Oracle® Complex Maintenance, Repair, and Overhaul

Implementation Guide

Release 11*i*

Part No. B13737-01

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Oracle Complex Maintenance, Repair, and Overhaul Implementation Guide, Release 11*i*

Part No. B13737-01

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Preface

Welcome to the Oracle Complex Maintenance, Repair, and Overhaul Implementation Guide, Release 11*i*.

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

- The principles and customary practices of your business area.
- Oracle Complex Maintenance, Repair, and Overhaul.

  If you have never used Oracle Complex Maintenance, Repair, and Overhaul, Oracle suggests you attend one or more of the Oracle Applications training classes available through Oracle University.
- Oracle Self-Service Web Applications.

  To learn more about Oracle Self-Service Web Applications, read the *Oracle Self-Service Web Applications Implementation Manual*.
- 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

The Oracle Complex Maintenance, Repair, and Overhaul Implementation Guide contains the information you need to understand and use Oracle Complex Maintenance, Repair, and Overhaul. This guide contains two chapters:

- Chapter 1 provides an overview of Oracle Complex Maintenance, Repair, and Overhaul.
- Chapter 2 describes the setup tasks that you need to perform in Oracle Applications for Oracle Complex Maintenance, Repair, and Overhaul.
- Appendix A provides the necessary navigation paths.

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 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/

Accessibility of Code Examples in Documentation

JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

Other Information Sources

You can choose from many sources of information, including documentation, training, and support services, to increase your knowledge and understanding of Oracle Complex Maintenance, Repair, and Overhaul.

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

Online Documentation

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

- **PDF Documentation-** See the Online Documentation CD for current PDF documentation for your product with each release. This Documentation CD is also available on Oracle*MetaLink* and is updated frequently.
- **Release Content Document -** See the Release Content Document for descriptions of new features available by release. The Release Content Document is available on Oracle*MetaLink*.
- **About document -** Refer to the About document for information about your release, including feature updates, installation information, and new

documentation or documentation patches that you can download. The About document is available on Oracle*MetaLink*.

Related Guides

Oracle Complex Maintenance, Repair, and Overhaul shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other guides when you set up and use Oracle Complex Maintenance, Repair, and Overhaul.

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). 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.

Guides Related to This Product

Oracle Inventory User's Guide

This guide describes how to define items and item information, perform receiving and inventory transactions, maintain cost control, plan items, perform cycle counting and physical inventories, and set up Oracle Inventory.

Oracle Bill of Materials User's Guide

This guide describes how to create various bills of material to maximize efficiency, improve quality, and lower costs for the most sophisticated manufacturing and/or maintenance environments. By detailing integrated product structure and processes, flexible product and process definition, and configuration management, this guide enables you to manage product details within and across multiple sites.

Oracle Work in Process User's Guide

This guide describes how Oracle Work in Process provides a complete production management system. Specifically, this guide describes how discrete, repetitive, assemble-to-order, project, flow, and mixed manufacturing environments are supported.

Oracle Order Management User's Guide

This guide describes how to enter sales orders and returns, copy exisiting sales orders, schedule orders, release orders, create price lists and discounts for orders, run processes, and create reports.

Oracle Enterprise Asset Management User's Guide

This guide discusses maintenance work orders, how to manage them, and eAM's preventive maintenance solution. eAM's integration points and how to use them are described in detail.

Oracle Purchasing User's Guide

This guide describes how to create and approve purchasing documents, including requisitions, different types of purchase orders, quotations, RFQs, and receipts. This guide also describes how to manage your supply base through agreements, sourcing rules and approved supplier lists. In addition, this guide explains how you can automatically create purchasing documents based on business rules through integration with Oracle Workflow technology, which automates many of the key procurement processes.

Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide

This guide describes how to anticipate and manage both supply and demand for your items. Using a variety of tools and techniques, you can create forecasts, load these forecasts into master production schedules, and plan your end-items and their component requirements. You can also execute the plan, releasing and rescheduling planning suggestions for discrete jobs and repetitive schedules.

Oracle Projects User's Guide

This guide provides instruction on how to set up and use Oracle Projects. If you install Oracle Projects, use this user guide to learn how to enter expense reports in Projects that you import into Payables to create invoices. You can also use this manual to see how to create Project information in Projects which you can then record for an invoice or invoice distribution.

Oracle Install Base Concepts and Procedures Guide

This guide provides an introduction to the concepts, and explains how to navigate the system, enter data, and query information in the Oracle Installed Base interface that forms part of Oracle Complex Maintenance, Repair, and Overhaul.

Oracle Warehouse Management User's Guide

This manual provides information about warehouse resource management, warehouse configuration, and advanced pick methodologies for material handling for warehouses, manufacturing facilities, and distribution centers. This product is one of the components of Oracle Mobile Supply Chain Applications.

Oracle Install Base Implementation Guide

This guide provides information for setting up the contents of many of the lists of values (LOV) that you see in Oracle Install Base.

Oracle Quality User's Guide

This guide describes how Oracle Quality can be used to meet your quality data collection and analysis needs. This guide also explains how Oracle Quality interfaces with other Oracle Manufacturing applications to provide a closed loop quality control system.

Oracle Contracts Core Concepts and Procedures Guide

This guide describes how Oracle Contract can be used to enable companies to author, execute, and manage virtually all business-to-business contracts required by complex global enterprises.

Oracle Customer Support Implementation Guide

This guide describes how to set up the list of values that you see in Oracle Customer Support. Oracle's service solution provides everyone in the organization - with a complete, real-time customer view that allows for immediate access to information on past interactions with the customer and also provides agents with knowledge of possible solutions to speed issue resolution. Additionally, the solution empowers customers to solve their own issues via a self-service portal with access to the same knowledge base that agents utilize for quick resolution.

Oracle Service Implementation Guide

This guide describes how to set up Oracle Service.

Oracle Self–Service Web Applications Implementation Guide

This manual contains detailed information about the overview and architecture and setup of Oracle Self–Service Web Applications. It also contains an overview of and procedures for using the Web Applications Dictionary.

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 and the Oracle 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 guides and implementation guides.

Oracle Applications Implementation Wizard User Guide

If you are implementing more than one Oracle product, you can use the Oracle Applications Implementation Wizard to coordinate your setup activities. This guide describes how to use the wizard.

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.

"About" Document

For information about implementation and user documentation, instructions for applying patches, new and changed setup steps, and descriptions of software updates, refer to the "About" document for your product. "About" documents are available on Oracle*MetaLink* for most products starting with Release 11.5.8.

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 and describes the Oracle Application Object Library components that are needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. This manual also provides information to help you build your custom Oracle Forms Developer forms so that the forms 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.

Oracle Workflow Administrator's Guide

This guide explains how to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes, as well as how to monitor the progress of runtime workflow processes.

Oracle Workflow Developer's Guide

This guide explains how to define new workflow business processes and customize existing Oracle Applications-embedded workflow processes. It also describes how to define and customize business events and event subscriptions.

Oracle Workflow User's Guide

This guide describes how Oracle Applications users can view and respond to workflow notifications and monitor the progress of their workflow processes.

Oracle Workflow API Reference

This guide describes the APIs provided for developers and administrators to access Oracle Workflow.

Oracle Applications Flexfields Guide

This guide provides flexfields planning, setup and reference information for the Oracle Complex Maintenance, Repair, and Overhaul implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This guide 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 Oracle*Metalink*

Oracle Applications Message Manual

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

Training and Support

Training

Oracle offers a complete set of training courses to help you and your staff master Oracle Complex Maintenance, Repair, and Overhaul 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 Complex Maintenance, Repair, and Overhaul 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 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 Complex Maintenance, Repair, and Overhaul and this user guide.

Oracle values your comments and feedback. In this guide is a reader's comment form that you can use to explain what you like or dislike about Oracle Complex Maintenance, Repair, and Overhaul or this user guide. Mail your comments to the following address or call us directly at (650) 506-7000.

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

Or, send electronic mail to **mfgdoccomments_us@oracle.com**.

1

Oracle Complex Maintenance, Repair, and Overhaul Overview

Oracle Complex Maintenance, Repair, and Overhaul (CMRO) enables maintenance, repair and overhaul organizations that manage complex configurable and regulated equipment systems, to define, plan and execute every aspect of their maintenance operations such as configuration management, engineering, maintenance planning, and execution. It provides maintenance organizations with the tools required to increase asset turnover, improve response times, and increase service levels. Oracle CMRO is a fully integrated component of Oracle's 11i eBusiness suite.

This chapter includes the following topics:

Overview of Oracle Complex Maintenance, Repair, and Overhaul

Oracle Complex Maintenance, Repair, and Overhaul is designed to manage the entire business process of defining, planning and executing the maintenance of complex configurable and regulated equipment systems. Improved response times, increased service levels, and faster asset turnaround times are critical to maintaining successful long-term maintenance, repair, and overhaul (MRO) operations. Oracle CMRO offers features such as maintenance-based inventory management, reliability centered maintenance, a fully web-based architecture, and online access to repair documentation that enable maintenance organizations to maximize efficiency and save costs. By integrating every component of the maintenance, repair, and overhaul operation, Oracle CMRO provides complete real-time visibility across the entire operation.

Oracle CMRO enables organizations to do the following:

- Maintain complex configurations
- Effectively plan enterprise-wide operations
- Optimize maintenance execution
- Centrally manage all engineering data

Maintaining Complex Configurations

Organizations that build or maintain products with complex configurations need to track configuration history. Oracle CMRO enables you to establish master configurations. Requirements automatically flow to all units based on that master and the history is updated every time changes are made to the configuration. You can combine requirements with actual repair and usage results to provide unit-specific maintenance and configuration history. With this configuration control, you can easily track component history throughout the lifecycle. You can also classify units into smaller groups based on common attributes.

Effectively planning Enterprise-wide operations

Maintenance frequency and scope continually change based on usage, new regulatory requirements, and issues discovered during operation. Maintenance plans need to be updated periodically to ensure high asset reliability and safety. Oracle CMRO enables comprehensive fleet and unit-based maintenance planning and scheduling. You can establish Fleet maintenance programs to create maintenance requirements and to schedule maintenance activities. You can plan work across all locations to meet both short-term and long-term requirements. By long term planning, you can optimize capacity and resource utilization. Concurrently, you can make daily adjustments to respond to changes based on recent activities.

Optimizing Maintenance Execution

Oracle CMRO enables you to streamline the execution process and simplify processes such as creating work orders, deploying resources, and updating maintenance history and configurations. Basic maintenance tasks associated with job creation and job completion are automated to increase worker productivity and to minimize aircraft downtime. You can capture results to ensure regulatory compliance and to guarantee traceability. Maintenance history is updated as and when work is completed. You can enter new service requests and work orders based on additional findings during scheduled maintenance activities. Oracle CMRO enables component shipping to and from third party maintenance

providers. You can also charge costs associated with maintenance activities throughout the repair cycle.

Centrally managing all Engineering data

Using Oracle CMRO, you can create, store, and manage data centrally. Oracle CMRO enables companies to leverage electronic storage and delivery of technical documentation for real-time access to accurate information and to ensure regulatory compliance. For example, you can capture quality information from all sources (suppliers, original equipment manufacturers, operators, third party maintenance providers) and store it in this single location to ensure traceability. Oracle CMRO provides for route management with reusable templates for individual operation instructions or a series of operations and an integrated document index. By automatically updating all related operations, these templates eliminate the need to perform system queries when route information is changed. Automating these processes eliminates costly manual labor, resulting in higher productivity and improved quality.

Oracle CMRO Module Overview

Oracle Complex Maintenance, Repair, and Overhaul enables organizations to streamline maintenance operations, meet the demands for transport and service, and improve profitability. Oracle CMRO comprises the following ten modules:

Route Management

Using Route Management, you can maintain work cards in electronic form, so that they are easily accessible. You can use these work cards to provide technicians with task instructions and information on labor estimates, skill requirements, tools, parts, and materials required by the job. You can also remove redundant tasks and processes by storing each task card once in the database and then reusing it in multiple operations.

Document Index

Using Document Index, you can maintain references to paper documentation and include links that technicians can use to access electronic documents, either in the database or on the Web. You can keep all document references under version control to simplify compliance with regulations. You can also link document references to part types or individual serialized parts to eliminate searches,

maintain lists of suppliers, and automatically alert everyone on a distribution list when new documents or revisions arrive.

Fleet Maintenance Program

You can use CMRO's Fleet Maintenance Program to create maintenance requirements for all planned and unplanned maintenance. You can associate work cards and maintenance documents with maintenance requirements and define effectivity by associating these maintenance requirements with a Master Configuration, Unit Configuration or a Product Classification. To forecast maintenance due dates, you can designate intervals and thresholds on maintenance requirements. The Affected Items Listing enables maintenance personnel to view all units affected by a maintenance requirement.

Master Configuration

Using Master Configuration, you can record the ***as designed*** configuration of the equipment that is maintained. This enables you to easily navigate through the hierarchy, specify which parts can be used in the assembly, and provide technicians with permissible part choices for each location. To enable technicians to easily access the information that they need, you can link documents to part positions and work cards. Master configurations can be used as templates for creating unit configurations.

Unit Configuration

You can use Unit Configuration to track the current ***as operated*** configuration of the equipment and to maintain the life cycle service history of the system and all the component parts, while considering the special conditions that affect service life measurements. To enable easy access to information, you can record the positions in the assembly where serialized parts are located and associate documents with them.

Product Classification

The Product Classification module enables you to classify units into various groups for maintenance activities and associate documentation and maintenance requirements to these product classifications. The maintenance plans are automatically updated when units move from one group into another.

Unit Maintenance Plan

The Unit Maintenance Plan module enables you to maintain utilization forecasts, determine the remaining service time of units, and calculate due dates for maintenance requirements.

Visit Work Package

The Visit Work Package module enables you to create equipment-based maintenance visit definitions that connect equipment with a block of tasks, location and date. You can create and manage visit templates, and create visits from predefined templates. You can also manage maintenance requirements, calculate costs incurred on a visit using the visit task work breakdown structure, and define job hierarchy for all tasks in a visit.

Long Term Planning

The Long Term Planning module enables you to assess the maintenance workload capacity for all facilities and define a maintenance visit's resource requirements. You can schedule maintenance visits across the organization based on resource and facility availability, and compare resource capacities with resources required for the projected workload.

Production

The Production module enables you to view job assignments, component and material availability; record maintenance activities, job completion, material and component consumption; and update maintenance compliance details. To satisfy regulatory requirements, quality inspection results can be issued. You can initiate new service requests for unplanned maintenance discovered during planned maintenance visits.

The Production module enables you to track all time and materials associated with jobs throughout the repair cycle and interfaced to Oracle Costing, to provide maintenance organizations with a real view into service costs.

Production Planning

The Production Planning module offers maintenance organizations an extensive site-level planning tool. Production planners managing shop floor activities assign personnel and equipment to jobs, fine tune work schedules, manage procurement and create material requirements for unplanned maintenance. Using Production

planning, you can track components sent out for repair against the maintenance visit. Planners and shop floor managers consider working conditions when planning thereby ensuring a safe working environment.

Outside Processing

Using Outside Processing (OSP) you can ship serialized parts to Independent Service Organizations for service. Production planners assign jobs to third-party providers and group jobs that are marked for outside servicing onto an Outside Processing Work Order. The work order contains all the information required for executing the required service. When the OSP Work Order is finalized, purchase orders and shipping orders are created. After the work is completed, jobs are reassigned to internal personnel for quality checks and parts receiving.

2

Setting Up

This chapter discusses setting up Oracle Complex Maintenance, Repair and Overhaul (CMRO). It includes the following topics:

Getting Started

Before setting up CMRO, you must identify all your implementation users, and the access privileges they require. You can create additional implementation responsibilities if you want to restrict access.

You must use the System Administrator responsibility to create the required Oracle Applications user(s). Implementation users need access to one or more of the following responsibilities:

- System Administrator
- CMRO Super User
- Foundation Administrator
- Support Administrator

Use the Users window to define Oracle Applications users.Oracle Application user is uniquely identified by an application user name.

For detailed instructions on creating application users, refer to *Oracle Applications System Administrator's Guide.*

Oracle CMRO Implementation Checklist

The following tables comprise a checklist of all the steps you need to follow to implement Oracle Complex Maintenance, Repair & Overhaul. They include setup steps for data that is shared with other Oracle Applications, but is required by Oracle CMRO.

You must set up other related Oracle applications prior to setting up CMRO.

Table 2–1 Setting Up an Organization

Description	Reference
Step 1 - Set Up an Operating Unit Step 2 - Create an Organization Step 3 - Set Up an Inventory Organization	*Release 11i Multi-Org Today; An Oracle White Paper, December 2001* *Oracle Human Resources User's Guide*

Table 2–2 Setting Up Oracle Inventory

Description	Reference
Step 1 - Set Up Master Items Step 2 - Set Up Subinventory	*Oracle Inventory User's Guide*

Table 2–3 Setting Up Oracle Bills of Material (BOM)

Description	Reference
Step 1 - Set Up Departments and Resources	*Oracle Bills of Material User's Guide*

Table 2–4 Setting Up Oracle Warehouse Management

Description	Reference
Step 1 - Associate Departments with Subinventories Step 2 - Set Up Material Status Step 3 - Associate Material Status with Subinventories Step 4 - Set up Profile Options	*Oracle Warehouse Management User's Guide*

Table 2–5 Setting Up Oracle Purchasing

Description	Reference
Step 1 - Set Up Buyers	*Oracle Purchasing User's Guide*
Step 2 - Set Up Approvals	
Step 3 - Set Up Purchasing Options	
Step 4 - Set Up Receiving Options	
Step 5 - Set Up Financial Options	
Step 6 - Set Up Open Accounting Periods	

Table 2–6 Setting Up Oracle Order Management

Description	Reference
Step 1 - Set Up Security Processing Constraints	*Oracle Order Management User's Guide* *Oracle Shipping Execution User's Guide*
Step 2 - Set Up Customers	

Table 2–7 Setting Up Oracle Project

Description	Reference
Step 1 - Create Project Template	*Oracle Projects User's Guide*
Step 2 - Assign Project Template Name to User Profile	

Table 2–8 Setting Up Oracle Enterprise Asset Management

Description	Reference
Step 1 - Set Up WIP Accounting Classes	*Oracle Enterprise Asset Management User's Guide*
Step 2 - Set Up EAM Parameters	
Step 3 - Set Up Asset Category Code	
Step 4 - Verify WIP_EAM_Activity_Priority Lookup	

Table 2–9 Setting Up Oracle Material Requirement Planning (MRP)

Description	Reference
Step 1 - Set Up Material Planning Parameters	*Oracle Material Requirement Planning User's Guide*
Step 2 - Set Up Master Demand Schedule Names	*Oracle Advanced Planning Implementation and User's Guide, May 2003*
Step 3 - Set Up MRP Names	

Table 2–10 Setting Up Oracle Service

Description	Reference
Step 1 - Define Service Request Status	*Oracle Customer Support Implementation Guide*
Step 2 - Define Service Request Type	
Step 3 - Define Service Request Severities	
Step 4 - Set Up Profile Options	

Table 2–11 Setting Up Oracle Contracts

Description	Reference
Step 1 - Set Up Buyer	*Oracle Contracts Core Concepts and Procedures Guide*
Step 2 - Set Up Supplier	
Step 3 - Set Up Standard Articles	
Step 4 - Set Up Categories and Sources	
Step 5 - Set Up Contract Groups	
Step 6 - Set Up Contract Events	

Table 2–12 Setting Up Oracle Install Base

Description	Reference
Step 1 - Set Up Install Parameters	*Oracle Install Base Implementation Guide*
Step 2 - Set Up Instance Statuses	
Step 3 - Set Up Asset Locations	

Table 2–13 Setting Up Oracle Counters

Description	Reference
Step 1 - Define Counter Groups	*Oracle Service Implementation Guide*

Table 2–14 Setting Up Oracle Quality

Description	Reference
Step 1 - Set Up Route and Operation Quality Plans	*Oracle Quality User's Guide*
Step 2 - Set Up Deferral, MRB Disposition Quality, Non-Routine Job Inspection and Non-Routine Operation Inspection Plans	
Step 3 - Create Counter Readings Quality Plan	

Table 2–15 Setting Up Oracle Content Manager

Description	Reference
Step 1 - Setting up Interface Tables	-

Table 2–16 Oracle Complex Maintenance, Repair, and Overhaul Standard Setup

Description	Reference
Step 1 - Set Up Profile Options	-

Table 2–17 Oracle CMRO Approval Workflow Setup

Description	Reference
Step 1 - Set Up Profile Options	-
Step 2 - Create Approval User(s) and Role	

Table 2–18 Oracle CMRO Module Setup

Description	Reference
Step 1 - Set Up Document Index	-
Step 2 - Set Up Route Management	
Step 3 - Set Up Product Classification	
Step 4 - Set Up Master Configuration	
Step 5 - Set Up Unit Configuration	
Step 6 - Set Up Fleet Maintenance Program	
Step 7 - Set Up Unit Maintenance Plan	
Step 8 - Set Up Visit Work Package	
Step 9 - Set Up Long Term Planning	
Step 10 - Set Up Production	

Setting Up Oracle CMRO

Setting Up Oracle CMRO includes the following sections:

- Setting Up Other Related Oracle Applications on page 2-6
- CMRO Specific Setups on page 2-112

Setting Up Other Related Oracle Applications

Oracle CMRO is integrated with other applications that are part of the Oracle E-Business suite. This integration lends additional functionality to Oracle CMRO and enables it to fully support the maintenance, repair and overhaul needs of Operators, Third Party Maintainers, and Original Equipment Manufacturers. You must first set up an Organization and then install and implement the related Oracle applications or components.

This section covers the following topics:

- Setting Up an Organization on page 2-7
- Setting Up Oracle Inventory on page 2-34
- Setting Up Oracle Bills of Material (BOM) on page 2-59
- Setting Up Oracle Warehouse Management on page 2-63
- Setting Up Oracle Purchasing on page 2-69

Setting Up an Organization

In general, an organization can be a company, department, division, cost center, or virtually any other organizational unit within a business. Organization Setup includes the following steps:

Setting Up an Operating Unit

An Operating Unit is the organization unit, through which you create, process, report on, and secure financial applications data.

To set up an Operating Unit, you must:

1. Develop an organization structure.
2. Define Set of Books.
3. Define locations.
4. Define Business Groups (optional).
5. Associate responsibilities with Business Group (optional).
6. Define Organizations.

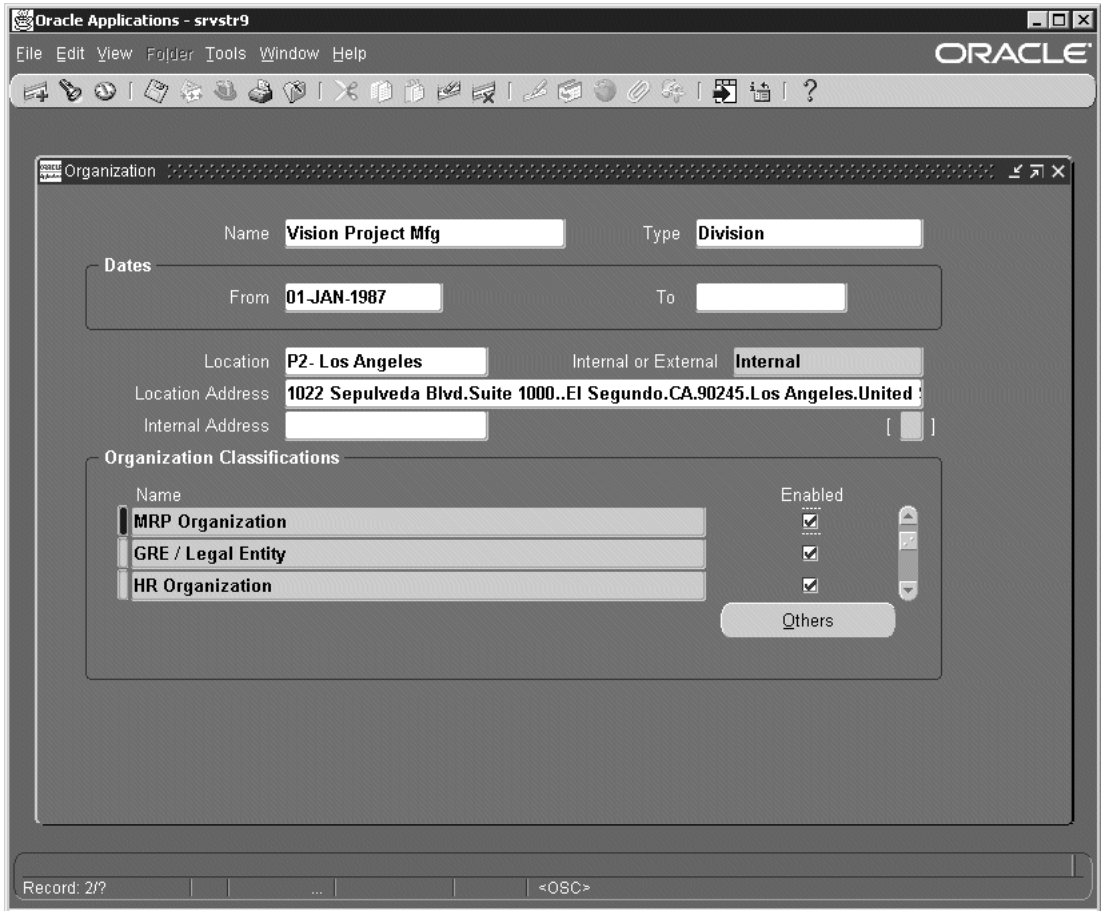
7. Define Organization Relationships.
8. Define Responsibilities.
9. Set MO: Operating Unit profile option.
10. Convert to Multiorg Architecture (required only if current set up is not multiorg enabled).
11. Verify Order Management System parameters.
12. Set Profile Options specific to Operating Unit.
13. Define Inventory Organization security (optional).
14. Implement the application products.

