen
G	Increase Order Quantity To
Н	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
T	Past Due Order

Generate Single Level Master Schedules

This chapter contains these topics:

- Section 17.1, "Generating Single Level Master Schedules,"
- Section 17.2, "Generating a Master Schedule for All Items,"
- Section 17.3, "Reviewing Items for Master Schedule Selection,"
- Section 17.4, "Generating a Master Schedule for Selected Items."

17.1 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

17.1.1 Before You Begin

Generate a forecast for independent demand items. See Creating Detail Forecasts in the *JD Edwards World Forecasting Guide*.

17.1.2 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.

17.1.3 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.
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.

17.2 Generating a Master Schedule for All Items

Navigation

From Material Planning Operations (G34), choose Single Site Planning

From Single Site Periodic Planning (G3422), choose DRP or MPS Regeneration

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:

Section 18.1, "About Forecast Consumption."

17.2.1 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.

17.2.2 Data Sequence

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

17.2.3 Processing Options

See Section 23.3, "Gross Regeneration."

17.3 Reviewing Items for Master Schedule Selection

Navigation

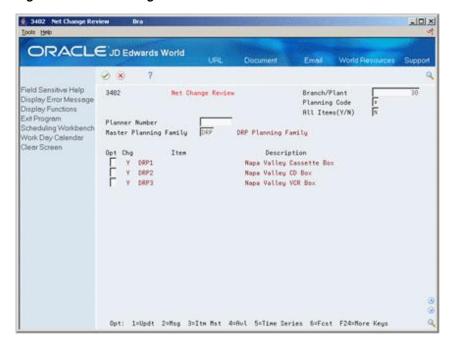
From Material Planning Operations (G34), choose Single Site Planning From Single Site Periodic Planning (G3422), choose Net Change Review

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

Figure 17-1 Net Change Review screen



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

- Branch/Plant
- Master Planning Family

Field	Explanation
Master Planning Family	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.
	This field is one of six classification categories available primarily for purchasing purposes.

17.3.1 Processing Options

See Section 54.2, "Net Change Review (P3402)."

17.4 Generating a Master Schedule for Selected Items

Navigation

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:

Section 17.2, "Generating a Master Schedule for All Items" for the processing options for this program.

17.4.1 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.

	Generating	а	Master	Schedule	for	Selected	Items
--	------------	---	--------	----------	-----	----------	-------

Working with Forecast Consumption

This chapter contains these topics:

- Section 18.1, "About Forecast Consumption,"
- Section 18.2, "Setting Up Forecast Consumption,"
- Section 18.3, "Forecast Consumption Example."

18.1 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.

18.2 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

18.2.1 Adding Planning Fence Information

Navigation

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

To enter planning fence information in the Item Branch/Plant

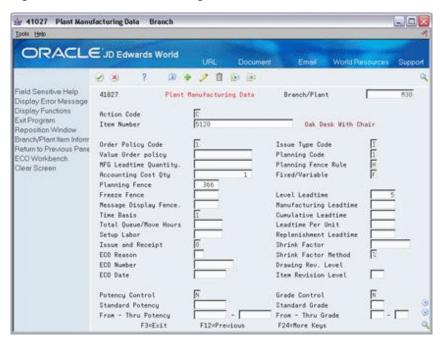
On Item Branch/Plant Information

41026 Item Branch/Plant Information Branch ORACLE JD Edwards World 7 10 + 1 1 8 8 field Sensitive Help 41826 Item Branch/Plant Information Branch/Plant Display Error Message Action Code Display Functions Item Number Dak Desk With Chair Exit Program Classification Codes Stocking Type G/L Class Base Price Revisions
Manufacturing Values
Item Price Group Sales Taxable tem/Location Informati, Basket Reprice Group Purchasing Taxable hem Master Revisions tem Group Definition | Varranty I tem Group Bulk Depot/Productinfo Backgrders Allowed Serial No. Required hem Profile Check Rvailability Y/N
Summary Availability Shelf Life Days
Product Catalog Date | 887 Codes Lot Status Code Lot Process Type Commitment Method 1 Mix Lots/Serial Number Product Catalog Detail (ABC Codes reference Profiles Que Margin Maintenance (%) ot Processing Display Audit Informatio Country of Origin Clear Screen Planner Number Dobson, Jane Buyer Number Wright, Allen Supplier Print Message F5=Codes F6=Cost F9=Price F18=Manufacturing F15=Bulk Info F24=Keys

Figure 18-1 Item Branch/Plant Information screen

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

Figure 18-2 Plant Manufacturing Data screen



- Enter H in the following field:
 - Planning Fence Rule
- 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.

18.2.2 Adding Sales Order Document Type

Navigation

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.

To add a sales order document type to the UDC table

On General User Defined Codes

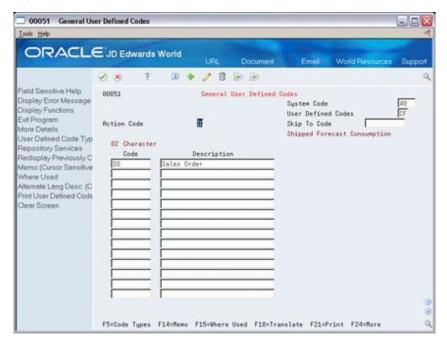


Figure 18–3 General User Defined Codes (Add Sales Order Document) screen

- Enter I in the following field:
 - Action Code
- Enter 40 in the following field: 2.
 - System Code

- **3.** Enter CF in the following field:
 - **User Defined Codes**
- **4.** Press Enter to inquire on this table.
- Review or change the following fields, as needed:
 - Code
 - Description

18.2.3 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.

Navigation

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

To define monthly forecast consumption periods

On Forecast Consumption Periods

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

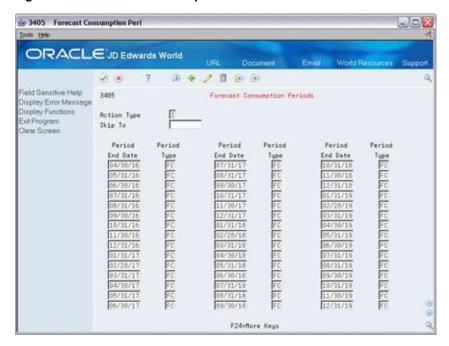
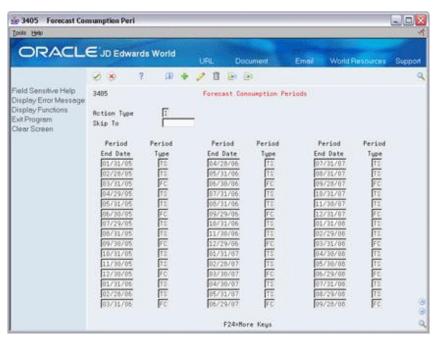


Figure 18-4 Forecast Consumption Periods screen

- 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

Figure 18–5 Forecast Consumption Period (Time Series Buckets) screen



18.2.4 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 Section 54.4, "Master Planning Schedule - Plant Maintenance (P3482)."

See Section 54.5, "Multi-Facility - Gross Regeneration (P3483)."

18.2.5 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 Section 54.3, "Time Series (P3413)."

18.3 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).

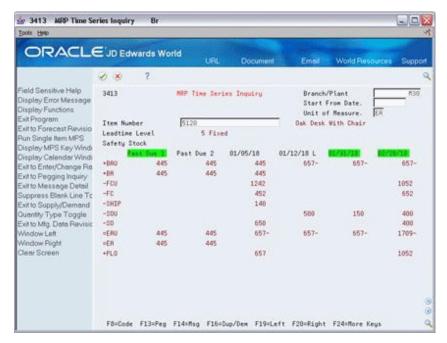


Figure 18–6 MRP Time Series Inquiry screen

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.

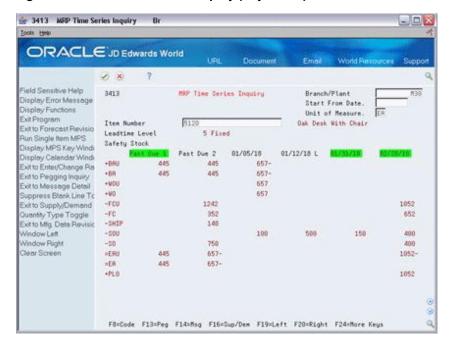


Figure 18–7 MRP Time Series Inquiry (Days Later) screen

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.



Figure 18–8 MRP Time Series Inquiry (One Week Later) screen

See Also:

Appendix C, "Time Series Quantity Types."

Work with Master Schedules

This chapter contains these topics:

- Section 19.1, "Working with Master Schedules,"
- Section 19.2, "Reviewing DRP/MPS Time Series,"
- Section 19.3, "Reviewing Planning Families,"
- Section 19.4, "Working with Messages,"
- Section 19.5, "Adding a Freeze Code to a Purchase Order,"
- Section 19.6, "Adding a Freeze Code to a Work Order."

19.1 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

19.2 Reviewing DRP/MPS Time Series

Navigation

From Material Planning Operations (G34), choose DRP

From DRP Daily Operations (G3411), choose DRP Time Series/ATP Inquiry

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

19.2.1 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
-LEXP	- Lot Expired
-FCU	- MPS/Forecast (Unadjusted)
-FC	- MPS/Forecast
-SHIP	- Shipped Quantity

Quantity Types	Description
-SOU	- Sales Orders (Unadjusted)

19.2.2 What You Should Know About

Торіс	Description	
Period quantities	Period quantities are either:	
	 Adjusted - Assumes that the user will process the messages. 	
	 Unadjusted - Assumes that the action messages will not be processed. The U at the end of quantity types indicates that period quantities are unadjusted. 	
Time series calculation	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.	
ATP unadjusted calculation (ATPU)	Unadjusted ATP assumes that no action messages have been processed.	
Negative ATP/ATPU	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.	
Cumulative available to promise unadjusted	The following calculation assumes the user has not acted on the messages:	
(CATPU) calculation	■ CATPU = running total of ATPU	
	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.	
Suppressing blank lines	You can use a function key to suppress the quantity types that have no data in them.	

To review DRP time series

On DRP Time Series/ATP Inquiry

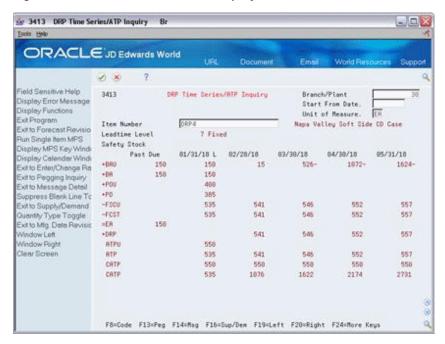


Figure 19-1 DRP Time Series/ATP Inquiry screen

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

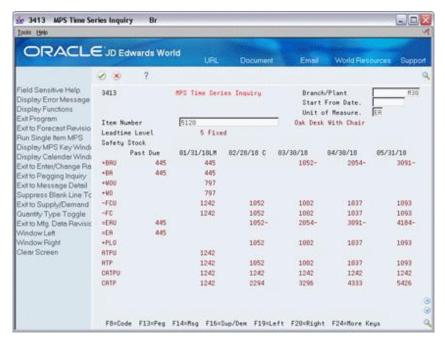
- Branch/Plant
- Item Number

You can press F15 to suppress blank lines

To review MPS time series

On MPS Time Series Inquiry

Figure 19-2 MPS Time Series Inquiry screen



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

- Branch/Plant
- Item Number

19.2.3 Processing Options

See Section 54.3, "Time Series (P3413)."

19.3 Reviewing Planning Families

Navigation

From Material Planning Operations (G34), choose DRP

From DRP Daily Operations (G3411), choose DRP Planning Family Review

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 that 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

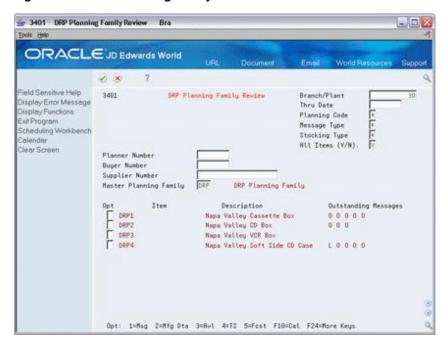


Figure 19–3 DRP Planning Family Review screen

To locate your planning family, complete the following fields:

- Branch/Plant
- Master Planning Family

19.3.1 Processing Options

See Section 54.10, "Review Planning Family (P3401)."

19.4 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.

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.

19.4.1 What You Should Know About

Topic	Description
Placing messages on hold	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.
Clearing messages	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.
Deleting messages	You can delete any message that you have reviewed but did not process.

19.4.2 Reviewing Detail Messages

Navigation

From Material Planning Operations (G34), choose Daily DRP

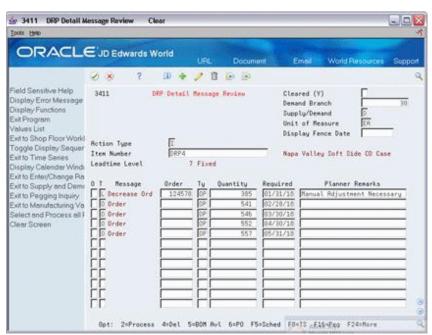
From Daily DRP Operations (G3411), choose DRP Detail Message Review

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

Figure 19–4 DRP Detail Message Review screen



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

Branch/Plant

Item Number

19.4.3 Processing Work Order Messages

Navigation

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.

To process a message in the P3411 the action code can remain I and you can place a 2 in the option column. If there are no errors, the system will clear the message from the screen. There are two common errors you may encounter:

- You have not determined a supplier for purchased items, which you need to assign in the fold of the message.
- There may a problem with the dates. Make sure that you have dates that are valid.

Once the message has been processed and cleared it can be brought back and looked at by using the cleared message toggle on the top right hand corner of the screen. To create the order, at this point, press F3 and the PO Generator Window program (P43032) will pop up. An option 9, in the window, will cancel the processed message and replace the message back in the P3411 as unprocessed. Option 1, in the window, gives some further detail to the items that are being ordered and their costs. To generate the order use an F6 and the order number will appear next to the order type in the window. Once an order number has been assigned, that order exists in the F4311 file and can be inquired on with the open orders program or Enter/Change Purchase Orders (P4311).

To process work order messages

On DRP Detail Message Review

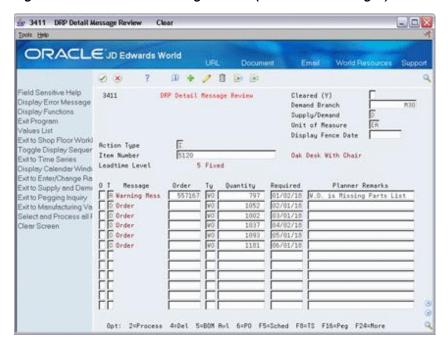


Figure 19–5 DRP Detail Message Review (Work Order Messages) screen

- To locate the message for the item, complete the following fields:
 - Branch/Plant
 - Item Number
- To process the message, choose the appropriate selection option. Based on the message type, the system processes the work order as follows:
 - Released
 - Canceled
 - Deferred
 - Expedited
 - Increased

19.4.3.1 What You Should Know About

Topic	Description
Processing messages	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.
Fixed order quantity (FOQ)	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.
Order status	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.

19.4.4 Processing Purchase Order Messages

Navigation

From Material Planning Operations (G34), choose Daily DRP

From Daily DRP Operations (G3411), choose DRP Detail Message Review

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.

19.4.4.1 What You Should Know About

Торіс	Description
Processing messages using blanket order checking	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.

Topic	Description
Consolidating multiple item numbers	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.
Process messages using a planning family	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.
Freezing purchase orders	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.
Obsolete or use-up items	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:

- Section 19.3, "Reviewing Planning Families,"
- Section 22.1, "Processing Orders,"
- Section 47.1, "Generating Supplier Schedules" for information on processing messages using this system.

To process a single action message

On Detail Message Review

🚁 3411 DRP Detail Message Review Clear ORACLE JD Edwards World D + / 1 0 2 3411 DRP Detail Message Review Cleared (Y) Display Error Message Demand Branch Display Functions Exit Program Supply/Demand Unit of Measure Display Fence Date Exit to Shop Floor Workl Toggle Display Sequer Iten Number Napa Valley Soft Side CD Case Exit to Time Series Display Calendar Winds Leadtine Level 7 Fixed Exit to Enter/Change Ra Exit to Supply and Demi Message Required 01/31/18 Exit to Supply and Demi
Exit to Pegging Inquiry
Exit to Manufacturing Va
Select and Process all | 0 0 rder
Clear Screen | 0 0 rder Clear Screen C Order Opt: 2=Process 4:Del 5=BOM Rul 6=PO F5=Sched F8=T5 F16=P40 F24=Hore

Figure 19–6 DRP Detail Message Review (Single Action Message) screen

- Complete the following required fields:
 - Demand Branch

- Item Number
- Enter the selection option next to the message that you want to process.
- To process the message, accept the record. 3.
- Exit the program.

The system displays Suppliers Selected For Order.

Figure 19-7 Suppliers Selected for Order screen



- On Suppliers Selected For Order, press F6 or click on Create Order on the Functions menu to create the purchase order.
- To close the window, choose the appropriate selection option.
- 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

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

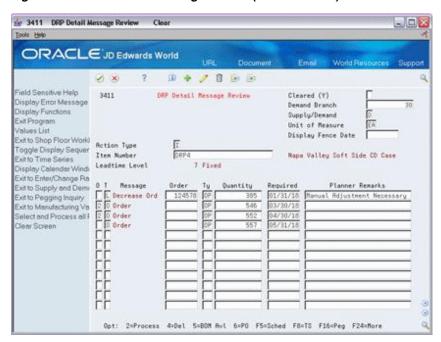


Figure 19-8 DRP Detail Message Review (Consolidation) screen

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

The system displays Suppliers Selected For Order.

43032 Suppliers Selected For Order Eurotione Tools Help

Figure 19–9 Suppliers Selected for Order (Consolidation) screen

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

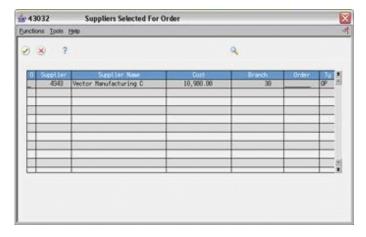
Cleared

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

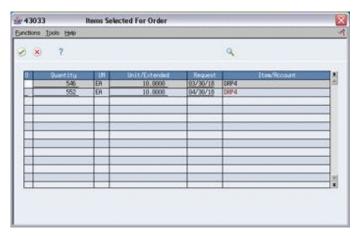
Figure 19-10 Suppliers Selected for Order (Cancel PO Items) screen



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

The system displays Item Selected For Order.

Figure 19-11 Items Selected for Order screen



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.

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

19.4.5 Processing Options

See Section 53.9, "Message Detail (P3311)."

19.5 Adding a Freeze Code to a Purchase Order

Navigation

From Stock Based Purchasing (G43A), choose Purchase Order Processing

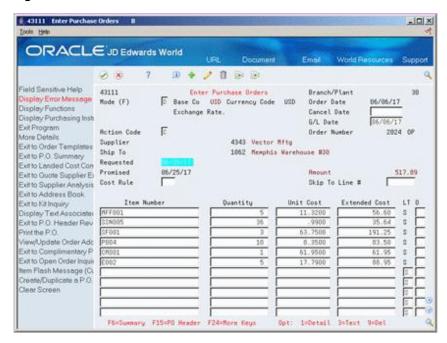
From Purchase Order Processing (G43A11), choose Enter Purchase Orders

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

Figure 19-12 Enter Purchase Orders screen



- 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.

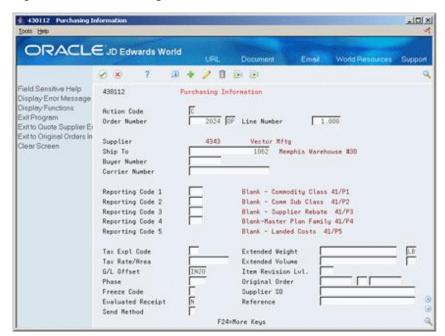


Figure 19–13 Purchasing Information screen

- 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)	

19.6 Adding a Freeze Code to a Work Order

Navigation

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

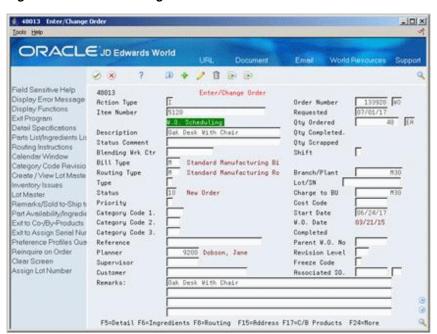


Figure 19-14 Enter/Change Order screen

- 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

Validate Master Schedules

This chapter contains these topics:

- Section 20.1, "Validating Master Schedules,"
- Section 20.2, "Generating Rough Cut Capacity Plans,"
- Section 20.3, "Reviewing Work Schedules on Production Status,"
- Section 20.4, "Reviewing Rate Schedule and Work Center Loads."

20.1 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

20.1.1 What You Should Know About

Topic	Description	
Revising resource units	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.	
Recalculating work center hours	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.	

20.2 Generating Rough Cut Capacity Plans

Navigation

From Resource & Capacity Planning (G33), choose Periodic Rough Cut Capacity From Periodic Resource/Capacity Planning (G3321), choose Rough Cut Capacity **Planning**

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.

20.2.1 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 Work with Hours and Quantities in the JD Edwards World Shop Floor Control - Discrete Guide.
- Verify that resource units exist for all critical work centers in your generation. See Setting Up Resource Units in the JD Edwards World Shop Floor Control - Discrete Guide.
- Set up supply and demand inclusion rules for RCCP. See Section 21.2, "Setting Up Supply and Demand Inclusion Rules."
- Run Master Production Schedule. See Section 47.1, "Generating Supplier Schedules."

20.2.2 What You Should Know About

Topic	Description	
Reviewing RCCP	After you generate RCCP, you can review the capacity load to determine if you need to change capacity or the scheduled load.	
Reviewing work center load	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.	
	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.	
Reviewing period summary	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.	
	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.	
Calculating rated capacity	To calculate rated capacity for critical work centers, the system uses the following standard formula:	
	 Number of employees (or machines) x hours per day x efficiency factor x utilization factor 	
	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 $(8 / 10 = .80)$.	
	For reference, the inverse (actual hours / standard hours) is called realization. The goal is to approach 1.0 realization.	
	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.	

Topic	Description	
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:

- Section 9.2, "Entering Resource Units Manually,"
- Section 12.2, "Reviewing Dispatch Groups for Resource Requirements Planning,".
- Section 12.4, "Reviewing Period Summaries,".
- Section 12.5, "Reviewing Message Detail,"
- Section 20.3, "Reviewing Work Schedules on Production Status,"
- Section 20.4, "Reviewing Rate Schedule and Work Center Loads."

20.2.3 Processing Options

See Section 54.6, "Planning (P3382)."

20.3 Reviewing Work Schedules on Production Status

Navigation

From Resource & Capacity Planning (G33), choose Daily Rough Cut Capacity From Daily Rough Cut Capacity Planning (G3312), choose Production Status

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:

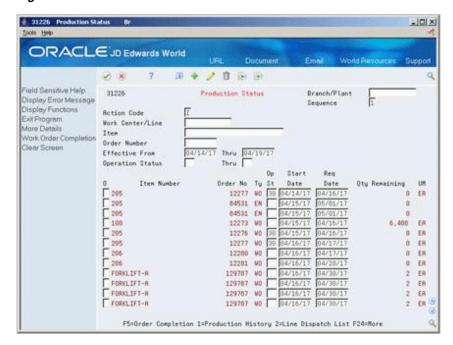
- Access work order information, including the header, the parts list, and the routing instructions
- Display work order information, such as work center, remaining labor, and machine and setup hours

- 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

Figure 20-1 Production Status screen



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

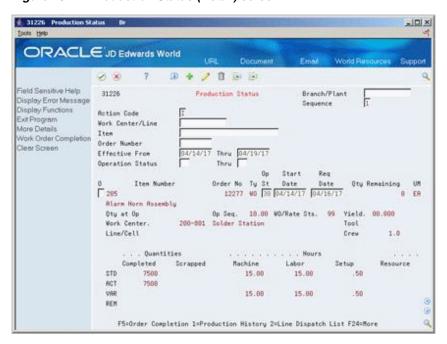


Figure 20-2 Production Status (Detail) screen

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:	
	1 – Display work orders in start date order.	
	2 – Display work orders in requested date order.	
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.	

