

Oracle® Process Manufacturing

Capacity Planning User's Guide

Release 11*i*

Part No. A96513-02

January 2003

The OPM Capacity Planning User's Guide describes the setup required to use OPM with the Oracle Applications Advanced Supply Chain Planning solutions. In addition, Resource setup, used by the OPM Production Execution and Product Development applications, is also described.

Oracle Process Manufacturing Capacity Planning User's Guide, Release 11i

Part No. A96513-02

Copyright © 2002, 2003 Oracle Corporation. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information of Oracle Corporation; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent and other intellectual and industrial property laws. Reverse engineering, disassembly or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. Oracle Corporation does not warrant that this document is error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Oracle Corporation.

If the Programs are delivered to the U.S. Government or anyone licensing or using the programs on behalf of the U.S. Government, the following notice is applicable:

Restricted Rights Notice Programs delivered subject to the DOD FAR Supplement are "commercial computer software" and use, duplication, and disclosure of the Programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, Programs delivered subject to the Federal Acquisition Regulations are "restricted computer software" and use, duplication, and disclosure of the Programs shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software - Restricted Rights (June, 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and Oracle Corporation disclaims liability for any damages caused by such use of the Programs.

Oracle is a registered trademark of Oracle Corporation. Other names may be trademarks of their respective owners.

Contents

Send Us Your Comments	vii
Preface	ix
Audience for This Guide	ix
How To Use This Guide	ix
Documentation Accessibility	ix
Other Information Sources	x
Online Documentation.....	x
Related User's Guides.....	x
Guides Related to All Products	xi
Oracle Applications User's Guide	xi
User Guides Related to This Product	xi
Accounting Setup User's Guide.....	xi
Cost Management User's Guide	xi
Manufacturing Accounting Controller User's Guide	xii
Oracle Financials Integration User's Guide.....	xii
Inventory Management User's Guide.....	xii
Physical Inventory User's Guide.....	xii
Order Fulfillment User's Guide	xii
Purchase Management User's Guide	xiii
Using Oracle Order Management with Process Inventory Guide	xiii
Production Management User's Guide.....	xiii
Process Operation Control User's Guide.....	xiii
Integration with Advanced Planning and Scheduling User's Guide	xiv
MPS/MRP and Forecasting User's Guide	xiv

Capacity Planning User's Guide	xiv
Using Oracle Process Manufacturing with Oracle Manufacturing Scheduling.....	xiv
Product Development User's Guide.....	xv
Quality Management User's Guide	xv
Regulatory Management User's Guide	xv
Implementation Guide.....	xv
System Administration User's Guide.....	xvi
API User's Guides	xvi
Installation and System Administration	xvi
Oracle Applications Concepts	xvi
Installing Oracle Applications	xvi
Upgrading Oracle Applications	xvii
Maintaining Oracle Applications.....	xvii
Oracle Applications System Administrator's Guide.....	xvii
Oracle Alert User's Guide	xvii
Oracle Applications Developer's Guide.....	xvii
Oracle Applications User Interface Standards for Forms-Based Products	xviii
Other Implementation Documentation	xviii
Oracle Applications Product Update Notes	xviii
Multiple Reporting Currencies in Oracle Applications.....	xviii
Multiple Organizations in Oracle Applications.....	xviii
Oracle Workflow Guide.....	xviii
Oracle Applications Flexfields Guide.....	xviii
Oracle eTechnical Reference Manuals.....	xix
Oracle Manufacturing APIs and Open Interfaces Manual.....	xix
Oracle Order Management Suite APIs and Open Interfaces Manual.....	xix
Oracle Applications Message Reference Manual.....	xix
Training and Support.....	xix
Training.....	xix
Support.....	xx
Do Not Use Database Tools to Modify Oracle Applications Data	xx
About Oracle	xx
Your Feedback.....	xxi

1 Setting Up In Capacity Planning

Defining Generic Resources.....	1-3
Defining Plant Resource Parameters	1-5
Integrating with Enterprise Asset Management.....	1-8
Linking Each Resource Instance to a Serial Numbered Asset	1-8
Alternates.....	1-10
Defining Alternate Resources	1-11
Resource Availability	1-12
Defining Exception Codes	1-13
Defining Resource Exceptions	1-15
Defining Resource Unavailability.....	1-16
Setting Up Resource Classes	1-17
Routings and Operations	1-18
Setting Up Process Parameters	1-19
Business Rules.....	1-19
Defining Process Parameters Set	1-22
Setting Up Generic Resource Parameters	1-23
Editing Plant Resource Parameters	1-25

A Capacity Planning Navigator Paths

B Capacity Planning Profile Values

Index

Send Us Your Comments

Oracle Process Manufacturing Capacity Planning User's Guide, Release 11i

Part No. A96513-02

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

Did you find any errors?

Is the information clearly presented?

Do you need more information? If so, where?

Are the examples correct? Do you need more examples?

What features did you like most?

If you find any errors or have any other suggestions for improvement, please indicate the document title and part number, and the chapter, section, and page number (if available). You can send comments to us in the following ways:

Electronic mail: appsdoc_us@us.oracle.com

FAX: 650-506-7200 Attn: Oracle Process Manufacturing

Postal service:

Oracle Corporation

Oracle Process Manufacturing

500 Oracle Parkway

Redwood City, CA 94065

USA

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact your local Oracle Support Services.

Audience for This Guide

Welcome to Release 11*i* of the *Oracle Process Manufacturing Capacity Planning User's Guide*.

This guide assumes you have a working knowledge of the following:

The principles and customary practices of your business area.

Oracle Process Manufacturing

If you have never used *Oracle Process Manufacturing*, Oracle suggests you attend one or more of the *Oracle Process Manufacturing* training classes available through Oracle University.

The Oracle Applications graphical user interface.

To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User's Guide*.

See Other Information Sources for more information about Oracle Applications product information.

How To Use This Guide

This guide contains the information you need to understand and use *Capacity Planning*.

Chapter 1, *Setting Up in Capacity Planning*, describes the setup required to use OPM with the Oracle Applications Advanced Supply Chain Planning solutions. In addition, Resource setup, used by the OPM Production Execution and Product Development applications, is also described.

Appendix A, *Capacity Planning Navigator Paths*, describes how to navigate to each window.

Appendix B, *Capacity Planning Profile Values*, describes profile options.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of

assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle Corporation is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at <http://www.oracle.com/accessibility/>.

Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of *Oracle Process Manufacturing*.

If this guide refers you to other Oracle Applications documentation, use only the Release 11i versions of those guides.

Online Documentation

All Oracle Applications documentation is available online (HTML or PDF).