Creating an Organization

To create an organization:

1. Select the Manufacturing and Distribution Manager responsibility. From the Navigator, select Inventory > Setup > Organizations > Organizations. The Find Organization window appears.
2. Select New (A).
3. Enter an organization Name.
4. Select the following values from the Organization Classification list of values:
   - Business Group
   - HR Organization
   - GRE/Legal Entity
   - MRP Organization
   - Operating Unit
   - Project Expenditure
   - Project Manufacturing Organization
   - Project Task Owning Organization

Figure 2–1 Organization



5. Select the Enable check box for all the above parameters.
6. Save your work.

Organization Classifications

Business Group: The purpose of the Business Group is to partition human resource information. The Business Group is the highest level in an organization structure hierarchy in the E-Business Suite. You can use the Business Group to model the consolidated enterprise or a major division of a company that is an employer.

HR Organization: The HR Organization classification is applied to the organizations to which the user assigns employees.

Government Reporting Entities (GRE): The GRE in the Oracle Human Resources products is the same organization as the Legal Entity that appears in the Oracle Financial products. The GRE represents the real-world legal entity that pays employees, withholds their taxes, and provides reports on various matters concerning them to government agencies.

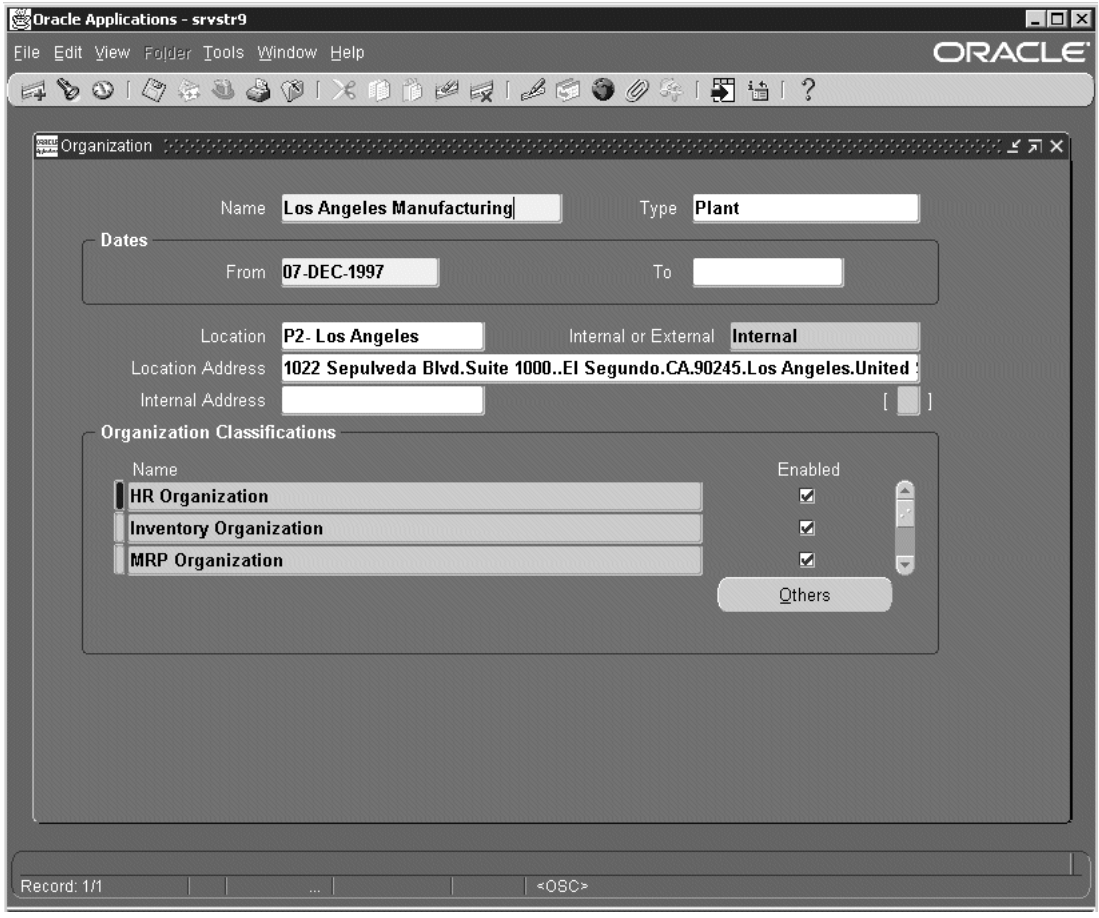
Setting Up an Inventory Organization

The Inventory Organization is an organization for which you track inventory transactions and balances.

To set up an Inventory Organization:

1. From the Navigator, select Inventory > Setup > Organizations > Organizations. The Find Organization window appears.
2. Select New(A). The Organization window appears.
3. Enter an organization name in the Name field.
4. Within the Organization Classification block, select the following values from the Name list of values (LOV):
   - HR Organization
   - Inventory
   - MRP
   - Project Expenditure
   - Project Manufacturing Organization
   - Project Task Owning Organization
   - WIP Organization

Figure 2–2 Organization Window

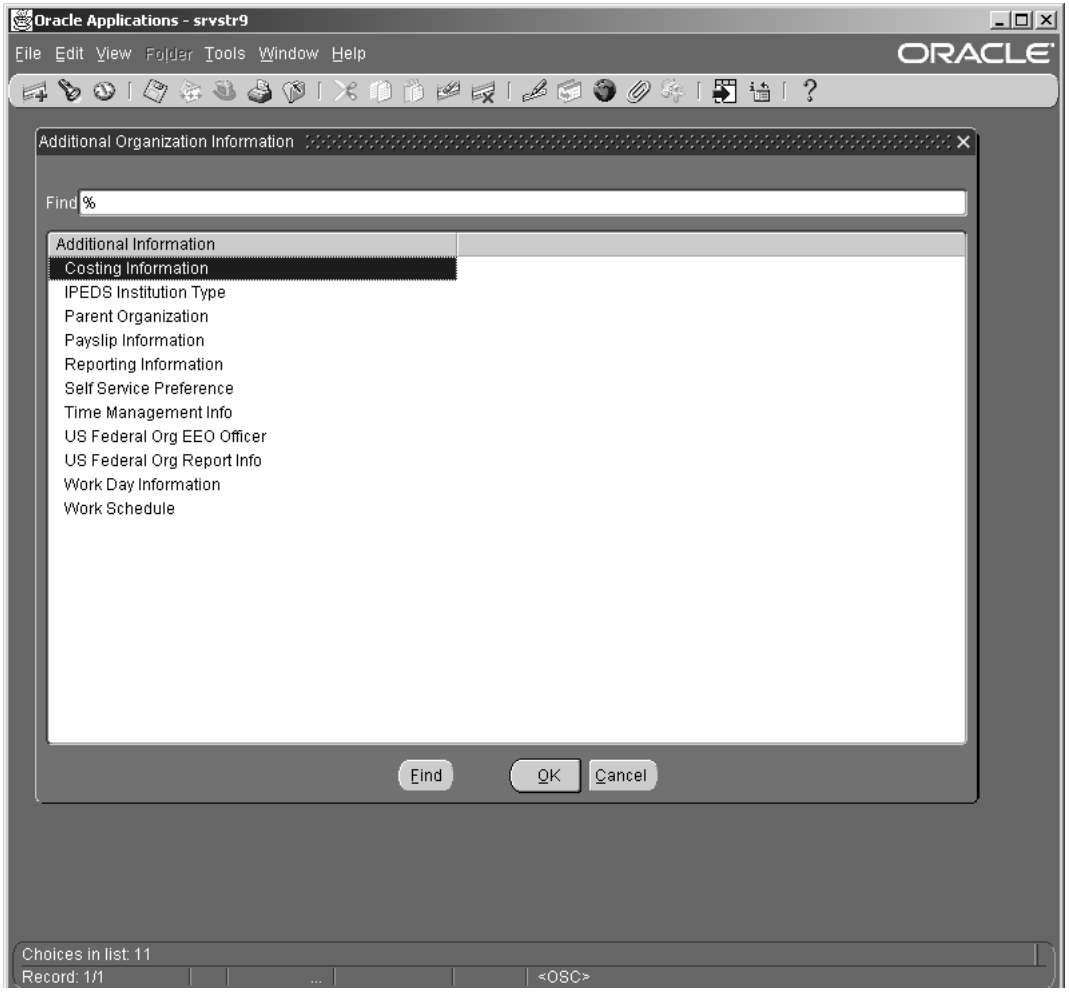


5. Select the Enable check box for each of the above mentioned classification.
6. Save your work.
7. As indicated below, set up the parameters for each of the above mentioned Organization Classifications.

To set up HR Organization parameters:

1. In the Organizations window, select HR Organization.Click the Others button.The Additional Organization Information window appears.

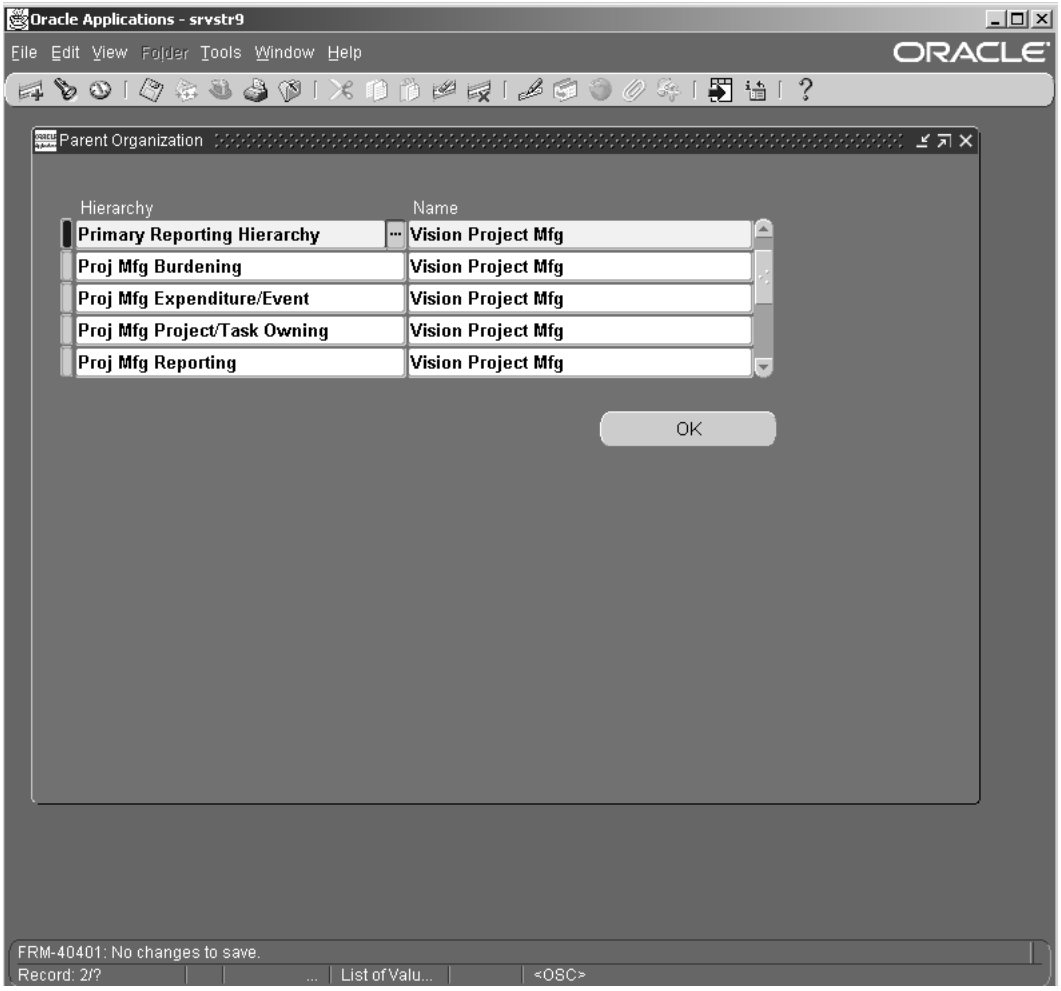
Figure 2–3 Additional Organization Information Window



2. Select Costing Information from the list. Enter a value in the Costing Information field.
3. Save your work.

4. Navigate to the Additional Organization Information window and choose Parent Organization from the list of values. Select Primary Reporting Hierarchy from the Hierarchy LOV.
5. From the Name LOV, select the organization that you have defined and enabled as a Business Group.
6. Save your work.

Figure 2–4 Parent Organization Window

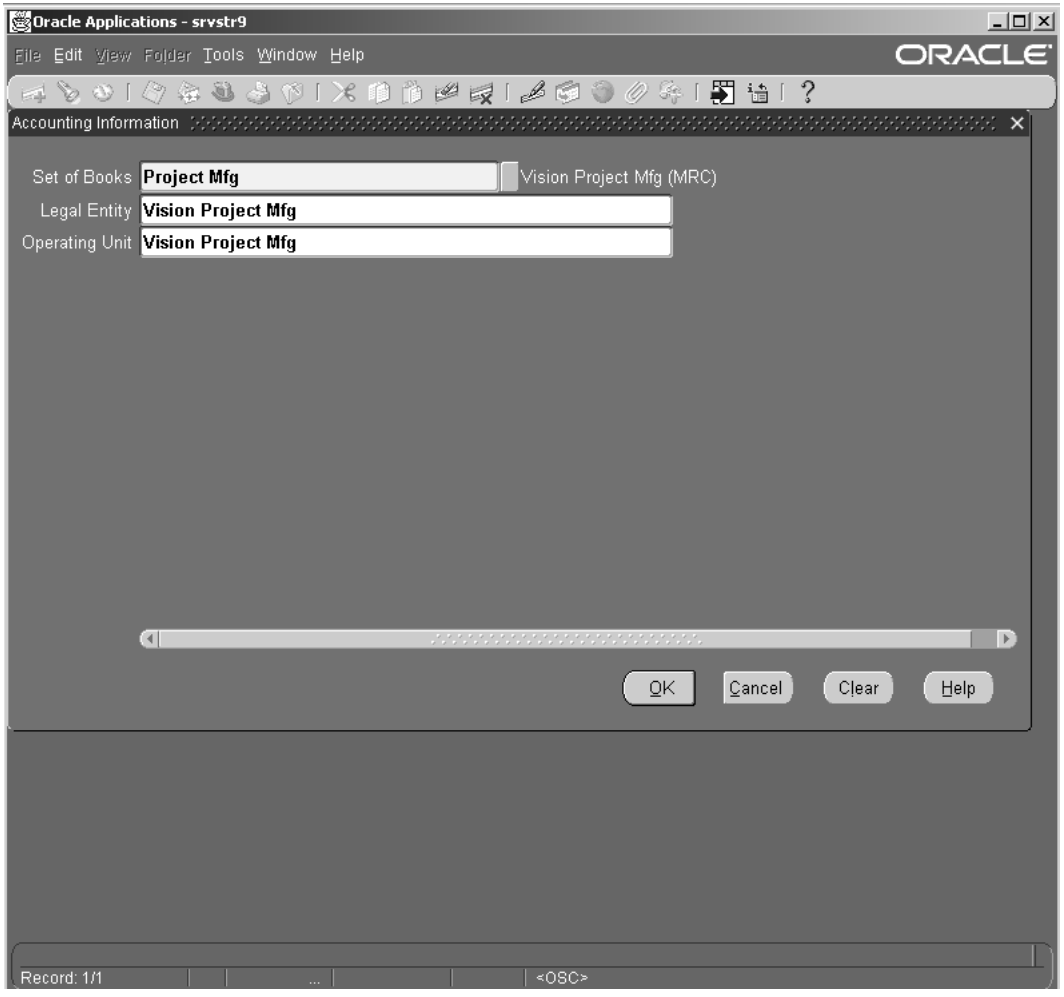


To set up Inventory Organization parameters:

1. Select Inventory Organization in the Organizations window. Click the Others button. Choose Accounting Information from the list of values.
2. Click in the Accounting Information field. The Accounting Information descriptive flexfields window opens.

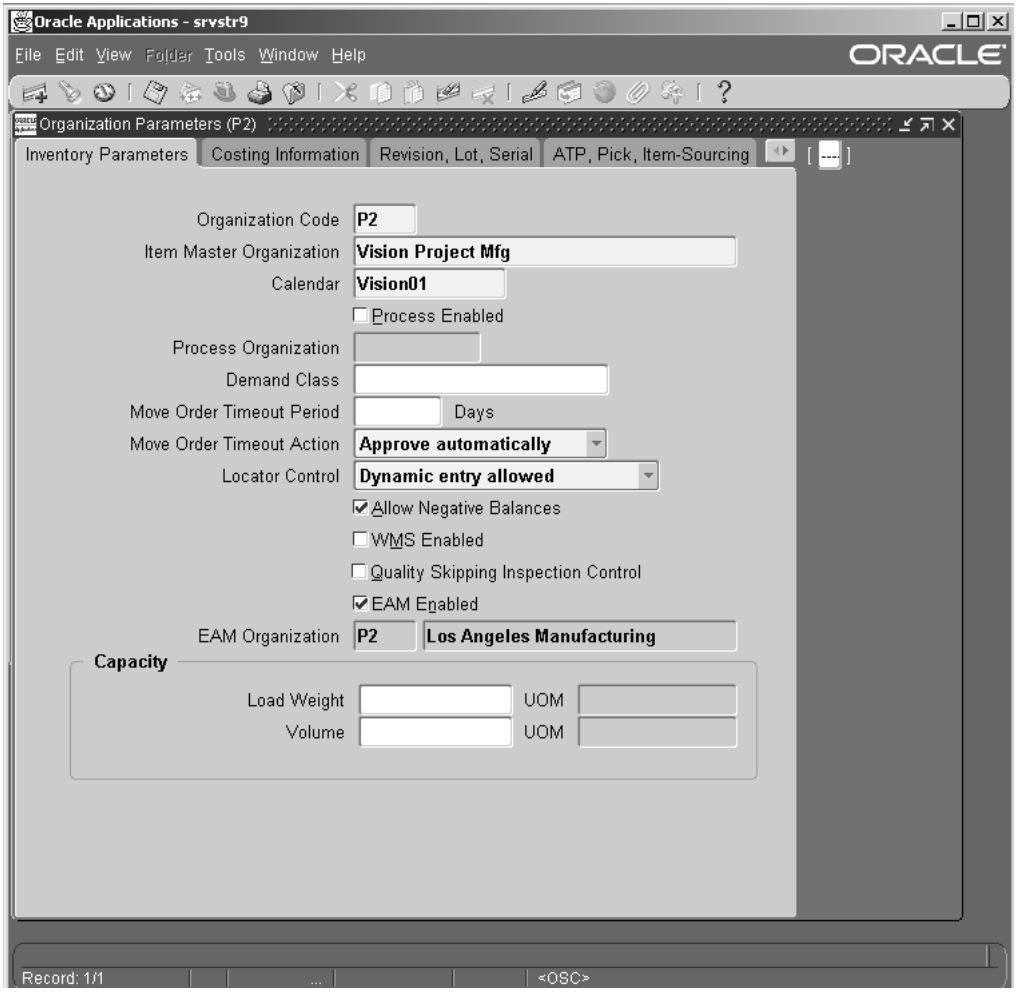
3. Select the Set of Books, Legal entity and Operating Unit from their corresponding list of values. Click OK.
4. Save your work.

Figure 2–5 Accounting Information Window



5. Navigate to the Additional Organization Information window and select Inventory Information from the list. The Organization Parameters window opens.
6. Select the Inventory Parameters tab. Enter an Organization Code.
7. Select the Item Master Organization and Calendar from their corresponding list of values.
8. Select the EAM Enabled check box.
9. Save your work.

Figure 2–6 Organization Parameters Window - Inventory Parameters

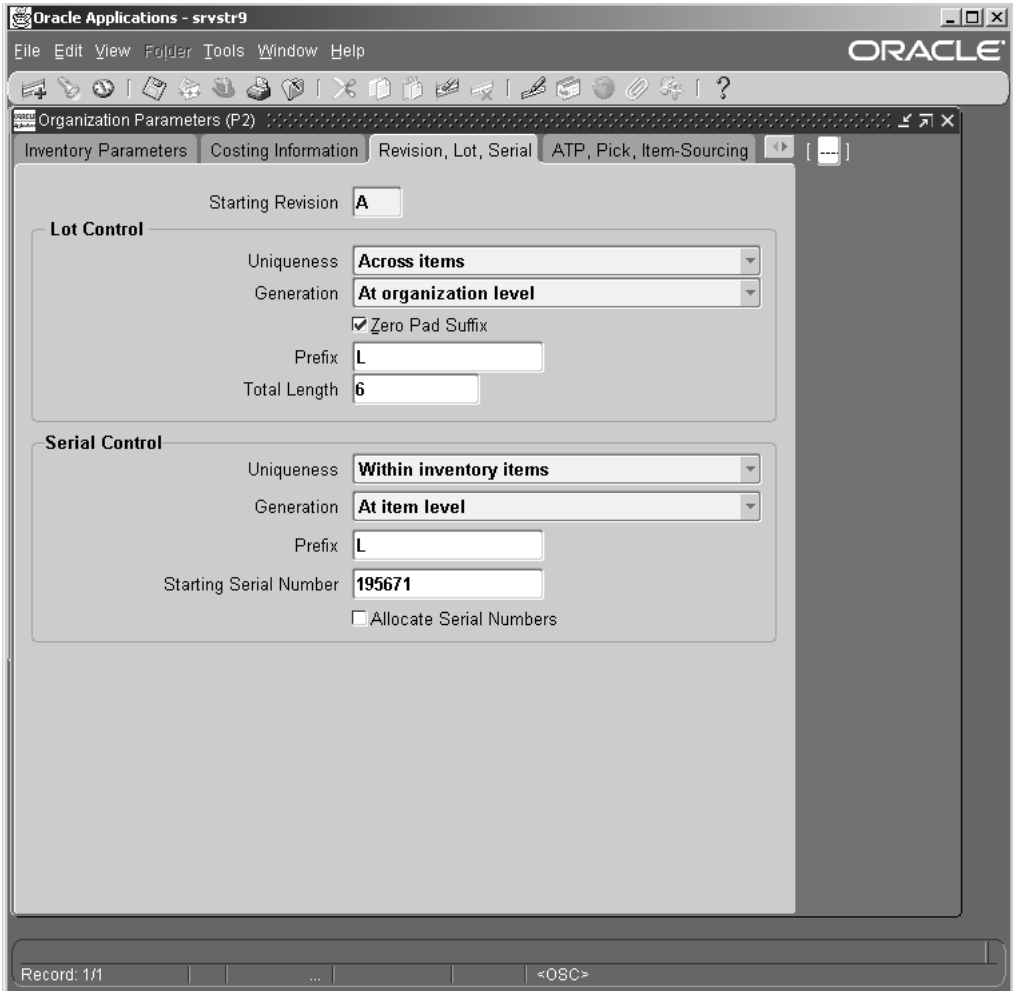


10. Select the Revision, Lot, Serial parameters tab. Enter the following information:

Field	Value
Lot Control Uniqueness	None
Lot Control Generation	At Organization Level