20.3.1 Processing Options

See Section 54.8, "Production Status (P31226)."

20.4 Reviewing Rate Schedule and Work Center Loads

Navigation

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

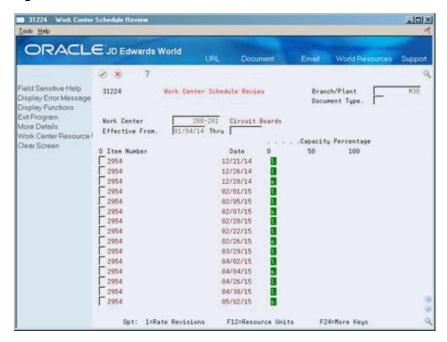
Use Work Center Schedule Review to review the work scheduled at either a work center or line for a day, week, or month. You can also select a specific date range for which to view the load for the work center. If you need to adjust the scheduled load at the work center, you can access several different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

Figure 20-3 Work Center Schedule Review screen



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

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

20.4.1 Processing Options

See Section 54.7, "Work Center Schedule Review (P31224)."

Set Up DRP, MPS, and RCCP

This chapter contains these topics:

- Section 21.1, "Setting Up DRP, MPS and RCCP,"
- Section 21.2, "Setting Up Supply and Demand Inclusion Rules,"
- Section 21.3, "Setting Up Message Types for DRP, MPS and RCCP,"
- Section 21.4, "Setting Up Time Fence Rules for DRP, MPS and RCCP,"
- Section 21.5, "Setting Up Forecast Consumption Periods,"
- Section 21.6, "Setting Up a Rough Cut Capacity Display."

21.1 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

21.2 Setting Up Supply and Demand Inclusion Rules

Navigation

From Material Planning Operations (G34), enter 29

From Material Planning Setup (G3440), choose Requirements Planning Setup

From Material Planning Setup (G3442), choose Supply/Demand Inclusion Rules

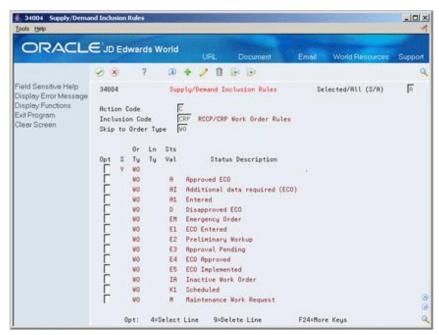
You set up supply and demand inclusion rules to display the supply, demand, and available quantities for an item. The source of these quantities in supply and demand equations are as follows:

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

To set up supply and demand inclusion rules

On Supply/Demand Inclusion Rules

Figure 21-1 Supply/Demand Inclusion Rules screen



- To locate the status values for your inclusion code, complete the following fields:
 - Inclusion Code
 - Skip to Order Type

2. Choose the work order statuses to include in supply and demand calculations.

ield 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	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.)	
	The following document types are defined by JD Edwards World and should not be changed:	
	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	
	Form-specific information	
	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.	
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.	

21.2.1 Processing Options

See Section 54.9, "Supply/Demand Inclusion Rules (P34004)."

21.3 Setting Up Message Types for DRP, MPS and RCCP

Navigation

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

-IOX ORACLE JD Edwards World 田中/日日日 Field Sensitive Help 88851 Action Messages Display Error Message Sustem Code Displey Functions User Defined Codes Exit Program Action Code Skip To Code Message Type User Defined Code Typ 81 Character Repository Services Code Description Description-2 Redisplay Previously C Memo (Cursor Sensitive Order & Expedite Where Used Cancel Alternate Lang Desc (C Print User Defined Code Defer Expedite Clear Screen Frozen Order Decrease Rate Quantity to Increase Rate Quantity to Decrease Order Quantity to

Manual Reminder Create Rate

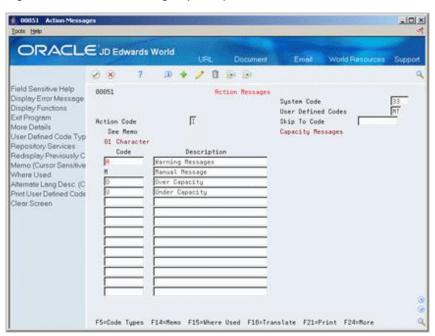
Figure 21-2 Action Messages screen

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

F5=Code Types F14=Memo F15=Where Used F18=Translate F21=Print F24=More

System Code

Figure 21-3 Action Messages (RCCP) screen



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

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

Navigation

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

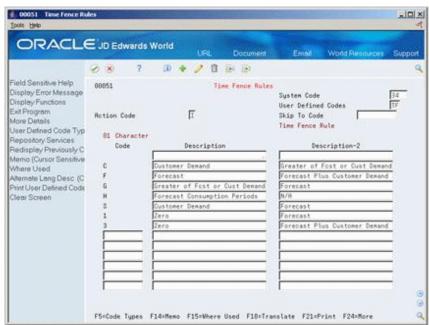
Time fences are points of time at which you can make changes to either policy or operating procedures. The system supports three time fences:

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

Figure 21-4 Time Fence Rules screen



Complete the following fields:

Code

- Description
- Description-2

21.5 Setting Up Forecast Consumption Periods

Navigation

From Material Planning Operations (G34), enter 29

From Material Planning Setup (G3440), choose Requirements Planning Setup

From Material Planning Setup (G3442), choose Forecast Consumption Periods

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.

21.5.1 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

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.

To set up forecast consumption periods

On Forecast Consumption Periods

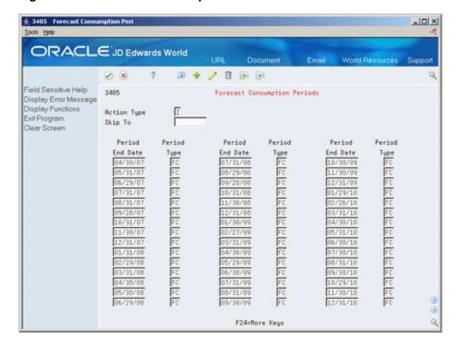


Figure 21-5 Forecast Consumption Periods screen

Complete the following fields:

- Period End Date
- Period Type

Field	Explanation A date on which the defined period ends.	
End Date		
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	

21.6 Setting Up a Rough Cut Capacity Display

Navigation

From Resource & Capacity Planning (G33), enter 29

From Resource/Capacity Planning Setup (G3341), choose Rough Cut Capacity

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



Figure 21–6 Rough Cut Capacity Display screen

Complete the following fields:

- Code
- Description

Process Orders

This chapter contains the topic:

Section 22.1, "Processing Orders."

22.1 Processing Orders

Navigation

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

22.1.1 Before You Begin

Verify that work orders have been entered manually or have been processed using the MPS Planning Messages program. See Section 47.1, "Generating Supplier Schedules."

See Also:

Processing Work Orders in the JD Edwards World Shop Floor Control - Discrete Guide.

22.1.2 Processing Options

See Section 54.11, "Generate and Print Work Orders (P31410)."

Plan Bills in the MPS/DRP System

This chapter contains these topics:

- Section 23.1, "Purpose,"
- Section 23.2, "Demand Structure,"
- Section 23.3, "Gross Regeneration."

23.1 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.

23.2 Demand Structure

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

Total Bike Sales (Item BIKERT) 100% 10-Speed Bike Sales 15-Speed Bike Sales (Item BIKERT10) (Item BIKER T15) 70% 30% Blue 10-Speed Bike Sales (Item BIKERT10BL) Green 10-Speed Bike Sales (Item BIKERT10GR) Blue 15-Speed Bike Sales (Item BIKERT15BL) Green 15-Speed Bike Sales (Item BIKERT15GR) 60% 40%

Figure 23-1 Demand Structure

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.

23.2.1 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.

23.2.2 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.

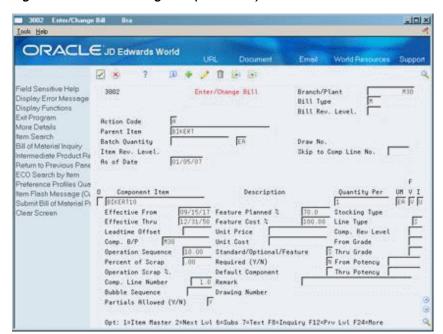
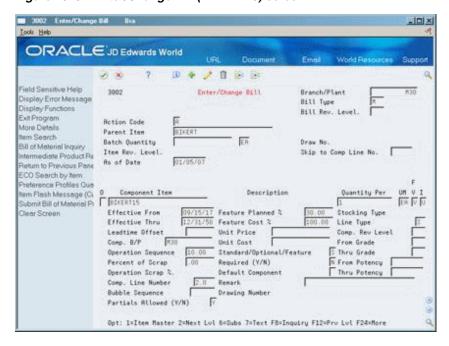


Figure 23-2 Enter/Change Bill (BIKERT10) screen

Figure 23-3 Enter/Change Bill (BIKERT15) screen



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 $700 (1000 \times .70)$
- The forecast for 15-speed bikes would be $300 (1000 \times .30)$
- 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 \times .25)
- Demand for blue 15-speed bikes would be 225 (300 x .75)

23.3 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.

Part V

Multi-Level Master Scheduling

This part contains these chapters:

- Chapter 24, "Overview to Multi-Level Master Scheduling,"
- Chapter 25, "Set Up Multi-Level Master Schedules,"
- Chapter 26, "Generate Multi-Level Master Schedules."

Overview to Multi-Level Master Scheduling

This chapter contains these topics:

- Section 24.1, "Objectives,"
- Section 24.2, "About Multi-Level Master Scheduling."

24.1 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

24.2 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, featur 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.	

24.2.1 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:

T1000 (Automobile) ENG 100 (Engine Feature) (Options)

Figure 24-1 Engine Options Planning Bill

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.

24.2.2 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.

T1000 Auto rojected Grouu leguirementu Projected Available Planned Order Releate 50 50 Engine Feature Projected Gross Requirements 50 |50 | 50 Scineduled Receipts Leadtime = 0 Projected Available Balance Planned Order Release 50 50 V-8 V-6 Week: 4 Projected Gross Regulrements Projected Gross Requirements 38 38 38 Scheduled Receipts Scheduled Receipts Projected Available Palance Projected Available Balance Planned Order Release Planned Order

Figure 24-2 Planned Order

Feature Planning % = 75 %

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.

Feature Planning % = 25 %

See Also:

- Section 15.2, "About Single Level Master Scheduling" for an overview of master scheduling concepts and terms,
- Set Up a Planning Bill in the JD Edwards World Forecasting Guide.

Set Up Multi-Level Master Schedules

This chapter contains these topics:

- Section 25.1, "Setting Up Multi-Level Master Schedules,"
- Section 25.2, "Setting Up Order Policy Rules,"
- Section 25.3, "Setting Up Stocking Types,"
- Section 25.4, "Setting Up Feature Planned Percents."

25.1 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

25.1.1 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:

- Section 21.1, "Setting Up DRP, MPS and RCCP" for information on how to define distribution or production and rough cut capacity data that you want the system to use during processing,
- Chapter 17, "Generate Single Level Master Schedules" for more information on the master scheduling process.

25.2 Setting Up Order Policy Rules

Navigation

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.

25.2.1 What You Should Know About

Торіс	Description
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

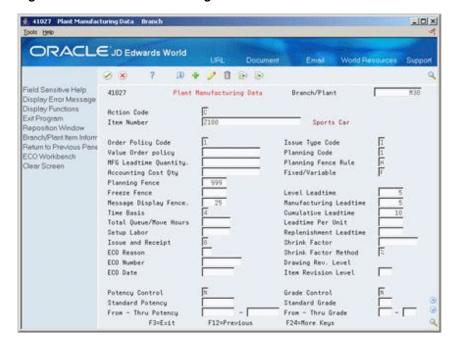


Figure 25-1 Plant Manufacturing Data screen

- 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	A code that designates the rules for inventory reordering in the MPS/MRP/DRP systems. Valid codes are:
	0 – Reorder point (not planned by MPS/MRP/DRP)
	1 – Lot-for-lot or as required
	2 – Fixed order quantity
	3 – Economic order quantity (EOQ)
	4 – Periods of supply
	5 – Rate scheduled item
	The codes above are hard-coded.

Field	Explanation
Planning Code	A code that indicates how Master Production Schedule (MPS), Material Requirements Planning (MRP), or Distribution Requirements Planning (DRP) processes this item. Valid codes are:
	0 - Not Planned by MPS, MRP, or DRP
	1 – Planned by MPS or DRP
	2 – Planned by MRP
	3 - Planned by MRP with additional independent forecast
	4 – Planned by MPS, Parent in Planning Bill
	5 – Planned by MPS, Component in Planning Bill
	These codes are hard-coded.
Level Leadtime	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:
	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).

25.3 Setting Up Stocking Types

Navigation

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

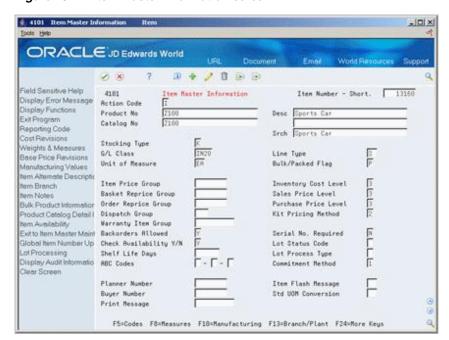


Figure 25–2 Item Master Information screen

- To locate the item for which you want to plan orders, complete the following field:
 - Item Number
- 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

25.4 Setting Up Feature Planned Percents

Navigation

From Product Data Management (G30), choose Daily PDM Discrete

From Daily PDM Discrete (G3011), choose Enter/Change Bill

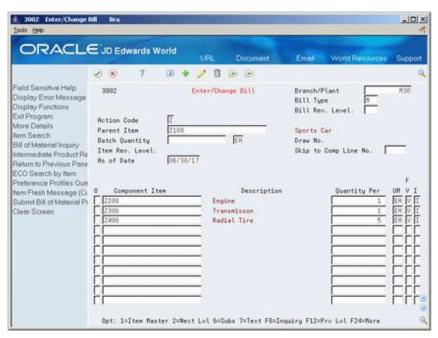
Set up a feature planned percent to define the percentage of demand for a specified feature based on projected sales.

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

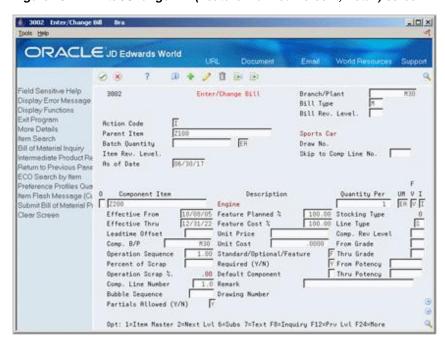
On Enter/Change Bill

Figure 25–3 Enter/Change Bill (Feature Planned Percent) screen



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

Figure 25-4 Enter/Change Bill (Feature Planned Percent, Detail) screen



3. Complete the following field:

Feature Planned Percent

Field	Explanation
Parent Item	A number that the system assigns to an item. It can be in short, long, or 3rd item number format.
	Form-specific information
	Header - The Parent field contains the item number of the parent item.
	Detail - The Component Item field contains the item number of the component item.
Feature Planned %	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.
	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%.

Generate Multi-Level Master Schedules

This chapter contains the topic:

Section 26.1, "Generating Multi-Level Master Schedules."

26.1 Generating Multi-Level Master Schedules

Navigation

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.

26.1.1 Before You Begin

Set up multi-level master scheduling.

See Also:

- Section 17.1, "Generating Single Level Master Schedules" for more information on generating master schedules and to review the processing options,
- Section 19.1, "Working with Master Schedules" for information on how to review time series and action messages that are an output of generating a multi-level master schedule,
- Section 20.1, "Validating Master Schedules" for information on how to validate the master schedule, to ensure that you have sufficient work center capacity.
- Section 25.1, "Setting Up Multi-Level Master Schedules,"

26.1.2 What You Should Know About Processing Options

Topic	Description	
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.	

Part VI

Manufacturing and Distribution Environments

This part contains these chapters:

- Chapter 27, "Overview to Manufacturing and Distribution Environments,"
- Chapter 28, "Work with Batch Manufacturing,"
- Chapter 29, "Work with Repetitive Manufacturing,"
- Chapter 30, "Work with Process Manufacturing."

Overview to Manufacturing and Distribution **Environments**

This chapter contains these topics:

- Section 27.1, "Objectives,"
- Section 27.2, "About Manufacturing and Distribution Environments."

27.1 Objectives

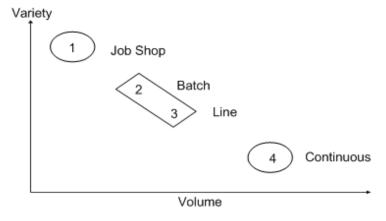
To use the Manufacturing and Distribution Planning (MDP) system to manage a variety of manufacturing and distribution environments

27.2 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.

Figure 27–1 Continuum of Manufacturing and Distribution Environments



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

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

27.2.1 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

27.2.2 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.

27.2.3 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.

27.2.4 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

27.2.5 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

27.2.6 What You Should Know About

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

About Manufacturing	and	Distribution	Environments
---------------------	-----	--------------	--------------

Work with Batch Manufacturing

This chapter contains these topics:

- Section 28.1, "Working with Batch Manufacturing,"
- Section 28.3, "Creating Batch Routings,"
- Section 28.4, "Processing Batch Work Orders,"
- Section 28.5, "Generating MPS for Batch Bills,"
- Section 28.6, "Reviewing Batch Output from the MPS Generation."

28.1 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

28.2 Creating Batch Bills of Material

Navigation

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.

28.2.1 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

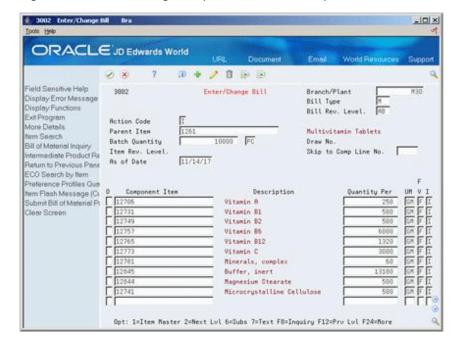


Figure 28-1 Enter/Change BIII (Batch Bill of Material) screen

- 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
- To create a new batch bill of material for the parent item, complete the following fields:
 - **Batch Quantity**
 - Batch Unit of Measure
- To view additional information, access the detail area (F4).

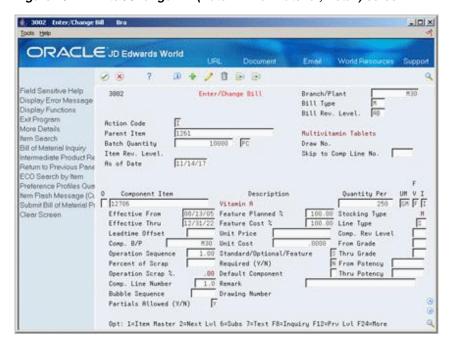


Figure 28–2 Enter/Change Bill (Batch Bill of Material, Detail) screen

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:

Work with Bills of Material in the JD Edwards World Product Data Management - Discrete Guide for more information about batch bills of material.

28.2.2 Processing Options

See Section 55.1, "Bill of Material Revisions (P3002)."

28.3 Creating Batch Routings

Navigation

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.

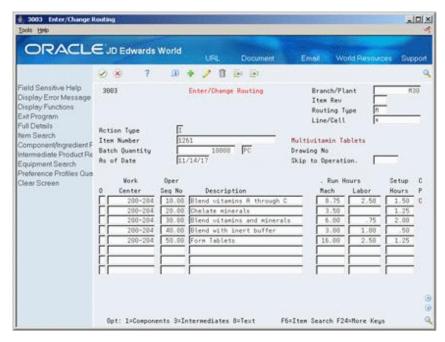
28.3.1 Before You Begin

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

To create batch routings

On Enter/Change Routing

Figure 28-3 Enter/Change Routing screen



- To locate the routing for the item, complete the following fields:
 - Item Number
 - **Batch Quantity**
 - Branch/Plant
 - Routing Type
- 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.

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

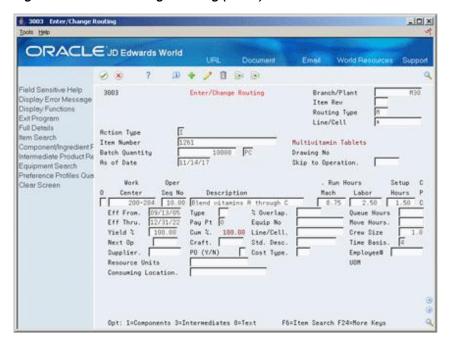


Figure 28–4 Enter/Change Routing (Detail) screen

- Complete the following optional fields:
 - Resource Units Consumed
 - Replenishment Location
 - **UOM**

See Also:

Work with Routings in the JD Edwards World Product Data Management - Discrete Guide for more information about batch routings.

28.3.2 Processing Options

See Section 55.2, "Routing Master Revisions (P3003)."

28.4 Processing Batch Work Orders

Navigation

From Shop Floor Control (G31), choose Process - Daily Order Preparation

From Daily Order Preparation - Process (G3113), choose Enter/Change Order or **Order Processing**

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:

- Create Work Orders in the JD Edwards World Shop Floor Control -*Process Guide* for information about attaching parts lists and routing instructions interactively,
- Process Work Orders in the JD Edwards World Shop Floor Control -Process Guide for information about attaching parts lists and routing instructions using the batch program.

28.5 Generating MPS for Batch Bills

Navigation

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

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:

Figure 28–5 Planned Order for Batch Quantity

Batch	MPS	Resulting MPS	
Quantity	Requirement	Planned Order	
1000	1500	1000	
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:

Figure 28–6 Planned Order for Largest Batch Quantity

Batch Quantity	MPS Requirement	Resulting MPS Planned Order	
400	1500	1000	
600 800	600		
1000			
400 600	3000 1000	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:

Figure 28–7 Planned Order for Multiple Batch Bills

Batch MPS Quantity Requirement 400 780 600 800 1000	Resulting MPS Planned Order 800
--	---------------------------------------

See Also:

Section 17.1, "Generating Single Level Master Schedules" for the processing options for this program.

28.6 Reviewing Batch Output from the MPS Generation

Navigation

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:

- Section 19.2, "Reviewing DRP/MPS Time Series" for more information on MPS Time Series Inquiry, and for the processing options,
- Section 19.4, "Working with Messages" for the processing options for MPS Detail Message Review.

To review the time series for batch output

On MPS Time Series Inquiry

3413 MPS Time Series Inquiry Br -IOX ORACLE JD Edwards World 3413 MPS Time Series Inquiry Branch/Plant Display Error Message Start From Date. Display Functions Unit of Measure. Exit Program Ext Program

Ext to Forecast Revisio
Run Single Item MPS

Leadtine Level
5 Fixed
100 Tablet Bottles Multivitamin Tablets Fun Single Item MPS
Display MPS Key Windi 88/16/18 88/17/18 88/18/18 88/21/18 L 88/22/18 Display Calendar Windi Exit to Enter/Change Ra Exit to Pegging Inquiry
Exit to Message Detail 89888 89000 Window Left *PD Window Right +900 Clear Screen +₩0 -LEXP -FCU -FC F8=Code F13=Peg F14=Msg F16=Sup/Dem F19=Left F28=Right F24=More Keys

Figure 28-8 MPS Time Series Inquiry screen

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

- Branch/Plant
- Item Number

28.6.1 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

28.6.2 What You Should Know About

Topic	Description
Suppressing blank lines	You can use the function key F15 to suppress the quantity types that have no quantity in the time series.