Online Help - The new features section in the HTML help describes new features in 11i. This information is updated for each new release of *Oracle Process Manufacturing*. The new features section also includes information about any features that were not yet available when this guide was printed. For example, if your administrator has installed software from a mini-packs an upgrade, this document describes the new features. Online help patches are available on MetaLink.

11i Features Matrix - This document lists new features available by patch and identifies any associated new documentation. The new features matrix document is available on MetaLink.

Readme File - Refer to the readme file for patches that you have installed to learn about new documentation or documentation patches that you can download.

Related User's Guides

Oracle Process Manufacturing shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other user's guides when you set up and use *Oracle Process Manufacturing*.

You can read the guides online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides.

If you require printed guides, you can purchase them from the Oracle Store at <http://oraclestore.oracle.com>.

Guides Related to All Products

Oracle Applications User's Guide

This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI) available with this release of *Oracle Process Manufacturing* (and any other Oracle Applications products). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes.

You can access this user's guide online by choosing "Getting Started with Oracle Applications" from any Oracle Applications help file.

User Guides Related to This Product

Accounting Setup User's Guide

The OPM Accounting Setup application is where users set up global accounting attributes about the way financial data will be collected by OPM. These attributes include such things as account keys, financial calendars, and account segments. Since OPM is closely integrated with Oracle General Ledger (GL), much of the attributes are defined in the Oracle GL instead of OPM, and therefore, the windows are display only within OPM. The *Oracle Process Manufacturing Accounting Setup User's Guide* describes how to setup and use this application.

Cost Management User's Guide

The OPM Cost Management application is used by cost accountants to capture and review the manufacturing costs incurred in their process manufacturing businesses. The *Oracle Process Manufacturing Cost Management User's Guide* describes how to setup and use this application.

Manufacturing Accounting Controller User's Guide

The Manufacturing Accounting Controller application is where users define the impact of manufacturing events on financials. For example, event RCPT (Inventory Receipts) results in a debit to inventory, a credit to accrued accounts payable, a debit or a credit to purchase price variance, etc. These impacts are predefined in the Manufacturing Accounting Controller application so users may begin using OPM to collect financial data out-of-the-box, however, they may also be adjusted per your business needs. The *Oracle Process Manufacturing Manufacturing Accounting Controller User's Guide* describes how to setup and use this application.

Oracle Financials Integration User's Guide

Since OPM is closely integrated with Oracle General Ledger, financial data that is collected about the manufacturing processes must be transferred to the Oracle Financials applications. The OPM Oracle Financials Integration application is where users define how that data is transferred. For example, users define whether data is transferred real time or batched and transferred at intervals. The *Oracle Process Manufacturing Oracle Financials Integration User's Guide* describes how to setup and use this application.

Inventory Management User's Guide

The OPM Inventory Management application is where data about the items purchased for, consumed during, and created as a result of the manufacturing process are tracked. The *Oracle Process Manufacturing Inventory Management User's Guide* includes information to help you effectively work with the Oracle Process Manufacturing Inventory application.

Physical Inventory User's Guide

Performing physical inventory count is the most accurate way to get an accounting of all material quantities purchased, manufactured, and sold, and update your onhand quantities accordingly. The OPM Physical Inventory application automates and enables the physical inventory process. The *Oracle Process Manufacturing Physical Inventory User's Guide* describes how to setup and use this application.

Order Fulfillment User's Guide

The OPM Order Fulfillment application automates sales order entry to reduce order cycle time. Order Fulfillment enables order entry personnel to inform customers of scheduled delivery dates and pricing. The *Oracle Process Manufacturing Order Fulfillment User's Guide* describes how to setup and use this application.

Purchase Management User's Guide

OPM Purchase Management and Oracle Purchasing combine to provide an integrated solution for Process Manufacturing. Purchase orders are entered in Oracle Purchasing and received in OPM. Then, the receipts entered in OPM are sent to Oracle Purchasing. The *Oracle Process Manufacturing Purchase Management User's Guide* describes how to setup and use this integrated solution.

Using Oracle Order Management with Process Inventory Guide

Oracle Process Manufacturing and Oracle Order Management combine to provide an integrated solution for process manufacturers. The manufacturing process is tracked and handled within Oracle Process Manufacturing, while sales orders are taken and tracked in Oracle Order Management. Process attributes, such as dual UOM and lot control, are enabled depending on the inventory organization for the item on the sales order. Order Management accepts orders entered through Oracle Customer Relationship Management (CRM). Within CRM, orders can originate from TeleSales, Sales Online, and iStore, and are booked in Order Management, making the CRM suite of products available to Process customers, through Order Management. The *Oracle Order Management User's Guide* and *Using Oracle Order Management with Process Inventory Guide* describes how to setup and use this integrated solution.

Production Management User's Guide

The OPM Production Management application records information about production batches. It enables you to track production batches and firm planned orders (FPOs), and convert FPOs to single or multiple production batches. In addition, the application is used to allocate ingredients, record actual ingredient usage, certify and complete production batches, and record actual product production quantities among other production processes. The *Oracle Process Manufacturing Production Management User's Guide* describes how to setup and use this integrated solution.

Process Operation Control User's Guide

The Oracle Process Manufacturing Process Operation Control (POC) application is an extension to the OPM Production Management application, that allows you to record more complete and detailed manufacturing data. The *Oracle Process Manufacturing Process Operation Control User's Guide* describes how to setup and use this application.

Integration with Advanced Planning and Scheduling User's Guide

Oracle Process Manufacturing and Oracle Advanced Planning and Scheduling (APS) combine to provide an integrated solution for process manufacturers that can help increase planning efficiency. The integration provides for constraint-based planning, performance management, materials management by exception, mixed mode manufacturing that enables you to choose the best method to produce each of your products, and combine all of these methods within the same plant/company. The *Oracle Process Manufacturing Integration with Advanced Planning and Scheduling User's Guide* describes how to setup and use this application.

MPS/MRP and Forecasting User's Guide

The Oracle Process Manufacturing Material Requirements Planning (MRP) application provides long-term "views" of material demands and projected supply actions to satisfy those demands. The Master Production Scheduling (MPS) application lets you shorten that view to a much narrower and immediate time horizon, and see the immediate effects of demand and supply actions. The *Oracle Process Manufacturing MPS/MRP and Forecasting User's Guide* describes how to setup and use this application.

Capacity Planning User's Guide

The OPM Capacity Planning User's Guide describes the setup required to use OPM with the Oracle Applications Advanced Supply Chain Planning solutions. In addition, Resource setup, used by the OPM Production Execution and Product Development applications, is also described.