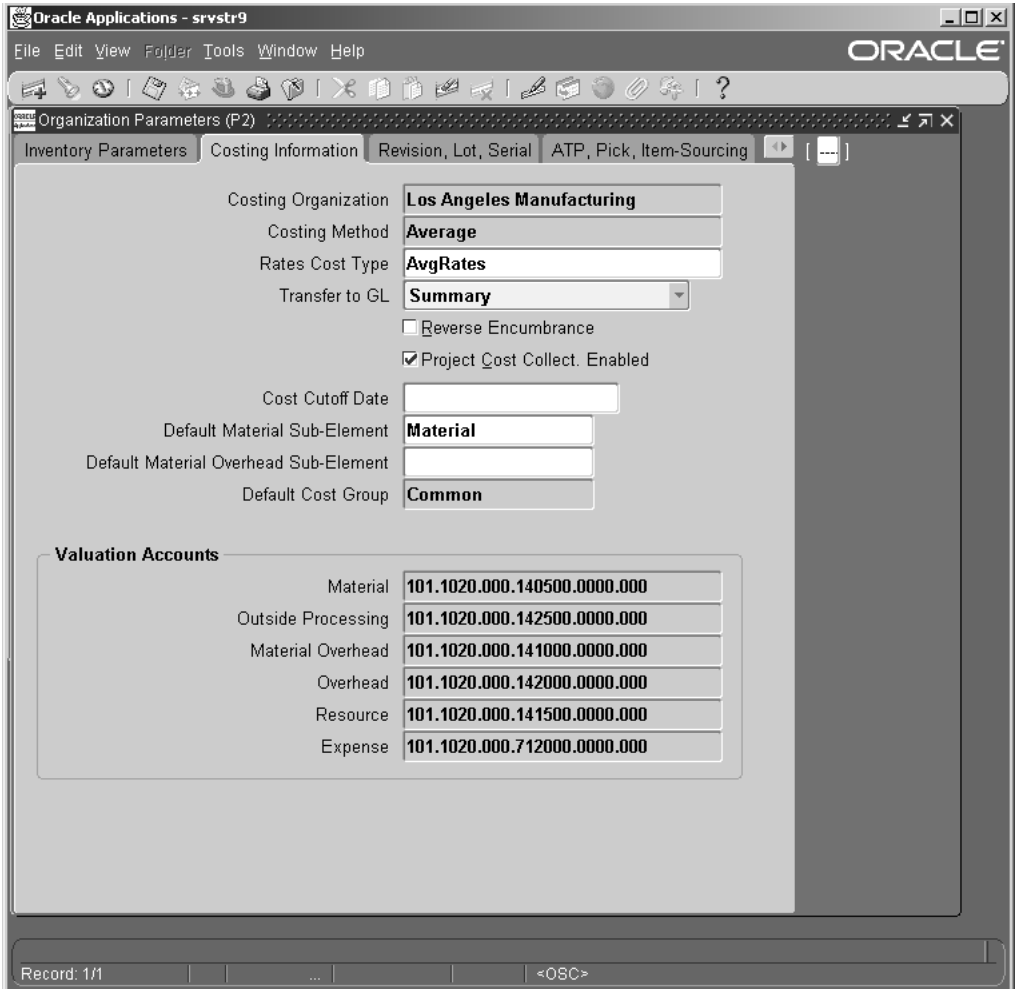
Field	Value
Serial Control Uniqueness	Within Inventory Items
Serial Control Generation	At Item Level

Figure 2–7 Organization Parameters Window - Revision, Lot, Serial Parameters



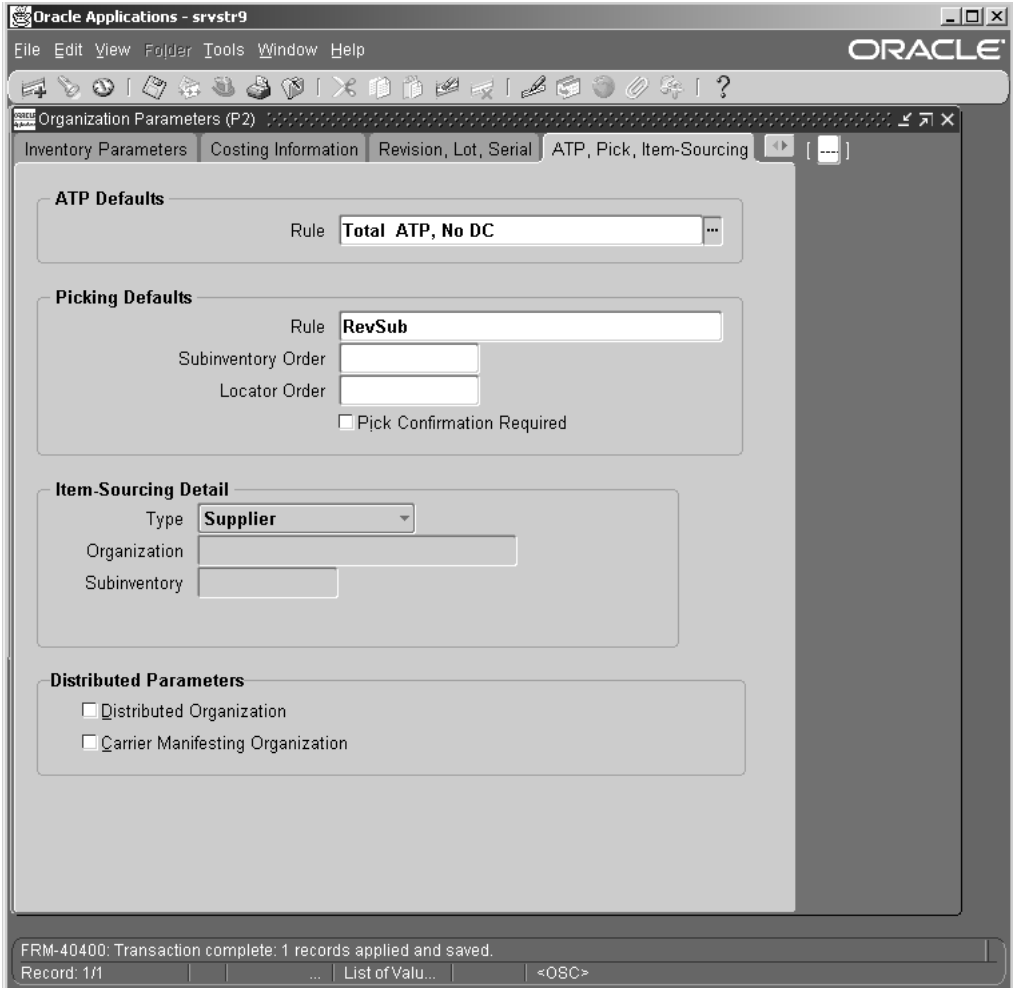
11. Save your work.
12. Select the Costing Tab. Select Average Costing from the Costing Method list of values.
13. Select the Enable Project Cost Collection check box.
14. Enter the required information in the Valuable Accounts block.
15. Save your work.

Figure 2–8 Organization Parameters Window - Costing Parameters



16. Click the ATP, Pick, Item-Sourcing parameters tab. Select an ATP Defaults Rule from the Rule LOV.
17. Save your work.

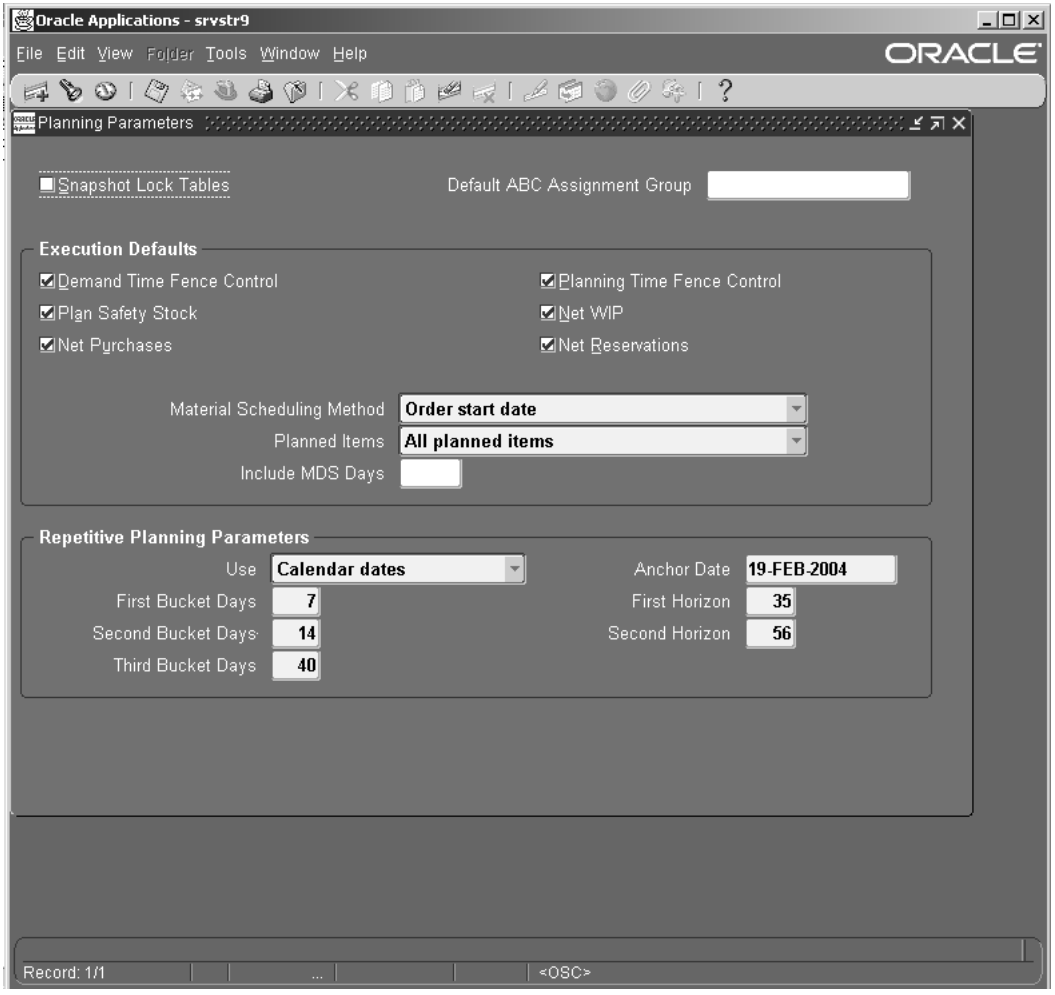
Figure 2–9 Organization Parameters Window - ATP, Pick, Item-Sourcing Parameters



To set up MRP Organization parameters:

1. In the Organization window, select MRP Organization. Click the Others button.
2. The Planning Parameters window opens. Select the Net WIP and Net Reservation check box.
3. Save your work.

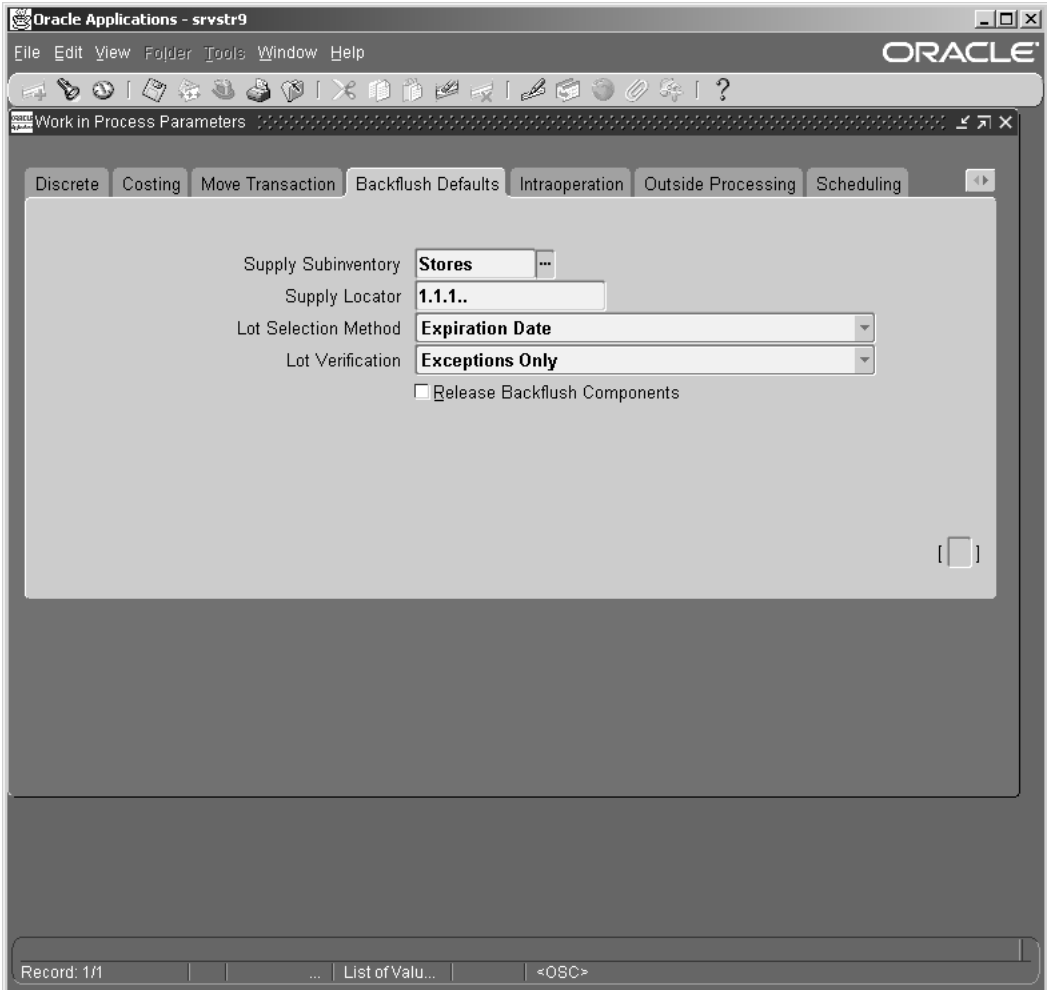
Figure 2–10 Planning Parameters Window



To set up Work in Process (WIP) Organization parameters:

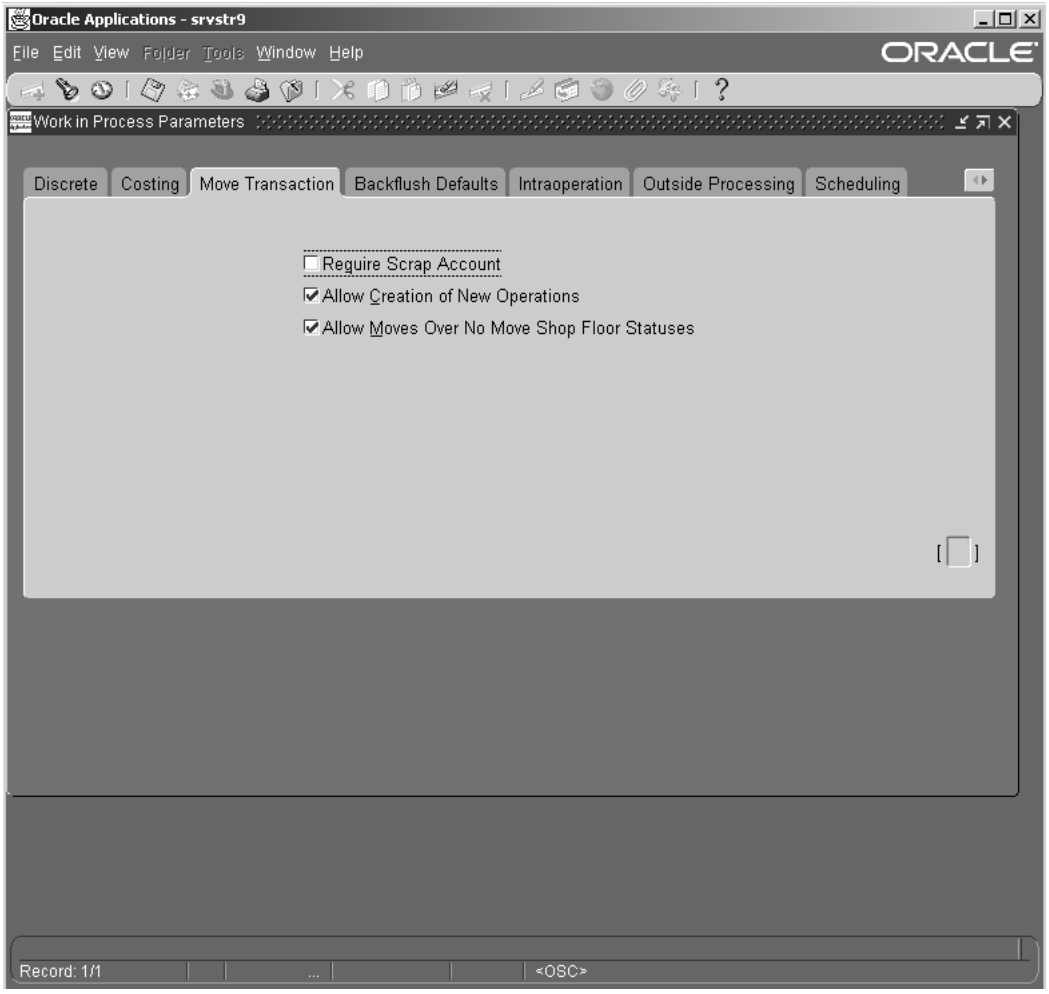
1. Select WIP Organization in the Organization window. Click the Others button.
2. Click the Backflush Defaults tab. Select Supply subinventory from the LOV. Enter a Supply Locator (if required).

Figure 2–11 Work In Process Parameters Window - Backflush Defaults Tab



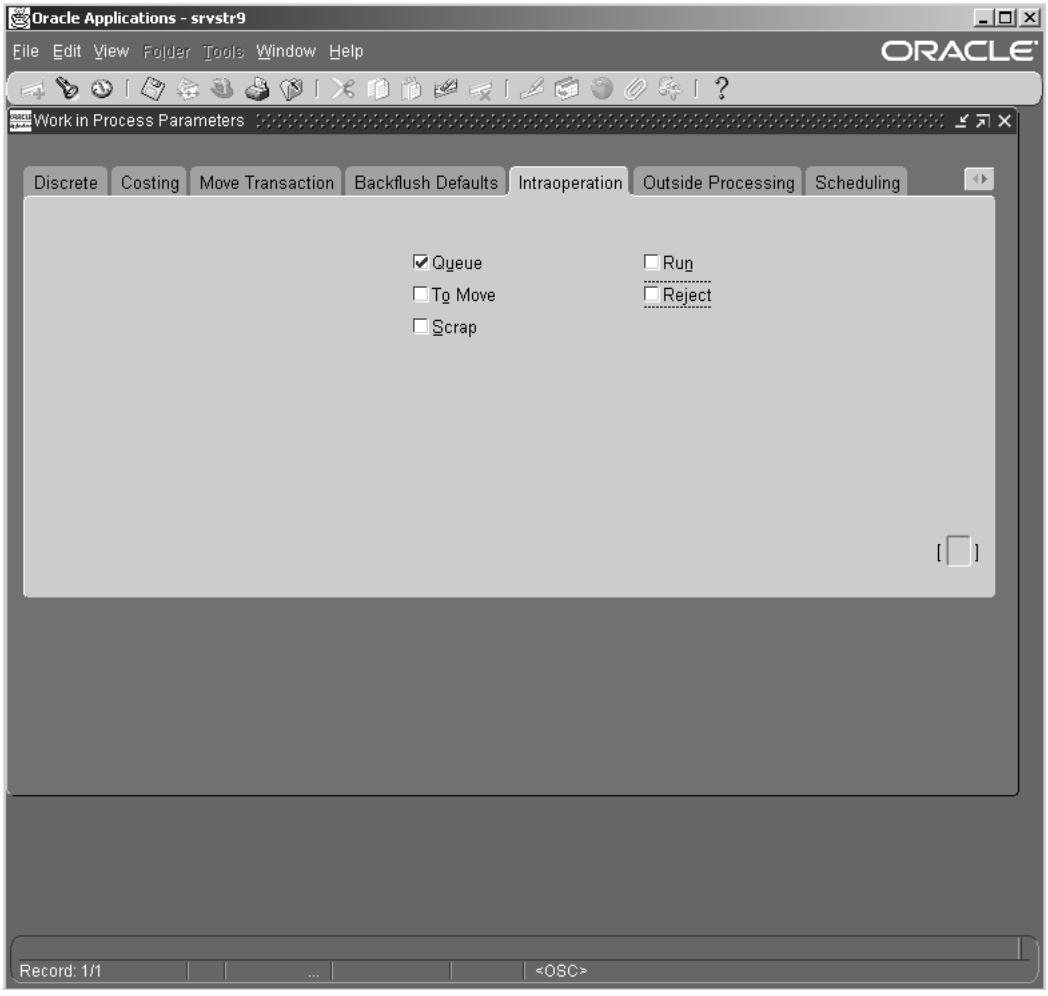
3. Select the Move Transaction tab. Check the Allow Creation of New Operations and the Allow Moves Over No Move Shop Floor Statuses check boxes.

Figure 2–12 Work In Process Parameters Window - Move Transaction Tab



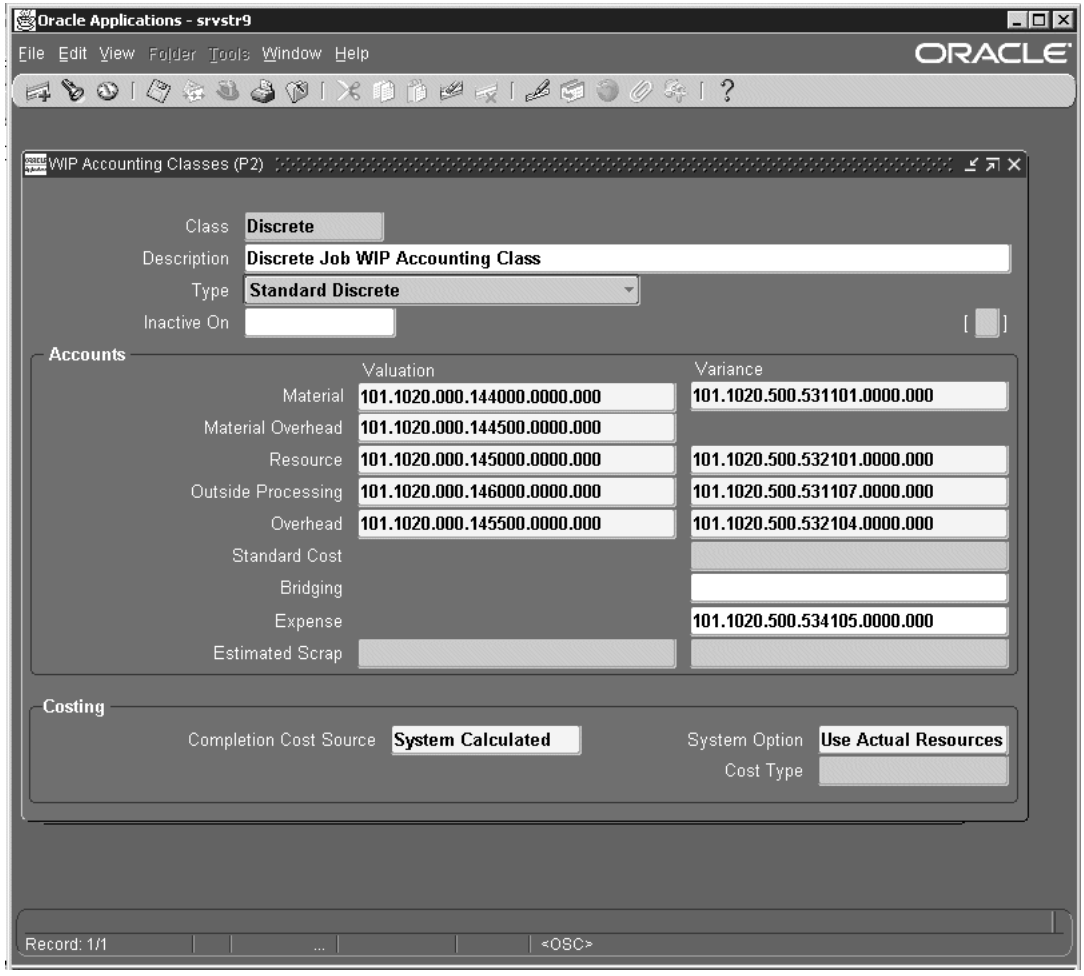
4. Select the Intra-operation tab. Enable the Queue Check Box. Disable other check boxes.
5. Save your work.

Figure 2–13 Work In Process Parameters Window - Intraoperation Tab



6. From the Navigator, select WIP > Setup > WIP Accounting Class.
7. Enter a Class and Description.
8. Select Standard Discrete from the Type drop-down list. Enter Accounts information.
9. Save your work.