To review action messages for batch output

On MPS Detail Message Review

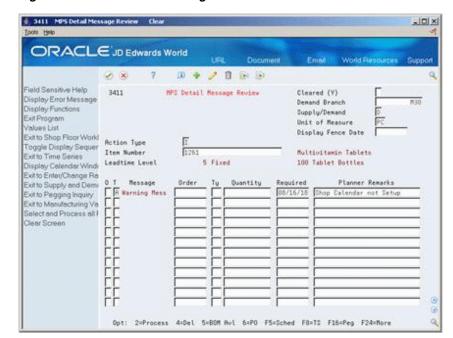


Figure 28–9 MPS Detail Message Review screen

To locate the message for your item, complete the following fields:

- Demand Branch
- Item Number

Work with Repetitive Manufacturing

This chapter contains these topics:

- Section 29.1, "Working with Repetitive Manufacturing,"
- Section 29.2, "Defining Order Policy for Repetitive Items,"
- Section 29.3, "Creating Repetitive Routings,"
- Section 29.4, "Creating Line/Item Relationships,"
- Section 29.5, "Creating Rate Schedules,"
- Section 29.6, "Generating MPS for Repetitive Items,"
- Section 29.7, "Reviewing Repetitive Rate Scheduled Output from MPS Generation,"
- Section 29.8, "Validating Load on Lines or Cells."

29.1 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

29.2 Defining Order Policy for Repetitive Items

Navigation

From Inventory Management (G41), choose Inventory Master/Transactions

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

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

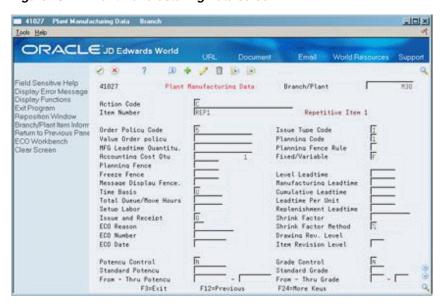
■ 41026 Item Branch/Plant Information Br Look Help ORACLE JD Edwards World Field Sensitive Help
Display Error Message
Display Functions
Ext Program

41826
Rotion Code
Item Number
FEP1 Branch/Plant M38 Repetitive Item 1 Classification Codes 8 Stocking Tupe Line Tupe Cost Ledger G/L Class Base Price Revisions Manufacturing Values Item Price Group Mem/Location Information Price Group Item Master Revisions Order Reprice Group Varrantu Item Group Sales Taxable Purchasing Taxable hem Group Definition | Warrantu Item Group Bulk Depol/Product Info | Backorders Allowed Serial No. Required Check Availability Y/M Shelf Life Daws Lot Status Code Lot Process Tupe Product Cafalog Detail (ABC Codes Preference Profiles Que Marqin Naintenance (%) Commitment Method Mix Lots/Serial Number Display Audit informatio Country of Origin United States Planner Number Buuer Number Supplier Print Message F5=Codes F6=Cost F9=Price F18=Manufacturing F15=Bulk Info F24=Keus

Figure 29-1 Item Branch/Plant Information screen

- To locate the item record, complete the following fields:
 - Branch/Plant
 - Item Number
- Choose Manufacturing Values (F10). 2.

Figure 29–2 Plant Manufacturing Data screen



- On Plant Manufacturing Data, identify the item as a rate scheduled item in the 3. following field:
 - Order Policy Code

29.3 Creating Repetitive Routings

Navigation

From Product Data Management (G30), choose Daily PDM Discrete

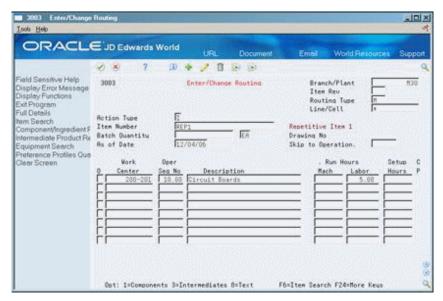
From Daily PDM Discrete (G3011), choose Enter/Change Routing

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

Figure 29–3 Enter/Change Routing screen



- To locate the routing for your item, complete the following fields:
 - Branch/Plant
 - Line/Cell
 - Item Number
- Access the detail area (F4).

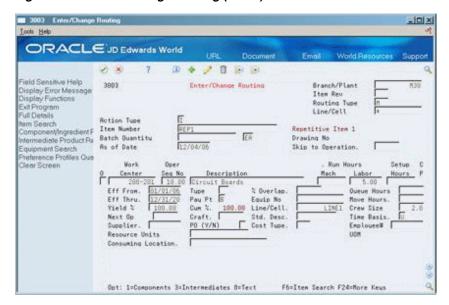


Figure 29-4 Enter/Change Routing (Detail) screen

- 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.

29.4 Creating Line/Item Relationships

Navigation

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 Rela Look Help ORACLE JD Edwards World 0 + / 0 3 3 Field Sensitive Help Display Error Message Display Functions Exit Program Reinquire on Record Clear Screen Line/Item Relationships 31093 Branch/Plant Action Code Item Number REP1 ER Repetitive Item 1 LINE1 Repetitive line 1 Line/Cell Capacity Consumed Use as Default (0/1), Default Shift No Shift Default Period 12 Veeklu F24=More Keus

Figure 29–5 Line/Item Relationships screen

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	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.
	For payroll and time entry:
	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.
	If an employee occasionally works a different shift, you enter the shift code on each applicable timecard to override the default.
Period	A code that determines the frequency of the schedule. Valid codes are:
	1 – Monthly
	2 – Weekly
	3 – Daily
	4 – Per Shift

29.5 Creating Rate Schedules

Navigation

From Shop Floor Control (G31), choose Repetitive

From Repetitive Daily Processing (G3141), choose Enter/Change Rate Schedule

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.

29.5.1 Before You Begin

- Set up your work centers. See Setting Up Work Centers in the *JD Edwards World* Shop Floor Control - Discrete Guide.
- Set up your routing instructions. See Creating Work Orders in the JD Edwards World Shop Floor Control - Discrete Guide.
- Set up your line/item relationships. See Section 29.4, "Creating Line/Item Relationships."

To create rate schedules

On Enter/Change Rate Schedule

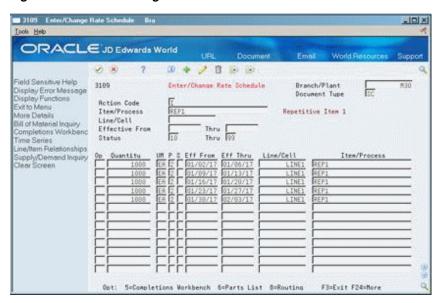
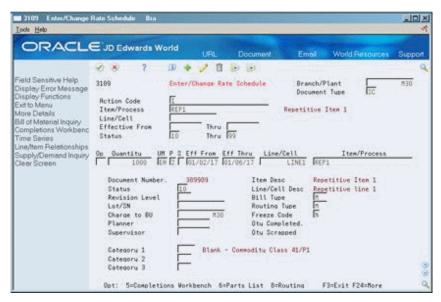


Figure 29-6 Enter/Change Rate Schedule screen

- **1.** Complete the following fields:
 - Branch/Plant
 - Schedule Type
 - Item Number
 - Line/Cell
 - Effective From
 - Effective To
 - Quantity
 - Unit of Measure
- Access the detail area (F4).

Figure 29–7 Enter/Change Rate Schedule (Detail) screen



- **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.
	Note: 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.
Category 2	User defined code system 00, type W2, which indicates the type or category of a work order.
	Note: 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.)
Category 3	User defined code system 00, type W3, which indicates the type or category of a work order.
	Note: 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.)
Qty Scrapped	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.
	In manufacturing, this can also be the number of units scrapped to date.
Qty Completed	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.
	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.

29.5.2 What You Should Know About

Торіс	Description
Deleting a rate schedule	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.
Duplicating schedules	You can enter duplicate rate schedules.
Creating rates automatically	You automatically create a rate when you process a Create Rate message in Detail Message Review.

See Also:

Schedule Rates in the JD Edwards World Shop Floor Control - Process *Guide* for more information on processing options.

29.6 Generating MPS for Repetitive Items

Navigation

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

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

29.6.1 What You Should Know About

Торіс	Description
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:

- Section 17.2, "Generating a Master Schedule for All Items" for the processing options for this program,
- Section 17.4, "Generating a Master Schedule for Selected Items."

29.7 Reviewing Repetitive Rate Scheduled Output from MPS Generation

Navigation

From Material Planning Operations (G34), choose MPS

From MPS Daily Operations (G3412), choose MPS Time Series Inquiry or MPS **Detail Message Review**

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

3413 MRP Tune Series In Look Help ORACLE JD Edwards World Field Sensitive Help Display Error Message Display Functions Exit Program Exit to Forecast Revisio Run Single Item MPS Display MPS Key Winds Branch/Plant Start From Date. 3413 MRP Time Series Inquiru Unit of Measure. Repetitive Item 1 Item Number Leadtime Level Safetu Stock Fixed 81/82/17 01/83/17 81/84/17 81/85/17 01/05/17 81/13/17 Display Calendar Winds Exit to Enter/Change Ra Exit Degging Inquiry
Exit to Message Detail
Suppress Blank Line Tc
Exit to Supply/Demend
Quantity Type Toggle
Exit to Mity Data Pervisic
Window Left
Window Egit
Clear Screen +BAU +BA 300-220-100-+P0 +MD +RS 1100 1100 1100 1100 F8=Code F13=Peq F14=Msq F16=Sup/Dem F19=Left F28=Right F24=More Keus

Figure 29-8 MPS Time Series Inquiry screen

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

- Branch/Plant
- Item Number

29.7.1 What You Should Know About

Topic	Description
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

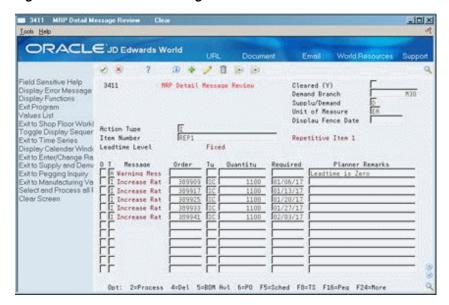
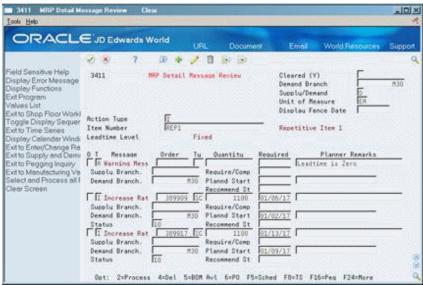


Figure 29-9 MPS Detail Message Review screen

- 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). 2.

Figure 29-10 MRP Detail Message Review (Detail) screen



29.7.2 What You Should Know About

Topic	Description
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:

Section 19.4, "Working with Messages" for the processing options for this program.

29.8 Validating Load on Lines or Cells

Navigation

From Shop Floor Control (G31), choose Repetitive

From Repetitive Daily Processing (G3115), choose Schedule Review

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

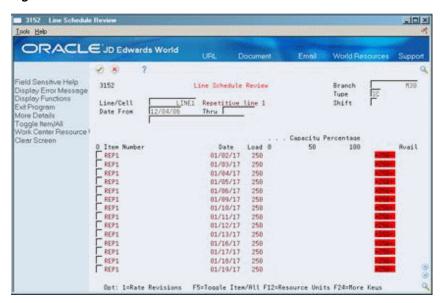


Figure 29-11 Line Schedule Review screen

To locate the schedule, complete the following fields:

- Branch/Plant
- Line/Cell or Work Center
- Effective From
- Effective To

29.8.1 Processing Options

See Section 55.3, "Schedule Review (P3152)."

See Also:

Section 20.4, "Reviewing Rate Schedule and Work Center Loads" for the processing options for this program.

Work with Process Manufacturing

This chapter contains these topics:

- Section 30.1, "Working with Process Manufacturing,"
- Section 30.2, "Defining the Stocking Types for Processes,"
- Section 30.3, "Defining Co- and By-Products,"
- Section 30.4, "Generating MPS for the Process Industry,"
- Section 30.5, "Reviewing Process Output from MPS Generation."

30.1 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.

Co-Product (Potate Chip) = Time Series Process By-Products

Figure 30-1 Time Series for Co-Products

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.

30.2 Defining the Stocking Types for Processes

(Potato Peel)

Navigation

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

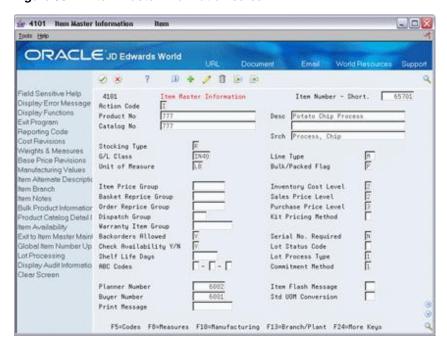


Figure 30–2 Item Master Information screen

- To locate your item record, complete the following field:
 - **Product Number**
- Complete the following field:
 - Stocking Type

30.3 Defining Co- and By-Products

Navigation

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

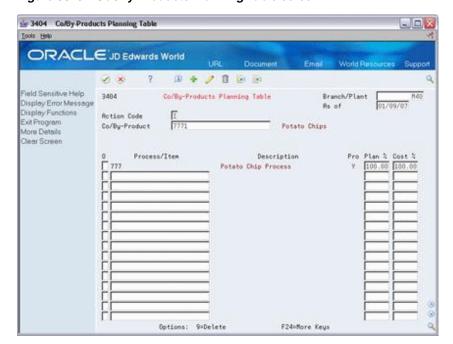


Figure 30–3 Co-/By-Products Planning Table screen

- To locate the co-/by-product table, complete the following fields:
 - Co-/By-Product
 - Branch/Plant
- Complete the following fields:
 - Process/Item
 - **Process**
 - Plan Percentage
 - Cost Percentage
- Access the detail area (F4).

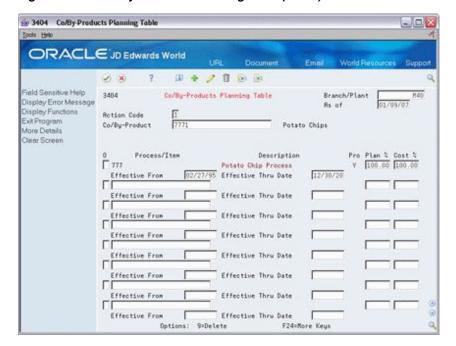


Figure 30-4 Co-/By-Products Planning Table (Detail) screen

- 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.

30.4 Generating MPS for the Process Industry

Navigation

From Material Planning Operations (G34), choose Single Site Planning From Single Site Periodic Planning Operations (G3422), choose MPS Regeneration When you choose MPS Regeneration, the system:

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

See Also:

Section 17.4, "Generating a Master Schedule for Selected Items" for the processing options for this program.

30.4.1 What You Should Know About

Topic	Description
Process Planning	Set the process planning processing option for the net change versions you use for MRP and MPS planning.
	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.
Forecast Consumption	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.

30.5 Reviewing Process Output from MPS Generation

Navigation

From Material Planning Operations (G34), choose MPS

From MPS Daily Operations (G3412), choose Time Series Inquiry 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 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 coand 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

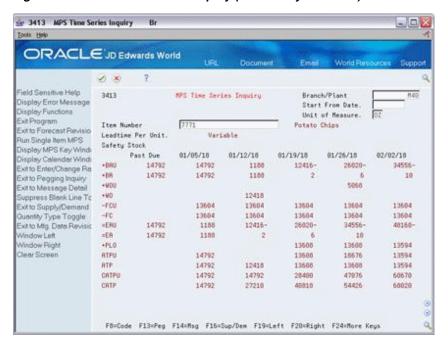


Figure 30–5 MPS Time Series Inquiry (Co- and By-Products) screen

To locate the time series for your co- or by-product, complete the following fields:

- Branch/Plant
- Item Number

30.5.1 What You Should Know About

Торіс	Description	
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.	

30.5.2 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.

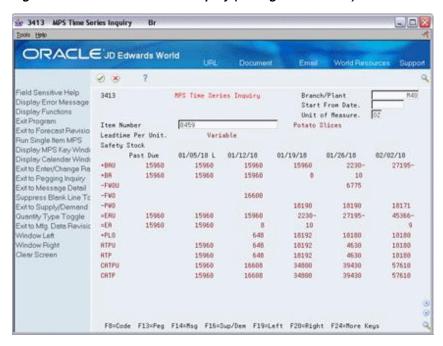


Figure 30–6 MPS Time Series Inquiry (Pacing Co-Products) screen

View the time series for the product which is not the pacing co-product. Review the quantities in period 01/12/18.

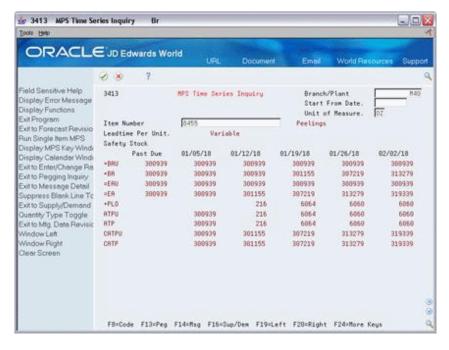


Figure 30-7 MPS Time Series Inquiry (No Pacing Co-Product) screen

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

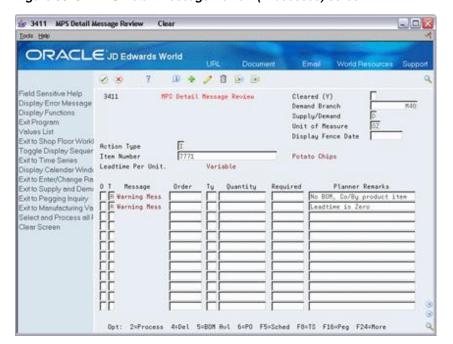


Figure 30–8 MPS Detail Message Review (Processes) screen

- 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.

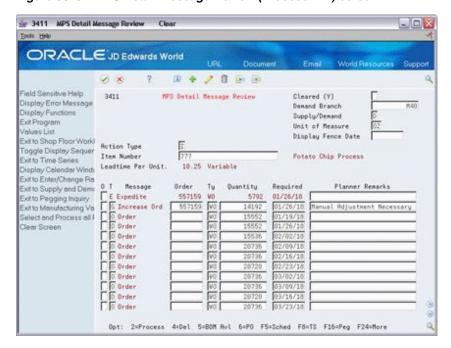


Figure 30-9 MPS Detail Message Review (Process 777) screen

30.5.2.1 What You Should Know About

Topic	Description
Co-product messages	Co-products that are 100% planned by the process do not receive order messages.

30.5.3 Processing Options

See Section 55.4, "Message Detail (P3411)."

See Also:

- Section 19.1, "Working with Master Schedules" for the processing options for MPS Time Message Inquiry,
- Section 19.4, "Working with Messages" for the processing options for Detail Message Review.

Part VII

DRP/MPS Multi-Facility Scheduling

This part contains the chapters:

- Chapter 31, "Overview to DRP/MPS Multi-Facility Scheduling,"
- Chapter 32, "Set Up Multi-Facility Schedules,"
- Chapter 33, "Generate Multi-Facility Schedules,"
- Chapter 34, "Work with Multi-Facility Planning Output."

Overview to DRP/MPS Multi-Facility Scheduling

This chapter contains these topics:

- Section 31.1, "Objectives,"
- Section 31.2, "About DRP/MPS Multi-Facility Scheduling."

31.1 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

31.2 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:

Table	Description	
Bill of Materials Master (F3002)	Contains warehouse or facility level information about bills of material, such as:	
	 Costs and quantities of components 	
	■ Features and options	
	 Levels of detail for each bill 	
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:	
	 Item numbers and descriptions 	
	 Category codes 	
	Units of measure	
Item Branch (F4102)	Contains warehouse or plant level information, such as:	
	■ Costs	
	Quantities	
	■ Location	
	■ Branch level category codes	

31.2.1 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

Set Up Multi-Facility Schedules

This chapter contains these topics:

- Section 32.1, "Setting Up Multi-Facility Schedules,"
- Section 32.2, "Setting Up Supply and Demand Relationships,"
- Section 32.3, "Reviewing Branch Relationships on the Relationships Chart."

32.1 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.

32.1.1 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:

- Section 15.2, "About Single Level Master Scheduling" for more information on the master scheduling process,
- Section 21.1, "Setting Up DRP, MPS and RCCP" for information on how to define DRP, MPS, or RCCP data to use during processing.

32.2 Setting Up Supply and Demand Relationships

Navigation

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

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.	
	Note: 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

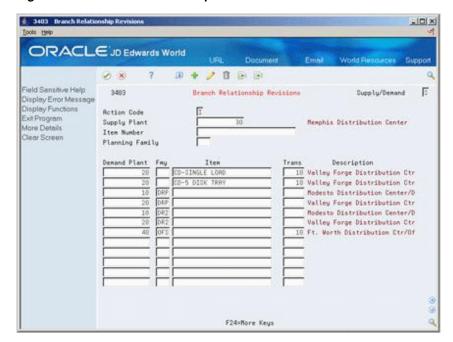


Figure 32-1 Branch Relationship Revisions screen

- Complete the following field: 1.
 - Supply Plant
- 2. Complete the following optional fields:
 - Supply/Demand
 - Family
 - Item
 - Transit Leadtime
- Access the detail area (F4).

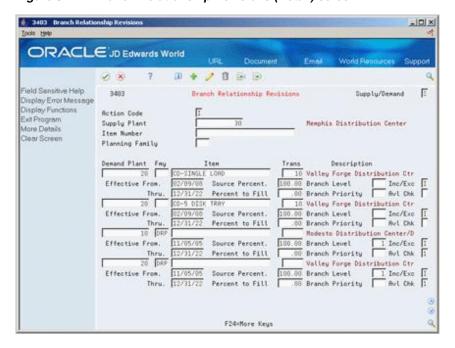


Figure 32-2 Branch Relationship Revisions (Detail) screen

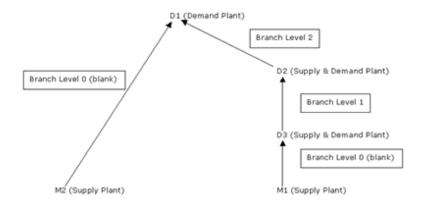
- Complete the following optional fields:
 - Branch Level
 - **Branch Priority**
 - Availability Check
- Allow the system to enter defaults or complete the following fields:
 - Effective From
 - Effective Thru
 - Source Percent
 - Percent to Fill
 - Markup Percent
 - Fixed
 - Include/Exclude
 - Unit Extended

Field	Explanation
Supply/Demand	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.
	S – Supply branch/plant
	D – Demand branch/plant
	Form-specific information
	If you are viewing messages for the supply branch/plant, the fold area shows branch/plants generating demand for each resupply order.
	If you are viewing messages for the demand branch/plant, the fold area shows branch/plants to which each resupply order is directed.
Fmy	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.
	This field is one of six classification categories available primarily for purchasing purposes.
	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.
	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.
Item Number	You use this field to establish item number specific relationships or exclusions.

Field	Explanation
Trans	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.
	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.
	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).
Branch Level	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).
	Note: Assign branch levels carefully so that the planning system generates all demand before allocating supply. See diagram below.
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.
Source Percent	The system uses source percent to determine what percent of the planned order should be supplied by the source branch.
	For example:
	Demand Branch - ATL
	Supply Branch - DEN source percent = 40% , CHI source percent = 60%
	If ATL needs 100 parts, the system generates a message to transfer 40 parts from DEN and 60 parts from CHI.
	A source percent of 100 transfers the entire supply from that Branch/Plant.

Field	Explanation	
Percent to Fill	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:	
	■ Percent to Fill - 75%	
	■ Demand - 200	
	 If the supply branch has 150 (75 percent of 200) or more available, then the planning system places the transfer order message. 	
	The system generates the transfer order message when the percent to fill is zero.	
	Note: In order to allow the system to generate transfer order messages, you must activate availability checking.	
Markup Percent	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.	
Fixed	The amount to use to mark up the cost when the item is transferred from one branch to another.	
Inc/Exclude	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.	
Unt/Ext	This code determines if the fixed cost markup is to be added to the unit cost or the extended cost. Valid values are:	
	U – Add markup to the unit cost	
	E – Add markup to the extended cost	

Figure 32-3 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.