Using Oracle Process Manufacturing with Oracle Manufacturing Scheduling

Oracle Process Manufacturing integrates with Oracle Manufacturing Scheduling to manage and utilize resources and materials. Through the Process Manufacturing application, you set up manufacturing, inventory, procurement and sales order data. Through the Manufacturing Scheduling application, you can optimize the schedule based on resource and component constraints and user predefined priorities. Using different optimization objectives, you can tailor Manufacturing Scheduling to meet your needs.

Using Oracle Manufacturing Scheduling helps you improve productivity and efficiency on your shop floor. By optimally scheduling shop floor jobs, and being able to quickly react to unplanned constraints, you can lower manufacturing costs, increase resource utilization and efficiency, and increase customer satisfaction through improved on-time delivery. The *Using Oracle Process Manufacturing with*

Oracle Manufacturing Scheduling User's Guide describes how to setup and use this integrated solution.

Product Development User's Guide

The Oracle Process Manufacturing Product Development application provides features to manage formula and laboratory work within the process manufacturing operation. It allows you to manage multiple laboratory organizations and support varying product lines throughout the organization. You can characterize and simulate the technical properties of ingredients and their effects on formulas. You can optimize formulations before beginning expensive laboratory test batches. Product Development coordinates each development function and enables a rapid, enterprise-wide implementation of new products in your plants. The *Oracle Process Manufacturing Product Development User's Guide* describes how to setup and use this application.

Quality Management User's Guide

The Oracle Process Manufacturing Quality Management application provides features to test material sampled from inventory, production, or receipts from external suppliers. The application lets you enter specifications and control their use throughout the enterprise. Customized workflows and electronic record keeping automate plans for sampling, testing, and result processing. You can compare specifications to assist in regrading items, and match customer specifications. Aggregate test results and print statistical assessments on quality certificates. Several preformatted reports and inquiries help manage quality testing and reporting. The *Oracle Process Manufacturing Quality Management User's Guide* describes how to set up and use this application.

Regulatory Management User's Guide

The Oracle Process Manufacturing Regulatory Management application generates the Material Safety Data Sheets (MSDSs) required by authorities to accompany hazardous materials during shipping. You can create MSDSs from OPM Formula Management with Regulatory or Production effectivities. The *Oracle Process Manufacturing Regulatory Management User's Guide* describes how to setup and use this application.

Implementation Guide

The *Oracle Process Manufacturing Implementation Guide* offers information on setup. That is, those tasks you must complete following the initial installation of the Oracle

Process Manufacturing software. Any tasks that must be completed in order to use the system out-of-the-box are included in this manual.

System Administration User's Guide

Much of the System Administration duties are performed at the Oracle Applications level, and are therefore described in the *Oracle Applications System Administrator's Guide*. The *Oracle Process Manufacturing System Administration User's Guide* provides information on the few tasks that are specific to OPM. It offers information on performing OPM file purge and archive, and maintaining such things as responsibilities, units of measure, and organizations.

API User's Guides

Public Application Programming Interfaces (APIs) are available for use with different areas of the Oracle Process Manufacturing application. APIs make it possible to pass information into and out of the application, bypassing the user interface. Use of these APIs is documented in individual manuals such as the *Oracle Process Manufacturing Inventory API User's Guide*, *Oracle Process Manufacturing Process Execution API User's Guide*, *Oracle Process Manufacturing Product Development Formula API User's Guide*, *Oracle Process Manufacturing Quality Management API User's Guide*, and the *Oracle Process Manufacturing Cost Management API User's Guide*. Additional API User's Guides are periodically added as additional public APIs are made available.

Installation and System Administration

Oracle Applications Concepts

This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11*i*. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

Installing Oracle Applications

This guide provides instructions for managing the installation of Oracle Applications products. In Release 11*i*, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications, the Oracle8 technology stack, and the Oracle8*i* Server technology stack by

automating many of the required steps. This guide contains instructions for using Oracle Rapid Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user's guides and implementation guides.

Upgrading Oracle Applications

Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

Maintaining Oracle Applications

Use this guide to help you run the various AD utilities, such as AutoUpgrade, AutoPatch, AD Administration, AD Controller, AD Relink, License Manager, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities. This guide also provides information on maintaining the Oracle applications file system and database.

Oracle Applications System Administrator's Guide

This guide provides planning and reference information for the Oracle Applications System Administrator. It contains information on how to define security, customize menus and online help, and manage concurrent processing.

Oracle Alert User's Guide

This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

Oracle Applications Developer's Guide

This guide contains the coding standards followed by the Oracle Applications development staff. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. It also provides information to help you build your custom Oracle Forms Developer 6*i* forms so that they integrate with Oracle Applications.

Oracle Applications User Interface Standards for Forms-Based Products

This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications products and how to apply this UI to the design of an application built by using Oracle Forms.

Other Implementation Documentation

Oracle Applications Product Update Notes

Use this guide as a reference for upgrading an installation of Oracle Applications. It provides a history of the changes to individual Oracle Applications products between Release 11.0 and Release 11*i*. It includes new features, enhancements, and changes made to database objects, profile options, and seed data for this interval.

Multiple Reporting Currencies in Oracle Applications

If you use the Multiple Reporting Currencies feature to record transactions in more than one currency, use this manual before implementing *Oracle Process Manufacturing*. This manual details additional steps and setup considerations for implementing *Oracle Process Manufacturing* with this feature.

Multiple Organizations in Oracle Applications

This guide describes how to set up and use *Oracle Process Manufacturing* with Oracle Applications' Multiple Organization support feature, so you can define and support different organization structures when running a single installation of *Oracle Process Manufacturing*.

Oracle Workflow Guide

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes. You also use this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

Oracle Applications Flexfields Guide

This guide provides flexfields planning, setup and reference information for the *Oracle Process Manufacturing* implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This manual also provides information on creating custom reports on flexfields data.

Oracle eTechnical Reference Manuals

Each eTechnical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for a specific Oracle Applications product. This information helps you convert data from your existing applications, integrate Oracle Applications data with non-Oracle applications, and write custom reports for Oracle Applications products. Oracle eTRM is available on Metalink

Oracle Manufacturing APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes API's and open interfaces found in Oracle Manufacturing.

Oracle Order Management Suite APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes API's and open interfaces found in Oracle Order Management Suite.

Oracle Applications Message Reference Manual

This manual describes all Oracle Applications messages. This manual is available in HTML format on the documentation CD-ROM for Release 11i.

Training and Support

Training

Oracle offers a complete set of training courses to help you and your staff master *Oracle Process Manufacturing* and reach full productivity quickly. These courses are organized into functional learning paths, so you take only those courses appropriate to your job or area of responsibility.