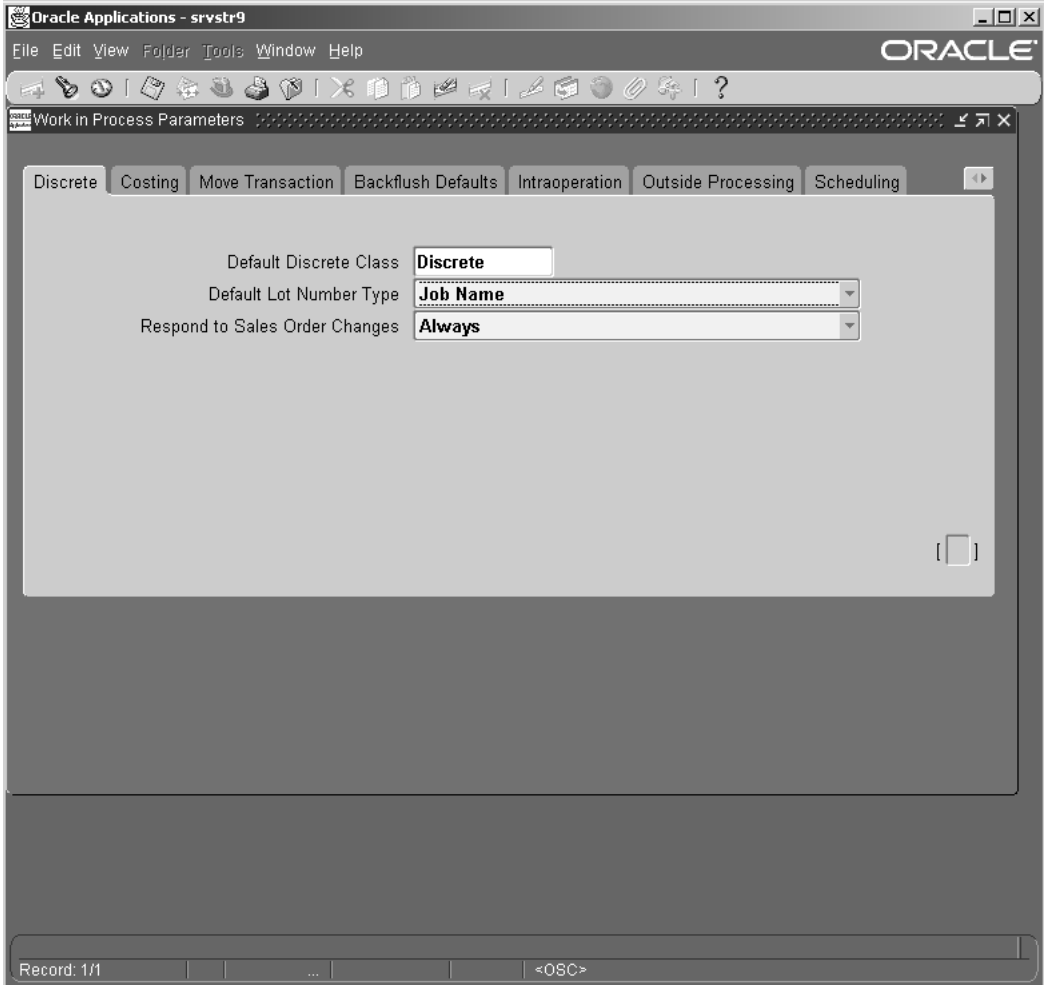
Figure 2–14 WIP Accounting Classes Window



10. Similarly, create Expense Non-Standard, Maintenance, and Asset Non-Standard Accounting Classes. For more information about setting up Accounting classes, see the *Oracle Work in Process User's Guide*.
11. Save your work.
12. From the Navigator, select Inventory >Setup > Organizations > Organizations.Query for your Organization.

13. Select WIP Organization within the Organization Classifications block. Click the Others button.The Work in Process parameters window appears.
14. Select the Discrete tab. Choose a default Discrete Class from the Default Discrete Class list of values.
15. Save your work.

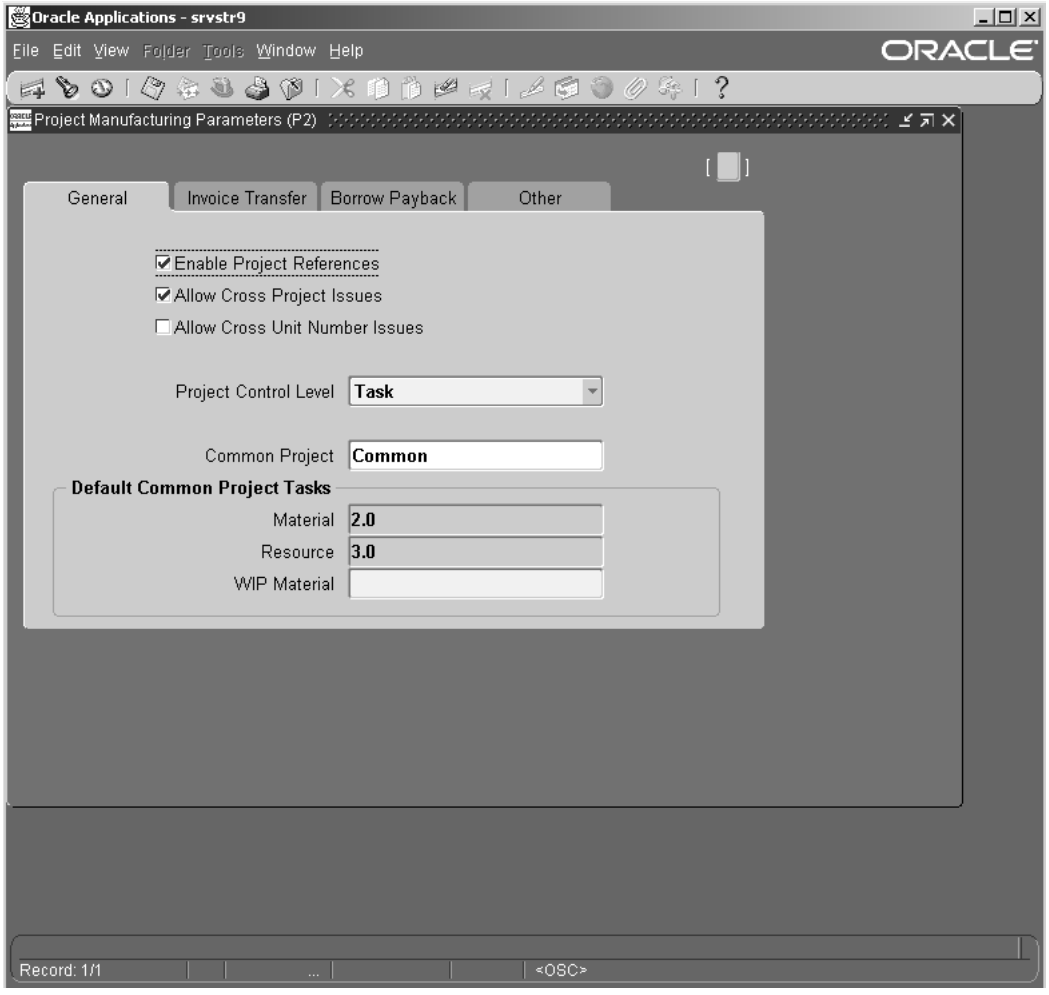
Figure 2–15 Work in Process Parameters Window - Discrete Tab



To set up Project Manufacturing parameters:

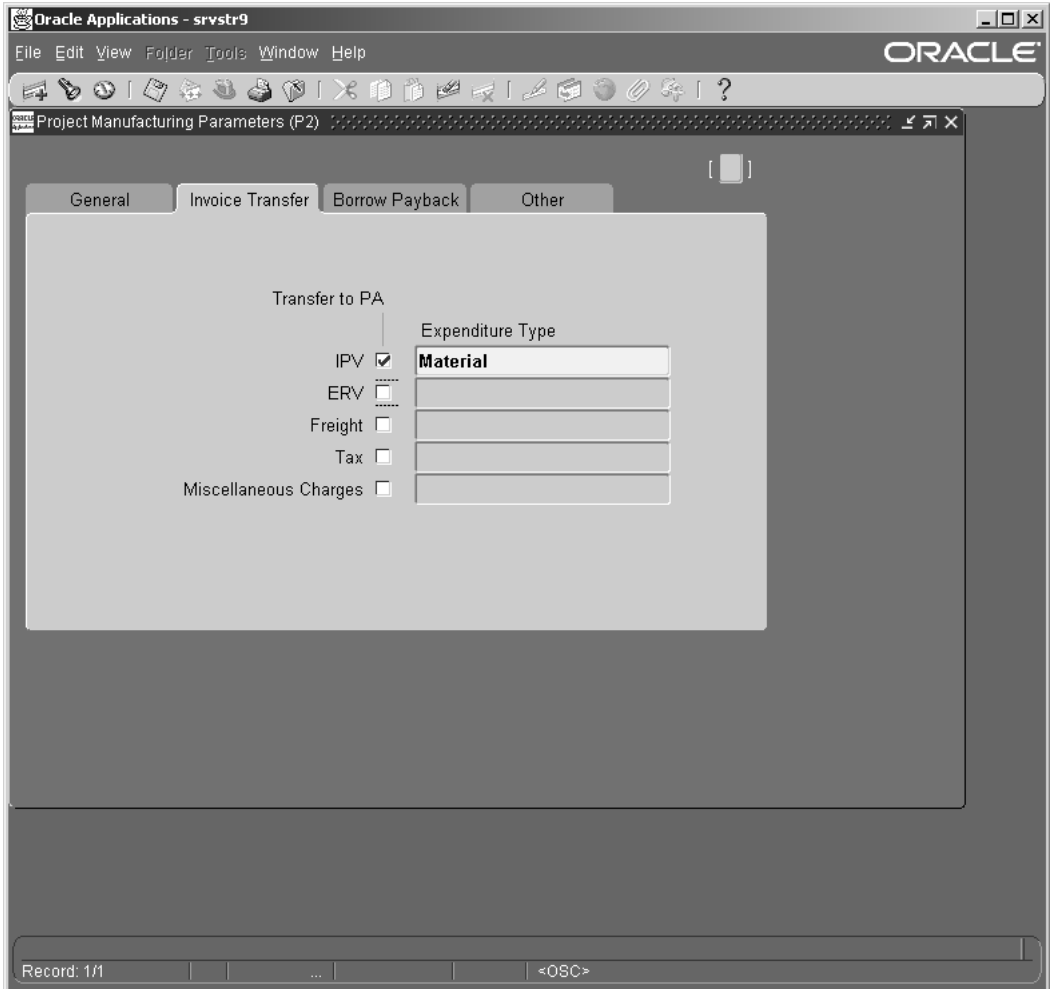
1. In the Organizations window, select Project Manufacturing Organization. Click the Others button. The Project Manufacturing Parameters window opens.
2. Select the General tab. Check the Enable Project Reference check box.
3. Select Task from the Project Control Level drop-down list.

Figure 2–16 Project Manufacturing Parameters Window - General Tab



4. Click the Invoice Transfer tab. Check the IPV check box to enable IPV.
5. Select Material from the Expenditure Type LOV.
6. Save your work.

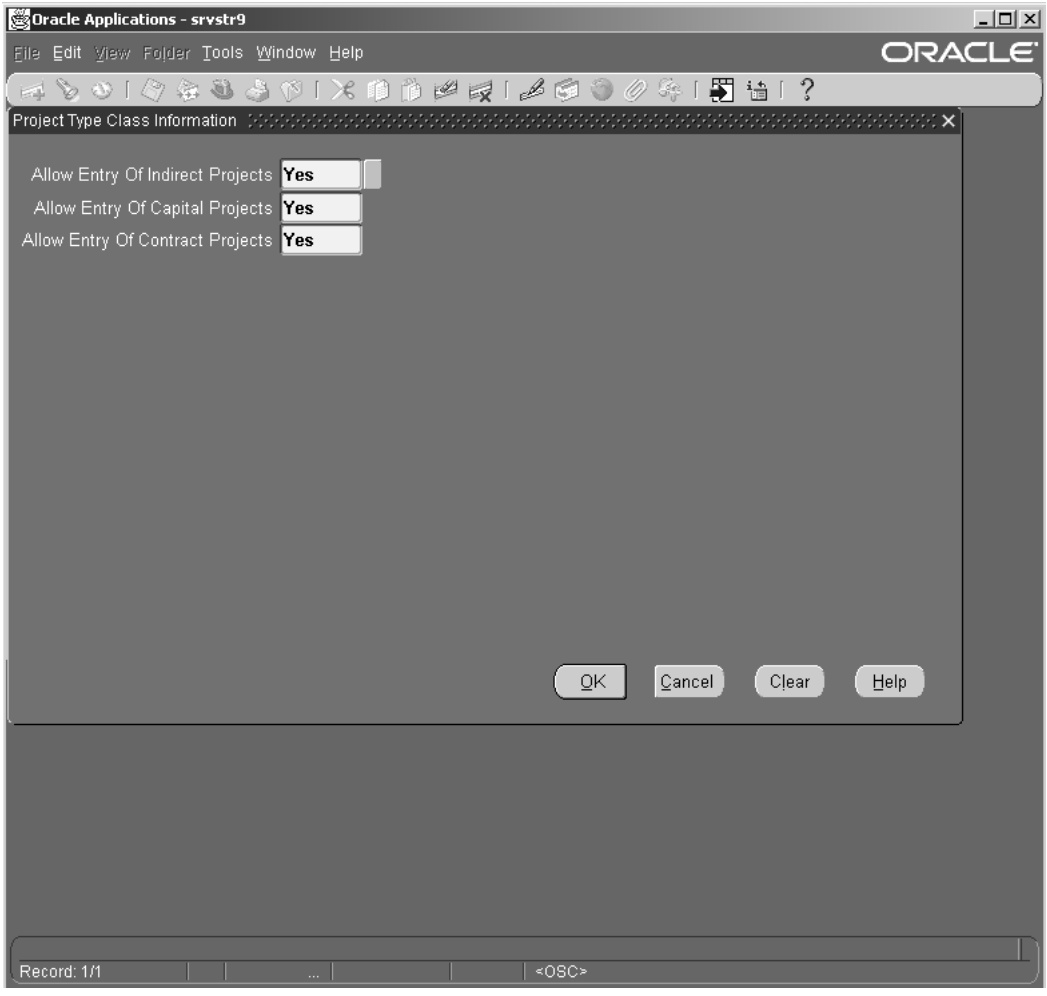
Figure 2–17 Project Manufacturing Parameters Window - Invoice Transfer Tab



To set up Project Task Owning Organization parameters:

1. In the Organizations window, select Project Task Owning Organization. Click the Others button. The Additional Organization Information window opens.
2. Click in the Project Type Class Information field. In the Project Type Class Information sub-window that opens, select Yes for all the following parameters:
   - Allow Entry of Indirect Projects
   - Allow Entry of Capital Projects
   - Allow Entry of Contract Projects
3. Click Ok. Save your work.

Figure 2–18 Project Type Class Information Window

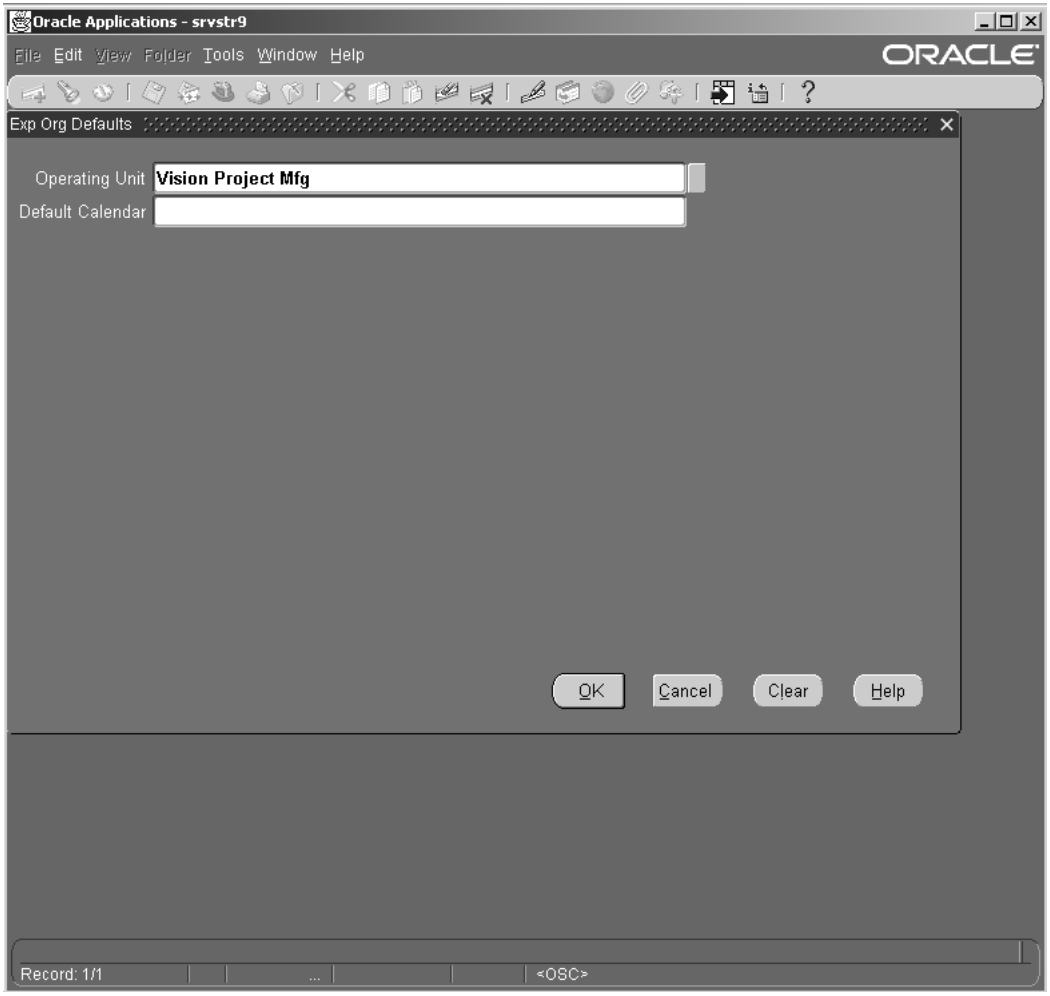


To set up Project Expenditure/Event Organization parameters:

1. In the Organizations window, select Project Expenditure/Event Organization. Click the Others button.
2. Click in the Exp Org Defaults field. The Exp Org Defaults sub-window appears.
3. Enter or select an Operating Unit (the same as the item master Organization).

4. Save your work.

Figure 2–19 Exp Org Defaults Window

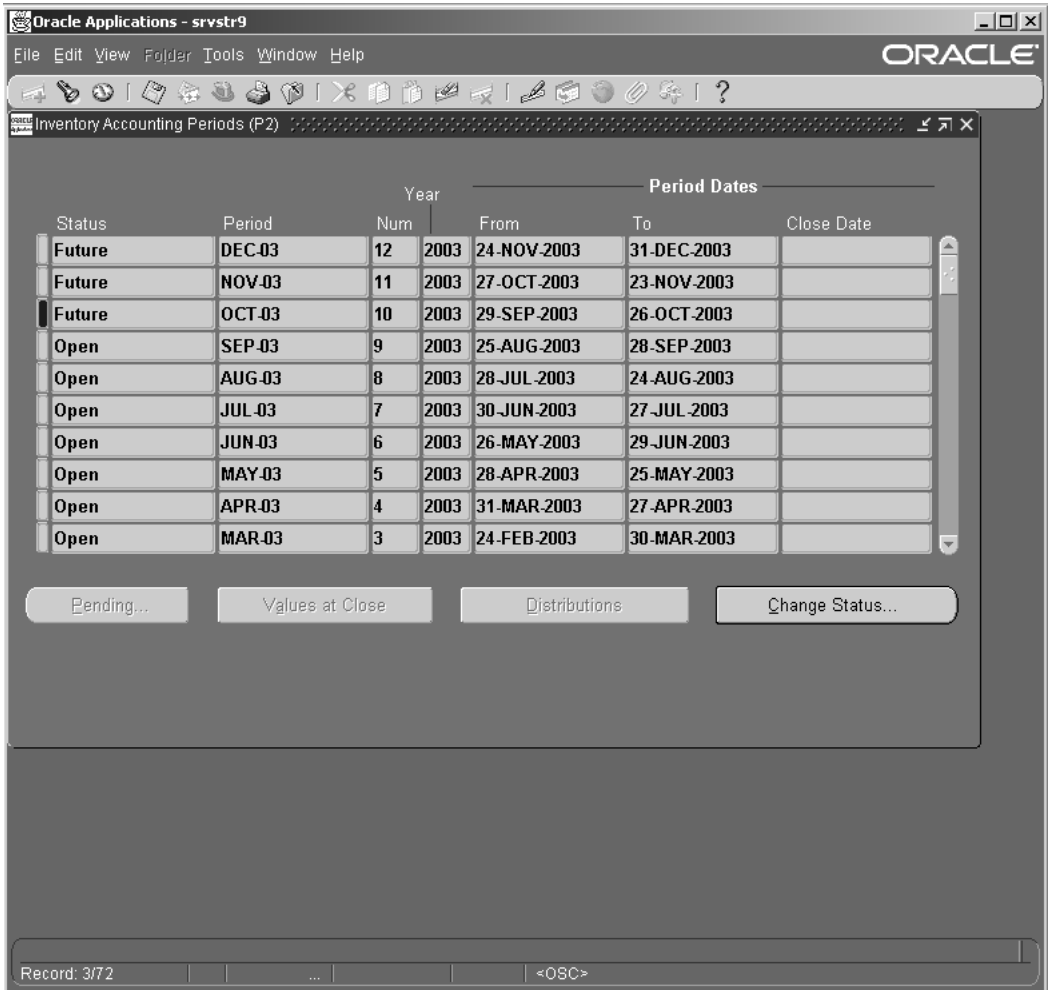


Additional Setup

1. From the Navigator, select Inventory > Accounting Close Cycle > Inventory Accounting Periods.

2. Select an Inventory Accounting Period and change status to Open.
3. Save your work.

Figure 2–20 Inventory Accounting Periods Window



See Also:

Release 11i Multi-Org Today; An Oracle White Paper, December 2001

Setting Up Oracle Inventory

In Oracle CMRO, you use instances of Oracle Inventory when defining the allowable parts in a master configuration, and when describing the components in a unit configuration. Oracle CMRO invokes Oracle Inventory methods to populate the database with information on allowable components in a configuration, and the components actually available to create a unit configuration. The Production module uses predefined inventory items as reference when invoking the inventory methods that issue and return parts, or when defining the material requirements for an organization job. The route management module uses the predefined inventory items as material and tool requirements used to perform a route or an operation.

Setting up Oracle Inventory includes the following steps:

- Creating Component Items
- Creating Service Items
- Setting Up Subinventory

For every Inventory Organization, you must define Items and set up at least one subinventory. Cost group and Locator should have been setup prior to setting up subinventory.