32.2.1 What You Should Know About

Topic	Description
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.

32.2.2 Processing Options

See Section 56.1, "Branch Relationship Revisions (P3403)."

32.3 Reviewing Branch Relationships on the Relationships Chart

Navigation

From Material Planning Operations (G34), choose Multi-Facility Planning

From Multi-Facility Periodic Planning Operations (G3423), enter 29

From Multi-Facility Setup (G3443), choose Branch Relationships Chart

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

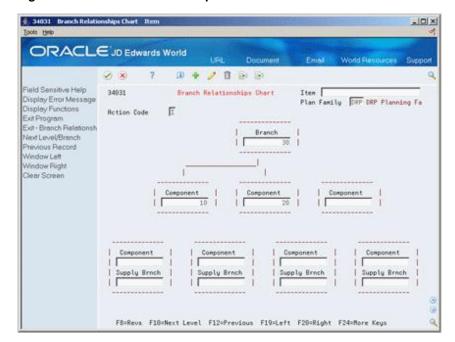


Figure 32-4 Branch Relationships Chart screen

- To locate the branch/plant for which you want to display supply and demand 1. relationships, complete the following field:
 - Branch
- To narrow your search to a specific level of detail, complete one of the following optional fields:
 - Item
 - Plan Family

Field	Explanation
Branch	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:
	■ Branch/Plant (MMCU)
	■ Dept A (MCU)
	■ Dept B (MCU)
	■ Job 123 (MCU)
	Business unit security is based on the higher-level business unit.
	Form-specific information
	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.

Field	Explanation
Plan Family	A user defined code (system 41, type P4) under which you can organize logically related items.
	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.
	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.

32.3.1 Processing Options

See Section 56.2, "Branch Relationships Chart (P34031)."

Generate Multi-Facility Schedules

This chapter contains the topic:

Section 33.1, "Generating Multi-Facility Schedules."

33.1 Generating Multi-Facility Schedules

Navigation

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.

33.1.1 Before You Begin

Set up DRP/MPS multi-facility scheduling. See Section 32.1, "Setting Up Multi-Facility Schedules."

33.1.2 Processing Options

See Section 54.5, "Multi-Facility - Gross Regeneration (P3483)."

Work with Multi-Facility Planning Output

This chapter contains these topics:

- Section 34.1, "Working with Multi-Facility Planning Output,"
- Section 34.2, "Reviewing Multi-Facility Time Series,"
- Section 34.3, "Processing Multi-Facility Transfer Order Messages,"
- Section 34.4, "Reviewing Transfer Messages."

34.1 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

34.1.1 Before You Begin

Generate a current multi-facility schedule. See Section 33.1, "Generating Multi-Facility Schedules."

34.2 Reviewing Multi-Facility Time Series

Navigation

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.

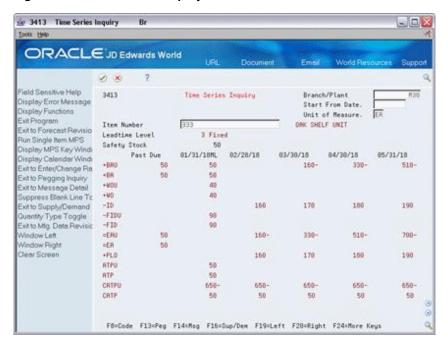
This data is derived from the most recent regeneration or net change run. Processing options in the DRP/MPS regeneration program enable you to set up daily, weekly, or monthly time periods (buckets).

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

Figure 34-1 Time Series Inquiry screen



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

- Branch/Plant
- Item Number

See Also:

Section 19.2, "Reviewing DRP/MPS Time Series."

34.3 Processing Multi-Facility Transfer Order Messages

Navigation

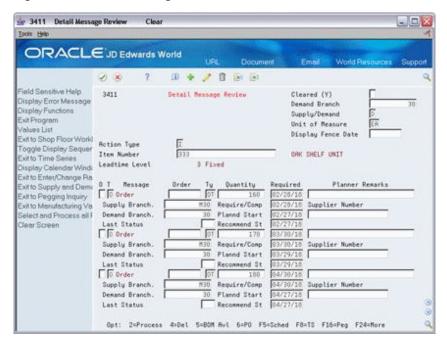
From Material Planning Operations (G34), choose Daily Multi-Facility Planning From Multi-Facility Planning Daily Operations (G3414), choose Detail Message Review

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

Figure 34-2 Detail Message Review screen



- 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.

34.4 Reviewing Transfer Messages

Navigation

From Material Planning Operations (G34), choose Multi-Facility Planning

From Multi-Facility Planning (G3414), choose Transfers

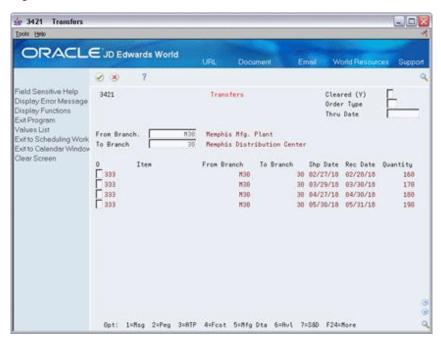
Use Transfers as a convenient utility to analyze planned transfer orders created during a multi-plant DRP/MPS/MRP generation. You can also use Transfers to view other activity associated with branches or plants, such as:

- Pegging
- **ATP**
- Forecast
- Manufacturing data
- Available capacity
- Supply and demand

To review transfer messages

On Transfers

Figure 34-3 Transfers screen



- Complete the following fields:
 - From Branch
 - To Branch

The system displays the planned transfer orders created during the multi-plant generation.

- To review the messages for a transfer order, enter a 1 in the following field:
 - Option

34.4.1 Processing Options

See Section 56.4, "Transfer Order Review (P3421)."

34.4.2 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:

Section 19.4, "Working with Messages."

Part VIII

Single Facility Material Requirements Planning

This part contains these chapters:

- Chapter 35, "Overview to Single Facility Material Requirements Planning,"
- Chapter 36, "Generate Material Requirements Plans,"
- Chapter 37, "Work with Material Requirements Plans,"
- Chapter 38, "Validate Material Requirements Plans,"
- Chapter 39, "Set Up Material & Capacity Requirements Planning,"
- Chapter 40, "Process Orders for MRP."

Overview to Single Facility Material Requirements Planning

This chapter contains these topics:

- Section 35.1, "Objectives,"
- Section 35.2, "About Single Facility MRP."

35.1 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

35.2 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:

Table	Description	
Bill of Materials Master (F3002)	Contains warehouse or facility level information about bills of material, such as:	
	 Costs and quantities of components 	
	 Features and options 	
	 Levels of detail for each bill 	
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:	
	 Item numbers and descriptions 	
	 Category codes 	
	Units of measure	
Item Branch (F4102)	Contains warehouse or plant-level information, such as:	
	Costs	
	 Quantities 	
	■ Location	
	■ Branch level category codes	

35.2.1 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

35.2.2 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.

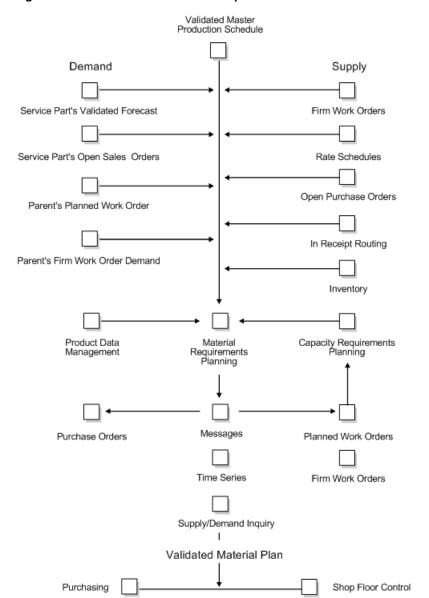


Figure 35-1 MRP and MPS Flow Comparison

35.2.3 How Do You Run MRP Effectively?

MRP runs most effectively when you ensure the accuracy and validity of the following items:

Item	Description
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.

Item	Description
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:

Chapter 16, "Understand Time Fences and System Messages."

Generate Material Requirements Plans

This chapter contains the topic:

Section 36.1, "Generating Material Requirements Plans."

36.1 Generating Material Requirements Plans

Navigation

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	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:	
	 Reads the selected forecast 	
	 Uses data from the MRP inclusion rules to calculate requirements for master planned items 	
	 Generates a time series and messages for the selected items and components of selected items 	

Function	Description	
MRP Net Change	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:	
	 Evaluates selected information 	
	 Performs calculations 	
	 Generates a time series and messages for the selected items and components of selected items 	

36.1.1 Before You Begin

- Verify that MRP/CRP has been set up.
- Understand the concepts and terms described in Single Level Master Scheduling. See Section 15, "Overview to Single Level Master Scheduling."
- Generate a forecast for independent demand items. See Creating Detail Forecasts in the *JD Edwards World Forecasting Guide*.

36.1.2 What You Should Know About

Topic	Description
Bill of material	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.
	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.
Low level code	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.
Generation type	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.
Frozen orders	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.
Data selection	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.
	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.

See Also:

- Section 39.1, "Setting Up Material and Capacity Requirements Planning" for information on how to define MRP/CRP data to use during processing,
- Section 17.3, "Reviewing Items for Master Schedule Selection" 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 Section 54.1, "Master Planning Schedule -Plant Maintenance (P3482)."

Work with Material Requirements Plans

This chapter contains these topics:

- Section 37.1, "Working with Material Requirements Plans,"
- Section 37.2, "Reviewing MRP Time Series,"
- Section 37.3, "Reviewing Planning Families for MRP,"
- Section 37.4, "Working with Messages for MRP,"
- Section 37.5, "Working with Scheduling Information."

37.1 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

37.2 Reviewing MRP Time Series

Navigation

From Material Planning Operations (G34), choose MRP

From Manual Receipts Processing Daily operations (G3414), choose Time Series Inquiry

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.

37.2.1 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 Section 36.1, "Generating Material Requirements Plans."

See Also:

Section 19.2, "Reviewing DRP/MPS Time Series."

37.3 Reviewing Planning Families for MRP

Navigation

From Material Planning Operations (G34), choose MRP

From Manual Receipts Processing Daily Operations (G3413), choose MRP Planning Family Review

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:

Section 19.3, "Reviewing Planning Families."

37.4 Working with Messages for MRP

Navigation

From Material Planning Operations (G34), choose MRP

From MRP Daily Operations (G4313), choose Detail Message Review

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.

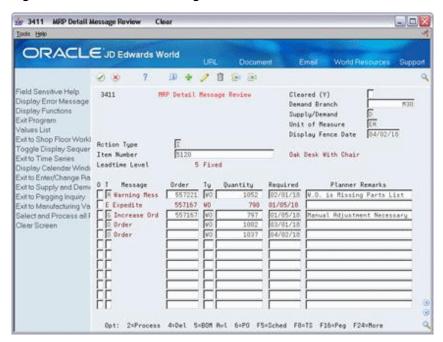


Figure 37-1 MRP Detail Message Review screen

See Also:

Section 19.4, "Working with Messages" for information on the Detail Message Review processing options.

37.4.1 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.

37.4.1.1 What You Should Know About

Topic	Description
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:

Section 19.4, "Working with Messages."

37.4.2 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)	MRP automatically changes schedule dates and quantity for each planning generation.
	The status code for document type +PLO is P.
	The component demand is -PWO.
Firm orders (WO)	MRP creates messages that require the planner to balance supply and demand.
	+WO does not always equal +WOU in schedule dates or quantities.
	A status code for document type WO of 10 indicates that the system has released the work order.
	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.

Order Type	Description
Firm orders (WO)	These orders contain parts lists and routing instructions. MRP creates messages that require the planner to balance supply and demand.
	+WO does not always equal +WOU in schedule dates or quantities.
	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.
	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.
Firm orders (WO)	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.
	+WO does not always equal +WOU in schedule dates or quantities.
	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.
Work orders (WO)	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.
	+WO does not always equal +WOU in schedule dates or quantities.
	Any status code for document type WO inside the freeze fence.
	The component demand is -FWO and -FWOU. The system does not create any messages from the parent demand.
Work orders (WO)	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.
	Any status code for document type WO indicates a freeze code on the work order header.
	The component demand is -FWO and -FWOU. The system does not create any messages from the parent demand.

37.4.3 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.

37.4.4 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:

- Section 19.3, "Reviewing Planning Families,"
- Section 19.4.3, "Processing Work Order Messages,"
- Section 19.4.4, "Processing Purchase Order Messages."

37.5 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

37.5.1 Reviewing MRP Pegging Demand

Navigation

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

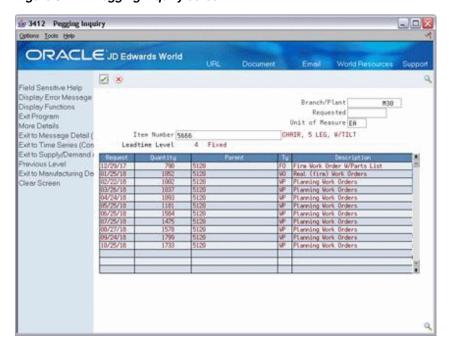


Figure 37-2 Pegging Inquiry screen

- To locate the item for which you want to review pegging demand, complete the following fields:
 - Item Number
 - Branch/Plant
- To narrow your search to a specific date, complete the following optional field:
 - Requested

Field	Explanation
Requested	The date that an item is to arrive or that an action is to be complete.
	Form-specific information
	As of date for pegging.
Parent	The system provides for three separate item numbers.
	1. Item Number (short) - An eight-digit, computer assigned, completely non-significant item number.
	2. 2nd Item Number - The 25-digit, free form, user defined alphanumeric item number.
	3. 3rd Item Number - Another 25-digit, free form, user defined alphanumeric item number.
	Form-specific information
	On this screen, you see the item number for the parent of this component part.

37.5.1.1 Processing Options

See Section 57.1, "Pegging (P3412)."

37.5.2 Reviewing MRP Supply and Demand

Navigation

From Material Planning Operations (G34), choose MRP

From MRP Daily Operations (G3413), choose Supply/Demand Inquiry

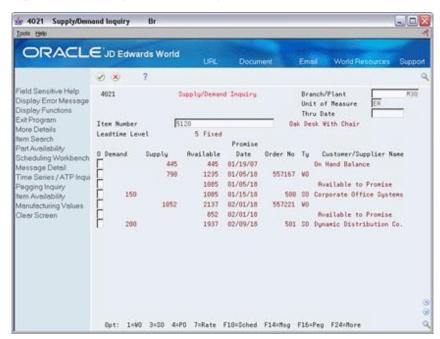
Use Supply and Demand Inquiry to review the current demand for a selected item. Supply and Demand Inquiry allows you to:

- 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

Figure 37–3 Supply/Demand Inquiry screen



- 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.

37.5.2.1 Processing Options

See Section 57.2, "Supply & Demand (P4021)."

37.5.3 Reviewing Shop Floor Workbench for MRP

Navigation

From Material Planning Operations (G34), choose MRP

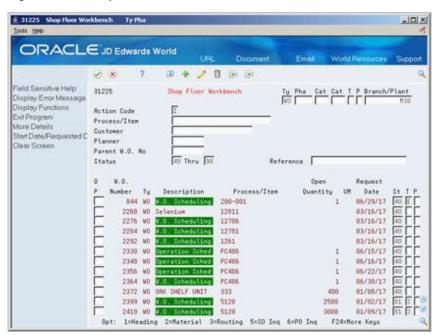
From MRP Daily Operations (G3413), choose Shop Floor Workbench

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

Figure 37-4 Shop Floor Workbench screen



- 1. 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	A number that the system assigns to an item. It can be in short, long, or 3rd item number format.
	Form-specific information
	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.
	Detail - The Item Number field in the detail section of the screen indicates what item the work order on that line is for.
Customer	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.
	Form-specific information
	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.
	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.
Planner	The address book number of a manager or planner.
	Note: 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.)
	Form-specific information
	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.
	Fold Area - The Planner field in the fold area contains the planner number for the planner who scheduled the work order listed.

Field	Explanation
Parent W.O. No	This is the parent work order number. You can use this number to:
	1. Enter default values for newly added work orders, for example, Type, Priority, Status, or Manager.
	2. Group work orders for project setup and reporting
	Form-specific information
	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.
Status	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.
	Form-specific information
	You can update the status for the work order on this screen without accessing the work order header.
Search X-Ref	An alphanumeric value used as a cross-reference or secondary reference number. Typically, this is the customer number, supplier number, or job number.
	Form-specific information
	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.
	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.

37.5.3.1 What You Should Know About

Topic	Description
Rate scheduled items	You can review rate scheduled items on the Line Scheduling Workbench.
	See Overview to Repetitive Manufacturing in the <i>JD Edwards</i> World Shop Floor Control - Process Guide.

37.5.3.2 Processing Options

See Section 57.3, "Manufacturing Scheduling Workbench (P31225)."

37.5.4 Reviewing Leadtime for MRP

Navigation

From Material Planning Operations (G34), choose MRP

From MRP Daily Operations (G3413), choose Leadtime Inquiry

Use Leadtime Inquiry to review leadtimes for a component or ingredient.

To review leadtime for MRP

On Leadtime Inquiry

🖆 30207 Leadtime Inquiry ORACLE JD Edwards World Field Sensitive Help Leadtime Inquiry 38287 Branch/Plant Display Error Message | Second | S **Bode** Display Functions As of tem Search hem Search
Actual/Calculated Lead
Leadtine Clear Screen Opt: 1=Mfg Data F6=Item Search F15=Rctual/Crit. Path F24=More Keys

Figure 37-5 Leadtime Inquiry screen

- 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	Indicates the display mode for the bill of material.
	1 – Single Level Bill of Material. Shows level one (direct) components only.
	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.
	3 – Indented Bill of Material. The multi-level bill of material with each level indented for differentiation.
	You can also set this value in the processing options.

Field	Explanation
Level	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:
	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).
Manufacturing	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.
	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.
	You can enter the manufacturing lead time manually or you can have the system calculate it when you run the Leadtime Rollup program.
Cumulative	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.
	Manufactured - The total of all level lead times for all manufactured items, plus the highest cumulative lead time of all its components.
	Purchased - The item's level lead time. Purchased item lead times are included in the calculation of cumulative lead times.
	You can enter this value manually or you can have the system calculate it when you run the Leadtime Rollup program.

37.5.4.1 Processing Options

See Section 57.4, "Lead Time Inquiry (P30207)."

Validate Material Requirements Plans

This chapter contains these topics:

- Section 38.1, "Validating Material Requirements Plans,"
- Section 38.2, "Generating Capacity Requirements Plans,"
- Section 38.3, "Reviewing Capacity Requirements Plans."

38.1 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.

38.1.1 What You Should Know About

Topic	Description
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:

Section 20.1, "Validating Master Schedules" for detailed information on these programs.

38.2 Generating Capacity Requirements Plans

Navigation

From Resource & Capacity Planning (G33), choose Periodic Capacity Requirement

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

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.

38.2.1 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 Work with Hours and Quantities in the *JD Edwards World Shop Floor Control - Discrete Guide*.
- Verify that resource units exist for all work centers in your generation. See Setting Up Resource Units in the *JD Edwards World Shop Floor Control - Discrete Guide*.
- Set up supply and demand inclusion rules. See Section 21.2, "Setting Up Supply and Demand Inclusion Rules" for MRP.
- Run MRP generation. See Chapter 36, "Generate Material Requirements Plans."

See Also:

- Section 9.2, "Entering Resource Units Manually,"
- Section 20.2, "Generating Rough Cut Capacity Plans" for information on the processing options.

38.3 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

38.3.1 Reviewing Dispatch Groups for Capacity Requirements Planning

Navigation

From Resource & Capacity Planning (G33), choose Daily Capacity Requirements From Daily Capacity Requirements Planning (G3313), choose Review Dispatch Group

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:

Section 12.2, "Reviewing Dispatch Groups for Resource Requirements Planning" for information on the processing options.

38.3.2 Reviewing Work Center Load for Capacity Requirements Planning

Navigation

From Resource & Capacity Planning (G33), choose Daily Capacity Requirements

From Daily Capacity Requirements Planning (G3313), choose Review Work Center Load

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.

38.3.2.1 Before You Begin

Verify that your resource units and capacity requirements plan are current.

See Also:

Section 12.3, "Reviewing Work Center Load for Resource Requirements Planning" for information on the processing options.

38.3.3 Reviewing Period Summaries for Capacity Requirements Planning

Navigation

From Resource & Capacity Planning (G33), choose Periodic Capacity Requirements

From Periodic Resource and Capacity Planning (G3321), choose Period Summary report

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 Date - 5/31/17 Business Unit. . 200-204 Final Assembly/Inspection Efficiency . . . 80.00 Prime Load Code. B Dispatch Group . 200-200 Assembly Department Utilization. . . 100.00 Machine plus Setup H Unit of Measure. HR Hour Item Order Number Item Description Per. End Units UM Percen Number Ty Requirement 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 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

38.3.3.1 Processing Options

See Section 53.8, "Period Summary (P3312)."

38.3.4 Reviewing MRP Work Schedules on the Dispatch List

Navigation

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.

38.3.4.1 What You Should Know About

Торіс	Description
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:

Section 38.3.4, "Reviewing MRP Work Schedules on the Dispatch List" for the processing options for this program.

38.3.5 Reviewing MRP Rate Schedule and Work Order Loads

Navigation

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:

Section 20.4, "Reviewing Rate Schedule and Work Center Loads" for the processing options for this program.

38.3.6 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 Section 38.3, "Reviewing Capacity Requirements Plans."
- **2.** Revise the forecast.
 - See Revising a Summary of Forecast in the JD Edwards World Forecasting Guide.
- **3.** Complete the steps for generating the requirements plan. See Section 38.2, "Generating Capacity Requirements Plans."
- **4.** Complete the steps for reviewing the revised requirements plan.
 - See Section 38.3, "Reviewing Capacity Requirements Plans."
- **5.** Repeat the steps until all loads at each work center are appropriate.

Set Up Material & Capacity Requirements Planning

This chapter contains these topics:

- Section 39.1, "Setting Up Material and Capacity Requirements Planning,"
- Section 39.2, "Setting Up MRP Supply and Demand Inclusion Rules,"
- Section 39.3, "Setting Up Message Types for MRP,"
- Section 39.4, "Setting Up Time Fence Rules for MRP,"
- Section 39.5, "Setting Up Forecast Consumption Periods for MRP,"
- Section 39.6, "Setting Up the Capacity Requirements Display."

39.1 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:

Section 21.1, "Setting Up DRP, MPS and RCCP" for detailed information on these programs.

39.2 Setting Up MRP Supply and Demand Inclusion Rules

Navigation

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
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:

Section 39.2, "Setting Up MRP Supply and Demand Inclusion Rules.'

39.3 Setting Up Message Types for MRP

Navigation

From Material Planning Operations (G34), enter 29

From Material Planning Setup (G3442), choose Action Messages

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:

Section 21.3, "Setting Up Message Types for DRP, MPS and RCCP" for information on how to change the message type descriptions.

39.4 Setting Up Time Fence Rules for MRP

Navigation

From Material Planning Operations (G34), enter 29

From Material Planning Setup (G3442), choose Time Fence Rules

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:

Section 21.4, "Setting Up Time Fence Rules for DRP, MPS and RCCP" for information on how to specify time fence rules.

39.5 Setting Up Forecast Consumption Periods for MRP

Navigation

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).

39.5.1 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

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.

See Also:

Section 39.5, "Setting Up Forecast Consumption Periods for MRP" for more detailed information on this program.