You have a choice of educational environments. You can attend courses offered by Oracle University at any one of our many Education Centers, you can arrange for our trainers to teach at your facility, or you can use Oracle Learning Network (OLN), Oracle University's online education utility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization structure, terminology, and data as examples in a customized training session delivered at your own facility.

Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep *Oracle Process Manufacturing* working for you. This team includes your Technical Representative, Account Manager, and Oracle's large staff of consultants and support specialists with expertise in your business area, managing an Oracle[®] server, and your hardware and software environment.

Do Not Use Database Tools to Modify Oracle Applications Data

*Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.*

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using Oracle Applications can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 160 software modules for financial management, supply chain management, manufacturing, project systems, human resources and customer relationship management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services, in over 145 countries around the world.

Your Feedback

Thank you for using *Oracle Process Manufacturing* and this user's guide.

Oracle values your comments and feedback. At the end of this guide is a Reader's Comment Form you can use to explain what you like or dislike about *Oracle Process Manufacturing* or this user's guide. Mail your comments to the following address or call us directly at (650) 506-7000.

Oracle Applications Documentation Manager
Oracle Corporation
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Or, send electronic mail to appsdoc_us@oracle.com.

Setting Up In Capacity Planning

Oracle Process Manufacturing (OPM) encompasses several applications specifically designed for use in managing the process manufacturing operation. These applications include Product Development (laboratory formulation), Quality Management, and Cost Management among others. Advanced Supply Chain Planning (ASCP) solutions can be implemented for use with these OPM applications, by setting up data fields from the OPM Capacity Planning menu.

This user's guide describes the OPM Capacity Planning product. It describes the setup required to use OPM with the Oracle Applications Advanced Supply Chain Planning solutions. In addition, Resource setup, used by the OPM Production Execution and New Product Development applications, is also described.

The following topics are discussed:

- Defining Generic Resources
- Defining Plant Resource Parameters
- Defining Alternate Resources
- Resource Availability
- Defining Exception Codes
- Defining Resource Exceptions
- Defining Resource Unavailability
- Setting Up Resource Classes
- Routings and Operations
- Setting Up Process Parameters
- Defining Process Parameters Set

Setting Up Generic Resource Parameters
Editing Plant Resource Parameters

Defining Generic Resources

Resources are the assets you use to produce batches, including production equipment and employee labor. You can define each resource generally (for example, OVENS) or specifically (for example, OVEN 1, OVEN 2). For each resource, you must assign a component classification code for costing purposes. You can optionally group resources into resource classifications. For example, Ovens and Stoves may be grouped into Cooking Units.

See: *Oracle Process Manufacturing Cost Management User's Guide* for details on the Cost Component Classes window.

Capacity Planning illustrates production capacity from a timeframe point of view. Through Capacity Planning, you can setup all capacity related Advanced Planning and Scheduling and Manufacturing Scheduling data. The other menu options are used as OPM setup.

Prerequisites

Define resource classes (for example, Cooking, Washup) on the Resource Class window in the OPM Cost Management application.

Define cost component classification codes on the Component Classes window available in the OPM Cost Management application.

Ensure that the unit of measure of time is established on the Unit of Measure window in the OPM System Administration application.

To define a resource:

1. Navigate to the **Resources** window.
2. Enter a **Resource** code to identify this resource. Required.
3. Enter a brief **Description** of the resource. Required.
4. Enter a **Usage UOM** (usually in hours) by which you measure the amount of time used for processing this resource. For planning and scheduling, you must define in time. Required.
5. Enter the **Resource Class** to which this resource belongs. For example, the resource Chefs may be included in the resource class Labor.
6. Enter a **Cost Component Class**. A cost component class links this individual resource to a unit of measure and allows you to establish costing parameters for the resource in the Cost Management application. Required.

Capacity

7. Enter the **Minimum** and **Maximum** amount per vessel capacity for this resource.
8. Enter the **Capacity UOM** for this resource. This is usually specified in mass or volume not time.
9. Check the **Calculate Charges** box if the capacity of an operation is constrained by the resource for the purpose of calculating charges. If another capacity-constrained resource in the same operation has a smaller capacity, then the system uses the smallest capacity-constrained resource to calculate how many times an operation is repeated for the purposes of calculating charges. For example, a capacity-constrained mixer in an operation holds a maximum of 200 gallons. A batch calls for 250 gallons, so the mixer (and the operation) runs twice (incurs two charges) to produce enough quantity for the batch. However, if another capacity-constrained resource holding a maximum of 50 gallons is also part of the operation, then the operation incurs five charges instead of two. If you check the Calculate Charges box in the Resources window for a resource, then the box defaults as checked in the Resource Information window for all plant and corresponding resource combinations. You can change the default value in the Calculate Charges box in the Resource Information window for any plant-resource combination.
10. Enter the **Capacity Tolerance** used by OPM. If the capacity falls within this specified percentage, then the resource is processed without calculating charges. If the material is over the capacity, then it is planned and scheduled incorporating calculated charges. For example, if a batch calls for 20 gallons and the capacity tolerance is 10%, then there is a single charge for up to 22 gallons. There is an extra charge for 23 gallons and higher.
11. Enter the **Utilization**. This percentage is used by APS only.
12. Enter the **Efficiency**. This percentage is used by APS only.
13. Save your work.

See Also

Oracle Process Manufacturing Cost Management User's Guide

Oracle Process Manufacturing System Administration User's Guide

Oracle Process Manufacturing Implementation Guide

Defining Plant Resource Parameters

A resource may operate at a different capacity at one production plant than it does at another. For example, at one plant the resource may be able to process 300-500 gallons per day, but only 300-400 gallons per day at another plant. Also, the cost of using the resource may be more in one plant than in another.

For scheduling, the resource must be defined at the plant. If the resource is not enabled at the plant, then it is assumed that the resource does not exist there. Use the Resource Information window to enter plant specific information regarding each resource. This information includes costing information, resource usage unit of measure, and available hours per day for the resource in a specific production plant. Capacity Planning references this information to determine the availability and throughput of resources in each specific plant (organization). Creating a resource here enables them for scheduling and planning. Also, you can define process parameter values specifically for plants. Refer to the "Editing Plant Resource Parameters" topic for details.

Prerequisites

Define unit of measure types.

Define units of measure.

Define units of measure conversions.

Define organizations, resources, and resource units of measure, and select the appropriate plant where you want to define plant resources.