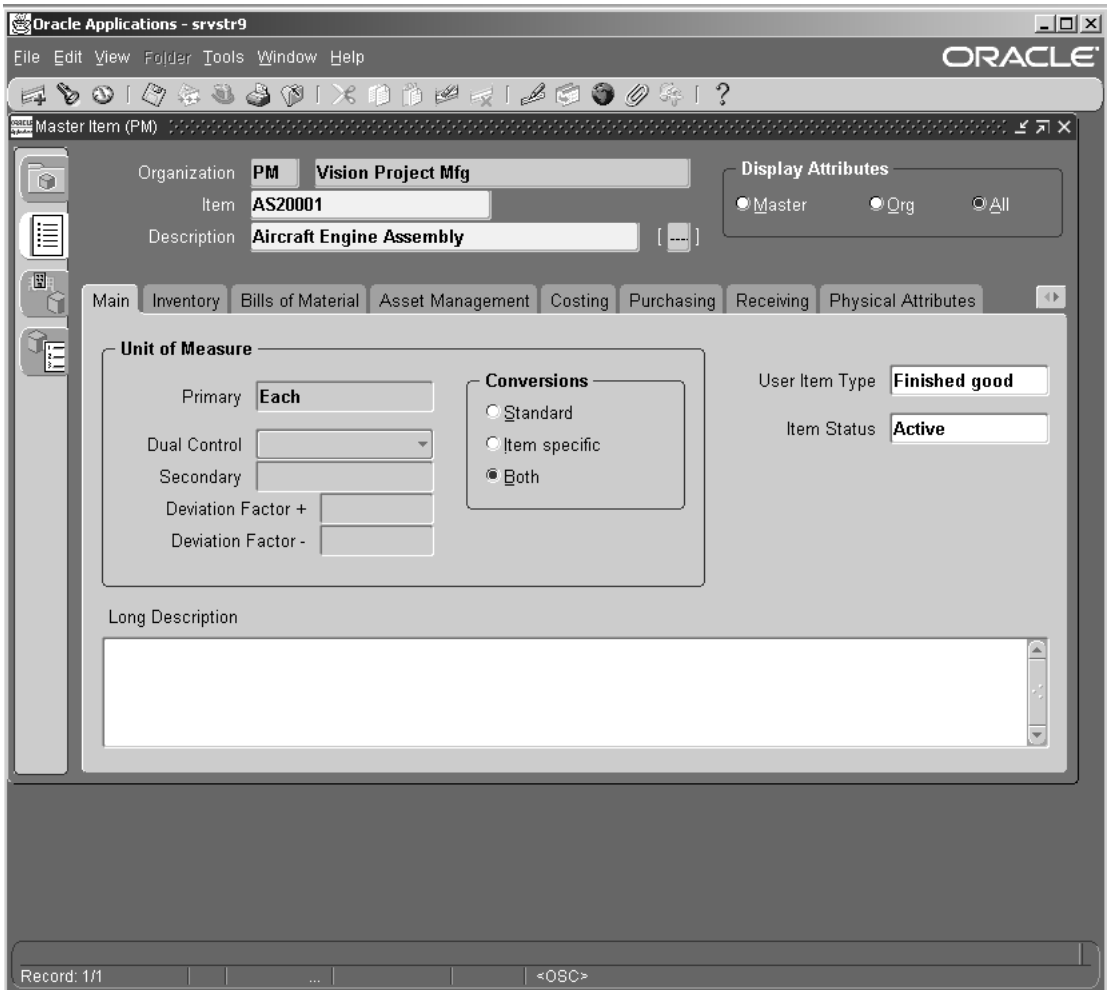
To create Component Items

1. Select the Manufacturing and Distribution Manager responsibility. From the Navigator, select Inventory > Items > Master Items.

   Note: All items must be set up at the Master Inventory Organization Level and then assigned to specific Inventory Organizations. Oracle recommends that you define an Item Template for each type of item that will be used in your organization.

2. Enter a name in the Item field.
3. Enter a description in the Description field.
4. Click the Main tab. Select Active from the Item Status drop-down menu.

Figure 2–21 Master Item Window - Main Tab

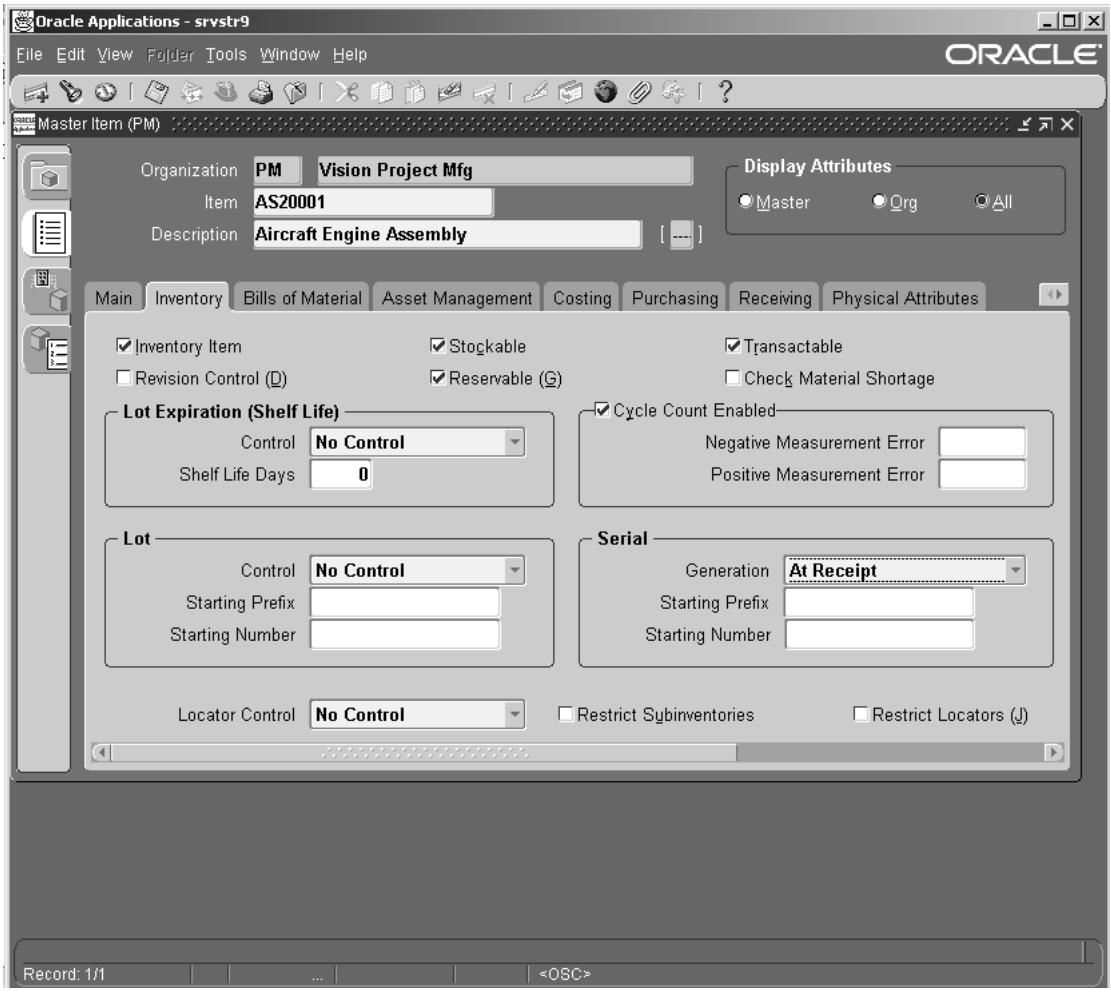


5. Click the Inventory tab. Select the following check boxes:
   - Inventory Item
   - Stockable
   - Reservable

- Transactable

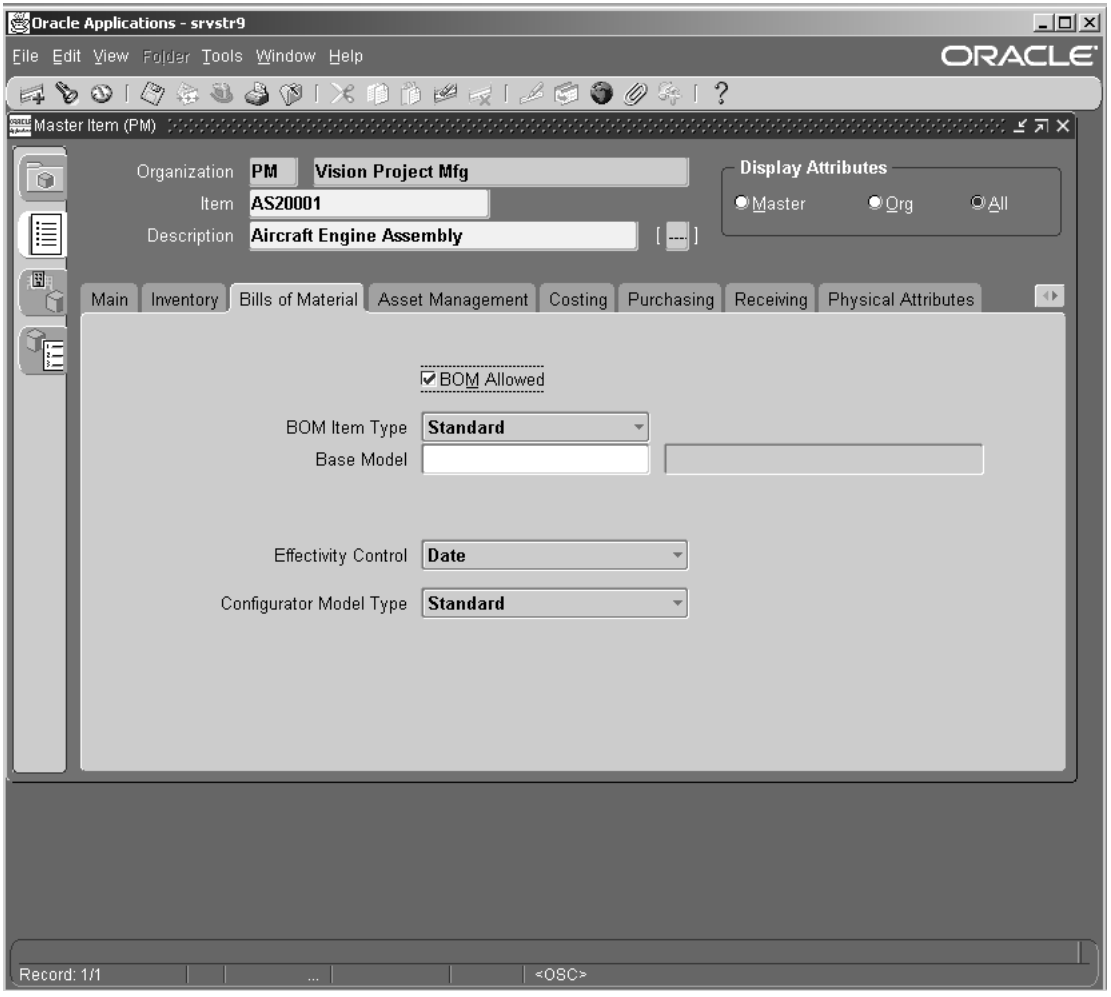
6. For Lot and Lot Expiration, select No control from the Control drop-down menu.
7. Select Serial Control: At receipt (if the items are serial number trackable; otherwise set it to non-serialized) from the Serial Generation drop-down menu.
8. Select No Control from the Locator Control drop-down menu.

Figure 2–22 Master Item Window - Inventory Tab



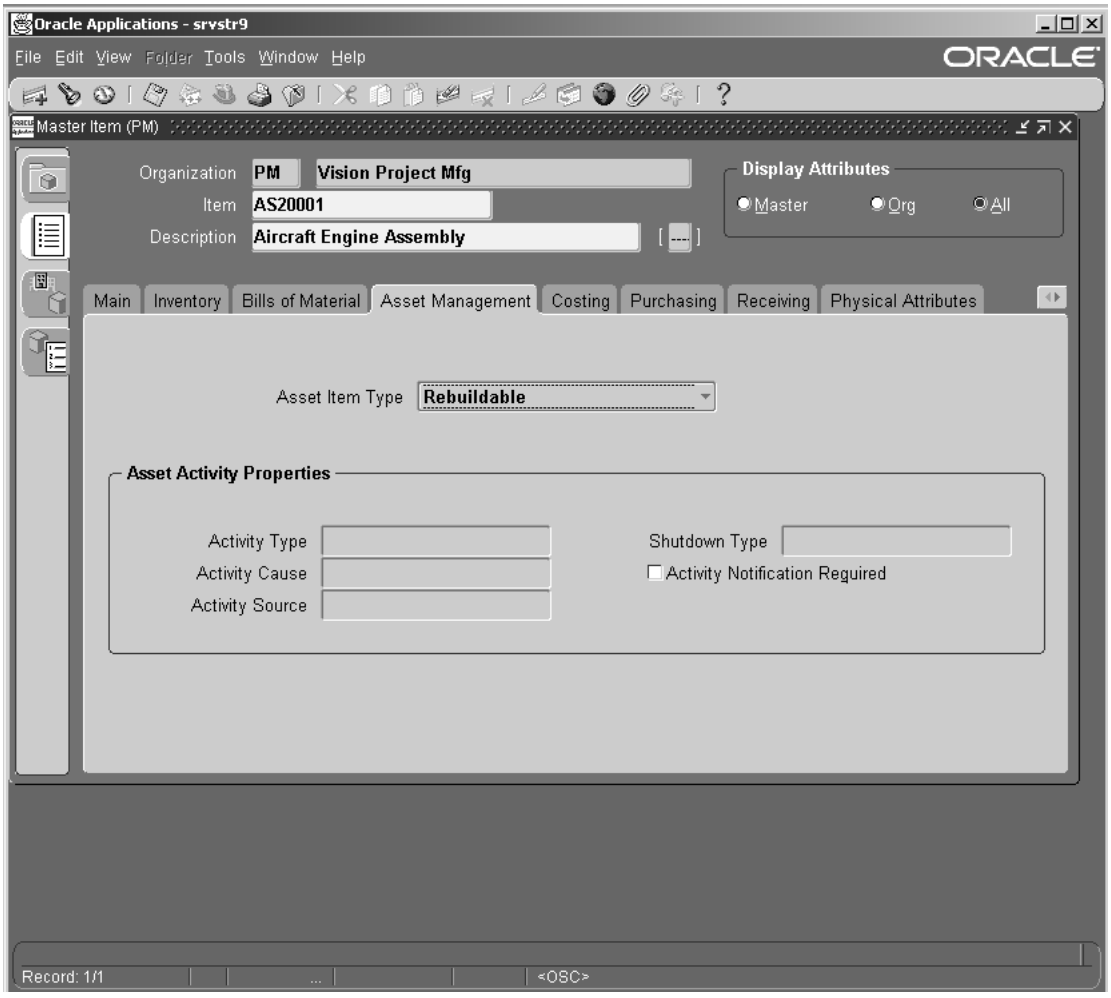
9. Click the Bills of Material tab. Select the BOM Allowed check box.

Figure 2–23 Master Item Window - Bills of Material Tab



10. Click the Asset Management tab. Select Rebuildable from the Asset Item Type drop- down menu.

Figure 2–24 Master Item Window - Asset Management Tab



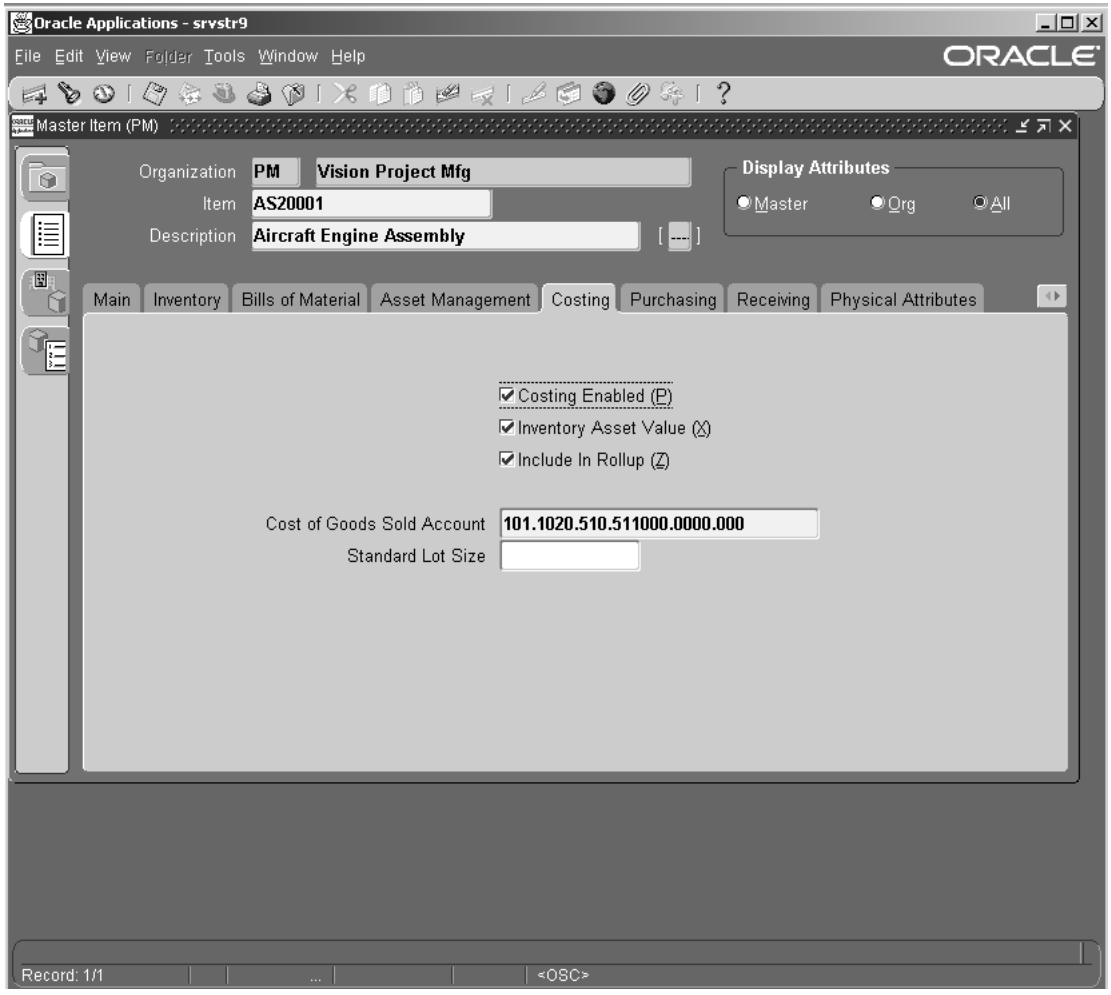
Note: You can select a value in the Asset Item Type field only if Oracle Enterprise Asset Management(eAM) set up is complete. Set up at least one item with Asset Group of Rebuildable in eAM.

11. Click the Costing tab. Select the following check boxes:

- Costing Enabled
- Inventory Asset Value
- Include in Rollup

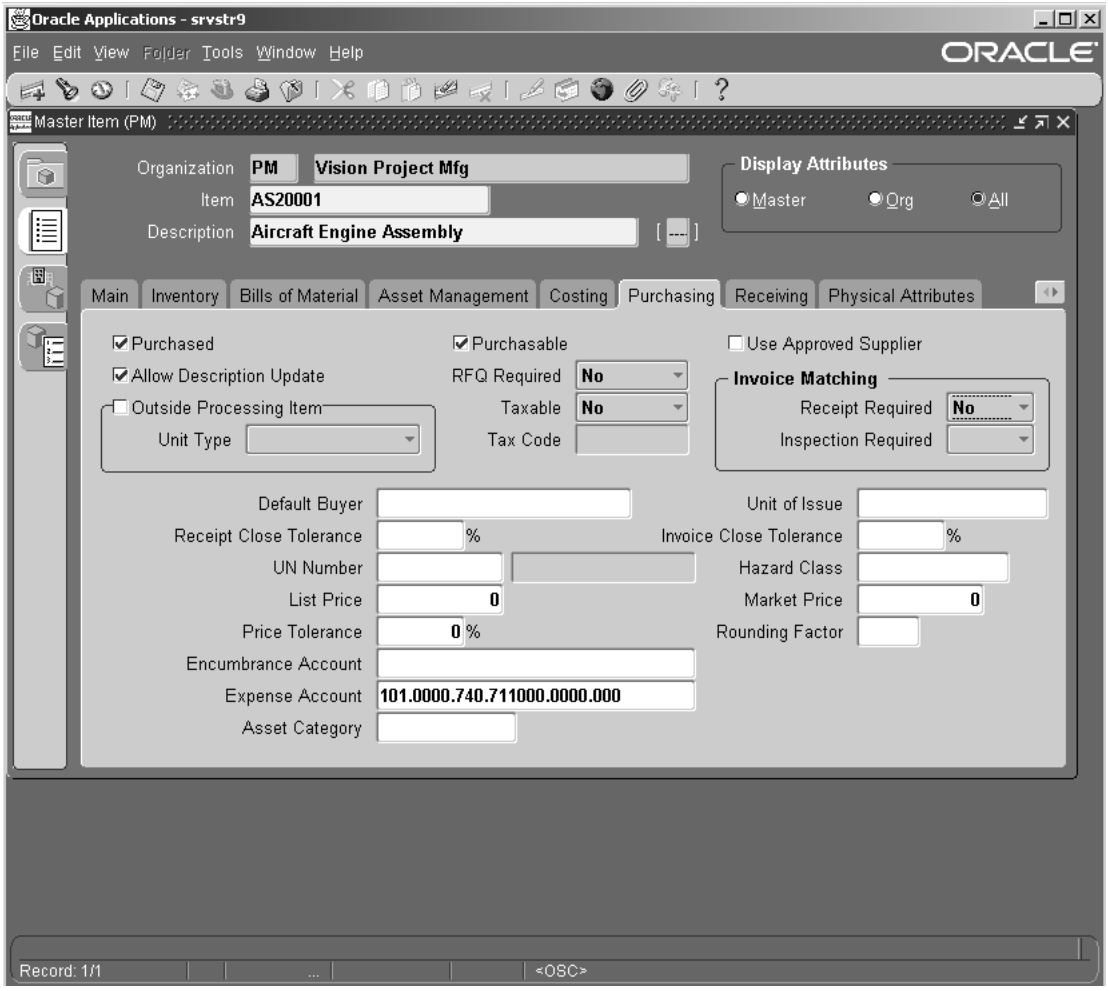
12. Enter value for Cost of Goods Sold Account.

Figure 2–25 Master Item Window - Costing Tab



13. Click the Purchasing tab. Select the following check boxes:
    - Purchased
    - Purchasable
    - Allow Description Update
14. Under Invoice Matching, set Receipt Required to No.

Figure 2–26 Master Item Window - Purchasing Tab



15. Click the Physical Attributes tab.

Note: When you enter values for Weight, Volume, and Dimensions, you must select the Container check box to ensure that the shipment flow works properly.

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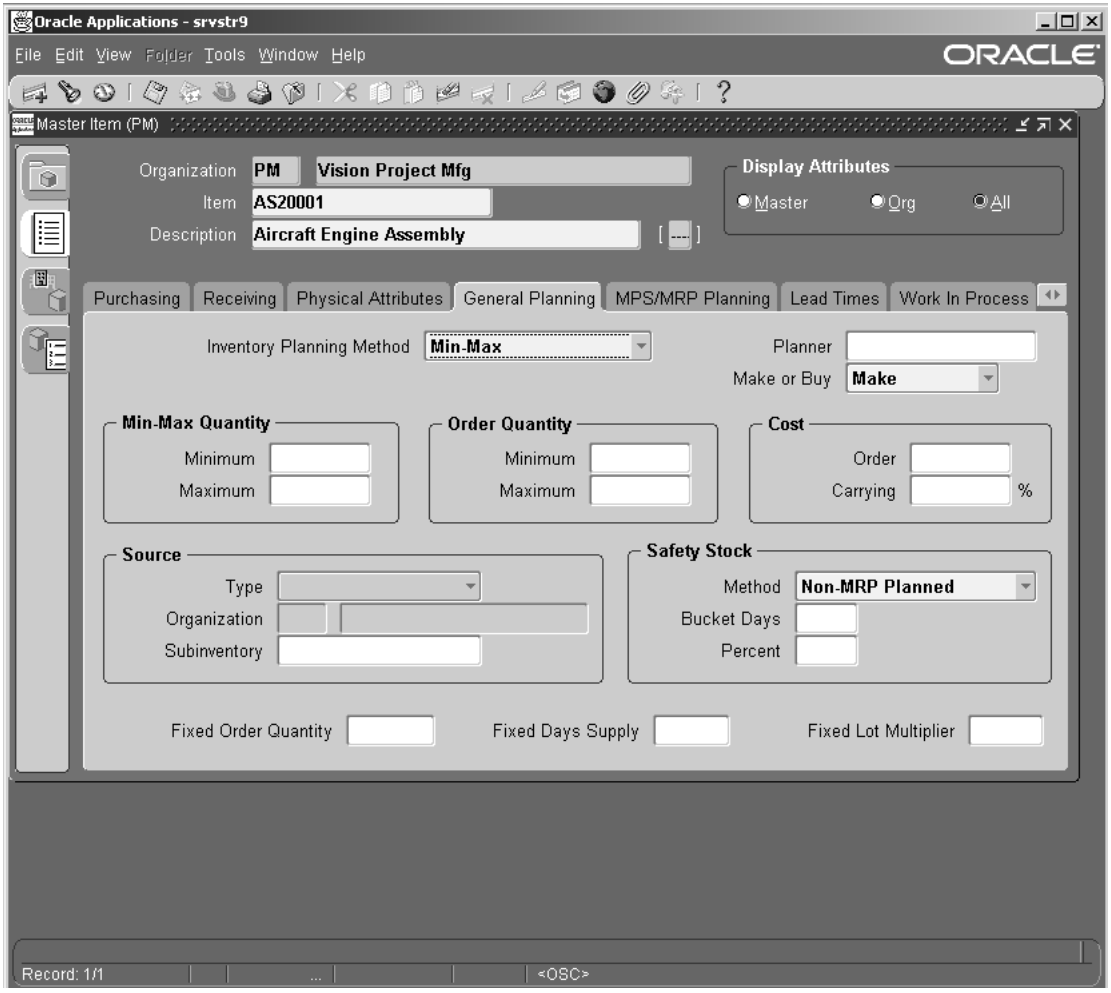
16. Click the General Planning tab. Select Min-Max from the Inventory Planning Method drop-down menu.