39.6 Setting Up the Capacity Requirements Display

Navigation

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

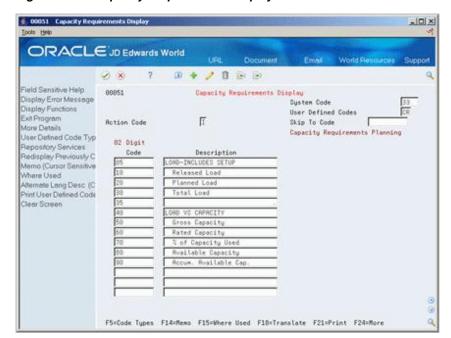


Figure 39–1 Capacity Requirements Display screen

Complete the following fields:

- Code
- Description

Process Orders for MRP

This chapter contains the topic:

Section 40.1, "Processing Orders for MRP."

40.1 Processing Orders for MRP

Navigation

From Shop Floor Control (G31), choose Discrete Daily Order Preparation

From Daily Order Preparation - Discrete (G3111), choose Order Processing

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 in the JD Edwards World Shop Floor Control - Discrete Guide.

Part IX

MRP Multi-Facility Scheduling

This part contains these chapters:

- Chapter 41, "Overview to MRP Multi-Facility Scheduling,"
- Chapter 42, "Set Up Multi-Facility Requirements Plans,"
- Chapter 43, "Generate Multi-Facility Requirements Plans,"
- Chapter 44, "Work with MRP Multi-Facility Planning Output."

Overview to MRP Multi-Facility Scheduling

This chapter contains these topics:

- Section 41.1, "Objectives,"
- Section 41.2, "About MRP Multi-Facility Scheduling."

41.1 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

41.2 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

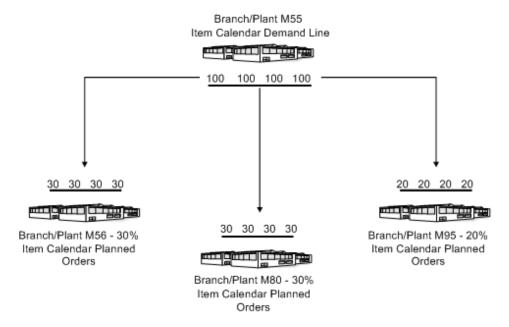
You can define facility relationships at any level of detail for an entire facility, a product group, master planning family, or an individual item number. In addition, you can incorporate all your facilities into a single planning schedule.

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.

Figure 41-1 Supply/Demand Plants



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.

Table	Description
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.

About MRF	Multi-Facility	Scheduling
-----------	----------------	------------

Set Up Multi-Facility Requirements Plans

This chapter contains these topics:

- Section 42.1, "Setting Up Multi-Facility Requirements Plans,"
- Section 42.2, "Setting Up MRP Supply and Demand Relationships,"
- Section 42.3, "Reviewing MRP Branch Relationships on the Relationships Chart."

42.1 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.

42.1.1 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 Section 36.1, "Generating Material Requirements Plans."

See Also:

- Section 39.1, "Setting Up Material and Capacity Requirements Planning" for information on how to define MRP and CRP data to use during processing,
- Section 32.1, "Setting Up Multi-Facility Schedules" for additional information on multi-facility scheduling.

42.2 Setting Up MRP Supply and Demand Relationships

Navigation

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:

Section 32.2, "Setting Up Supply and Demand Relationships" for the processing options for this program.

42.3 Reviewing MRP Branch Relationships on the Relationships Chart

Navigation

From Material Planning Operations (G34), enter 29

From Material Planning Setup (G3440), choose Multi-Plant Setup

From Multi-Plant Setup (G3443), choose Branch Relationships Chart

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:

Section 32.3, "Reviewing Branch Relationships on the Relationships Chart" for detailed information on this program.

Generate Multi-Facility Requirements Plans

This chapter contains the topic:

Section 43.1, "Generating Multi-Facility Requirements Plans."

43.1 Generating Multi-Facility Requirements Plans

Navigation

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.

43.1.1 Before You Begin

Set up MRP multi-facility scheduling. See Section 32.1, "Setting Up Multi-Facility Schedules."

See Also:

Section 33.1, "Generating Multi-Facility Schedules" for detailed information on the regeneration program.

43.1.2 What You Should Know About

Торіс	Description
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.

Topic	Description
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.

Work with MRP Multi-Facility Planning Output

This chapter contains these topics:

- Section 44.1, "Working with MRP Multi-Facility Planning Output,"
- Section 44.2, "Reviewing the Time Series for MRP Multi-Facility,"
- Section 44.3, "Processing MRP Transfer Order Messages."

44.1 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

44.1.1 Before You Begin

Generate a current multi-facility material planning schedule. See Section 43.1, "Generating Multi-Facility Requirements Plans."

44.2 Reviewing the Time Series for MRP Multi-Facility

Navigation

From Material Planning Operations (G34), choose MRP

From MRP Daily Operations (G3413), choose Time Series Inquiry

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:

- Section 19.2, "Reviewing DRP/MPS Time Series,"
- Section 37.2, "Reviewing MRP Time Series,"
- Section 44.2, "Reviewing the Time Series for MRP Multi-Facility" for the processing options for this program.

44.3 Processing MRP Transfer Order Messages

Navigation

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:

- Section 19.4, "Working with Messages" for the processing options for this program,
- Section 34.3, "Processing Multi-Facility Transfer Order Messages" for information on processing transfer order messages,
- Section 37.4.1, "Reviewing MRP Detail Messages" for additional information on messages generated for MRP.

Part X

Supplier Scheduling

This part contains these chapters:

- Chapter 45, "Overview to Supplier Scheduling,"
- Chapter 46, "Define Supplier Contracts,"
- Chapter 47, "Generate Supplier Schedules,"
- Chapter 48, "Revise Supplier Schedules,"
- Chapter 49, "Release Supplier Schedules,"
- Chapter 50, "Print Supplier Schedules."

Overview to Supplier Scheduling

This chapter contains these topics:

- Section 45.1, "Objectives,"
- Section 45.2, "About Supplier Scheduling."

45.1 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

45.2 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)	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:
	 Ship lead time
	■ Schedule days
	Ship pattern
	 Shipment quantity
	 Delivery location
	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.
Supplier Split Percentages (F43211)	Contains the data that identifies predetermined split percentages between suppliers, by item.

45.2.1 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.

45.2.2 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.

45.2.3 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.

Blanket Purchase Order Purchase Order Quantity 2,000 Open Quantity 16,000 Blanket Order Release Open Quantity 16,000 Supplier Shipment Pattern Weekly 16,000

Figure 45-1 Blanket Purchase Orders and Order Releases

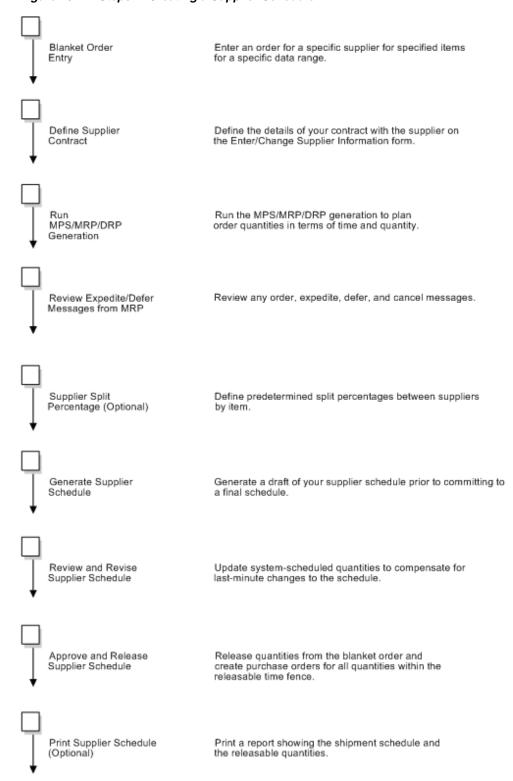
See Also:

Entering Blanket Orders in the JD Edwards World Procurement Guide.

45.2.4 What Are the Steps for Creating a Supplier Schedule?

The following graphic illustrates the steps you follow to create a supplier schedule.

Figure 45–2 Steps in Creating a Supplier Schedule



Define Supplier Contracts

This chapter contains these topics:

- Section 46.1, "Defining Supplier Contracts,"
- Section 46.2, "Defining Supplier Contract Information,"
- Section 46.3, "Generating and Revising Shipment Dates,"
- Section 46.4, "Defining Supplier Split Percentages."

46.1 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**

46.2 Defining Supplier Contract Information

Navigation

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.

Period	Description	
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.	

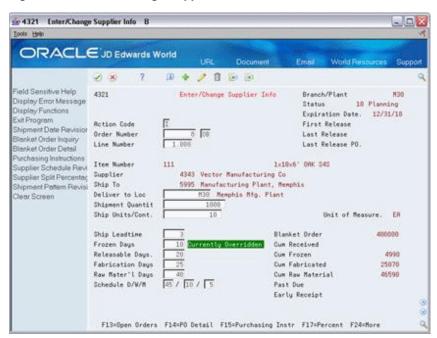
46.2.1 Before You Begin

Create a blanket purchase order for every item that you want to schedule through supplier scheduling. See Entering Blanket Orders in the JD Edwards World Procurement Guide.

To define supplier contract information

On Enter/Change Supplier Info

Figure 46-1 Enter/Change Supplier Info screen



- To set up schedule information for each line on the blanket order, complete the following fields:
 - Order Number
 - Line Number
 - Releasable Days
- Complete the following optional fields:
 - Deliver to Location
 - Shipment Quantity
 - Shipping Units/Container

- Shipment Leadtime
- Frozen Days
- Fabrication Days
- Raw Material Days

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.
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.

46.2.2 What You Should Know About

Topic	Description
Deleting supplier information	When you delete supplier information, the system deletes the entire record, including the history.

Торіс	Description
Shipment lead time	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.
	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.
Level leadtime	The level leadtime for a purchased item should include the shipment leadtime.
Shipping units per container	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.
Shipment quantity	The Shipment Quantity field identifies the minimum shipment quantity that the supplier is willing to accept.
Processing early and past due receipts	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.
	When you regenerate the schedule, the system displays the quantities in the Past Due and Early Receipt fields on Enter/Change Supplier Information.
	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.

46.2.3 Processing Options

See Section 58.1, "Supplier/Blanket Information (P4321)."

46.3 Generating and Revising Shipment Dates

Navigation

From Material Planning Operations (G34), choose MRP

From MRP Daily Operations (G3413), choose Ship Date Revisions

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

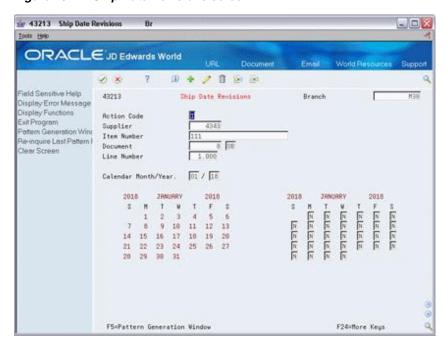


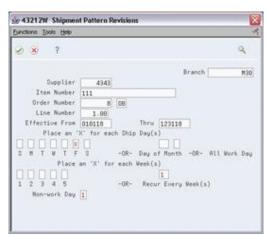
Figure 46-2 Ship Date Revisions screen

- Complete the following fields to locate the supplier and item:
 - Branch
 - Supplier
 - Item Number
 - Document and Type
 - Line Number

If you accesses Ship Date Revisions from Enter/Change Supplier Info, the information should appear by default.

Access Shipment Pattern Revisions (F5)

Figure 46-3 Shipment Pattern Revisions screen

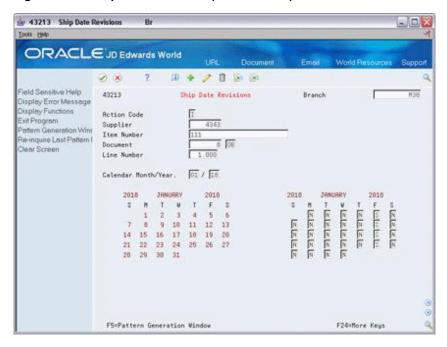


Note: You can also access Shipment Pattern Revisions directly from Enter/Change Supplier Info by pressing F18.

- Enter Effective From and Effective Thru dates.
- Enter the following to specify shipment day(s):
 - Day of the week
 - Day of the Month
- Enter the following to specify shipment week(s):
 - Week in the Month
 - Recur Every Week(s)
- Accept the dates to return to the Ship Date Revisions screen.

The dates now appear in the shipment calendar.

Figure 46-4 Ship Date Revisions (Dates Shown) screen



46.4 Defining Supplier Split Percentages

Navigation

From Material Planning Operations (G34), choose MRP

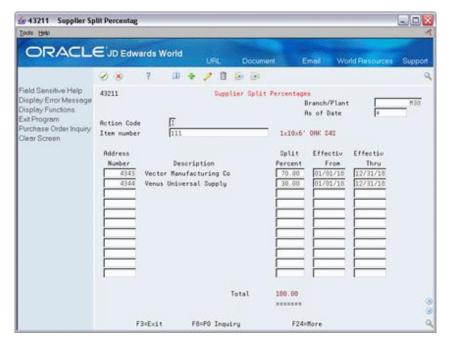
From MRP Daily Operations (G3413), choose Supplier Split Percentages

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.

To define supplier split percentages

On Supplier Split Percentages

Figure 46-5 Supplier Split Percentage screen



- To define split percentages among suppliers, complete the following fields:
 - Item Number
 - Branch/Plant
 - Split Percent
 - Effective From
 - Effective Thru
- Complete the following optional field:
 - As of Date

Field	Explanation
Split Percent	The percentage applied.
	For Suppler Release Scheduling: The percentage of the planned quantity that the system applies to the corresponding supplier.

46.4.1 Processing Options

See Section 58.2, "Supplier Split Percentages (P43211)."

Generate Supplier Schedules

This chapter contains the topic:

Section 47.1, "Generating Supplier Schedules."

47.1 Generating Supplier Schedules

Navigation

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.

47.1.1 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

47.1.2 What You Should Know About

Topic	Description
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:

- Section 17.1, "Generating Single Level Master Schedules,"
- Section 19.4, "Working with Messages,"
- Section 21.1, "Setting Up DRP, MPS and RCCP,"
- Section 37.2, "Reviewing MRP Time Series,"
- Section 48.1, "Revising Supplier Schedules."

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 ------ 111 1x10x6' OAK S4S O M30 *Messages exist that were not processed. No Supplier Schedule Master was found.

47.1.3 Processing Options

See Section 58.3, "Generate Supplier Schedule (P34400)."

Revise Supplier Schedules

This chapter contains the topic:

Section 48.1, "Revising Supplier Schedules."

48.1 Revising Supplier Schedules

Navigation

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

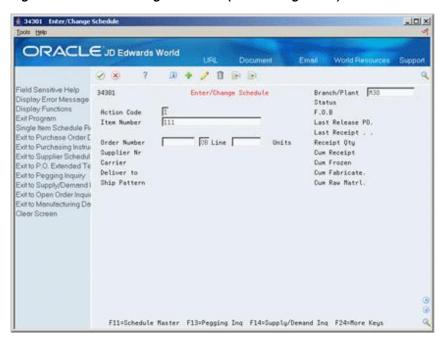
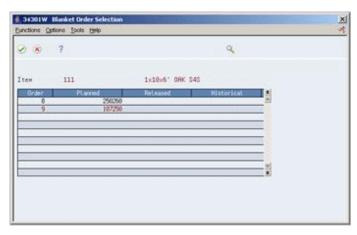


Figure 48-1 Enter/Change Schedule (Revise Single Item) screen

- 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.

Figure 48–2 Blanket Order Selection screen



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.

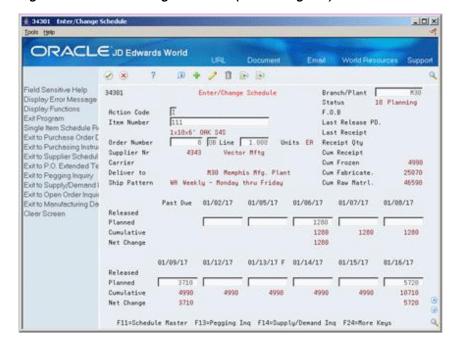


Figure 48-3 Enter/Change Schedule (Scheduling Info) screen

- 3. 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 the schedule moves through the system.	
	Form-specific information
	This field is display only.
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.

Field	Explanation
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.

48.1.1 What You Should Know About

Торіс	Description
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.

48.1.2 Processing Options

See Section 58.4, "Supplier Schedule Revisions (P34301)."

Release Supplier Schedules

This chapter contains the topic:

Section 49.1, "Releasing Supplier Schedules."

49.1 Releasing Supplier Schedules

Navigation

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

49.1.1 Before You Begin

Generate a current supplier schedule. See Section 47.1, "Generating Supplier Schedules."

49.1.2 What You Should Know About

Topic	Description
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.

49.1.3 Processing Options

See Section 58.5, "Release Supplier Schedule (P34410)."

Print Supplier Schedules

This chapter contains the topic:

Section 50.1, "Printing Supplier Schedules."

50.1 Printing Supplier Schedules

Navigation

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.

50.1.1 Before You Begin

Run the Release Supplier Schedule batch process. See Section 49.1, "Releasing Supplier Schedules.'

```
34450 JD Edwards World Page . . . . 1 Supplier Schedule Print Date . . . . 10/28/17
Branch/Plt.. CHI Item No. 111 Desc. 1x10x6' Oak 84S Blanket Order 104 OB 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 . . .
```

50.1.2 Processing Options

See Section 58.6, "Print Supplier Schedule (P34450)."

Part XI

Processing Options

This part contains these chapters:

- Chapter 51, "Item Master and Item/Branch Review Processing Options,"
- Chapter 52, "Forecasting Review Processing Options,"
- Chapter 53, "Resource Requirements Planning Processing Options,"
- Chapter 54, "Single Level Master Scheduling Processing Options,"
- Chapter 55, "Manufacturing and Distribution Environments Processing Options,"
- Chapter 56, "DRP/MPS Multi-Facility Scheduling Processing Options,"
- Chapter 57, "Single Facility Material Requirements Planning Processing Options,"
- Chapter 58, "Supplier Scheduling Processing Options."

Item Master and Item/Branch Review **Processing Options**

Processing Options Requiring Further Description

This chapter contains these topics:

- Section 51.1, "Item Master Revisions (P4101),"
- Section 51.2, "Branch/Plant Item Information (P41026),"
- Section 51.3, "Item / Branch Duplication (P41015)."

51.1 Item Master Revisions (P4101)

Processing Option

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES :	
1. Primary Unit of Measure	
(Blanks=EA)	
2. Weight Unit of Measure	
(Blanks=LB)	
PROCESS CONTROL:	
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))	
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 & Measures	
Manufacturing Values	
Bulk Product Information	
UCC Codes & UOMs	
Lot Processing	

Processing Options Requiring Further Description

5. Enter a '1' to use the window version of the screens selected above.

If left blank, the full screen versions will be displayed.

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.

GLOBAL UPDATE:

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).

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.

DREAM WRITER VERSIONS:

Enter the version to be used for each program.

If left blank, ZJDE0001 is used.

- 8. Item Availability (P41202)
- 9. Item Branch (P41026)
- 10. Product Catalog Detail (P41903)

DRAWING INFORMATION:

11. Enter a '1' to protect item drawing information from update.

51.2 Branch/Plant Item Information (P41026)

Processing Option	Processing Options Requiring Further Description
PROCESS CONTROL:	

Processing Options Requiring Further Description

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.

Classification Codes

Cost Revisions (conditional)

Price Revisions (conditional)

Unit of Measure

Quantities

Manufacturing Values

Item Profile

Bulk Product Information

Lot Processing

2. Enter '1' to use the window version of the screens selected above.

If left blank, the full screens will display.

DREAM WRITER VERSIONS:

- 3. Summary Availability (P41202)
- 4. Item / Location Information (P41024)
- 5. Product Catalog Detail Information (P41903)

REVISION LEVEL CONTROL:

6. Enter '1' to protect ECO revision information from update.

51.3 Item / Branch Duplication (P41015)

Processing Option Processing Options Requiring Further Description DEFAULT VALUES: 1. Enter the branch/plants to which you want to duplicate the items: 1) 2) 3) 4) 5) 6) 7) 8) 9) 10) SCREEN DEFAULTS:

Processing Options Requiring Further Description

2. Enter the data selection fields you want displayed on the video (Enter the data dictionary field name.):

Data Item One

Data Item Two

Data Item Three

Data Item Four

3. Enter a '1' to pre-load all selection options with a '1' to duplicate those lines.

FILE UPDATES:

4. Enter a '1' next to each file to duplicate.

If left blank, the file will not be duplicated:

Cost Ledger File (F4105)

Base Price File (F4106)

UOM Conversion Factors (F41002)

Bulk Depot/Product Info. (F41022)

Warehouse Item Profile (F46010)

Warehouse Item UOM/Profile (F46011)

Forecasting Review Processing Options

This chapter contains these topics:

- Section 52.1, "Forecast Generation (P34650),"
- Section 52.2, "Forecast Review (P34201),"
- Section 52.3, "Forecast Revisions (P3460)."

52.1 Forecast Generation (P34650)

Processing Option	Processing Options Requiring Further Description
FORECASTING METHODS:	
Enter a '1' by the method(s) desired:	
1. Percent Over Last Year	
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.	
2. Calculated Percent Over Last Year	
a. Enter the number of periods to include in the percentage.	
3. Last Year to This Year	
4. Moving Average	
a. Enter the number of periods to include in the average.	
5. Linear Approximation	
a. Enter the number of periods to include in the ratio.	
6. Least Squares Regression	
a. Enter the number of periods to include in regression.	
7. Second Degree Approximation	
a. Enter the number of periods to include.	
8. Flexible Method (Percent over N periods prior.)	
a. Enter the number of periods prior.	
b. Enter the percent over the prior period.	

Processing Options Requiring Further Description

- 9. Weighted Moving Average
- a. Enter the number of periods
- b. Weight for one period prior
- c. Weight for two periods prior
- d. Weight for three periods prior
- e. Weight for four periods prior
- f. Weight for five periods prior
- g. Weight for six periods prior
- h. Weight for seven periods prior
- i. Weight for eight periods prior
- j. Weight for nine periods prior
- k. Weight for ten periods prior
- 1. Weight for eleven periods prior
- m. Weight for twelve periods prior

Note: 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.

If no weight is entered for a period within the number of periods to include, a zero weight will be used for that period.

- 10. Linear Smoothing
- a. Enter the number of periods to include in smoothing average.
- 11. Exponential Smoothing
- a. Enter the number of periods to include in smoothing
- b. Enter the alpha factor. If left blank, alpha will be calculated.
- 12. Exponential Smoothing with Trend and Seasonality Factors
- a. Enter the alpha factor.

If left blank, alpha will be calculated.

b. Enter the beta factor.

If left blank, beta will be calculated.

c. Enter a '1' to include seasonality in the calculation.

If left blank, seasonality will not be included.

RECORD TYPES TO USE:

- 13. Enter the 'Actual Type' in which the actual information is stored.
- 14. Enter the Forecast Type to use when creating forecasts.

SUMMARY RECORDS:

15. Enter a '1' to create summary records for large customers.

(ABC type = 'A'.)

Processing Option	Processing Options Requiring Further Description
FORECAST TYPE AND RANGE:	
16. Enter a '1' to specify weekly forecasts.	
If left blank, monthly forecasts will be generated.	
17. Enter the date to start forecasts.	
If left blank, today's date will be used.	
18. Enter the number of periods to forecast.	
If left blank, three periods will be used.	
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.	
20. Enter a '1' to calculate best fit using Mean Absolute Deviation.	
If left blank, Percent of Accuracy will be used.	
21. Enter a '1' to run the report in final mode.	
If left blank, the report will run in proof mode.	
22. Enter a '1' to allow negative values to be written.	
If left blank, negative values will be written as zeroes.	
FISCAL DATE PATTERN:	
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). $ \\$	
BEST FIT AMOUNTS/QUANTITIES:	
24. Enter a '1' to calculate Best Fit using amounts.	
If left blank, quantities will be used to calculate Best Fit.	