To define resource parameters in specific plants:

1. Navigate to the **Resources Information** window.
2. Enter the **Organization** (production plant) for which you are defining a resource attribute. You must be able to enter an organization. The cost applies only to this plant and resource combination. You can, however, define the cost of using the resource in more than one plant allowing you to calculate the production costs for the resource across various organizations. Required.
3. Enter the **Resource** for which you are establishing available capacity parameters and production costs when used in the designated organization (production). Required.
4. Enter a **Resource Category**. You can group the resource that you specified in the previous field into a broader group for reporting purposes. For example, if you specify Blender 1 as the resource in the previous field, you can group that

resource into the more generic group Blenders. The Category Resource field defaults to the value in the Resource field if there is no grouping of the resource into a broader category. Required.

5. Enter the **Count**. This is the number or quantity of the resource used in the specified plant for which you are defining production costs and usage availability. If you consider the resources identical, then you can have a multiple count. The count depends on how broad a resource categorization you are defining. For example, if you defined the resource as Blender 1 (a specific machine), then enter 1. If you use three blenders in the production line and you defined the resource as Blenders (rather than defining each individual machine), then enter 3. Required.
6. Specify the maximum number of hours this resource is available in this plant each day in the **Available Use/Daily** field. Required.
7. Enter the **Planning Cost** of this resource when used in the specified plant. Used for reporting purposes only. The Planning Cost is used by planning and scheduling. Required.
8. Enter the **Usage UOM** by which the resource is measured in time in the specified plant. This is usually specified in hours. Required.
9. Enter the **Schedule Indicator**. This is used by Manufacturing Scheduling. In addition to being defined at the plant, the resource can be defined at three levels of scheduling.

Do Not Schedule the resource used in the specified plant for which you are defining production costs and usage availability with constraints. This resource is defined as having infinite capacity enabling you to schedule resources without constraints.

Schedule the resource used in the specified plant for which you are defining production costs and usage availability. This resource is defined with a finite schedule enabling you to schedule resource with constraints. As a result, the resource count or assigned quantity is used as a constraint.

Scheduling to Instance the resource used in the specified plant for which you are defining production costs and usage availability. This enables exact sequencing of the resources to be scheduled to particular instances. Ensure that the number of instances and count are the same.

10. Indicate if the resource you are defining for this plant is active or inactive through the **Inactive** field. Plant and resource flagged as inactive are not used for cost calculations for the resource, nor will resource availability be considered.

Capacity

11. Enter the **Range** for the resource's minimum and maximum amount per vessel capacity unit at this plant. Required.
12. Enter the **Ideal** for the resource's optimum throughput amount per vessel capacity unit at this plant. Required.
13. Enter the **UOM** by which the resource capacity is measured in this plant. This is usually specified in mass or volume. For example, indicate if the material is produced in gallons or pounds. Required.
14. Check the **Calculate Charges** box if the capacity of an operation is constrained by the resource for the purpose of calculating charges. If another capacity-constrained resource in the same operation has a smaller capacity, the system uses the smallest capacity-constrained resource to calculate how many times an operation is repeated for the purposes of calculating charges. For example, a capacity-constrained mixer in an operation holds a maximum of 200 gallons. A batch calls for 250 gallons, so the mixer (and the operation) runs twice (incurs two charges) to produce enough quantity for the batch. However, if another capacity-constrained resource holding a maximum of 50 gallons is also part of the operation, then the operation incurs five charges instead of two. If you check the Calculate Charges box in the Resources window for a resource, the box defaults as checked in the Resource Information window for all plant and corresponding resource combinations. You can change the default value in the Calculate Charges box in the Resource Information window for any plant-resource combination.
15. Enter the **Capacity Tolerance** used by OPM.
16. Enter the **Utilization** percent. You can indicate if a resource is not 100% used. For example, due to small breaks or maintenance tasks, a resource may not be available part of the time. If the utilization ratio of a resource is 90%, then the resource is not available for processing 10% of the time. This factor is taken into account during the planning stage.
17. Enter the **Efficiency** percent. You can indicate if an activity processed on a resource may take a longer time to process. For example, an activity that usually takes 12 hours to process on a resource, if it is 100% efficient, then it takes 24 hours if the resource is 50% efficient. This factor is taken into account during the planning stage.
18. Save your work.

Integrating with Enterprise Asset Management

You can define your resources as assets by linking your resources to assets defined in enterprise Asset Management (eAM). Linking to eAM enables OPM plants to view the scheduled maintenance for specific resources. You create a work order by using eAM to schedule maintenance on your resources defined as assets. The following steps define one part of the linking process. For more information on linking resources to assets in eAM, refer to the *Oracle Process Manufacturing Implementation Guide*.

To link OPM resources with equipment items:

1. Navigate to the **Resource Information** window.
2. Complete this window as described in the Defining Resource Parameters in Specific Plants topic.
3. Click **Equipments**.
4. Enter the **Equipment Item** that corresponds to the resource. If you enter a number greater than 1 in the **Count** field or if you define the resource generally, then you may have more than one equipment item corresponding to the resource. An equipment item needs to be created in Oracle Inventory. In Oracle Inventory, specify the item which is equal to equipment
5. Save your work.

Linking Each Resource Instance to a Serial Numbered Asset

The number of resource instances is defined by the number you entered in the Count field. If you want to link your resources to assets defined in eAM, link each resource instance to a serial numbered asset.

To link each resource instance to a serial numbered asset:

1. Navigate to the **Resource Information** window.
2. Complete this window as described in the Defining Plant Resource Parameters topic.
3. Click **Instances**. A note displays asking you to enter the default instance values before entering the values for each individual instance. Click **OK**.
4. Enter any values that apply to all instances in the **Instance Default Values** window. Click **Accept**. The **Resource Instances** window displays.

Resource Instances

5. Enter the **Vendor Name**. You can select the name of the vendor from whom you purchased the resource instance from the list of values or enter a new name.
6. Enter the **Model Number**.
7. Enter the **Serial Number**. Use this field to record equipment information. This is the actual serial number from the machine.
8. Enter the **Equipment Serial Number**. An equipment item needs to be created in Oracle Inventory. In Oracle Inventory, specify the item which is equal to equipment. The LOV provides the serial number associated with the equipment item. This is how the serial number links to the resource instance to an asset. Required when using eAM.
9. Enter the **Tracking Number**. This can be any other number you use to track the resource. For example, you could enter the asset number from eAM here or a lot number.
10. Enter the **Start Date**. This is the date that you plan to begin using the resource instance.
11. Enter the **End Date**. This is the date that you plan to stop using the resource instance.
12. Enter the **Last Maintenance Date**. This is the date when you last performed maintenance on the resource instance.
13. Enter the **Maintenance Interval**. This is the number of days recommended between scheduled maintenance activities. This field is used to provide information only.
14. Check the **Inactive** box if the resource instance is not available for use at the present time.