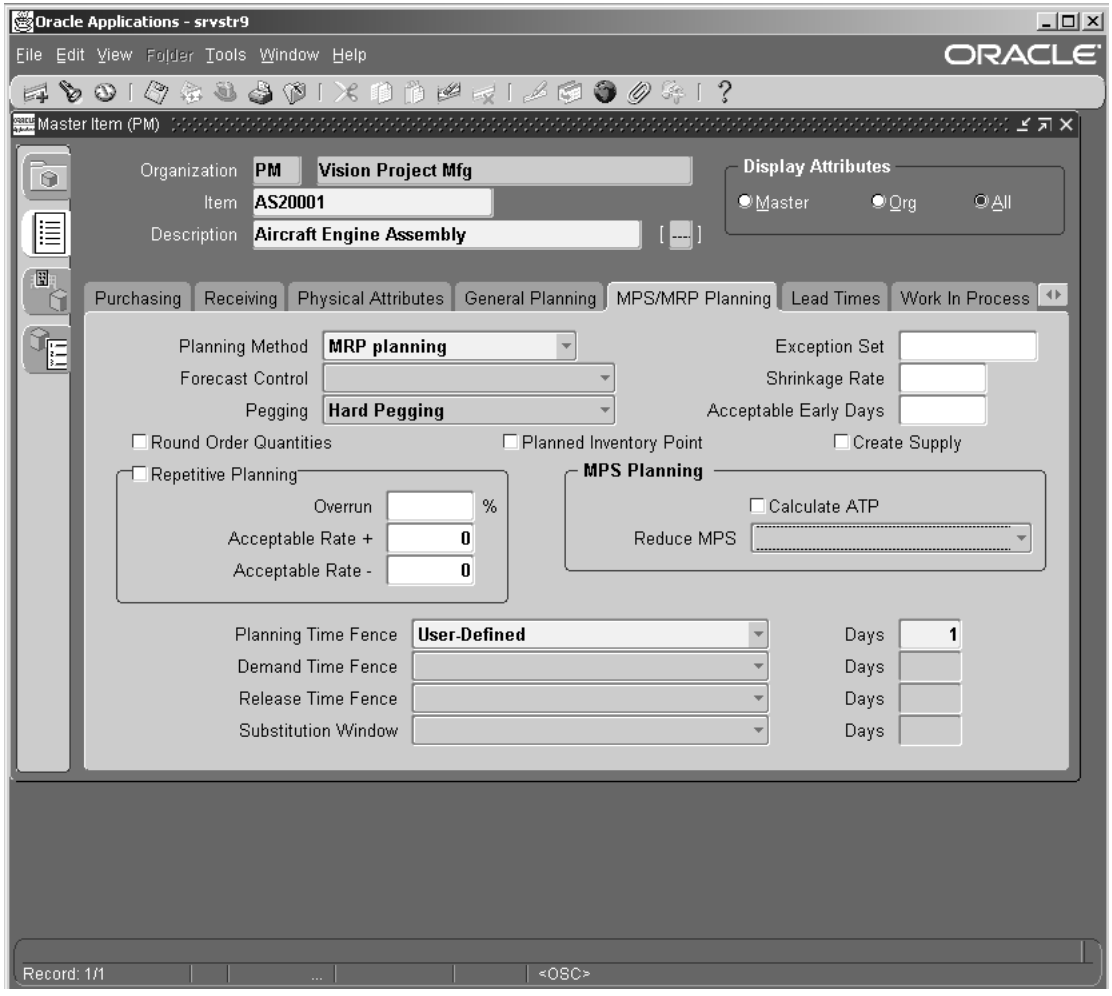
Figure 2–27 Master Item Window - General Planning Tab



17. Click the MSP/MRP Planning tab. Select MRP Planning from the Planning Method drop-down menu.

18. Select Hard Pegging from the Pegging drop-down menu.

Figure 2–28 Master Item WIndow - MSP/MRP Planning Tab

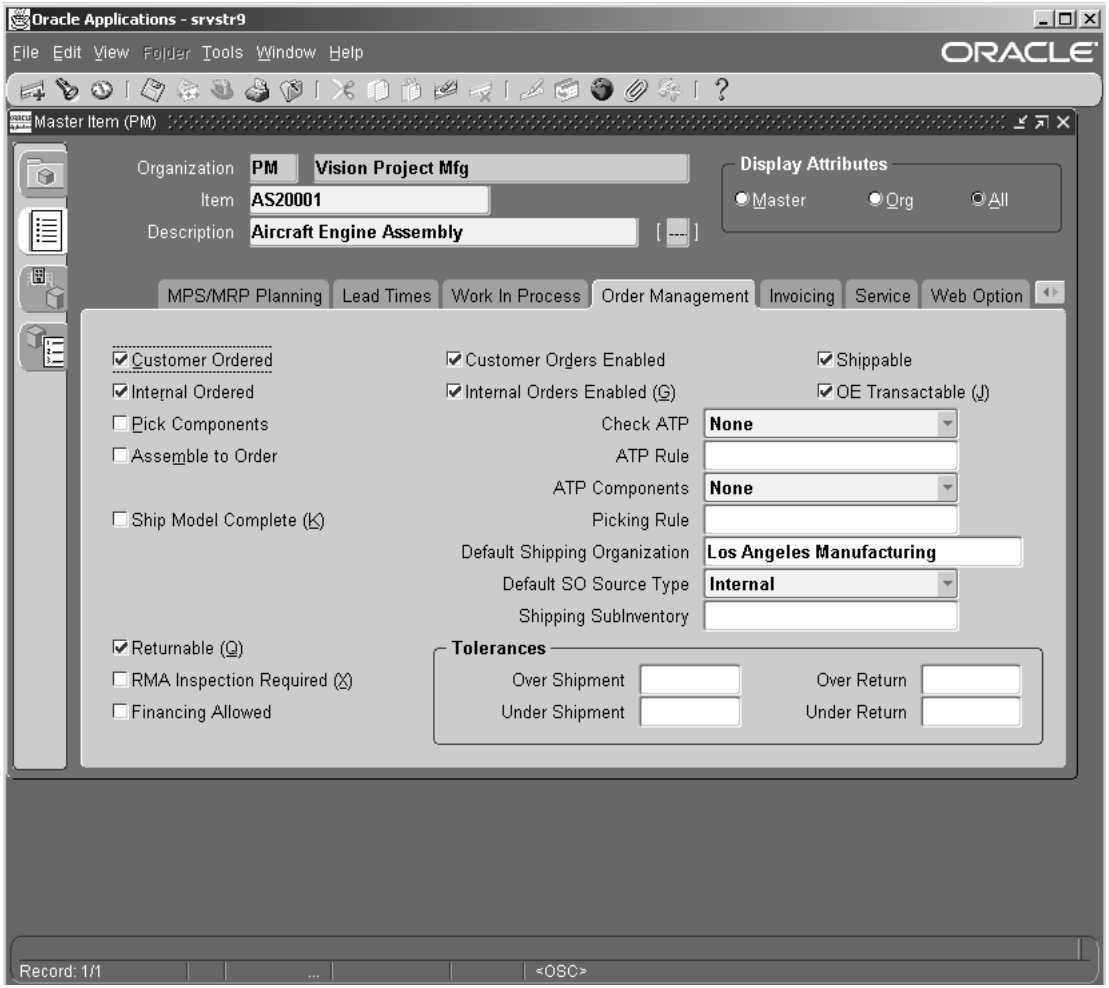


19. Click the Order Management tab. Select the following check boxes:

- Customer Ordered
- Internal Ordered

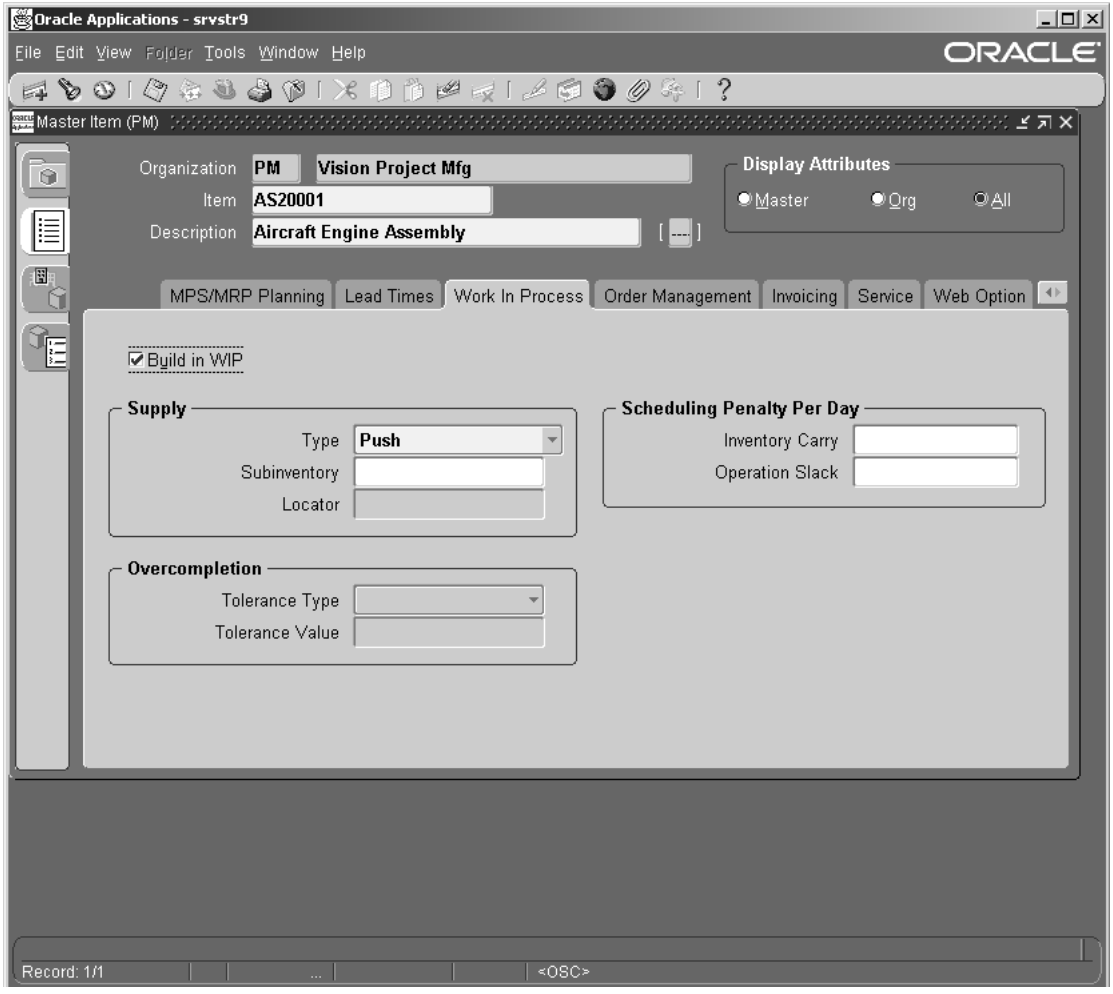
- Customer Orders Enabled
- Internal Orders Enabled
- Shippable
- OE Transactable
- Returnable

Figure 2–29 Master Item Window - Order Management Tab



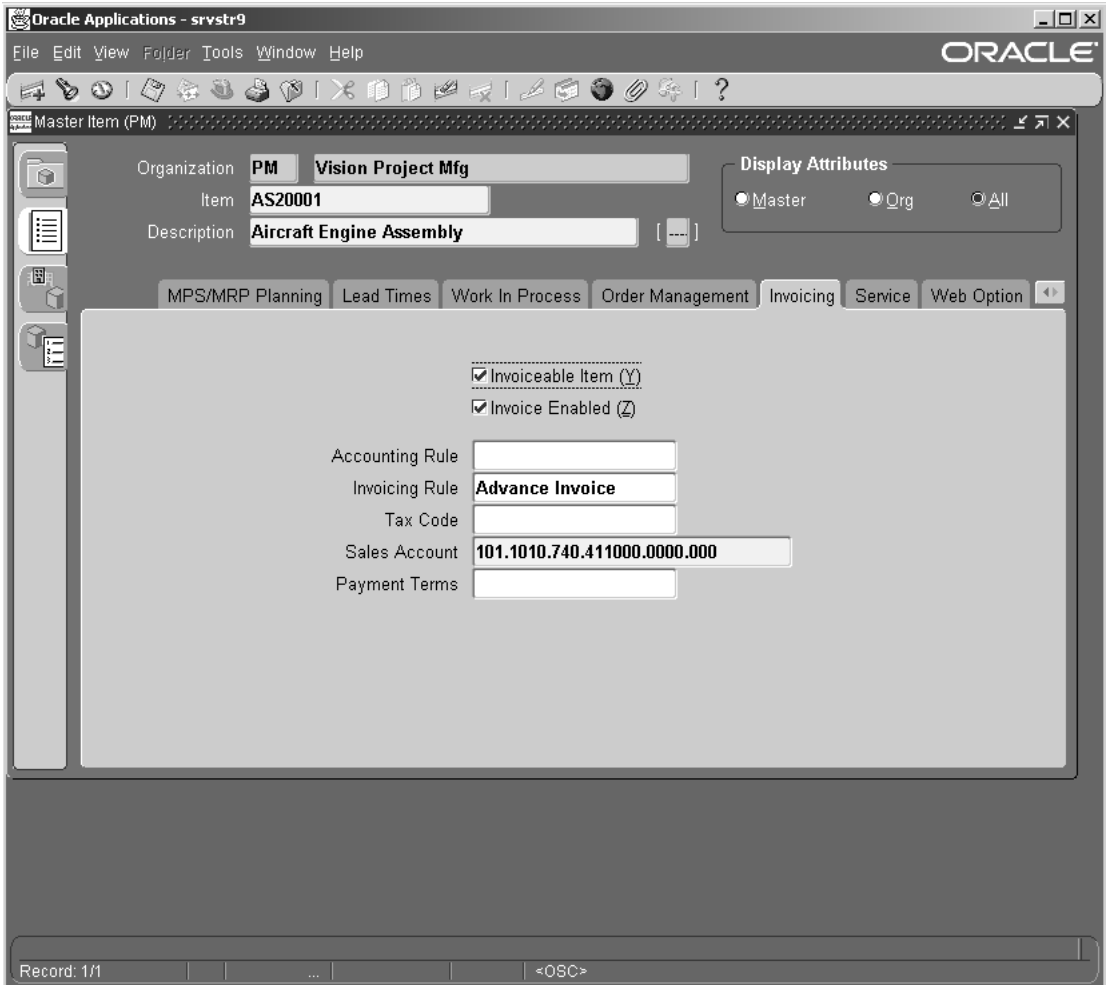
20. Click the Work in Process tab. Select the Build in WIP check box.
21. Select Supply Type of Push from the Supply Type drop-down menu.

Figure 2–30 Master Item Window - Work in Process Tab



22. Click the Invoicing tab. Select the Invoiceable Item and Invoice Enabled check boxes.

Figure 2–31 Master Item Window - Invoicing Tab



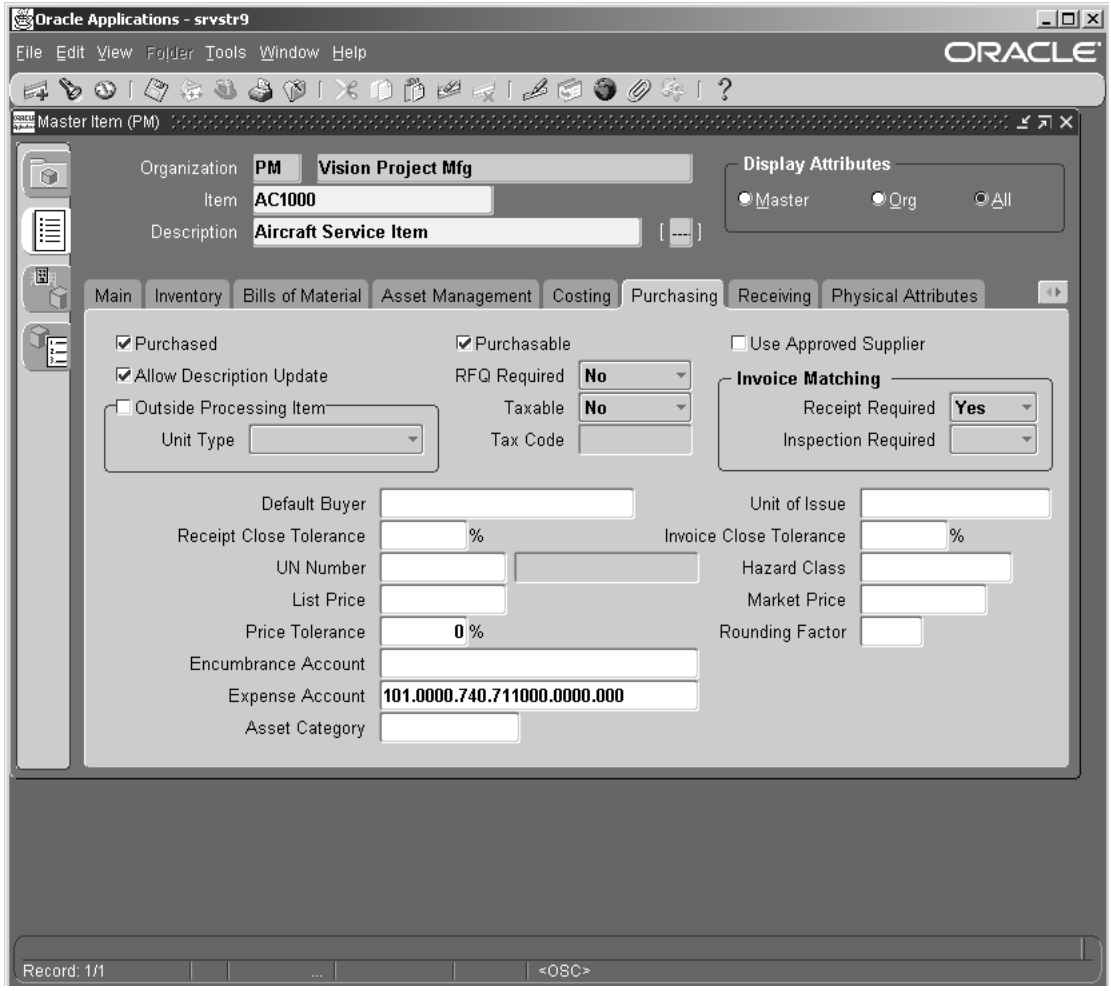
23. Click the Service tab. Select the Serviceable Product and Install Base Tracking check boxes.
24. Save your work.

To set up Service Items

1. Set up Service Items with attributes as described below.

Attribute	Value
Item Status	Active
Inventory Item	Disabled
Stockable	Disabled
Reservable	Disabled
Purchased	Enabled
Purchasable	Enabled
Description Update	Enabled
Receipt Required	Yes
OSP	Disabled

Figure 2–32 Master Item - Purchasing Tab



2. Save your work.

To set up Subinventory

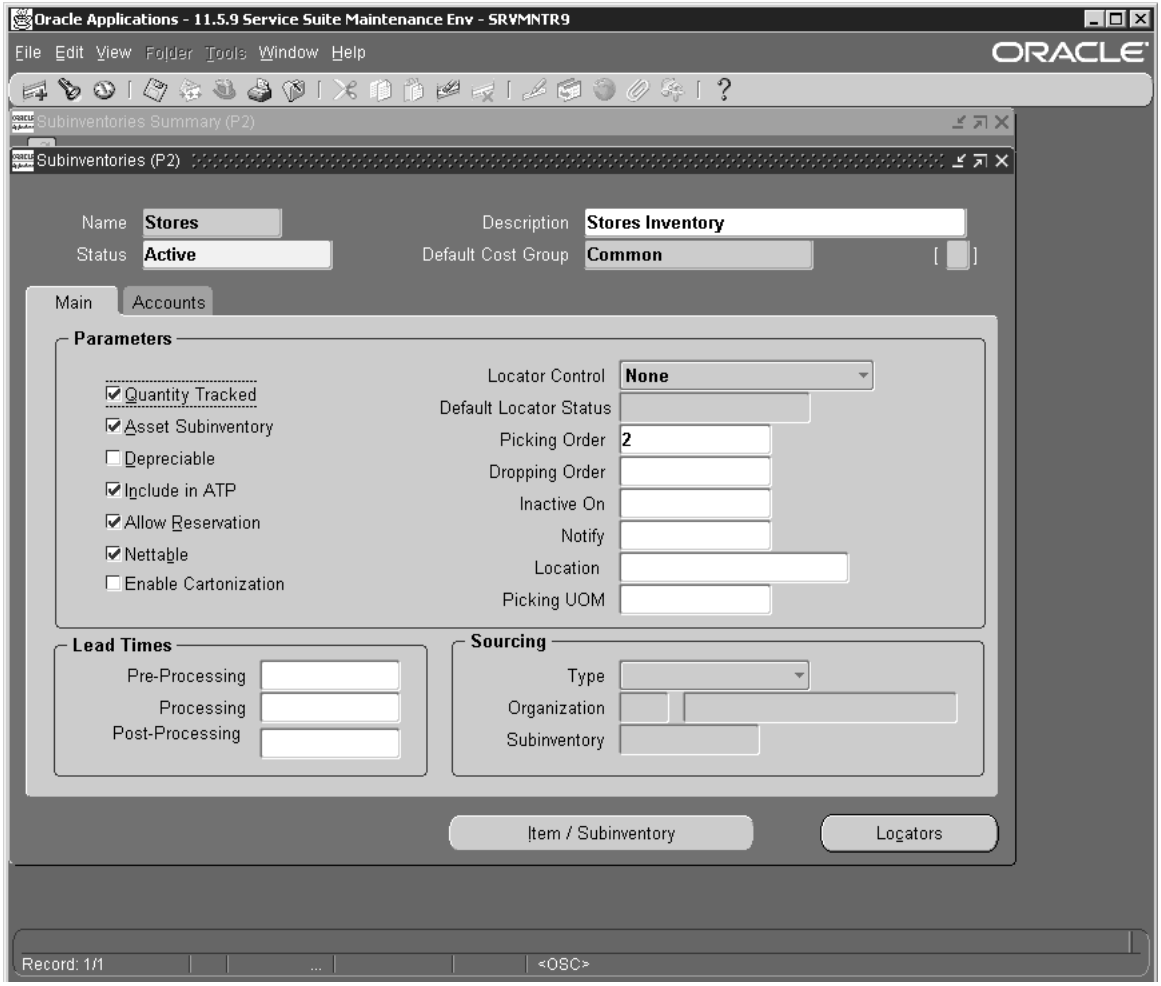
1. From the Navigator, select Inventory > Setup > Organization > Subinventories. The Subinventories window appears.
2. Define the following subinventories:

Note: Cost group and locators must be set up before defining subinventories.