52.2 Forecast Review (P34201)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter a '1' to display the Amount format first.	
If left blank, the Quantity format will be displayed.	
2. Forecast Type (Optional)	
3. Enter the default forecast type for displaying the actual quantities and amounts.	

52.3 Forecast Revisions (P3460)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	

Processing Option	Processing Options Requiring Further Description
1. Forecast Type (Optional)	
2. Enter a '1' to default the forecast type from the heading into the detail records on an add.	
3. Enter a '1' to display the Amount format first.	
If left blank, the Quantity format will be displayed.	

Resource Requirements Planning Processing Options

This chapter contains these topics:

- Section 53.1, "Work Center Resource Units (P3007),"
- Section 53.2, "Work Center Resource Units Refresh (P3007G),"
- Section 53.3, "Resource Profile Regeneration (P3365),"
- Section 53.4, "Resource Requirements Planning (P3380),"
- Section 53.5, "Message Inquiry (P3301),"
- Section 53.6, "Load (P3313),"
- Section 53.7, "Load Bar Graph (P3313B),"
- Section 53.8, "Period Summary (P3312),"
- Section 53.9, "Message Detail (P3311)."

53.1 Work Center Resource Units (P3007)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	

53.2 Work Center Resource Units Refresh (P3007G)

Processing Option	Processing Options Requiring Further Description
GENERATION INFORMATION:	
1. Enter the Start Date.	
2. Enter the End Date.	
Note: The program will regenerate resource units for the entire month of the start date and the entire month of the end date.	

Processing Options Requiring Further Description

4. Enter a string of up to 6 shift codes to be processed ('123 ').

If left blank, all shifts will be processed.

53.3 Resource Profile Regeneration (P3365)

Processing Option	Processing Options Requiring Further Description
PROCESSING CONTROL:	
1. Enter the effectivity dates:	
Effective From	
Effective Thru	

53.4 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.	
9. Enter a '1' to roll the Work Centers up to Dispatch Group.	

53.5 Message Inquiry (P3301)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter the Critical Work Center Code to be displayed or '*' for all work centers.	
2. Enter the Capacity Mode to use:	
1 = Resource Requirements Planning	
2 = Rough Cut Capacity Planning	
3 = Capacity Requirements Planning	
3. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	

53.6 Load (P3313)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter the Capacity Mode to use:	
1 = Resource Requirements Planning	
2 = Rough Cut Capacity Planning	
3 = Capacity Requirements Planning	
2. Enter UDC table to use for row descriptions.	
3. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
4. Dispatch List (P31226)	

53.7 Load Bar Graph (P3313B)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter the Capacity Mode to use:	
1 = Resource Requirements Planning	
2 = Rough Cut Capacity Planning	
3 = Capacity Requirements Planning	
2. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	

Processing Option	Processing Options Requiring Further Description
3. Dispatch List (P31226)	

53.8 Period Summary (P3312)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter the Capacity Mode to use:	
1 = Resource Requirements Planning	
2 = Rough Cut Capacity Planning	
3 = Capacity Requirements Planning	
2. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
3. Dispatch List (P31226)	

53.9 Message Detail (P3311)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. Enter the Capacity Mode to use:	
1 = Resource Requirements Planning	
2 = Rough Cut Capacity Planning	
3 = Capacity Requirements Planning	
2. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	

Single Level Master Scheduling Processing Options

This chapter contains these topics:

- Section 54.1, "Master Planning Schedule Plant Maintenance (P3482),"
- Section 54.2, "Net Change Review (P3402),"
- Section 54.3, "Time Series (P3413),"
- Section 54.4, "Master Planning Schedule Plant Maintenance (P3482),"
- Section 54.5, "Multi-Facility Gross Regeneration (P3483),"
- Section 54.6, "Planning (P3382),"
- Section 54.7, "Work Center Schedule Review (P31224),"
- Section 54.8, "Production Status (P31226),"
- Section 54.9, "Supply/Demand Inclusion Rules (P34004),"
- Section 54.10, "Review Planning Family (P3401),"
- Section 54.11, "Generate and Print Work Orders (P31410)."

54.1 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).	Set to 2 if using Planning Fence Rule H.
If left blank, there will be no past due periods.	
3. Enter the planning horizon periods (maximum of 52 periods):	Maximum of 52 including Past Due buckets
Days (e.g. 5)	
Weeks (e.g. 25)	
Months (e.g. 6)	
PROCESSING CONTROL:	

Processing Option Processing Options Requiring Further Description 4. Enter the Generation Mode: 1 = Net Change 2 = Gross Regeneration 5. Enter the Generation Type: 1 = Single Level MPS/DRP 2 = Planning Bill 3 = MRP5 = MRP with Frozen MPS PHANTOM ITEMS: 6. Enter a '1' to generate messages and time series records for phantoms. ON HAND ADJUSTMENTS: 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 an '*' 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 Note: Any quantity not included will be placed in the On Receipt bucket. DAMPER DAYS: 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). SAFETY LEADTIME: 12. Enter the purchased item lead time days. 13. Enter the manufactured item lead time days. FORECASTING INFORMATION: 14. Enter up to five forecast types: Forecast Type 1 Forecast Type 2 Forecast Type 3 Forecast Type 4 Forecast Type 5 15. Enter the Forecast Type for MPS to create when using Planning Bills. RATE BASED SCHEDULING INFORMATION:

Processing Options Requiring Further Description

16. Enter the Schedule Type for rate based items.

If left blank, 'SC' will be used.

17. Enter a '1' to extend rate based adjustments to lower level items.

18. Enter status code used to denote closed rates.

If left blank, 99 will be used.

19. Enter a '1' to include Past Due Rates as a supply.

PURCHASE ORDER INFORMATION:

20. Enter the Document Type for purchase orders.

If left blank, 'OP' will be used.

WORK ORDER INFORMATION:

21. Enter the Document Type for work orders.

If left blank, 'WO' will be used.

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.

INCLUSION RULES:

23. Enter the Version of Supply/Demand Inclusion Rules to be used.

PERFORMANCE ISSUES:

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.)

Note: If left blank, the run time of the generation will be reduced.

25. Enter the User Defined Code Type that contains the list of quantity types to be calculated & 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.

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.

Default of blank will not clear files.

Note: 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.

PROCESS PLANNING:

27. Enter a '1' to generate planning in Process Mode.

Note: If left blank, the run time of the generation will be reduced.

Processing Option Processing Options Requiring Further Description LOT EXPIRATION: 28A. Enter a '1' to consider lot expiration dates in calculations. 28B. Enter optional date to be used for expiration calculations when processing option 28A = '1'. If left blank, Lot expiration date will be used. 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

FORECAST CONSUMPTION PROCESSING:

29. Enter a '1' to use Forecast Consumption logic.

ROUNDING:

30. Enter a '1' to round existing Work/ Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.

Note: If left blank, no rounding will occur.

54.2 Net Change Review (P3402)

Processing Option	Processing Options Requiring Further Description
MPS TYPE CODES:	
1. Enter the Type Code to be displayed or a '*' for all Types.	

54.3 Time Series (P3413)

Processing Option	Processing Options Requiring Further Description
ITEM RECALCULATION:	
1. Enter the version to use when submitting a single item MPS/MRP/DRP recalculation.	
If left blank, version 'ZJDE0001' will be used.	
PAST DUE PERIODS:	
2. Enter the number of past due periods (0-2).	Set to 2 if using Planning Fence Rule H.
If left blank, there will be no past due periods.	
ROW DESCRIPTIONS:	
3. Enter the UDC for row descriptions.	
4. Enter the UDC for alternate row descriptions.	

Processing Option	Processing Options Requiring Further Description
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.	

54.4 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).	Set to 2 if using Planning Fence Rule H.
If left blank, there will be no past due periods.	
3. Enter the planning horizon periods (maximum of 52 periods):	Maximum of 52 including Past Due buckets
Days (e.g. 5)	
Weeks (e.g. 25)	
Months (e.g. 6)	
PROCESSING CONTROL:	
4. Enter the Generation Mode:	
1 = Net Change	
2 = Gross Regeneration	
5. Enter the Generation Type:	
1 = Single Level MPS/DRP	
2 = Planning Bill	
3 = MRP	
5 = MRP with Frozen MPS	
PHANTOM ITEMS:	
6. Enter a '1' to generate messages and time series records for phantoms.	
ON HAND ADJUSTMENTS:	

Processing Option	Processing Options Requiring Further Description
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 an '*' 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	
Note: Any quantity not included will be placed in the On Receipt bucket.	
DAMPER DAYS:	
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).	
SAFETY LEADTIME:	
12. Enter the purchased item lead time days.	
13. Enter the manufactured item lead time days.	
FORECASTING INFORMATION:	
14. Enter up to five forecast types:	
Forecast Type 1	
Forecast Type 2	
Forecast Type 3	
Forecast Type 4	
Forecast Type 5	
15. Enter the Forecast Type for MPS to create when using Planning Bills.	
RATE BASED SCHEDULING INFORMATION:	
16. Enter the Schedule Type for rate based items.	
If left blank, 'SC' will be used.	
17. Enter a '1' to extend rate based adjustments to lower level items.	
18. Enter status code used to denote closed rates.	
If left blank, 99 will be used.	
19. Enter a '1' to include Past Due Rates as a supply.	
PURCHASE ORDER INFORMATION:	
20. Enter the Document Type for purchase orders.	
If left blank, 'OP' will be used.	
WORK ORDER INFORMATION:	

Processing Options Requiring Further Description

21. Enter the Document Type for work orders.

If left blank, 'WO' will be used.

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

INCLUSION RULES:

23. Enter the Version of Supply/Demand Inclusion Rules to be used.

PERFORMANCE ISSUES:

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.)

Note: If left blank, the run time of the generation will be reduced.

- 25. Enter the User Defined Code Type that contains the list of quantity types to be calculated & 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.
- 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.

Default of blank will not clear files.

Note: 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.

PROCESS PLANNING:

27. Enter a '1' to generate planning in Process Mode.

Note: If left blank, the run time of the generation will be reduced.

Processing Option Processing Options Requiring Further Description LOT EXPIRATION: 28A. Enter a '1' to consider lot expiration dates in calculations. 28B. Enter optional date to be used for expiration calculations when processing option 28A = '1'. If left blank, Lot expiration date will be used. 1 = Sell By Date2 = 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 FORECAST CONSUMPTION PROCESSING: 29. Enter a '1' to use Forecast Consumption logic. ROUNDING:

54.5 Multi-Facility - Gross Regeneration (P3483)

30. Enter a '1' to round existing Work/ Purchasing orders suggested quantity to the nearest order

transaction unit of measure quantity. Note: If left blank, no rounding will occur.

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).	Set to 2 if using Planning Fence Rule H.
If left blank, there will be no past due periods.	
3. Enter the planning horizon periods (maximum of 52 periods):	Maximum of 52 periods including Past Due buckets
Days (e.g. 5)	
Weeks (e.g. 25)	
Months (e.g. 6)	
PROCESSING CONTROL:	
4. Enter the Generation Mode:	
1 = Net Change	
2 = Gross Regeneration	

Processing Option Processing Options Requiring Further Description 5. Enter the Generation Type: 1 = Single Level MPS/DRP 3 = MRP5 = MRP with Frozen MPS PHANTOM ITEMS: 6. Enter a '1' to generate messages and time series records for phantoms. ON HAND ADJUSTMENTS: 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 Note: Any quantity not included will be placed in the On Receipt bucket. DAMPER DAYS: 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). SAFETY LEADTIME: 12. Enter the purchased item lead time days. 13. Enter the manufactured item lead time days. FORECASTING INFORMATION: 14. Enter up to five forecast types: Forecast Type 1 Forecast Type 2 Forecast Type 3 Forecast Type 4 Forecast Type 5 RATE-BASED SCHEDULING INFORMATION: 15. Enter the Schedule Type for rate-based items. If left blank, 'SC' will be used. 16. Enter a '1' to extend rate-based adjustments to lower level items. 17. Enter status code used to denote closed rates. If left blank, 99 will be used.

Processing Option Processing Options Requiring Further Description 18. Enter a '1' to include Past Due Rates as a supply. PURCHASE ORDER INFORMATION: 19. Enter the Document Type for purchase orders. If left blank, 'OP' will be used. WORK ORDER INFORMATION: 20. Enter the Document Type for work orders. If left blank, 'WO' will be used. 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. **INCLUSION RULES:** 22. Enter the version of Supply/Demand Inclusion Rules to be used. PERFORMANCE ISSUES: 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.) Note: If left blank, the run time of the generation will be reduced. 24. Enter the User Defined Code Type that contains the list of quantity types to be calculated & 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. 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. Note: 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.

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.

MULTI-FACILITY INFORMATION:

Processing Options Requiring Further Description

- 27. Enter one of the following methods of Multi-Facility processing:
- 1 = Simple Consolidation
- a. Enter a '1' to also run a regular generation on the non-consolidated branches.
- b. Enter the Branch to consolidate to.
- 2 = Use Branch Relationships
- a. Enter the Category Code (1-5) to be used.
- b. Enter a '1' to make all manufactured items in the originating branch.
- 28. Enter the Document Type for transfer orders.

If left blank, 'OT' will be used.

PROCESS PLANNING:

29. Enter a '1' to generate planning in Process mode.

Note: If left blank, the run time of the generation will be reduced.

LOT EXPIRATION:

30A. Enter a '1' to consider lot expiration dates in calculations.

30B. Enter optional date to be used for expiration calculations when processing option 30A = '1'.

If left blank, Lot expiration date will be used.

- 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

FORECAST CONSUMPTION PROCESSING:

- 31. Enter a '1' to use Forecast Consumption logic.
- 32. Enter a '1' to allow Interplant Demand to consume Forecast.

ROUNDING:

33. Enter a '1' to round existing Work/ Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.

Note: If left blank, no rounding will occur.

54.6 Planning (P3382)

Processing Option	Processing Options Requiring Further Description
PROCESSING CONTROL:	
1. Enter the percent under rated capacity to generate a message.	
2. Enter the percent over rated capacity to generate a message.	
3. Enter the Branch/Plant to be processed.	
4. Enter the code for the Supply/Demand Inclusion Rules to use.	
5. Enter the Capacity Mode to use:	
2 = Rough Cut Capacity Planning	
3 = Capacity Requirements Planning	
6. Enter the Unit of Measure.	
If left blank, 'HR' will be used.	
7. Enter a '1' to roll the Work Centers up to Dispatch Group.	
8. Enter a '1' to modify the released order quantity and dates using MRP messages.	

54.7 Work Center Schedule Review (P31224)

Processing Option	Processing Options Requiring Further Description
SCREEN DEFAULTS:	
Enter the values to preload to the screen at initial inquiry.	
If left blank, no value will be preloaded.	
1. Document Type	
VERSIONS TO EXECUTE:	
2. Enter the version of Rate Revisions to call. Default is 'ZJDE0001'.	
DATE DISPLAY:	
3. Enter one of the following for the subfile dates to display:	
"1" = Monthly	
"2" = Weekly	
"3" = Daily The default is Daily ("3").	
WORK ORDER PROCESSING:	
4. Enter a '1' to include Work Order generated loads BEFORE Rate loads.	
Enter a '2' to include Work Order generated loads AFTER Rate loads.	
If left blank, no Work Order loads will be recognized.	

Processing Options Requiring Further Description

5. Enter the operation status 'from' and 'to' values to use to select active operations to include.

From Status

Through Status

54.8 Production Status (P31226)

Processing Option	Processing Options Requiring Further Description
DEFAULT VALUES:	
1. From Status (Optional)	
2. Through Status (Optional)	
3. The number of days to add to today's date for the Thru date (Optional)	

54.9 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.	

54.10 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.	

54.11 Generate and Print Work Orders (P31410)

Processing Option	Processing Options Requiring Further Description
GENERATION INFORMATION:	
1A. Enter one of the following:	Note: If using Backflush to Work Center location in
1 = Parts List only	Manufacturing Constants, then routings must be attached first for commitments to be made correctly.
2 = Routing only	attached hist for communicities to be made correctly.
3 = Both Parts List and Routing	
If left blank, neither parts list nor routing will be generated.	
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.	Note: If transactions have occurred against the order the parts list and routing should be protected from update.
If left blank, existing parts list and/or routing will be rewritten.	
2. Enter a '1' to use the W.O. Date for effectivity checking.	
If left blank, the W.O. Start Date is used.	
UPDATE INFORMATION:	
3. Enter the new Status Code for the work order/rate header.	
If left blank, status will not be changed.	

Processing Option	Processing Options Requiring Further Description
WORK ORDER PRINT INFORMATION:	
4. Enter a '1' to print work orders.	
If printing work orders:	
PARTS LIST PRINT INFORMATION:	
5. Enter a '1' to print Parts List	
6. Enter a '1' to print the 2nd line of information, which is scrap and related work center.	
7. Enter a '1' to print Parts List on a new page.	
8. Enter the version of the Parts List program (P31415).	
If left blank, 'ZJDE0001' will be used.	
9. Enter a '1' to print a consolidated Parts List.	
ROUTING PRINT INFORMATION:	
10. Enter a '1' to print the Routing.	
11. Enter a '1' to print Routing on a new page.	
12. Enter the version of the Routing Instructions program (P314151).	
If left blank, the operation sequence is used.	
BACKSCHEDULING INFORMATION:	
13. Enter the Unit of Measure for backscheduling.	Note: 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:	

Processing Options Requiring Further Description

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.

21. Enter a '1' to delete the existing Work Order Text and copy the Sales Order Text to the Work Order.

Enter a '2' to append the Sales Order Text to the end of the existing Work Order Text.

If left blank (default) the Work Order Text will not be updated.

CONFIGURED ITEM COSTS:

- 22. Enter one of the following options for calculating the standard cost for configured items in the Work Order Variance file (F3102).
- 1 = Always calculate the standard cost
- 2 = Only calculate the standard cost if it has not already done (no variance records exist)

If left blank, standard cost will not be calculated.

BOM SUBSTITUTES:

23. Enter '1' to allow the use of Bill of Material substitutes in case of a shortage.

PURCHASING JOURNAL ENTRIES:

24. Enter a '1' to load the Work Order Number into the Subledger field of the purchasing J/E's.

BLANKET/QUOTE PROCESSING:

25. Enter a '1' for automatic blanket order release processing.

BUILD AGAINST PRIOR REVISIONS:

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.

If left blank, prior revision level bills will not be selected.

WAREHOUSE PROCESSING:

- 27. Enter the request processing mode:
- 1 = Generate requests only
- 2 = Generate requests and process using the subsystem.

If left blank, requests will not be generated.

Processing Options Requiring Further Description

28. If processing pick requests using the subsystem, enter the version of Process Pick Requests (P46171) to call.

If left blank, 'XJDE0002' will be used.

- 29. Enter the default staging location for moving goods out of the warehouse.
- 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.

Note: This option only applies to parts with no work center locations.

GENERIC TEXT PRINT OPTIONS:

- 31. Enter a '1' to print the component's generic text on the Parts List.
- 32. Enter a '1' to print the operation's generic text on the Routing.

BAR CODE INFORMATION:

- 34. Enter the format for bar code printing.
- 1 = Code 3 of 9 (Code 39)
- 2 = Code 128

If left blank, bar codes will not print.

COMMITMENT PROCESSING:

35. Enter a '1' to bypass commitment processing when creating the Parts List.

If left blank, commitments will be processed per Commitment Control in Manufacturing Constants (P3009).

QUALITY MANAGEMENT:

- Enter '1' to print Manufacturing Specifications.
- Enter the version of the Manufacturing Specifications print program to call (P37470).

If left blank, 'ZJDE0001' will be used.

PHANTOM OPERATION SEQUENCE NUMBER:

38. Enter a '1' to default the phantom's (parent) operation sequence for the components on the parts list.

If left blank, the component's operation sequence will be used.

WORK ORDER START DATE UPDATE:

39. Enter a '1' to update the Work order Start Date with the Start Date of the first routing operation for variable lead time.

If left blank no updating will be performed

LOT EXPIRATION DATE:

Processing Options Requiring Further Description

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.

- '' = Parts list required date (default)
- '1' = Work order start date
- '2' = Work order requested (completion) date

AUTOMATIC LOT NUMBER GENERATION:

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.

Manufacturing and Distribution Environments Processing Options

This chapter contains these topics:

- Section 55.1, "Bill of Material Revisions (P3002),"
- Section 55.2, "Routing Master Revisions (P3003),"
- Section 55.3, "Schedule Review (P3152),"
- Section 55.4, "Message Detail (P3411)."

55.1 Bill of Material Revisions (P3002)

Processing Option	Processing Options Requiring Further Description
INVENTORY VALIDATION:	
1. Enter a '1' to validate for an existing Branch/Item record.	
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
Note: Options 2 and 3 are used ONLY to set Printer Overrides.	
2. Single-Level BOM Print (P30410)	
3. Multi-Level BOM Print (P30415)	
4. ECO Workbench (P30225)	
5. Component Maintenance (P3015)	
DREAM WRITER VERSION FROM WINDOW:	
6. Enter the version of ECO Revisions (P48020) to call from the Revisions Window (P30BREV).	
If left blank, version 'ZJDE0001' will be used.	
COMPONENT BRANCH:	
7. Enter a '1' to change the Component Branch (Additions Only) to that which is displayed at the top of the screen.	
FIELD DISPLAY:	

Processing Options Requiring Further Description

8. Enter a '1' by the following fields to activate them:

Bill Type

Batch Quantity

DEFAULT VALUES:

9. Bill Type (Optional)

DATE EFFECTIVITY:

10. Enter a date to default into the As of Date or '*' to display all dates.

If left blank, the system date will be used.

COMPONENT SEQUENCING:

- 11. Enter the sequence to be displayed:
- 1 Component Line Number
- 2 Operation Sequence Number

Note: If left blank, components will be sequenced by Component Line Number.

REVISION LEVEL CONTROL:

12. Enter a '1' to protect Component Revision Level from update.

55.2 Routing Master Revisions (P3003)

Processing Option

Processing Options Requiring Further Description

FIELD DISPLAY:

1. Enter a '1' by the following fields to activate them:

Line/Cell

Routing Type

Batch Quantity

DEFAULT VALUES:

2. Routing Type (Optional)

UPDATE OPTIONS:

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.

55.3 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)	

55.4 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.	
1. Purchase Order Entry (P4311)	
2. Open Purchase Orders (P430301)	
3. Supplier Master (P01054)	
4. Work Order Entry (P48013)	
5. Shop Floor Workbench (P31225)	
6. Blanket Order Release (P43060)	
7. Pegging Inquiry (P3412)	
8. Supply/Demand Inquiry (P4021)	
9. Enter/Change Rate Schedule (P3109)	
10. Time Series (P3413)	
11. Bill Availability (P30205)	
12. Transfer Order Entry (P4242)	
13. Manufacturing Values (P41027)	
14. Work Order Generation (X4201WO)	
PURCHASE ORDER INFORMATION:	
15. Enter a '1' to consolidate all messages for a supplier on one purchase order.	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
	Note: 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).

the same supply and demand branches on one order.

Processing Option Processing Options Requiring Further Description 16. Enter the status for cancelled orders. BLANKET ORDER INFORMATION: 17. Enter the document type associated with blanket orders. If left blank, open blanket orders will not be used. SUPPLY/DEMAND DEFAULT: 18. Enter the default mode for viewing Supply/Demand branch messages: D = Demand branch in header S = Supply branch in header If left blank, the data dictionary default will be used. DISPLAY SEQUENCE DEFAULT: 19. Enter the default sequence for viewing messages: 1 = Message Type, Recommended Complete date 2 = Recommended Complete date, Message Type If left blank, sequence '1' will be used. TRANSFER ORDER INFORMATION: 20. Enter a '1' to consolidate transfer order message for

DRP/MPS Multi-Facility Scheduling Processing Options

This chapter contains these topics:

- Section 56.1, "Branch Relationship Revisions (P3403),"
- Section 56.2, "Branch Relationships Chart (P34031),"
- Section 56.3, "Multi-Facility Gross Regeneration (P3483),"
- Section 56.4, "Transfer Order Review (P3421)."