Calibration

15. Enter the **Frequency**. The frequency indicates how many times in one period the resource instance requires calibrating. For example, a machine requires calibration four times a year. The number four is the frequency and a year is the period. This field is for informational purposes only.
16. Enter the type of **Period** in which the resource instance requires calibrating. For example, weekly, monthly, or yearly. This field is for informational purposes only.

17. Enter the **Calibration Item** used to calibrate the resource instance. You can select the inventory item with which to calibrate the resource from the list of values.
18. Enter the **Calibration Date** on which you calibrated the resource instance.
19. Enter the **Certification Date** on which the resource instance was certified.
20. Enter the name of the person who certified the resource instance in the **Certified By** field.
21. Save your work.

Alternates

You can access the **Alternate Resources** window by clicking **Alternates**. See the Defining Alternate Resources topic for more information.

See Also

Oracle Process Manufacturing Cost Management User's Guide

Oracle Process Manufacturing System Administration User's Guide

Oracle Process Manufacturing Implementation User's Guide

Defining Alternate Resources

An alternate resource is one that can perform the same operation as the primary resource. Alternate resources are used when the selected resource cannot be used, perhaps due to overload, breakdown, or performance issues. You can indicate resources that may be used as alternatives to a particular resource.

You cannot delete a resource on the Resources window if it is specified as an alternate on the Alternate Resource window. A message displays indicating that the deletion cannot be performed.

To define alternate resources:

1. Navigate to the **Alternate Resources** window.
2. Enter a primary **Resource** code for which you are defining alternates. It must be a resource already established on the Resources window.

Alternate Resource Factors

3. Enter an **Alternate Resource** code for the first resource that will be used as an alternate to the primary resource. It must be a valid resource code already established on the Resources window. You can enter additional alternate resources on succeeding lines. Required.
4. Enter the **Runtime Factor**. This is the rate determining time. For alternate resources, runtime is a factor of the primary resources runtime. For each alternate resource, specify the factor for runtime in comparison with primary resource. This must be a positive numeric factor. If the value is greater than 1, then this implies the alternate takes longer to complete the task than the original. If the value is equal to 1, then this implies that the resources process at the same rate. If the value is less than 1, then this implies that the alternate is faster than the original resource. Required.

Examples:

If runtime for the primary resource is four hours, then entry of a runtime factor of .75 indicates that alternate resource runtime is three hours ($4 * .75 = 3$).

If runtime for the primary resource is four hours, then entry of a runtime factor of 1.5 indicates that alternate resource runtime is six hours ($4 * 1.5 = 6$).

5. Save your work.

Resource Availability

Through the OPM Exception Code, Resource Unavailability, and Resource Exceptions windows, you can identify when resources are unavailable. This information is then passed from OPM to APS and Manufacturing Scheduling. Before OPM data is passed to APS and Manufacturing Scheduling, the resource unavailable time is subtracted from the plant's manufacturing calendar. The net available resource time is then passed to the APS and Manufacturing Scheduling. This lets APS and Manufacturing Scheduling issue exception messages when planned production exceeds resource capacity in an unconstrained plan. If you create a resource constrained plan, then daily production is limited by the resource constraint. You can record when each resource is unavailable after you have defined your plant, resources, and reason codes.

See Also

Defining Resource Exceptions

Defining Resource Unavailability

Defining Exception Codes

Defining Exception Codes

You can define a set of unavailable time and attach it to one or more resources. This set is called an exception set and is identified by an exception code. Exception codes are a collection of unavailable time associated to available resources. The availability of the resources is decreased by the time periods defined in the exception set.

To define exception codes:

1. Navigate to the **Exception Code** window.
2. Enter an **Exception Code** which can be up to 6 characters long. Required.
3. Enter a **Description** of the exception code.
4. If you want to inactivate the exception code, select the **Inactive Indicator**.

Unavailable Hours

5. Enter the range of time that one or more resources is unavailable in the **Start Date** and **End Date** fields. Required.
6. From the **Reason Code** list, select the reason for which the resource is unavailable. You can define a new reason code within the OPM System Administration application. The reason code **Description** displays. Required.
7. Repeat the above steps for each range of time that one or more resources are unavailable.

Resources

8. Enter the **Plant Code** that you want to associate with this exception set. Required.
9. Enter the **Resources** that you want to associate with this exception set. The **Resource Description** of the unavailable resource displays. Required.
10. Enter the **Resource Count**. If you enter a Resource Count, then you cannot enter an Instance Number.
11. Enter the **Instance Number** for the specific instance that is unavailable because of the exception set. If you enter an Instance Number, then you cannot enter a Resource Count.
12. If you have multiple plant and resource combinations to define, click **Associate** to identify those plant and resource combinations that have yet to be selected.

13. Click **Associate** to display the **Plant Resources** window.
14. Use the list of values for the **Plant Code**, **Resources**, and **Group Resource** fields to find a particular plant and resource combination. If a plant and resource combination has already been entered into the Resources region, you cannot find the combination. Only those combinations that you have yet to define appear in the Plant Resources window.
15. Click **Assign** to enter the combination in the Resources region.
16. Save your work.

See Also

Resource Availability

Defining Resource Exceptions

Defining Resource Unavailability

Oracle Process Manufacturing System Administration

Defining Resource Exceptions

You can view all of the exception sets associated with a resource and the total unavailable time for a resource through the Resource Unavailability window.

To define resource exceptions:

1. Navigate to the **Resource Exceptions** window.
2. Enter a **Plant Code** where the unavailable resource is located.
3. Enter a **Resource** that is unavailable. The resource is instance controlled.

Exception Code Assignment

4. If you want to associate additional exception sets with the plant code and resource, click a blank **Exception Code** field, then select an exception code from the list. A description of the exception code displays. Required.
5. Enter the **Resource Count**. If you enter a Resource Count, then you cannot enter an Instance Number.
6. Enter the **Instance Number** for the specific instance that is unavailable because of the exception set. If you enter an Instance Number, then you cannot enter a Resource Count.
7. If you want to view the total unavailable time for the resource, click **Details**. The **Resource Unavailability** window displays.
8. Save your work.

See Also

Resource Availability

Defining Resource Unavailability

Defining Exception Codes

Defining Resource Unavailability

You can view the total unavailable time for a single resource. The source of each unavailable time period displays. You have the option to manually add additional unavailable time for the resource. You can only delete those unavailable times that were entered manually.

To define resource unavailability:

1. Navigate to the **Resource Unavailability** window.
2. Select the **Plant Code** and **Resource** for which you want to view the unavailable time. The list of unavailable time periods for the resource displays.