Stores

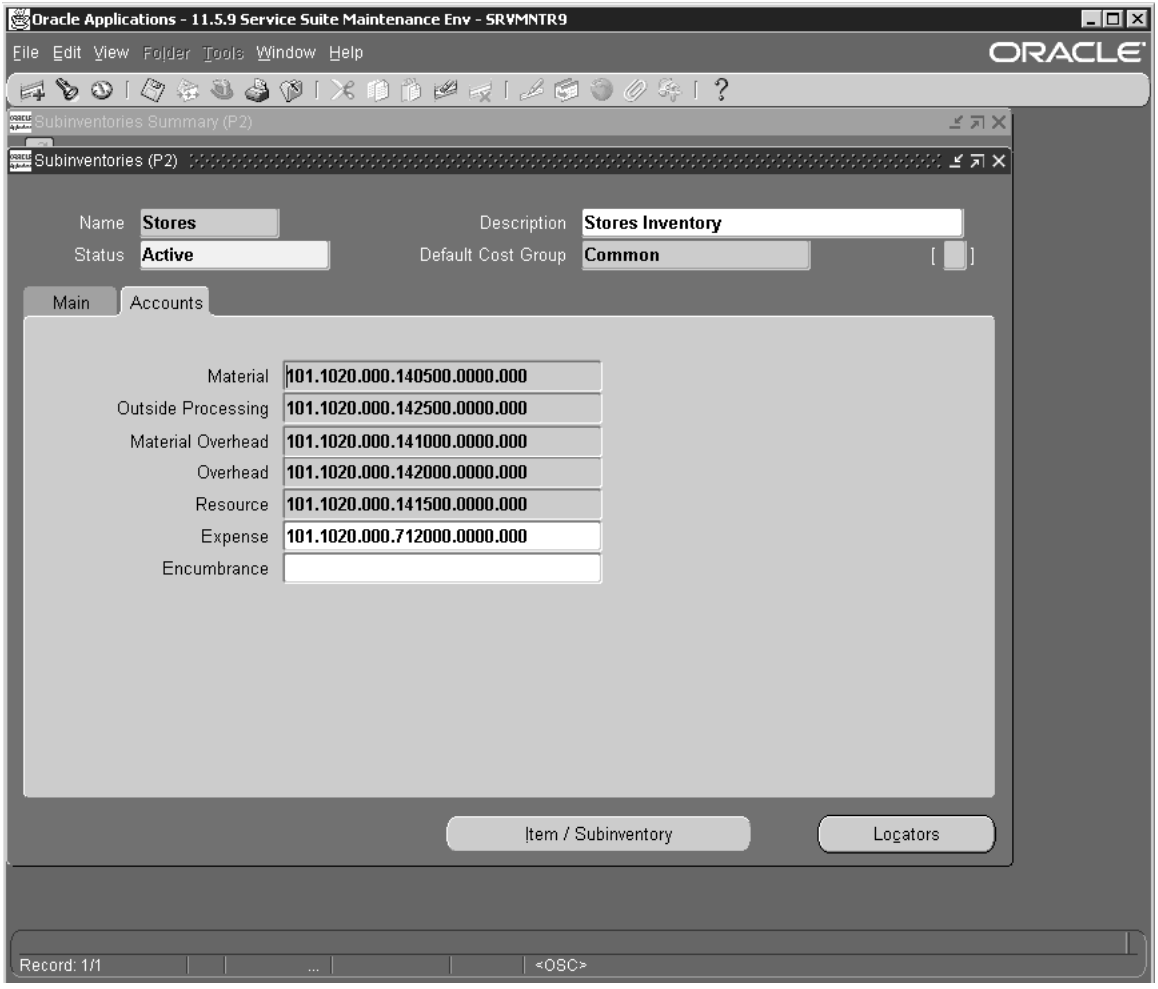
3. Type Stores in the Name field.
4. Select Active from the Status list of values.
5. Select the following check boxes:
   - Quantity Tracked
   - Asset Subinventory
   - Include in ATP
   - Allow Reservation
   - Nettable

Figure 2–33 Subinventories Window (Stores Subinventory)



6. Select the Accounts tab and enter appropriate accounting values.
7. Save your work.

Figure 2–34 Subinventories Window - Accounts Tab



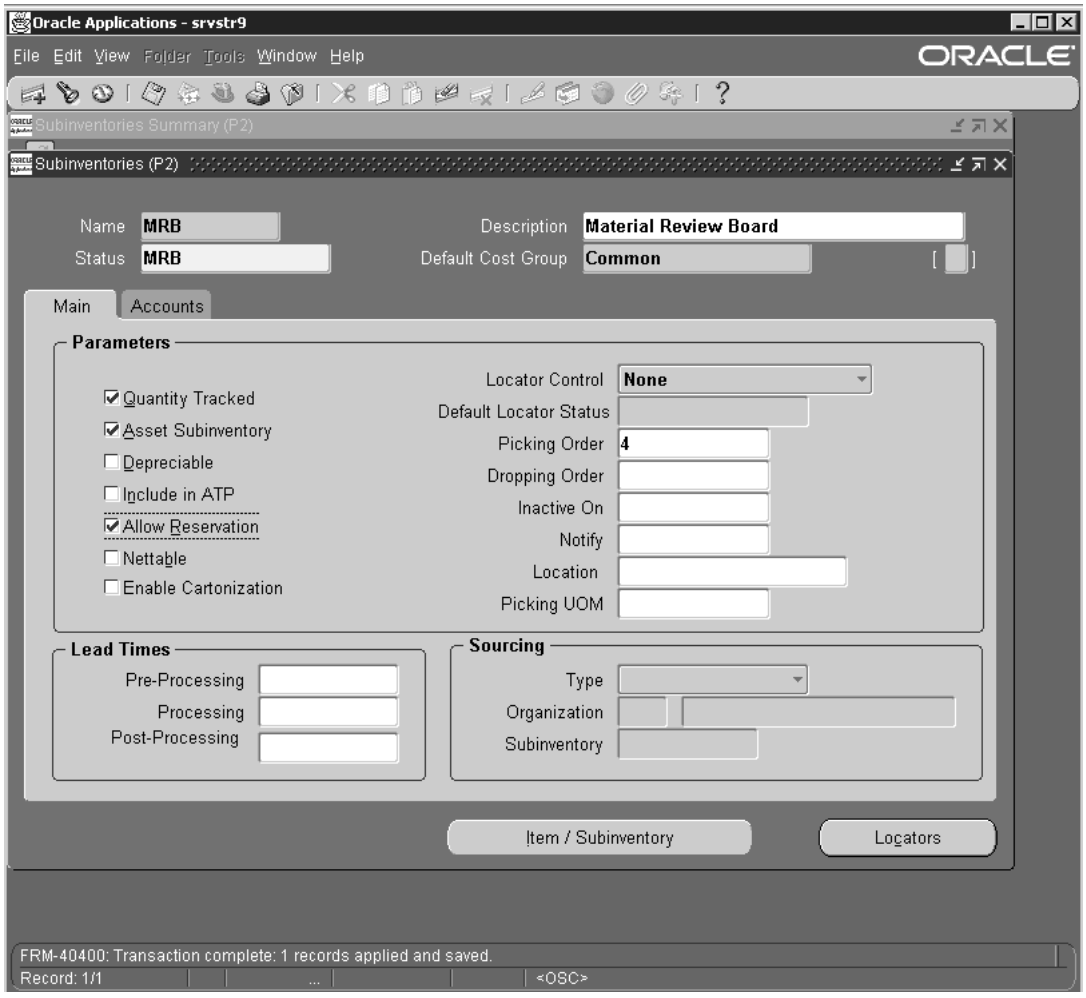
MRB

8. Click the New icon to create a new subinventory. Type MRB in the Name field.
9. Select Active from the Status list of values.

Note: The status must be set to MRB Review. You must install Oracle Warehouse Management (WMS) to use this status. You can set the status to Active initially, install Warehouse Management, create additional Transaction Types in WMS and then change subinventory status to 'MRB Review'.

10. Select the following check boxes:
    - Quantity Tracked
    - Asset Subinventory
    - Allow Reservation

Figure 2–35 Subinventories Window (MRB Subinventory)

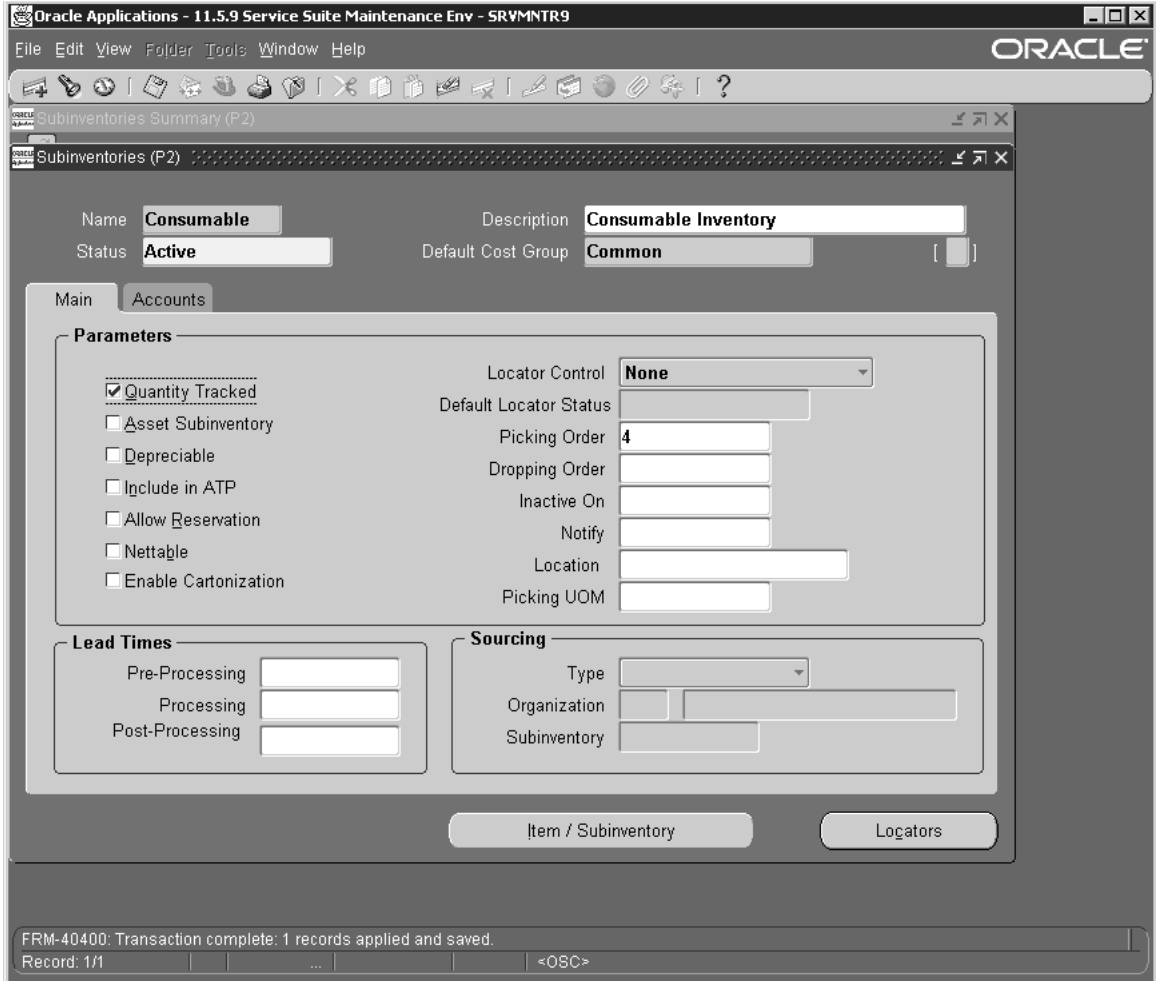


11. Select the Accounts tab and enter appropriate accounting values.
12. Save your work.

Consumable

13. Click the New icon to create a new subinventory. Type Consumable in the Name field.
14. Select Active from the Status list of values.
15. Select the Quantity Tracked check box. Disable all other attributes.

Figure 2–36 Subinventories Window (Consumable Subinventory)

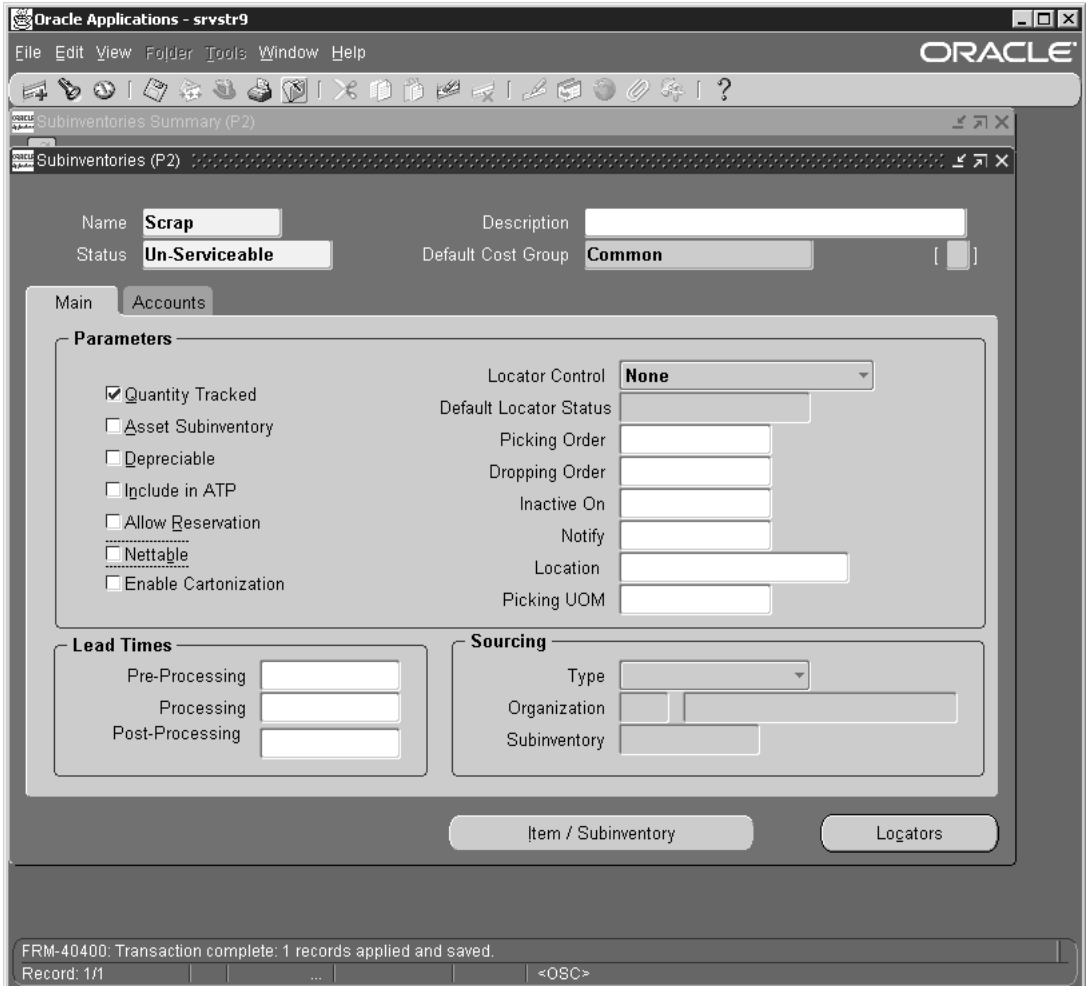


16. Select the Accounts tab and enter appropriate accounting values.
17. Save your work.

Scrap

18. Define a new subinventory by clicking the New icon. Type Scrap in the Name field.
19. Select Unserviceable from the Status list of values.
20. Select the Quantity Tracked check box. Disable all other attributes.

Figure 2–37 Subinventories Window (Scrap Subinventory)



21. Select the Accounts tab and enter appropriate accounting values.
22. Save your work.

See Also:

Oracle Inventory User's Guide

Setting Up Oracle Bills of Material (BOM)

Oracle CMRO uses the resources and departments that are set up in Oracle Bills of Material as the basis for the production job resource requirements.

Before setting up Oracle Bills of Material, you must ensure that:

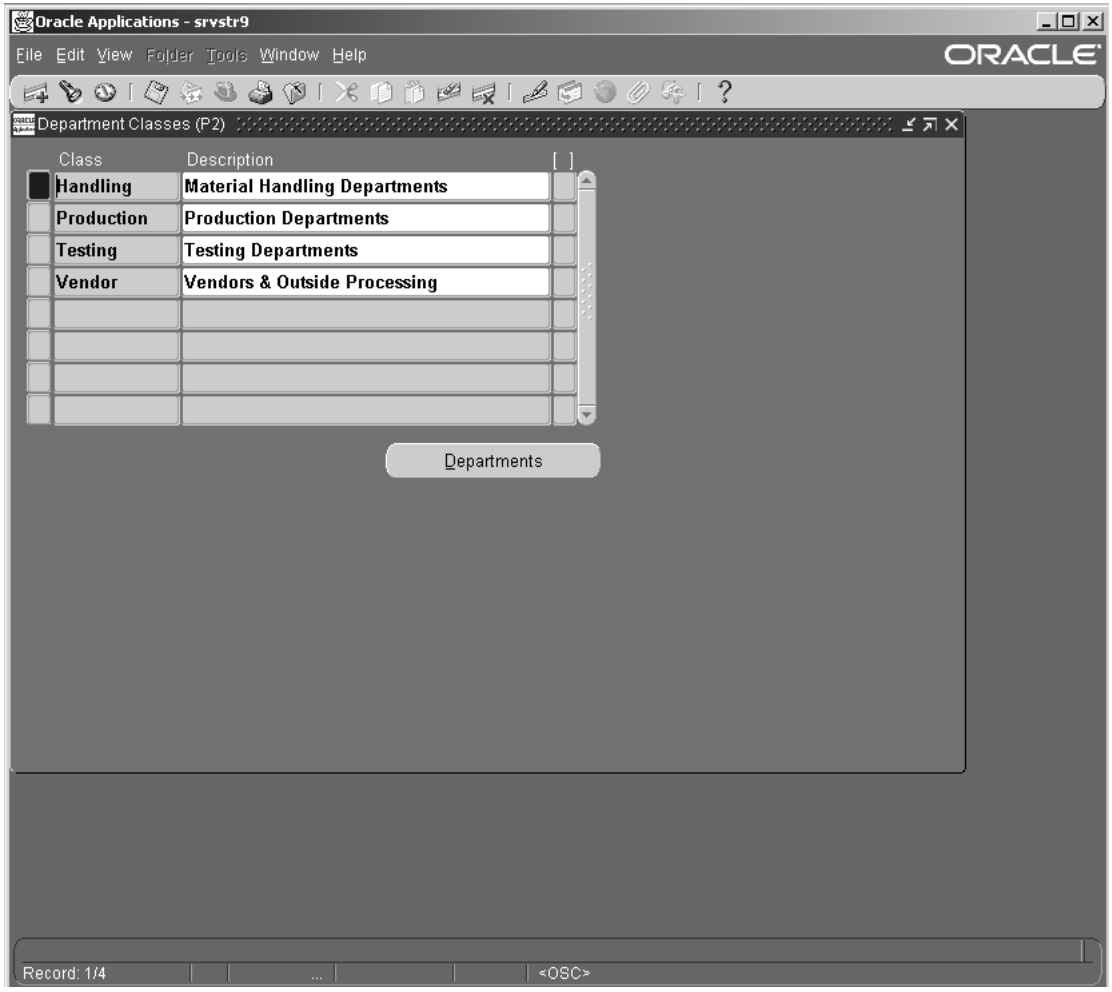
- Calendars and Exception templates are set up
- Employees have been set up

Setting up Oracle Bills of Material includes setting up departments and resources.

To set up Departments and Resources:

1. Select the Manufacturing and Distribution Manager responsibility. From the Navigator, select Bills of Material > Setup > Department Classes
2. Set up Department Classes. For Outside Processing purposes you must set up at least one Department Class called Vendor.

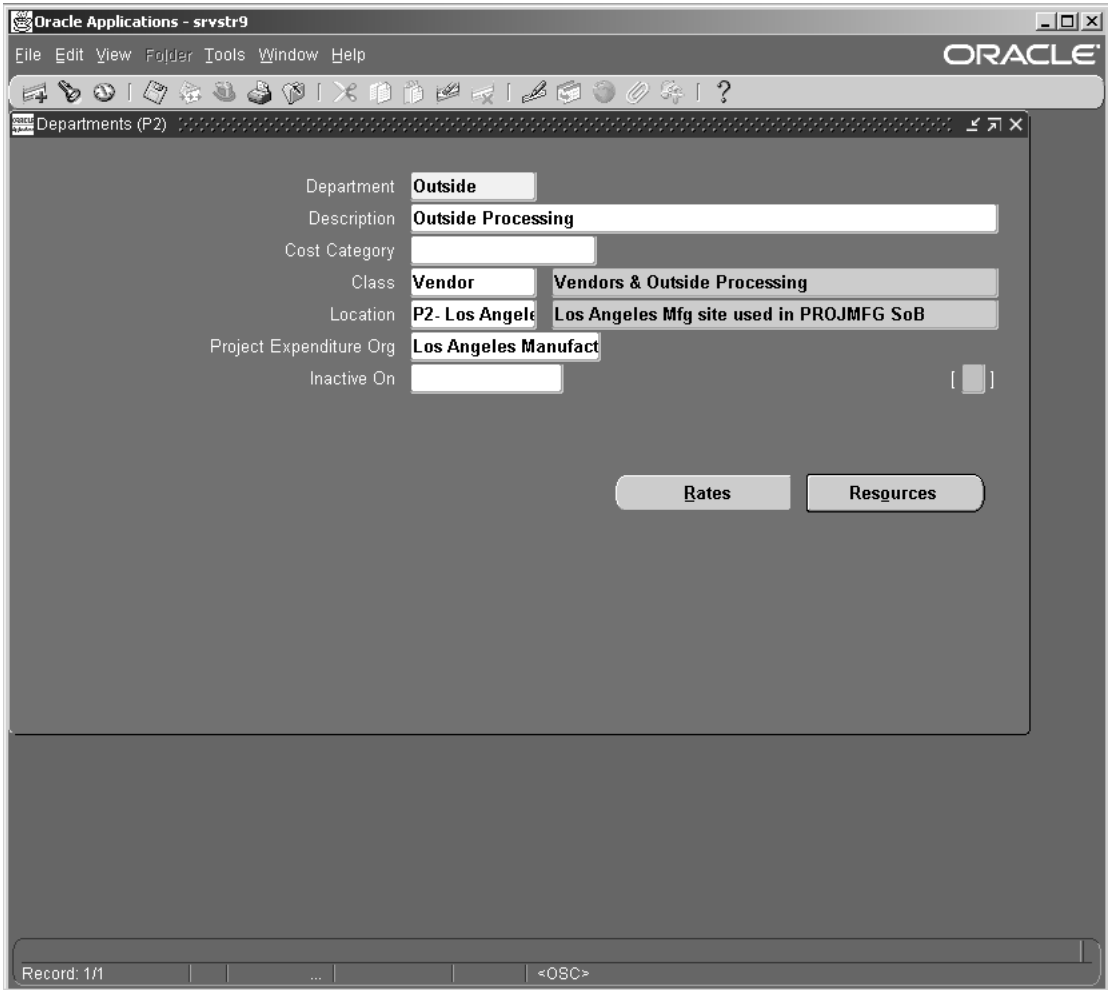
Figure 2–38 Department Classes Window



3. To set up a department, navigate to Bills of Material > Routings > Department. The Departments window appears.
4. Set up at least one Department that will be associated with the department class Vendor (case sensitive). It is recommended that you set up a Department that the users can easily identify as an outside department, for example, Outside Service (OSV).

5. Associate all Departments with a location.

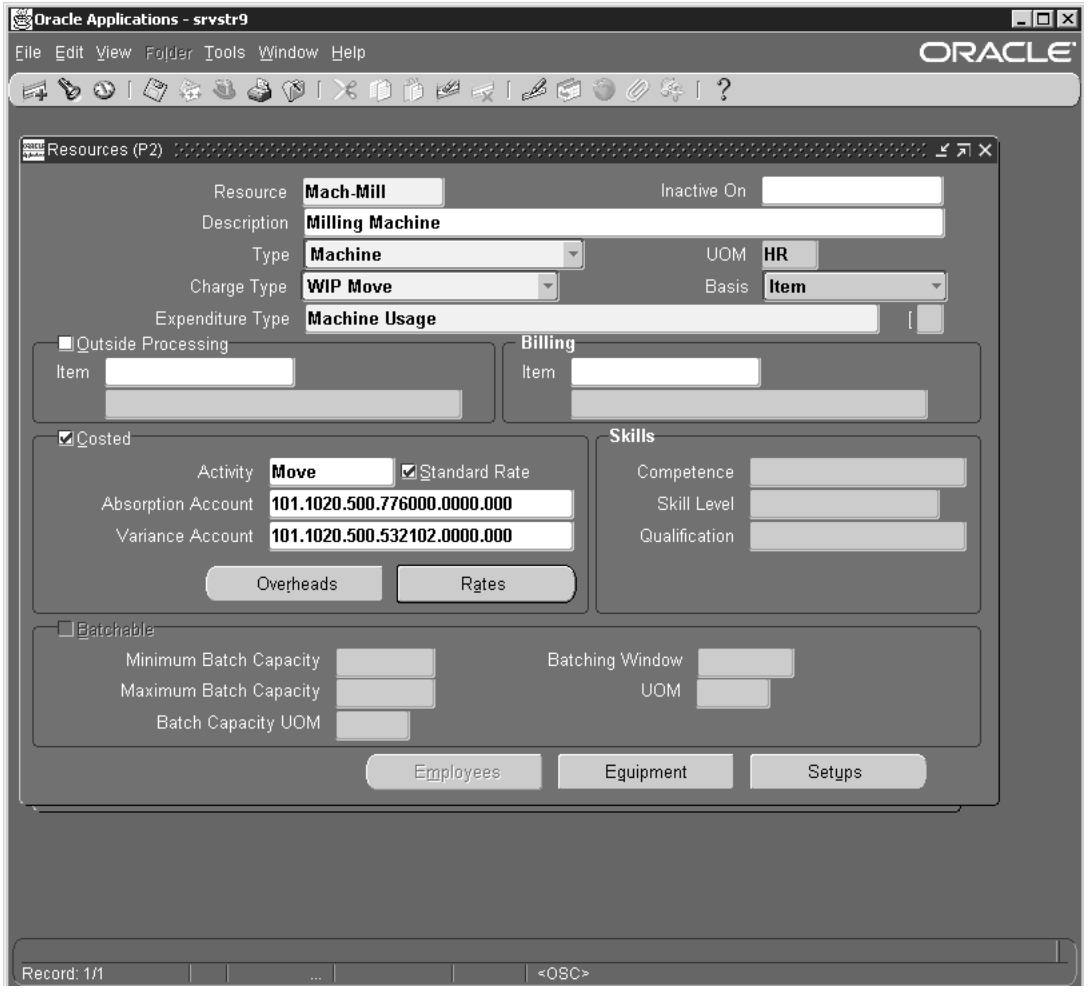
Figure 2–39 Departments Window



6. Set up Resources and associate with Employees. To set up resources navigate to Routings > Resources.

7. Define a resource of type Machine.

Figure 2–40 Resources Window



Note: In the item master you must check 'Equipment' flag (Physical attributes) to see valid values.