56.1 Branch Relationship Revisions (P3403)

Processing Option	Processing Options Requiring Further Description
SUPPLY OR DEMAND MODE:	
Enter the default mode for entry of Branch Relationships.	
D = Demand branch in header	
S = Supply branch in header	
DISPLAY FORMAT:	
2. Enter a '1' to display the sales transfer format.	
If left blank, the branch relationship format will be displayed.	
LEVEL UPDATE:	
3. Enter a '1' to automatically update the Branch Level field.	

56.2 Branch Relationships Chart (P34031)

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS:	
1. Enter the version of Branch Relationship Revisions program to call.	
If left blank, version 'ZJDE0001' will be used.	

56.3 Multi-Facility - Gross Regeneration (P3483)

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).	Set to 2 if using Planning Fence Rule H.
If left blank, there will be no past due periods.	
3. Enter the planning horizon periods (maximum of 52 periods):	Maximum of 52 periods including Past Due buckets
Days (e.g. 5)	
Weeks (e.g. 25)	
Months (e.g. 6)	
PROCESSING CONTROL:	
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	
PHANTOM ITEMS:	
6. Enter a '1' to generate messages and time series records for phantoms.	
ON HAND ADJUSTMENTS:	
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	
Note: Any quantity not included will be placed in the On Receipt bucket.	
DAMPER DAYS:	
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 12. Enter the purchased item lead time days. 13. Enter the manufactured item lead time days. FORECASTING INFORMATION: 14. Enter up to five forecast types: Forecast Type 1 Forecast Type 2 Forecast Type 3 Forecast Type 4 Forecast Type 5 RATE-BASED SCHEDULING INFORMATION: 15. Enter the Schedule Type for rate-based items. If left blank, 'SC' will be used. 16. Enter a '1' to extend rate-based adjustments to lower level items. 17. Enter status code used to denote closed rates. If left blank, 99 will be used. 18. Enter a '1' to include Past Due Rates as a supply. PURCHASE ORDER INFORMATION: 19. Enter the Document Type for purchase orders. If left blank, 'OP' will be used. WORK ORDER INFORMATION: 20. Enter the Document Type for work orders. If left blank, 'WO' will be used. 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. **INCLUSION RULES:** 22. Enter the version of Supply/Demand Inclusion Rules to be used. PERFORMANCE ISSUES: 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.) Note: If left blank, the run time of the generation will be reduced. 24. Enter the User Defined Code Type that contains the list of quantity types to be calculated & 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.

Processing Options Requiring Further Description

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.

Note: 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.

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.

MULTI-FACILITY INFORMATION:

- 27. Enter one of the following methods of Multi-Facility processing:
- 1 = Simple Consolidation
- a. Enter a '1' to also run a regular generation on the non-consolidated branches.
- b. Enter the Branch to consolidate to.
- 2 = Use Branch Relationships
- a. Enter the Category Code (1-5) to be used.
- b. Enter a '1' to make all manufactured items in the originating branch.
- 28. Enter the Document Type for transfer orders.

If left blank, 'OT' will be used.

PROCESS PLANNING:

29. Enter a '1' to generate planning in Process mode.

Note: If left blank, the run time of the generation will be reduced.

LOT EXPIRATION:

30A. Enter a '1' to consider lot expiration dates in calculations.

30B. Enter optional date to be used for expiration calculations when processing option 30A = '1'.

If left blank, Lot expiration date will be used.

- 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.

FORECAST CONSUMPTION PROCESSING:

31. Enter a '1' to use Forecast Consumption logic.

Processing Option	Processing Options Requiring Further Description
32. Enter a '1' to allow Interplant Demand to consume Forecast.	
ROUNDING:	
33. Enter a '1' to round existing Work/ Purchasing orders suggested quantity to the nearest order transaction unit of measure quantity.	
Note: If left blank, no rounding will occur.	

56.4 Transfer Order Review (P3421)

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
1. Message Detail (P3411)	
2. Pegging (P3412)	
3. Time Series (P3413)	
4. Forecast Detail (P3460)	
5. Manufacturing Data (P41027)	
6. Detail Availability (P41202)	
7. Supply/Demand Inquiry (P4021)	

Single Facility Material Requirements Planning Processing Options

This chapter contains these topics:

- Section 57.1, "Pegging (P3412),"
- Section 57.2, "Supply & Demand (P4021),"
- Section 57.3, "Manufacturing Scheduling Workbench (P31225),"
- Section 57.4, "Lead Time Inquiry (P30207),"
- Section 57.5, "Period Summary (P3352)."

57.1 Pegging (P3412)

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
1. Message File Revisions (P3411)	
2. Time Series (P3413)	
3. Supply/Demand Inquiry (P4021)	

57.2 Supply & Demand (P4021)

Processing Option	Processing Options Requiring Further Description
DISPLAY OPTIONS:	
1. Enter a '1' to deduct Safety Stock from Availability.	
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	

Processing Option Processing Options Requiring Further Description 3. Enter a '1' to summarize all In Receipt Routing steps into one line. 4. Enter a '1' to summarize Item Location records. 5. Enter one of the following: ' ' = No Available to Promise Line '1' = Available to Promise Line '2' = Cumulative ATP Line 6. Enter the version of Supply/Demand Inclusion Rules to be used. 7. Enter a '1' to display the window format if called from another program. 8. Enter a '1' to use an alternate screen format which has long quantity fields. DREAM WRITER VERSIONS: Enter the DREAM Writer version to use for each program listed. If left blank, version ZJDE0001 will be used. 9. Purchase Order Entry (P4311) 10. Purchase Order Inquiry (P430301) 11. Sales Order Entry (P4211) 12. Sales Order Inquiry (P42045) 13. Scheduling Workbench (P31225) 14. MPS/MRP/DRP Pegging Inq. (P3412) 15. MPS/MRP/DRP Time Series (P3413) 16. MPS/MRP/DRP Message Detail(P3411) **OPTIONAL RECORDS:** 17. Enter a '1' to include Planned Orders from MPS/MRP/DRP generations. If left blank, Planned Orders will not be displayed. 18. Enter the Forecast Type to include Forecast Type Forecast Type Forecast Type Forecast Type Forecast Type 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. 20. Enter a '1' to omit 'Bulk' Stocking Type records from screen. If left blank, 'Bulk' items will be included.

Processing Options Requiring Further Description

21. Enter the rate based Schedule Type to use.

If left blank, no rate based schedules will be displayed.

22. Enter a '1' to include Past Due Rates as a supply.

POTENCY:

23. Enter '1' to convert Quantities to Standard Potency.

LOT EXPIRATION:

24A. Enter '1' to reduce Quantity available due to lot expiration.

Note: This option will not work with ATP. If you use this option, option 5 must be set to blank or 2.

24B. Enter optional date to be used for expiration calculation when processing option 24A='1'.

If left blank, Lot Expiration Date will be used.

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.

LOT HOLD CODES:

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.

If left blank, held lots will not be considered on hand.

WORK ORDER ENTRY:

26. Enter the Dream Writer version to use for the Manufacturing Work Order Entry program.

If left blank, version ZJDE0001 will be used.

BILL AVAILABILITY:

27. Enter the version of Bill Availability (P30205) to be called.

If left blank, version ZJDE0001 will be used.

OVER DUE SUPPLY CONTROL:

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).

FORECAST DISPLAY OPTIONS:

Processing Options Requiring Further Description

29. Enter a '1' to override the planning fence rule and just use actual customer demand for the available calculation.

Note: forecast will still appear on the screen per processing option above.

When left blank, the available calculation will be based on the planning fence and rule established in the item's branch plant manufacturing data.

57.3 Manufacturing Scheduling Workbench (P31225)

Processing Option Processing Options Requiring Further Description DREAM WRITER VERSIONS: Enter the version for each program. If left blank, 'ZJDE0001' will be used. 1. Sales Order Inquiry (P42045) 2. Purchase Order Inquiry (P430301) 3. a Work Order Completions (P31114) 3. b Super Backflush (P31123) 4. Work Order Entry (P48013) 5. Sales Order Entry (P4211) 6. Purchase Order Entry (P43111) 7. Work Order Issues (P31113) **DISPLAY OPTIONS:** 8. Enter a '1' to display Requested Date or enter a '2' to display Start Date. (Default is '1') 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. **DEFAULT VALUES:** 10. Category Code 1 (Optional) 11. Category Code 2 (Optional) 12. Category Code 3 (Optional) 13. Type (Optional) 14. Priority (Optional) 15. Planner Number (Optional) 16. From Status (Optional) 17. Thru Status (Optional) 18. Item Number (Optional)

Processing Option	Processing Options Requiring Further Description
19. Customer Number (Optional)	
20. Reference (Optional)	
21. Document Type (Optional)	
PROCESS MANUFACTURING PROCESSING:	
22. Enter a '1' to automatically create the WO Routing Instructions when creating the WO Parts List on-line.	
23. Enter a '1' to automatically create the WO Parts List when creating the WO Routing Instructions on-line.	
SUBSTITUTE PROCESSING:	
24. Enter the substitute processing method to be used when creating the Parts List on-line.	
1 = Use substitutes for shortages.	
(Commitment processing must be used if '1' is selected.)	
2 = Display the substitute availability window when substitute quantity available can cover shortage.	
If left blank, substitute processing will not be done.	
COMMITMENT PROCESSING:	
25. Enter a '1' to bypass commitment processing when creating the Parts List on-line.	
If left blank, commitments will be processed per Commitment Control in Manufacturing Constants (P3009).	
WORK ORDER PARTS LIST INFORMATION:	
26. Enter the version of the Work order Parts List Quantities Inquiry(P3121).	
If left blank, 'ZJDE0001' will be used.	
QUALITY MANAGEMENT:	
27. Enter the version of Test Results Revisions (P3711) to call.	
If left blank, 'ZJDE0002' will be used.	

57.4 Lead Time Inquiry (P30207)

Processing Option	Processing Options Requiring Further Description
LEAD TIME CALCULATION:	
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.	
DISPLAY OPTIONS:	
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.	

57.5 Period Summary (P3352)

Processing Option Processing Options Requiring Further		
DEFAULT VALUES:		
1. Enter the Capacity Mode to use:		
1 = Resource Requirements Planning		
2 = Rough Cut Capacity Planning		
3 = Capacity Requirements Planning		
2. Enter the Unit of Measure.		
If left blank, 'HR' will be used.		
3. Enter the Start Date.		
If left blank, the system date will be used.		
4. Enter the End Date.		
If left blank, all data after the Start Date will displayed.		

Supplier Scheduling Processing Options

This chapter contains these topics:

- Section 58.1, "Supplier/Blanket Information (P4321),"
- Section 58.2, "Supplier Split Percentages (P43211),"
- Section 58.3, "Generate Supplier Schedule (P34400),"
- Section 58.4, "Supplier Schedule Revisions (P34301),"
- Section 58.5, "Release Supplier Schedule (P34410),"
- Section 58.6, "Print Supplier Schedule (P34450)."

58.1 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.		
1. Purchase Order Entry (P4311)		
2. Open Order Inquiry (P430301)		
3. Supplier Schedule (P34301)		
4. Supplier Split Percentage (P43211)		
DEFAULT VALUES:		
5. Document Type (Optional)		

58.2 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.	
1. Purchase Order Inquiry (P430301)	

58.3 Generate Supplier Schedule (P34400)

Processing Option Processing Options Requiring Further Description PROCESSING CONTROL: 1. Enter the Beginning Date for the generation. If left blank, the system date will be used. 2. Enter the Document Type to look for when retrieving an item's blanket order. If left blank, 'OB' will be used. 3. Enter the version of Supply/Demand Inclusion rules to use for active blanket order selection. SUPPLIER STATUS UPDATE: 4. Enter the status to use for updates to the Supplier Schedule. If left blank, the status will not be changed. MPS/MRP/DRP MESSAGES: 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. INITIALIZATION & REGENERATION: 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. 7. Enter a '1' to ignore frozen time fence days and allow operations inside the normal frozen time fence (All frozen days = '0').

58.4 Supplier Schedule Revisions (P34301)

If left blank, no quantities will be placed inside the

frozen time fence date.

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
1. Open Order Inquiry (P430301)	
2. Supply/Demand Inquiry (P4021)	
3. Purchase Order Entry (P4311)	
4. Vendor/Blanket Information (P4321)	
5. Pegging Inquiry (P3412)	
6. Single Item Release (P34410)	
SUPPLY/DEMAND INCLUSION RULES:	

Processing Option Processing Options Requiring Further Description 7. Enter the version of Supply/Demand Inclusion Rules to use for active blanket order selection. **DEFAULT VALUES:** 8. Document Type (Optional) SCHEDULE STATUS UPDATE: 9. Enter the status to use for updates to the Vendor Schedule. If left blank, the status will not be changed. 10. Enter the status beyond which changes cannot be made to the Vendor Schedule.

58.5 Release Supplier Schedule (P34410)

If left blank, the schedule is always open to change.

Processing Option	Processing Options Requiring Further Description
DREAM WRITER VERSIONS:	
Enter the version for each program.	
If left blank, 'ZJDE0001' will be used.	
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.	

58.6 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:		

Processing Option Processing Options Requiring Further Description 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.

Action Messages

This appendix contains the topic:

Section A.1, "About Action Messages."

A.1 About 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.

Туре	Descripti on	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
В	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.
С	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.

Туре	Descripti on	Planner Remarks	Action Taken on Work Orders When Message Processed	Action Taken on Purchase Orders When Message Processed
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.
Н	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.
N	Create rate	Blank	Clears message and creates the rate schedule. Displays rate schedule revisions.	N/A
0	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 adjustmen t suggestio n	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.

Туре	Descripti on	Planner Remarks	Action Taken on Work Orders When Message Processed	Action Taken on Purchase Orders When Message Processed
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.

Functional Servers

This appendix contains the topic:

Section B.1, "About Functional Servers."

B.1 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.

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 JD Edwards World Technical Foundation Guide.

B.1.1 Example: Voucher Processing Functional Server

The following programs use the voucher processing functional server. JD Edwards World provides two demo versions of the functional server, ZJDE0001 and ZJDE0002.

- Speed Voucher Entry (P040015)
- Standard Voucher Entry (P04105)
- Void Payment Entry (P4704103)
- Credit Tied to Debit Bill (P041010)
- Multi-Voucher (P041017)
- Calculate Withholding (P04580)

Time Series Quantity Types

This appendix contains the topic:

Section C.1, "About Time Series Quantity Types."

C.1 About 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 Section 54.3, "Time Series (P3413).")

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.

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.

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.

Code	Label	Description	Explanation	
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.	
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 appearSHIP 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.
67	-FID	- Firm Inter-Plant Demand	Firm Inter-Plant Demand Adjusted. Demand from existing transfer orders adjusted for MRP action messages.

Code	Label	Description	Explanation
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.

Index

A	Branch relationships chart form (P34031), 32-9
About DRP/MPS multi-facility scheduling	Branch relationships for MRP
About manufacturing and distribution	reviewing on chart, 42-2
environments, 27-1	Branch relationships master (F3403)
	tables, 35-3
About resource requirements planning (RRP), 7-2	Branch Relationships Revisions form (P3403), 32-2
About time fences, 16-1	Branch/plant and dispatch group
Adding a freeze code to a purchase order, 19-16	data selection, 11-2
Adding a freeze code to a work order, 19-17	Branch/plant information
Assemble-to-order, 5-9	assigning an item to a branch plant, 4-3
definition, 1-6	duplication of
Available capacity	form, 4-15
determining, 9-1	item information across multiple
Available to promise	branch/plants, 4-15
negative, 19-4	primary locations, 4-16
Available to promise (ATP)	entering branch/plant information, 4-1
unadjusted calculation, 19-4	entering branch, plant information, 4 1
	form, 4-9
В	form, 4-2
	item locations
Batch bills of material	
creating, 28-2	changing primary locations, 4-6
Batch manufacturing	deleting primary locations, 4-7
working with, 28-1	form, 4-5
Batch processing, 30-1	item manufacturing information
Batch routings	DRP/MPS/MRP, 4-11
creating, 28-4	form, 4-11
Batch work orders	locating item sources, 4-8
processing, 28-6	overview, 4-1
Best fit forecasting, 5-5	taxes, 4-8
Bill of material	working with item locations, 4-4
MRP, 36-2	
Bill of material master (F3002)	С
tables, 35-3	
Bills of material	Calculating rated capacity for critical work
using in MRP, 35-3	centers, 20-3
Blanket order release	Calculations
supplier scheduling, 45-2	available to promise, 16-4
Blanket purchase order	cumulative available to promise, 16-4
supplier scheduling, 45-2	ending available, 16-3
	time series, 16-3
Blanket purchase orders	Cancelling items on a purchase order, 19-13, 19-15
effective date range, 45-2	Capacity requirements display
BOM	setting up, 39-4
See bill of material	Capacity requirements display form (P00051), 39-4
Branch relationships chart	Capacity Requirements Planning
reviewing, 32-8	See CRP

Capacity requirements planning	generating, 6-1
reviewing work center load, 38-4	reviewing, 6-2
Capacity requirements plans	revising, 6-4
generating, 38-2	working with, 6-1
reviewing for MRP, 38-3	Detail message review
Changing	net change flag, 17-2
supplier information, 48-4	retrieving cleared messages, 12-10
Changing resource unit information, 9-3	Detail message review (F3411)
Classification Codes form	tables, 35-3
sample, 3-10, 3-11	Detail message review form (P3411), 34-3
Classification Codes program (P41011), 3-11	Detail messages
Cleared messages	clearing, 19-8
retrieving, 12-10	component warnings, 37-4
Clearing MRP messages	deleting, 19-8
releasing a supplier schedule, 49-2	fixed order quantity, 19-10
Co- and by-products	processing, 19-10
defining, 30-4	reviewing, 19-8
Co-/By-Products Planning Table form (F3404), 30-4	working with, 19-7
Consolidated messages	Determining available capacity, 9-1
processing, 19-13	See Entering work centers
Consolidating multiple item numbers	Determining long-range capacity plans, 7-3
processing messages, 19-12	Determining long-range load, 10-1
Continuous processing, 30-2	Differences between MRP and MPS, 35-4
Co-product messages, 30-11	Discrete manufacturing, 27-2
Creating rates automatically, 20.10	manufacturing and distribution environments, 27-2
Creating rates automatically, 29-10	
Creating repetitive routings, 29-4 Critical work centers	Dispatch groups reviewing for capacity requirements
calculating MPS load, 20-4	planning, 38-3
Cumulative available to promise unadjusted	Dispatch list
calculation, 19-4	reviewing MRP work schedules, 38-6
Customer contact	Distribution Requirements Planning
overview, 1-6	See DRP
overview, 10	Distribution requirements planning
D	See DRP
<u>D</u>	Distribution systems, 27-3
Data selection	DRP
branch/plant and dispatch group, 11-2	valid quantity types, 19-3
generating a master schedule for all items, 17-3	DRP Detail Message Review form (P3411), 19-12
MRP, 36-2	DRP Planning Family Review form (P3401), 19-7
Data selection values	DRP Time Series/ATP Inquiry form (P3413), 19-4
generating a master schedule for selected	DRP time series/ATP inquiry form (P3413), 34-2
items, 17-5	DRP/MPS time series
Default Units of Measure form	quantity types, 19-2
sample, 3-15	reviewing, 19-1
Defining order policy for repetitive items, 29-2	DRP/MPS/RCCP
Defining supplier contract information, 46-1	setting up, 21-1
Defining supplier contracts, 46-1	
Defining supplier split percentages, 46-6	E
Deleted messages	
review detailed messages form, 12-10	Effective date range
Deleting	blanket purchase orders, 45-2
rate schedule, 29-10	supplier schedule, 45-2
supplier information, 46-3	Ending available calculations
supply and demand relationships, 32-8	time series, 16-3
Demand forecasting how to use, 7-2	Engineer-to-order definition, 1-6
Demand patterns	raw materials & components, 5-9
forecasting features, 5-8	*
	Enter purchase orders form, 19-16

Enter/Change Forecast form (P3460), 6-5 Enter/Change Order form (P48013), 19-17 Enter/change resource profile form (P3003), 10-2 Enter/change resource units form (P3007), 9-2 Enter/Change Routing form (P3003), 28-5 Enter/change routing form (P3003), 29-4 Enter/change schedule form (P34301), 48-1 Enter/change supplier info form (P4321), 46-2 Enter/Change Work Center form (P3006), 8-2 Entering resource units manually, 9-2 Entering work centers for resource requirements planning, 8-1 Examples exploding planned orders, 24-3 revising a detail forecast, 6-5	branch relationships chart, 32-9 Branch Relationships Revisions, 32-2 capacity requirements display, 39-4 Classification Codes, 3-10, 3-11 Co-/By-Products Planning Table, 30-4 Default Units of Measure, 3-15 Detail message review, 34-3 DRP Detail Message Review, 19-12 DRP Planning Family Review, 19-7 DRP Time Series/ATP Inquiry, 19-4 DRP time series/ATP inquiry, 34-2 enter purchase orders, 19-16 Enter/Change Bill, 25-6, 28-2 Enter/Change Forecast, 6-5 Enter/Change Order, 19-17
Exploding planned orders example, 24-3	enter/change resource profile, 10-2 Enter/change resource units, 9-2 Enter/Change Routing, 28-5
F	enter/change routing, 29-4 Enter/change schedule, 48-1
Fast path commands forecasting, 5-12	enter/change supplier info, 46-2 Enter/Change Work Center, 8-2
material planning operations, 1-10 resource and capacity planning, 1-9	forecast consumption periods, 21-6 Forecast Text, 6-6
Feature planned percents setting up, 25-5	General User Defined Codes, 13-3 Item Alternative Description, 3-4
Firm planned order (+FPO) quantity types, 37-4	Item Branch Quantities, 4-9 Item Branch/Plant Information, 4-2
Firm work order (-FWO) quantity types for MRP, 37-4	item branch/plant information, 29-2 Item Master Information, 3-2, 25-5, 30-3
Fixed order quantity (FOQ) detail messages, 19-10	Item Units of Measure, 3-16 Item/Branch Duplication, 4-15
Forecast accuracy statistical laws, 5-9	Item/Location Information, 4-6 Leadtime Inquiry, 37-11
Forecast considerations, 5-10 Forecast consumption, 18-1, 41-2	Line balancing review, 20-7 Manufacturing Data, 4-11
Forecast consumption (F3405) tables, 35-3	Message Types, 21-3 MPS Detail Message Review, 28-9, 30-9
Forecast consumption periods setting up, 21-6 setting up for MRP, 39-3	MPS detail message review, 29-12 MPS Time Series Inquiry, 19-5 MPS Time Series/ATP Inquiry, 28-8, 29-11, 30-7
Forecast consumption periods form (P3405), 21-6 Forecast features foreca, 5-9	MRP detail message review, 37-3 net change review, 17-4 Pegging Inquiry, 37-6
forecast accuracy, 5-9 Forecast revisions	Plant Manufacturing Data, 4-11 plant manufacturing data, 25-3, 29-3
net change flag, 17-2 Forecast Text form (P0016), 6-6	Primary Location, 4-5 production status, 20-5
Forecasting fast path commands, 5-12 features, 5-4	purchasing information, 19-16 Rate Generation Rule, 29-6
Forecasting features demand patterns, 5-8	review dispatch groups, 12-2 Review Forecast, 6-2 Review Message Detail, 12-9
Forecasting levels and methods, 5-5 best fit forecasting, 5-5 Forecasting methods qualitative forecasting, 5-6	Review Message Betain, 12 9 Review Period Summary, 12-6 Review Work Center Load, 12-4 Rough Cut Capacity Display, 21-7 Schedule Review, 29-15
Forecasting overview, 5-1 Forecasting process, 5-10	shop floor workbench, 37-9 supplier split percentages, 46-7
Forms	Supply/Demand Inclusion Rules, 21-2