Unavailability

3. Displays the name of the exception code that causes unavailability. Otherwise, you can enter rows manually. You can change the default from Manual using the GMP: Manual Exception Code profile option.
4. If you want to add an additional unavailable time period, then click **Resource Count** in the Unavailability region. If you enter a Resource Count, then you cannot enter an Instance Number.
5. Enter the **Instance Number**. If you enter an Instance Number, then you cannot enter a Resource Count.
6. Type the unavailable time period into the **From Date** and **To Date** fields. Required.
7. From the list, select a **Reason Code** associated with the exception code. To enter a manual exception code, select a reason code from the list for the manual exception. Required.
8. The description of the reason code automatically fills the **Description** field.
9. Save your work.

See Also

Resource Availability

Defining Resource Exceptions

Defining Exception Codes

Setting Up Resource Classes

Through the Resource Classes window you define resource classes. Then assign the resource classes to your resources.

Prerequisites

Define resources.

To setup resource classes:

1. Navigate to the **Resource Classes** window.
2. Enter the **Resource Class** name or code.
3. Enter a **Description** for the resource class.
4. Save your work.

See Also

Defining Resources

Routings and Operations

These topics are discussed in the Oracle Process Manufacturing Product Development User's Guide.

Setting Up Process Parameters

A process parameter details information such as temperature, pressure, or time that is pertinent to the product, but does not fall into the classification of input or output. Process parameters can be used as set points, comparison values, or in conditional logic. OPM enables the association of process parameters to a resource, at the resource level within an operation and a recipe, as well as at the production batch level.

Business Rules

Process parameters are defined as independent resource characteristics, and are definable from the Process Planning and Product Development menus.

Process parameters can be tied to any resources defined in OPM Process Planning.

Multiple resources can be used in an operation (step), and process parameters are resource specific.

Batch creation takes the process parameters and their default values found in the recipe if they exist there; if no definitions exist in the recipe, then the operation is checked for their existence. If no definitions exist in the operation, then the resource is checked for their existence. If none exist in the resource, then you can insert process parameters directly into the batch associated with any resource in the Batch Step Resources window.

Process parameters with a numeric range can have a minimum or a maximum value or a range. For example, you can define a parameter with only a maximum value, such as less than or equal to 10.

Overrides - certain process parameter fields can be overridden once associated with resources, operations, and recipes.

- If the Parameter type is Numeric Range, then the Target field can be defined at the generic resource. The Target, Min, and Max value fields can be overridden at the recipe resource level. Once a batch is created, the actual value is the only field that can be entered.
- If the Parameter type is List of Values, then no overrides can be made. The List of Values can only be defined on the Process Parameter window. The Min and Max fields are not available. Once a batch is created, the actual value is the only field that can be entered.

- If the Parameter type is Text, then the Target value can be defined at the generic resource and overridden at the recipe resource level. The Min and Max fields are not available. Once a batch is created, the actual value is the only field that can be edited.
- If the parameter is added directly to a batch, then the Target field can be entered, and the Min and Max fields can be entered if it is a numeric type.

To set up process parameters:

1. Navigate to the **Process Parameters** window.
2. Enter the **Process Parameter** name. This field stores the process parameter (speed, temperature, etc.) and is the first field in a list of values displaying process parameters. Once the record is saved, this field is not updateable and the process parameter name must be unique. Required.
3. Enter a **Description** for the process parameter. Required.
4. Enter a **Parameter Type** for the process parameter. Required. This field cannot be changed once the record is saved. Valid values for this field are:

Text

If the Parameter type is Text, then the process parameter accepts any alphanumeric free text which is not validated. Once this value is selected, the fields associated with the Numeric Range, Units, and the list of values buttons are disabled.

Numeric Range

If the Parameter Type is Numeric range, then you can enter the Minimum, and Maximum values, and the Units field. Once this type is selected, the fields associated with the list of values is disabled.

List of Values

If the Parameter Type is List of Values, then you can enter the list of values in the detail section, but not the Numeric Range and the Units. This selection indicates that all possible values for this process parameter are defined in a static table of entries. The same can be evaluated in the Target field in the Generic and Plant Resource Parameter window.

Numeric

5. Enter the **Minimum Value** for the process parameter. This field is only required for a Numeric Type parameter. It is the lowest acceptable value for the process

parameter. Once this is entered, the Parameter Value and the Description fields are disabled. A Maximum value is not required.

6. Enter the **Maximum Value** for the process parameter. This field is only required for a Numeric Type parameter. It is the highest acceptable value for the process parameter. Once this is entered, the Parameter Value and the Description fields are disabled. A Minimum value is not required.
7. Enter the **Units** for the process parameter. These are the units established in the OPM Quality Management application. This field stores the unit of measure for the process parameter.

List of Values

8. Enter the **Parameter Value** for the process parameter. List as many process parameter values as necessary. The value in this field must be unique for the process parameter. When process parameters are used in other windows, this table appears in the list of values associated with the value field. This is required for a List Type parameter.
9. Enter the List of Values **Parameter Description** for the process parameter. You cannot create duplicate records and once the record is saved, deletion is not allowed. This is required for a List Type parameter.

Defining Process Parameters Set

Process parameter sets let you establish a group of process parameters that reduce data entry when associating process parameters to resources.

Prerequisites

Define process parameters.

To set up process parameter sets:

1. Navigate to the **Process Parameters Sets** window.
2. Enter the **Parameter Set** name. The values stored here are used as a lookup in the Resource, Operations, and Recipe windows to load a process parameters list. Once the record is saved, this field is unique and cannot be updated. Required.
3. Enter the **Set Description** for the parameter set. Required.

Parameter

4. Enter the **Process Parameter** name. Required. This field is used to associate process parameters to the process set defined in the window. The following fields display:

The **Seq** for the process parameter. This field is unique and is automatically populated with the next logical number.

Enter the **Process Parameter**.

The **Description** of the process parameter displays automatically.

Setting Up Generic Resource Parameters

Once process parameters are defined, you can associate them with Generic Resources. The Generic Resource Parameters window can be invoked from the Generic Resources window or from the Process Planning menu. You can associate process parameters by either:

Directly entering the parameter name in the Parameter region and assigning the target values.

Associating the parameters contained in a parameter set by clicking Associate Parameters. A list of values with the names of all available parameter sets is displayed. Once a set is selected, all the parameters associated with the set are entered in the window. Assign the Target, Minimum, and Maximum values for those parameters.

Prerequisites

Define process parameters.

Define parameter sets.

Define generic resources.