Text Messages, 3-8 Time Fence Rules, 21-5 User Defined Code Revisions, 13-1	Item branch (F4102) tables, 35-3 Item Branch Quantities form
Work Center Load Graph, 12-5	sample, 4-9
Freeze code	Item Branch Quantities program (P41022), 4-9
adding to a work order, 19-17	Item Branch/Plant Information form
adding to purchase order, 19-16	sample, 4-2 Itom branch (plant information form (P41026) 20.2
Freeze fence, 16-2, 39-3	Item branch/plant information form (P41026), 29-2
Freezing purchase orders, 19-12 Frozen orders	Item Branch/Plant Information program (P41026), 4-2
MRP, 36-2	Item master (F4101)
WIKI , 50-2	
	tables, 35-3 Item Master information
G	assigning item responsibility, 3-9
Generating	classification codes
master schedule for all items, 17-3	purchasing, 3-11
master schedule for selected items, 17-5	warehouse, 3-12
RRP	deleting, 3-2
See Determining long range load	entering, 3-1
See Validating RRP	entering, 3-1 entering basic item information, 3-3
Generating a master schedule for all items, 17-3	entering grade and potency information, 3-24
data selection, 17-3	entering grade and potency information, 3-24 entering item classification codes, 3-10
data sequence, 17-3	entering item units of measure information, 3-14
Generating a master schedule for selected items	grade and potency information
data selection values, 17-5	for lots, 3-25
Generating a single level master schedule	for sales, 3-25
net change flag control, 17-2	item descriptions
net change flag update, 17-1	form, 3-4
Generating a supplier schedule	item identifiers, 3-4
MRP messages, 47-2	item processing information, 3-4
Generating capacity requirements plans, 38-2	item text
Generating MPS for the process industry, 30-6	entering, 3-7
Generating multi-facility requirements plans, 43-1	manufacturing information
Generating resource requirements plans, 11-1	requirements planning, 3-19
Generating rough cut capacity plans, 20-2	messages
Generating single level master schedules, 17-1	attaching to an item, 3-7
Generating supplier schedules	notes
See Generating single level master schedule	entering for an item, 3-7
See Multi_facility master schedule	overview, 3-1
Generating supplier schedules	setting up a template, 3-2
See Setting up DRP/MPS/RCCP	units of measure information
Generation definition	conversions, 3-16
MRP multi-facility requirements plan, 43-1	Item Master Information form
Generation type	sample, 3-2
MRP, 36-2	Item Master Information form (P4101), 25-5, 30-3
	Item Master Information program (P4101), 3-3
Н	Item Units of Measure form
·	sample, 3-16
Held messages	Item Units of Measure program (P41002), 3-16
review detail messages form, 12-10	Item/Branch Duplication form
	sample, 4-15
1	Item/Branch Duplication program (P41015), 4-15
Instruments a disease on to	Item/Location Information form
Inventory adjustments	sample, 4-6
net change flag, 17-2	
Inventory transfers	L
net change flag, 17-2	-
Item Alternative Description form	Leadtime
sample, 3-4 Item Alternative Description program	reviewing for MRP, 37-11
(P41016W), 3-4	Leadtime Inquiry form (P30207), 37-11

Leadtime level	terms and concepts, 1-5
phantom item, 25-2	Manufacturing Data form
Leadtime rollup	sample, 4-11
net change flag, 17-2	Manufacturing data revisions
Level leadtime	net change flag, 17-2
supplier scheduling, 46-4	Manufacturing Values Entry program (P41013), 3-19
Levels and methods	Master planning schedule
best fit forecasting, 5-5	valid quantity types, 19-3
calculated percent over last year, 5-6	Master production schedule
exponential smoothing, 5-8	generating for repetitive items, 29-10
flexible method, 5-7	See MPS
forecasting, 5-5	Master schedule
geometrically weighted moving average, 5-8	generating for all items, 17-3
last year to this year, 5-6	generating for selected items, 17-4
linear approximation, 5-7	Master schedule for all items
moving average, 5-7	generating, 17-3
percent over last year, 5-6	Master schedule selection
second degree approximation, 5-7	reviewing items, 17-3
weighted moving average, 5-7	Master schedules
Line balancing review form (P3152), 20-7	validating, 20-1
Line scheduling workbench	working with, 19-1
reviewing for material requirements	Master scheduling
planning, 37-9	multi-level, 24-1
Load on lines or cells	single level, 15-1
validating, 29-14	Material and capacity requirements planning
Locating supply and demand relationships, 32-8	setting up, 39-1
Long-range capacity plan	Material planning operations
determining, 7-3	fast path commands, 1-10
Long-range load	overview, 1-2
determining, 10-1	Material requirements plan
Low level code	See MRP
MRP, 36-2	Material requirements planning
May 50 2	processing orders, 40-1
	setting up forecast consumption periods, 39-3
M	Material requirements planning multi-facility
Made-to-stock end items, 5-9	scheduling, 41-1
Make-to-order	Material requirements plans
definition, 1-6	generating, 36-1
raw materials & components, 5-9	processing work order messages, 37-5
Make-to-stock	validating, 38-1
definition, 1-6	Menu overview, 5-12
Manufacturing	
batch, 27-2	Message display fence, 39-3 time fences, 16-2
discrete, 27-2	
distribution systems, 27-3	Message types
process, 27-2	setting up, 21-3
rate based, 27-2	setting up for material requirements plans, 39-2
Manufacturing and distribution environments	Message Types form (P00051), 21-3
about, 27-1	Message where used update
batch manufacturing, 27-2	net change flag, 17-2
discrete manufacturing, 27-2	Messages
process manufacturing, 27-2	attaching to an item, 3-7
rate based manufacturing, 27-2	clearing, 19-8
	co-product, 30-11
Manufacturing and distribution planning	deleted
customer contact, 1-6 overview, 1-1	review detailed messages form, 12-10
	deleting, 19-8
planning and a total business solution, 1-7	held
resource and capacity planning overview, 1-1	review detail messages form, 12-10
system integration, 1-2	placing on hold, 19-8
system miegranom, 1-2	processing, 19-10

working with, 19-7	generation definition, 43-1
Messages for MRP	setting up, 42-1
working with, 37-2	Multi-facility requirements plans
MPS	generating, 43-1
generating for batch bills, 28-7	Multi-facility schedule
reviewing batch output, 28-8	generating, 33-1
MPS Detail Message Review form (P3411), 28-9, 30-9	setting up, 32-1
MPS detail message review form (P3411), 29-12	Multi-facility scheduling
MPS generation	DRP/MPS, 31-1
reviewing repetitive rate schedule output, 29-10	material requirements planning, 41-1
MPS load	types, 31-2
calculating for critical work centers, 20-4 MPS Time Series/ATP Inquiry form (P3413), 28-8,	Multi-facility time series reviewing, 34-1
29-11, 30-7	Multi-level master schedule, 24-1
MPS/MRP/DRP detail message review (F3411)	generation definition, 26-2
tables, 35-3	phantom items, 26-2
MPS/MRP/DRP lower level requirements (F3412)	planning codes, 25-2
tables, 41-2	Multi-level master scheduling
MPS/MRP/DRP lower requirements (F3412)	about, 24-1
tables, 35-3	planning bills, 24-2
MPS/MRP/DRP Summary	Multi-plant consolidation
tables (F3413), 35-3	MRP multi-facility requirements plan, 43-2
MRP	
bills of material, 36-2	N
data selection, 36-2	·
frozen orders, 36-2	Negative ATP/ATPU, 19-4
generation type, 36-2	Net change MRP, 36-2
low level code, 36-2	Net change flag
net change, 36-2 regeneration, 36-1	bill of material master, 17-2
running effectively, 35-5	detail message review, 17-2
single facility, 35-1	forecast revisions, 17-2
working with, 37-1	inventory adjustments, 17-2
MRP and CRP systems	inventory transfers, 17-2
synchronizing, 38-2	leadtime rollup, 17-2
MRP and MPS	manufacturing data revisions, 17-2
differences, 35-4	message where used update, 17-2
MRP detail message review form (P3411), 37-3	net change review, 17-2
MRP detail messages	purchase order entry, 17-2
component warnings, 37-4	repost open quantities, 17-2
reviewing, 37-3	sales order entry, 17-2
MRP messages	work order entry, 17-2
clearing, 49-2	work order inventory completions, 17-2
generating a supplier schedule, 47-2	work order inventory issues, 17-2
MRP multi-facility planning output	Net change flag update single level master schedule, 17-1
working with, 44-1	Net change review
MRP multi-facility requirements plan multi-facility consolidation, 43-2	net change flag, 17-2
transfer orders, 43-2	Net change review form (P3402), 17-4
MRP rate schedule and work order loads	Notes
reviewing, 38-6	entering for an item, 3-7
MRP supply and demand	0 ,
reviewing, 37-8	0
MRP Supply/demand inclusion rules	:
setting up, 39-2	Order policy rules
MRP time series	
	setting up, 25-2
reviewing, 37-1	Order status
Multi-facility planning output	Order status purchase order messages, 19-10
e e e e e e e e e e e e e e e e e e e	Order status

Over-capacity work centers, 12-6	Processing MRP transfer order messages, 44-2
Overloaded time frame	Processing orders, 22-1
leveling, 38-6	Processing purchase order messages, 19-11
Overview	Processing purchase order messages for MRP, 37-5
forecasting, 5-1	Processing receipts
system integration, 5-2	supplier scheduling, 46-4
	Processing work order messages, 19-9
P	Processing work order messages for MRP, 37-5
	Processing work orders, 22-1
Parts list revisions, 17-2	Production status form (P31226), 20-5
Parts list substitutes, 17-2	Programs and IDs
Pegging demand	P00051 (capacity requirements display), 39-4
reviewing, 37-6	P00051 (message types), 21-3
Pegging Inquiry form (P3412), 37-6	P00051 (rough cut capacity display), 21-7
Period quantities, 19-4	P00051 (time fence rules), 21-5
Period summaries	P0016 (forecast text), 6-6
reviewing, 12-6 reviewing for capacity requirements	P0016 (text messages), 3-8
planning, 38-4	P3002 (enter/change bill), 25-6, 28-2
Period summary	P3003 (enter/change routing), 28-5, 29-4
reviewing, 20-3	P3006 (enter/change work center), 8-2 P3007 (enter/change resource units), 9-2
Phantom item	P30207 (leadtime inquiry), 37-11
leadtime level, 25-2	P31041W (rate generation rule), 29-6
Planned order (+PLO)	P31224 (schedule review), 29-15
quantity types for MRP, 37-4	P31224 (schedule feview), 29-13
Planned work order (-PLO)	P31226 (production status), 20-5
quantity types for MRP, 37-4	P3152 (line balancing review), 20-7
Planning and a total business solution	P3303 (enter/change resource profile), 10-2
manufacturing and distribution planning, 1-7	P34004 (supply/demand inclusion rules), 21-2
Planning bill forecasts, 5-2	P3401 (DRP planning family review), 19-7
Planning bills	P3402 (net change review), 17-4
multi-level master scheduling, 24-2	P3403 (branch relationships revisions), 32-2
Planning codes	P34031 (branch relationships chart), 32-9
multi-level master schedule, 25-2	P3405 (forecast consumption periods), 21-6
Planning families	P3411 (detail message review), 34-3
reviewing, 19-6	P3411 (DRP detail message review), 19-12
Planning families for MRP	P3411 (MPS detail message review), 28-9, 29-12,
reviewing, 37-2	30-9
Planning fence, 16-2, 39-3	P3411 (MRP detail message review), 37-3
Plant Manufacturing Data form	P3412 (pegging inquiry), 37-6
sample, 4-11	P3413 (DRP time series/ATP inquiry), 19-4, 34-2
Plant manufacturing data form (P41027), 25-3, 29-3	P3413 (MPS time series inquiry, 19-5
Primary Location form	P3413 (MPS time series/ATP inquiry), 28-8,
sample, 4-5	29-11, 30-7
Prime load code	P34201 (review forecast), 6-2
work centers, 12-5	P34301 (enter/change schedule), 48-1
Printing a supplier schedule, 50-1	P3460 (enter/change forecast), 6-5
Process industry	P41002 (item units of measure), 3-16
generating MPS, 30-6	P4101 (item master information), 3-3, 25-5, 30-3
Process manufacturing	P41013 (manufacturing values entry), 3-19
batch processing, 30-1	P41015 (item/branch duplication), 4-15
continuous processing, 30-2	P41016W (item alternative description), 3-4
working with, 30-1	P41022 (item branch quantities), 4-9
Process output reviewing from MPS generation, 30-7	P41026 (item branch/plant information), 4-2, 29-2
	P41027 (plant manufacturing data), 25-3, 29-3
Processing consolidated messages, 19-13 Processing messages	P430112 (purchasing information), 19-16
blanket order checking, 19-11	P43111 (enter purchase orders), 19-16
consolidating multiple item numbers, 19-12	P4321 (enter/change supplier info), 46-2
planning family, 19-12	P43211 (supplier split percentages), 46-7 P48013 (enter/change order), 19-17
Panasatity 10111111// 1/ 1=	1 +0U1.7 (EU1EL/CUAUSE DIUEL). 17-1/

Purchase order entry	work center, 12-5
net change flag, 17-2	Resource profile
Purchase order messages	defining manually, 10-1
order status, 19-10	Resource requirements display
processing, 19-11	setting up, 13-1
Purchase order messages for MRP	Resource requirements plan (RRP)
processing, 37-5	validating, 12-10
Purchase orders	Resource requirements planning
cancelling items, 19-13, 19-15	See RRP
freezing, 19-12	Resource Requirements Planning (RRP)
Purchasing information form (P430112), 19-16	factors, 7-3
	Resource requirements planning (RRP)
Q	about, 7-2
	Resource requirements plans (RRP)
Qualitative forecasting	generating, 11-1
forecasting methods, 5-6	reviewing, 12-1
Quantity types for DRP and MPS, 19-2	setting up, 13-1
Quantity types for MRP firm planned order (+FPO), 37-4	Resource units
firm work order (-FWO), 37-4	calculations, 9-4
planned order (+PLO), 37-4	changing information, 9-3
planned work order (-PLO), 37-4	entering manually, 9-1, 19-13
reviewing, 37-4	generating, 9-3
work order (+WO), 37-4	revising, 20-2
work order (+vvo), or 1	Review Forecast form (P34201), 6-2
n	Reviewing DRP time series, 19-4
R	MPS time series, 19-5
Rate based scheduling information	MRP detail messages
setting processing options, 29-10	See Reviewing detail messages
Rate Generation Rule form, 29-6	MRP pegging demand, 37-6
Rate schedule and work center load	MRP supply and demand, 37-8
reviewing, 20-6	process output from MPS generation
Rate schedules	See Processing options for message file
creating, 29-7	revisions
deleting, 29-10	See Working with messages
Rated capacity	repetitive output from MPS generation
calculating for critical work centers, 20-3	See Processing options for message file
Rates	revisions
creating automatically, 29-10	See Processing options for schedule review
RCCP	Reviewing
calculating rated capacity, 20-3	repetitive output from MPS
reviewing, 20-3	_
work center load	generation
reviewing, 20-3	See Processing options for time series
Recalculating work center hours, 20-2	Reviewing branch relationships on the relationship
Regeneration	chart, 32-8
MRP, 36-1	Reviewing capacity requirements plans, 38-3
Releasing a supplier schedule, 49-1	Reviewing detail messages, 19-8
Repetitive items	Reviewing items for master schedule selection, 17-3
generating a master production schedule, 29-10	Reviewing leadtime for MRP, 37-11
Repetitive manufacturing	Reviewing line scheduling workbench for material
defining order policy, 29-2	requirements planning, 37-9
working with, 29-1	Reviewing MRP branch relationships on the
Repetitive routings	relationships chart, 42-2
creating, 29-4	Reviewing MRP rate schedule and work order
Repost open quantities	loads, 38-6
net change flag, 17-2 Resource and capacity planning	Reviewing MRP work schedules on the dispatch
fast path commands, 1-9	list, 38-6 Reviewing multi-facility time series 34-1
Resource offset	Reviewing multi-facility time series, 34-1 Reviewing period summaries for capacity
	Lie vie villig period buildinaries for capacity

requirements planning, 38-4	Setting up MRP supply and demand
Reviewing planning families, 19-6	relationships, 42-2
Reviewing rate schedule and work center load, 20-6	Setting up MRP supply/demand inclusion
Reviewing repetitive rate schedule output from MPS	rules, 39-2
generation, 29-10	Setting up multi-facility requirements plans, 42-1
Reviewing the rough cut capacity plan, 20-3	Setting up order policy rules, 25-2
Reviewing the schedule generation exception report, 47-2	Setting up rough cut capacity display, 21-7 Setting up stocking types, 25-4
Reviewing the time series for MRP	Setting up supply and demand inclusion rules, 21-1
multi-facility, 44-1	Setting up supply and demand relationships, 32-1
Reviewing time series	Setting up the capacity requirements display, 39-4
for pacing co-products, 30-8	Shipment leadtime
Reviewing transfer messages, 34-3	supplier scheduling, 46-4
Reviewing work center load, 12-3	Shipment quantity
Reviewing work center load for capacity	supplier scheduling, 46-4
requirements planning, 38-4 Reviewing work schedules on production	Shipping units per container supplier scheduling, 46-4
status, 20-4	Shop floor workbench form (P31225), 37-9
Revising detail forecasts, 6-4	Single facility MRP, 35-1
Revising resource units, 20-2	about, 35-1
Revising supplier schedules, 48-1	Single level master schedule
Rough cut capacity display	net change flag update, 17-1
setting up, 21-7	Single level master schedules
Rough Cut Capacity Display form (P00051), 21-7	generating, 17-1
Rough cut capacity plan	Single level master scheduling
reviewing period summary, 20-3	about, 15-1
Rough Cut Capacity Planning	applications, 15-2
See RCCP	DRP and purchased items, 15-2
Rough cut capacity plans	MPS and manufactured items, 15-3
generating, 20-2	st accuracy, 5-9
	Statistical laws
S	forecast accuracy, 5-9
	Steps for creating a supplier schedule, 45-3
Sales order entry net change flag, 17-2	Stocking type
Schedule generation exception report	defining for process manufacturing, 30-3
reviewing, 47-2	Stocking types
Schedule Review form (P31224), 29-15	setting up, 25-4 Summary forecasts, 5-2
Scheduling	Supplier contract
multi-facility	deleting information, 46-3
DRP/MPS, 31-1	Supplier contract information
Scheduling information	defining, 46-1
working with, 37-6	Supplier contracts
Setting processing options	defining, 46-1
rate based scheduling, 29-10	Supplier information
Setting up	changing, 48-4
multi-facility schedule	deleting, 46-3
See Setting up DRP/MPS/RCCP	Supplier schedule
Setting up a multi-level master schedule, 25-1	creating, 45-3
Setting up DRP, MPS and RCCP, 21-1	effective date range, 45-2
Setting up feature planned percents, 25-5	printing, 50-1
Setting up forecast consumption periods, 21-6	releasing, 49-1
Setting up forecast consumption periods for	Supplier schedule master (F4321)
MRP, 39-3	tables, 45-2
Setting up items	Supplier schedules
overview, 2-1	generating, 47-1
Setting up material and capacity requirements	revising, 48-1
planning, 39-1 Setting up message types for material requirements	Supplier scheduling, 45-1
plans, 39-2	blanket order release, 45-2 blanket purchase order, 45-2

level leadtime, 46-4	Sales History, 5-12
multiple, 47-2	Sales Order Detail, 5-12
processing receipts, 46-4	Summary Constants, 5-12
shipment leadtime, 46-4	Summary Forecast, 5-11
shipment quantity, 46-4	supplier schedule master (F4321), 45-2
shipping units per container, 46-4	supplier split percentages (F43211), 45-2
Supplier split percentages	Work Center Master (F3006), 7-4
defining, 46-6	
· ·	work order master (F4801), 35-3
Supplier split percentages (F43211)	Terms and concepts
tables, 45-2	manufacturing and distribution planning, 1-5
Supplier split percentages form (P43211), 46-7	Text Messages form
Supply and demand inclusion rules	sample, 3-8
setting up, 21-1	Text Messages program (P0016), 3-8
Supply and demand relationships	Time fence rules, 16-2
defining branch level, 32-8	setting up, 21-5
effective dates, 32-2	Time fence rules for MRP
inventory availability, 32-2	setting up, 39-3
locating, 32-8	Time Fence Rules form (P00051), 21-5
mark up, 32-2	Time fences
setting up for material requirements plans, 42-2	about, 16-1
supply and demand relationships	freeze fence, 16-2
deleting, 32-8	message display fence, 16-2
Supply/Demand Inclusion Rules form	planning fence, 16-2
(P34004), 21-2	single level master scheduling, 16-1
Suppress blank lines, 19-4	Time frames
Suppressing	leveling overload, 38-6
blank lines, 29-12, 30-8	Time series
Synchronizing MRP and CRP systems, 38-2	available to promise calculation, 16-4
System integration, 5-2	cumulative available to promise calculation, 16-4
	ending available calculations, 16-3
manufacturing and distribution planning, 1-2	
System messages DDP (MDC 1/4 F	pacing co-products
DRP/MPS, 16-5	example, 30-8
	reviewing for MRP multi-facility, 44-1
T	suppressing blank lines, 28-9, 29-12
m 11	Time series calculation, 19-4
Tables 5.12	Time series calculations, 16-3
Address Book, 5-12	Time Series form (P3413), 19-5
bill of materials master, 35-3	Transfer messages
bill of materials master (F3002), 1-9, 24-2, 41-2	reviewing, 34-3
branch relationships master (F3403), 35-3, 41-2	Transfer order messages
Branch/Plant Master, 5-12	processing, 34-2
branch/plant master (F4102), 1-9	processing for MRP, 44-2
Business Unit Master, 5-12	Transfer orders
capacity messages (F3311), 1-9	MRP multi-facility requirements plan, 43-2
Co-/By-Products Planning Table (F3404), 30-4	Type of load
Detail Forecast, 5-11	work centers, 12-5
Forecast (F3460), 7-4	Types of multi-facility scheduling, 31-2
forecast (F3460), 35-3	Types of main facility self-culturing, of 2
forecast consumption, 35-3	
Forecast Summary Work, 5-12	U
item branch (F4102), 24-2, 35-3, 41-3	Unit types
Item Master, 5-12	setting up, 13-2
item master (F4101), 1-9, 24-2, 35-3, 41-3	User Defined Code Revisions form, 13-1
MPS/MRP/DRP detail message review	Using bills of material in MRP, 35-3
	Come on material in with, 30-3
(F3411), 35-3, 41-3	
MPS/MRP/DRP lower level requirements	V
(F3412), 35-3, 41-2	Validating capacity requirements plans, 38-7
MPS/MRP/DRP summary (F3413), 35-3	
Pasauraa Protila (E2202) 7 A	Validatina maatawaalaadalaa 20.1
Resource Profile (F3303), 7-4 Resource Units (F3007), 7-4	Validating master schedules, 20-1 Validating material requirements plans, 38-1

W

```
Work center load
  reviewing
     for resource requirements planning, 12-3
  reviewing for RCCP, 20-3
Work centers
  different units of measure, 9-1
  entering for RRP, 8-1
  over-capacity, 12-6
  prime load code, 12-5
  recalculating hours, 20-2
  resource offset, 12-5
  type of load, 12-5
Work order (+WO)
  quantity types for MRP, 37-4
Work order entry
  net change flag, 17-2
Work order inventory completions
  net change flag, 17-2
Work order inventory issues
  net change flag, 17-2
Work order master (F4801)
  tables, 35-3
Work order messages
  processing for material requirements plans, 37-5
Work orders
  adding a freeze code, 19-17
  processing, 22-1
  processing for material requirements
      planning, 40-1
  processing messages, 19-9
Work schedules
  reviewing on production status, 20-4
Working with batch manufacturing, 28-1
Working with detail forecasts, 6-1
Working with master schedules, 19-1
Working with MRP, 37-1
Working with MRP multi-facility planning
    output, 44-1
Working with multi-facility planning output, 34-1
Working with process manufacturing, 30-1
Working with rate based manufacturing, 29-1
Working with repetitive manufacturing, 29-1
```