To set up a generic resource parameter:

1. Navigate to the **Generic Resource Parameters** window.
2. Query the **Resources**

Parameter Region

3. Enter the **Seq** number for the resource. Click **Associate Parameters**. This populates the process parameters and the sequences. Adjust the sequence numbering as necessary. Required.
4. Enter the **Process Parameter**. This field displays the process parameter name (speed, temperature, etc.). This field can be populated through the list of values or by clicking Associated Parameters. The **Units** field displays the unit of measure for a numeric type process parameter. Required.
5. Enter the **Target Value** for the process parameter. Target value is the ideal setting for the process being run.
6. Enter the **Min Value** for the process parameter. The minimum value is the lowest acceptable value for a numeric type process parameter. Do not exceed the range defined for the process parameter.

7. Enter the **MaxValue** for the process parameter. The maximum value is the highest acceptable value for a numeric type process parameter. Do not exceed the range defined for the process parameter.
8. Enter the units of measure for the process parameter in the **Units** field.

Editing Plant Resource Parameters

The Plant Resource Parameters window captures the process parameters information specific to a plant. You can enter this window after defining the generic resource parameters. This window inherits the resources and parameters information from the Generic Resources Parameters window and lets you override the Target values.

This window saves the record where the Target value has changed. If you want to change the generic resource parameter after the record is saved, then the Plant Resource Parameter window does not inherit the changed value from the Generic Resource Parameter window. However, by clicking Reset Values, you can default the value from the generic resource or retain the previously overridden value. The cursor must be on the record to do this. You can close the window if you do not want to change any Target values. In addition, the window does not let you create or delete the displayed process parameters.

Prerequisites

- Define process parameters.
- Define parameter sets.
- Define generic resources.
- Define generic resource parameters.
- Define plant resources.

To change plant resource parameters:

1. Navigate to the **Plant Resource Parameters** window. The following fields are displayed:
 - The **Plant Code** for the process parameters set.
 - The **Resources** for the process parameters set.

Parameters

- The **Seq** number for storing the process parameters in a unique sequence.
- The **Process Parameters** name.
- The **Units** field displays the unit of measure for a numeric type process parameter

Parameter

2. Edit the **Target Value** for the process parameter. This is the ideal setting for the process being run.
3. Enter the **Min Value** for the process parameter. The minimum value is the lowest acceptable value for a numeric type process parameter. Do not exceed the range defined for the process parameter.
4. Enter the **Max Value** for the process parameter. The maximum value is the highest acceptable value for a numeric type process parameter. Do not exceed the range defined for the process parameter.

Capacity Planning Navigator Paths

Although your system administrator may have customized your navigator, typical navigation paths are described in the following tables. In some cases, there is more than one way to navigate to a window. These tables provide the most typical default path.

Window	Path
Resources	OPM Process Planning:Capacity Planning:Setup:Generic Resources
Resource Information	OPM Process Planning:Capacity Planning:Setup:Plant Resources
Alternate Resources	OPM Process Planning:Capacity Planning:Setup:Alternate Resources
Sequence Dependent Setup	OPM Process Planning:Capacity Planning:Setup:Seq Dependent
Sequence Dependent Classes	OPM Process Planning:Capacity Planning:Setup:Seq Dependent Classes
Reschedule Update	OPM Process Planning:Capacity Planning:Production Updates:APS Reschedule
Resource Classes	OPM Process Planning:Capacity Planning:Setup:Resource Classes
Imported Batches	OPM Process Planning:Capacity Planning:Production Updates:APS New Batch
Routings	OPM Process Planning:Capacity Planning:Setup:Routings
Operations	OPM Process Planning:Capacity Planning:Setup:Operations

Window	Path
Batch Cancellations	OPM Process Planning:Capacity Planning:Production Updates:APS Cancel Batch
Resource Exceptions	OPM Process Planning:Capacity Planning:Setup:Resource Exceptions
Exception Code	OPM Process Planning:Capacity Planning:Setup:Exception Codes
Resource Unavailability	OPM Process Planning:Capacity Planning:Setup:Resource Unavailability
Resource Equipments	OPM Process Planning:Capacity Planning:Setup:Plant Resources:Equipments
Resource Instances	OPM Process Planning:Capacity Planning:Setup:Plant Resources:Instances

Capacity Planning Profile Values

During your implementation, you or your system administrator set values for selected profile options to specify how your Capacity Planner application controls access to and processes data. The profile options related to Capacity Planning are listed below.

GMP: Default Max Days

GMP:Maximum Delta Days

GMP:UOM for Hours

GMP:Default Schedule

GMP:Manual Exception Code

GMP:Enable Warehouse Security

GMP:Shorten Forecast Name

Your system administrator sets user profile options at one or more of the following levels: Site Application, Responsibility, and User. Use the Personal Profile Options window or view or set your profile options at the user level. You can consult the Oracle Process Manufacturing Implementation Guide for a complete description of the profile options listed below. Consult your Oracle Applications System Administrator's Guide for a list of profile options common to all Oracle Applications.

Index

A

Advanced Supply Chain Planning, 1-1
Alternative Resources, 1-11
APS Planning Engine, 1-12
ASCP, 1-1
Availability, 1-13

C

capacity planner navigator paths, 1
Classifications, 1-3
Cost Component Classes Window, 1-3
Cost Management, 1-1

E

eAM, 1-8
Enterprise Asset Management, 1-8
Exception Code, 1-12
Exception Codes, 1-13
Exceptions, 1-15

G

Generic Resources, 1-3
GMP Manual Exception Code Profile Option, 1-16

L

Linking Resources to Assets, 1-8
lock manufacturing orders, 1-15

M

Manual Exception Code, 1-16

N

navigator paths, 1

O

Operations, 1-18
OPM setup prerequisites
resources, 1-3

P

Planning Engine, 1-12
Plant Resources, 1-5
Plants, 1-5
Process Parameters, 1-19
Product Development, 1-18
Production Capacity, 1-3
Profile Option, 1-16
Profile Value, 1-16

Q

Quality Management, 1-1

R

Resource, 1-13
Resource Availability, 1-12, 1-13, 1-16
Resource Classes, 1-17
Resource Classifications, 1-3

Resource Exceptions, 1-12, 1-15
Resource Instances, 1-9
Resource Parameters in Specific Plants, 1-5
Resource Unavailability, 1-12, 1-15, 1-16
Resources, 1-3, 1-5, 1-8, 1-9, 1-11, 1-15, 1-17
Routings, 1-18
Routings and Operations, 1-18

S

Serial Numbered Asset, 1-8
Setting, 1-1
Setting Up, 1-1

U

Unavailable Time, 1-13, 1-15, 1-16