8. Set up Standard Operations.

9. Save your work

> **Note:** You must set up Departments and Resources at the operating unit, as well as at the Inventory Organization level. Routes are set up at the operating unit level. Visits (Visit Work Package - CMRO) are set at the Inventory Organization level.

See Also:

Oracle Bills of Material User's Guide

Setting Up Oracle Warehouse Management

Oracle Warehouse Management provides maintenance organizations, the functionality to control their inventory by status/condition and associate subinventories with a department. Before setting up Oracle Warehouse Management, you must ensure that:

- Oracle Inventory setup is complete
- Supply subinventories are setup
- Departments have been set up in Oracle BOM

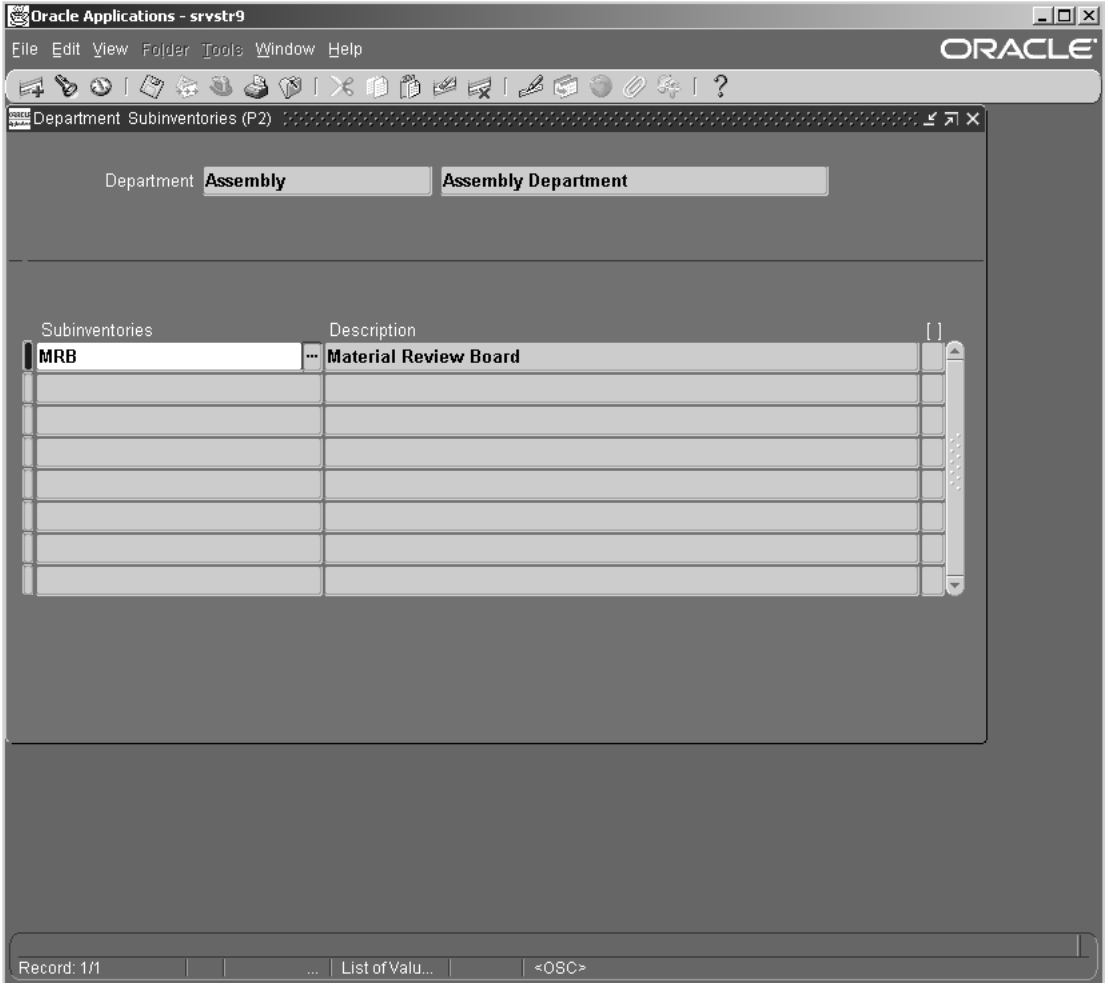
Setting up Oracle Warehouse Management includes:

- Associating departments with subinventories
- Defining Material status
- Associating material status with subinventories
- Setting up Profile Options

To associate departments with subinventories:

1. Change responsibility to Warehouse Management Super User. From the Navigator, select Setup > Warehouse Configuration > Resources > Associate Departments & Subinventories. The Department Subinventories window appears.
2. Select a department from the Department list of values and associate it with a Subinventory.
3. Save your work.

Figure 2–41 Department Subinventories Window

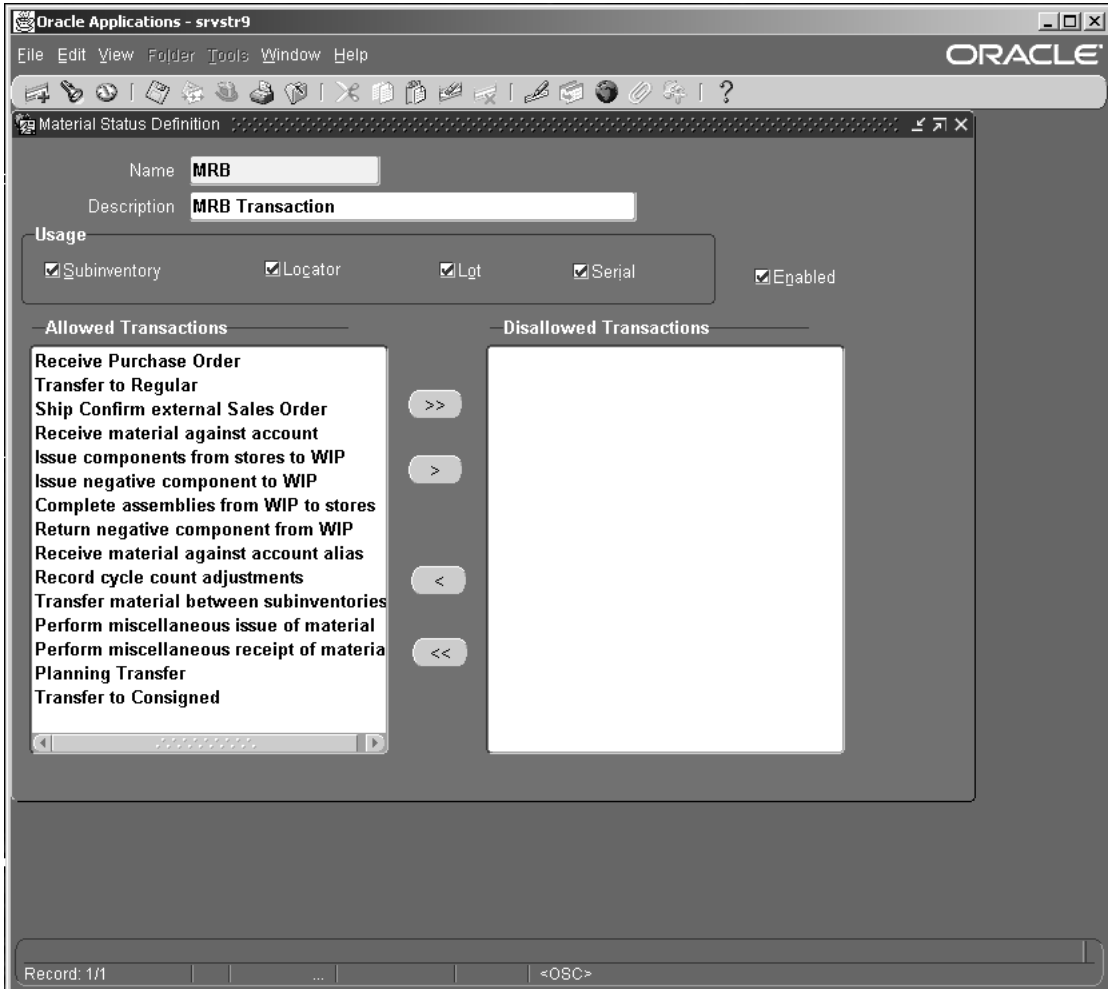


To set up Material Status:

1. Navigate to Setup > Transaction Setup > Inventory Transactions > Material Status. The Material Status Definition window appears.
2. Set up the following statuses:
   - MRB

- Unserviceable
- Serviceable

Figure 2–42 Material Status Definition Window

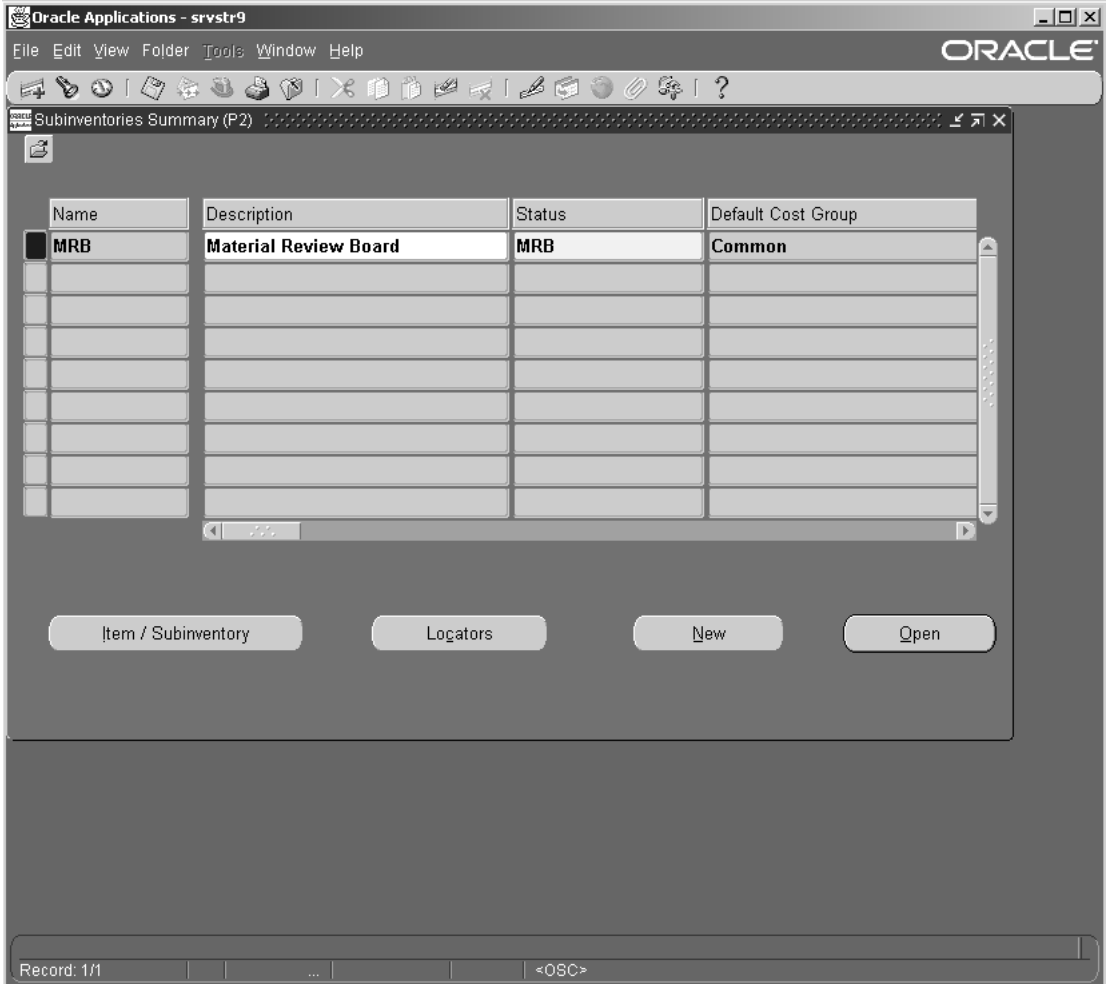


3. Save your work.

To associate Material Status with Subinventories:

1. Navigate to Setup > Warehouse Configuration > Warehouse > Subinventories. The Subinventories Summary window appears.
2. Select a subinventory and associate a Material Status with it.

Figure 2–43 Subinventories Summary Window

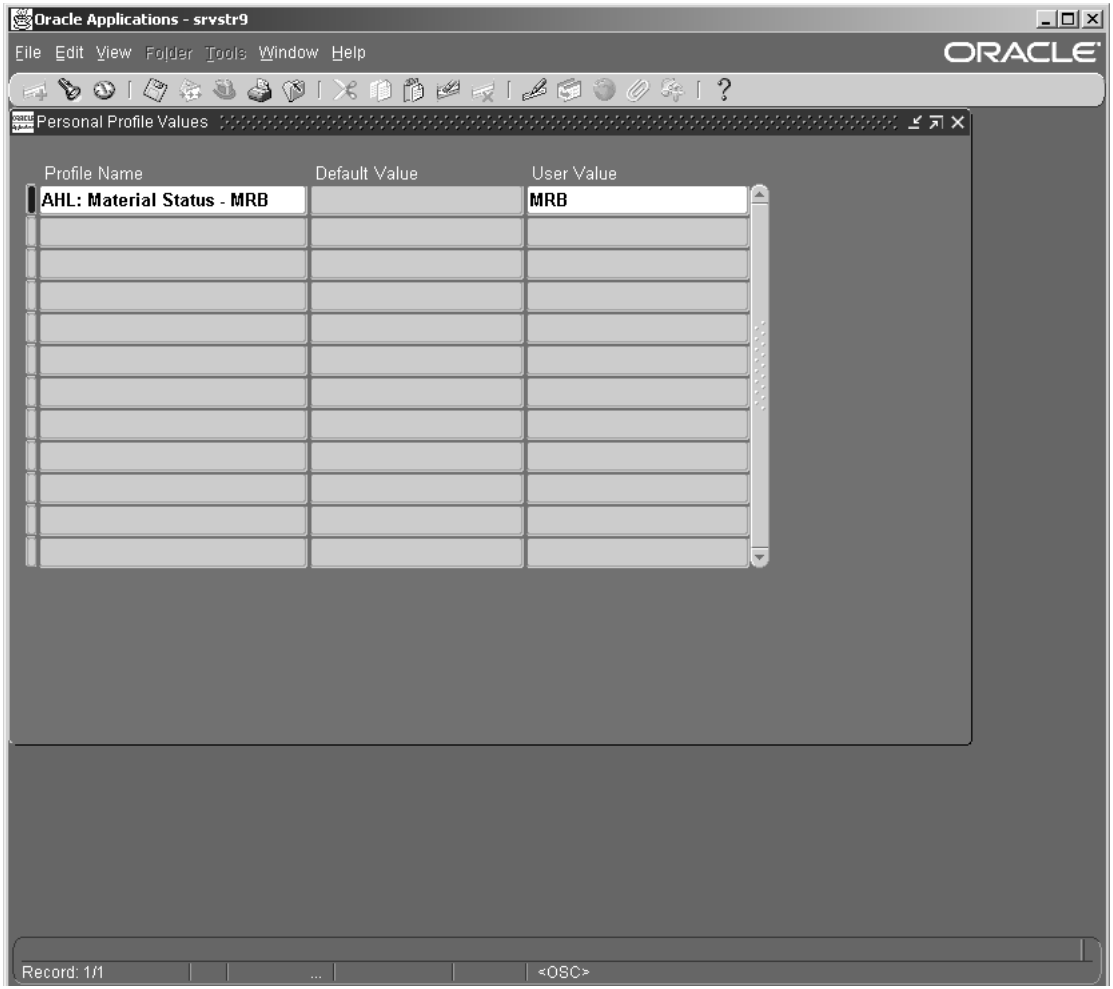


To set up Profile Options

1. Change responsibility to Application Developer. Navigate to Other > Profile. The Personal Profile Values window appears.
2. Set up the Profile options as indicated in the table below.

Profile Name	User Value
AHL: Material Status - Serviceable	Serviceable
AHL: Material Status - Unserviceable	Un-Serviceable
AHL: MRB Material Status - MRB	MRB

Figure 2–44 Personal Profile Values Window



3. Save your work.

See Also:

Oracle Warehouse Management User's Guide

Setting Up Oracle Purchasing

Before setting up Oracle Purchasing, you must ensure that:

- Oracle Inventory setup is complete
- Supply sub-inventories have been set up
- Oracle Human Resources setup is complete

To set up Oracle Purchasing:

1. Change responsibility to Manufacturing and Distribution Manager. From the Navigator, select Purchasing.
2. Set up the following in Oracle Purchasing:
    - Buyers
    - Approvals
    - Purchasing Options
    - Receiving Options
    - Financial Options
    - Open Accounting Periods

Figure 2–45 Approval Groups Window

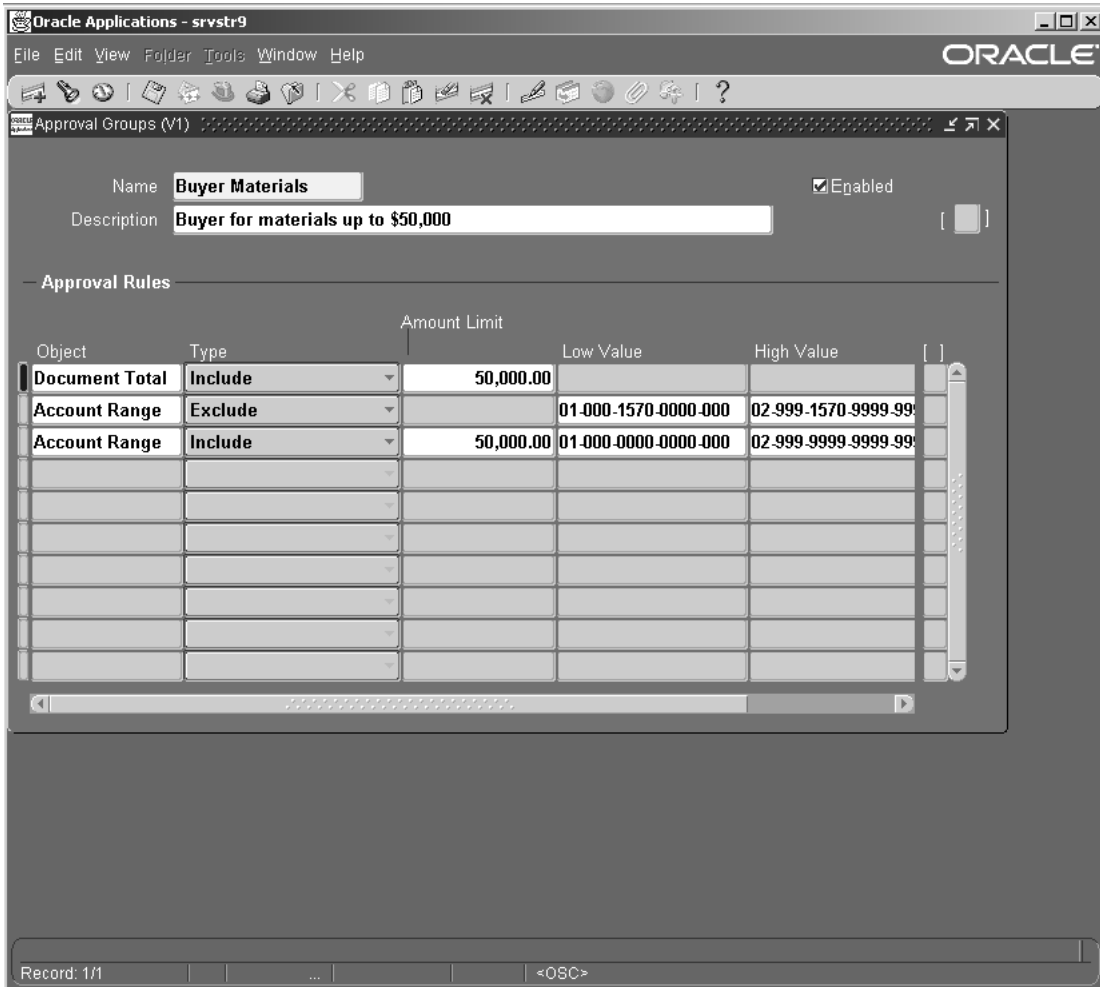


Figure 2–46 Buyers Window

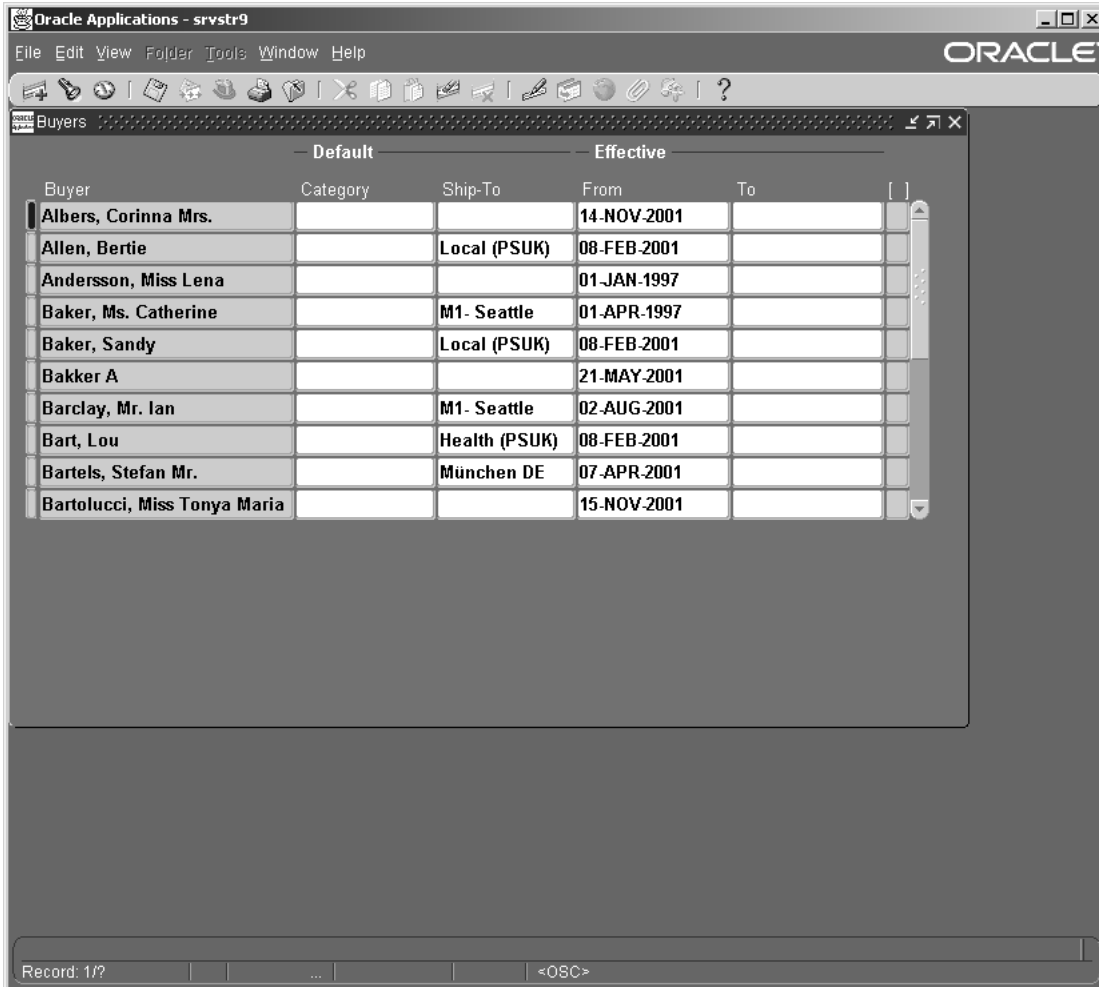
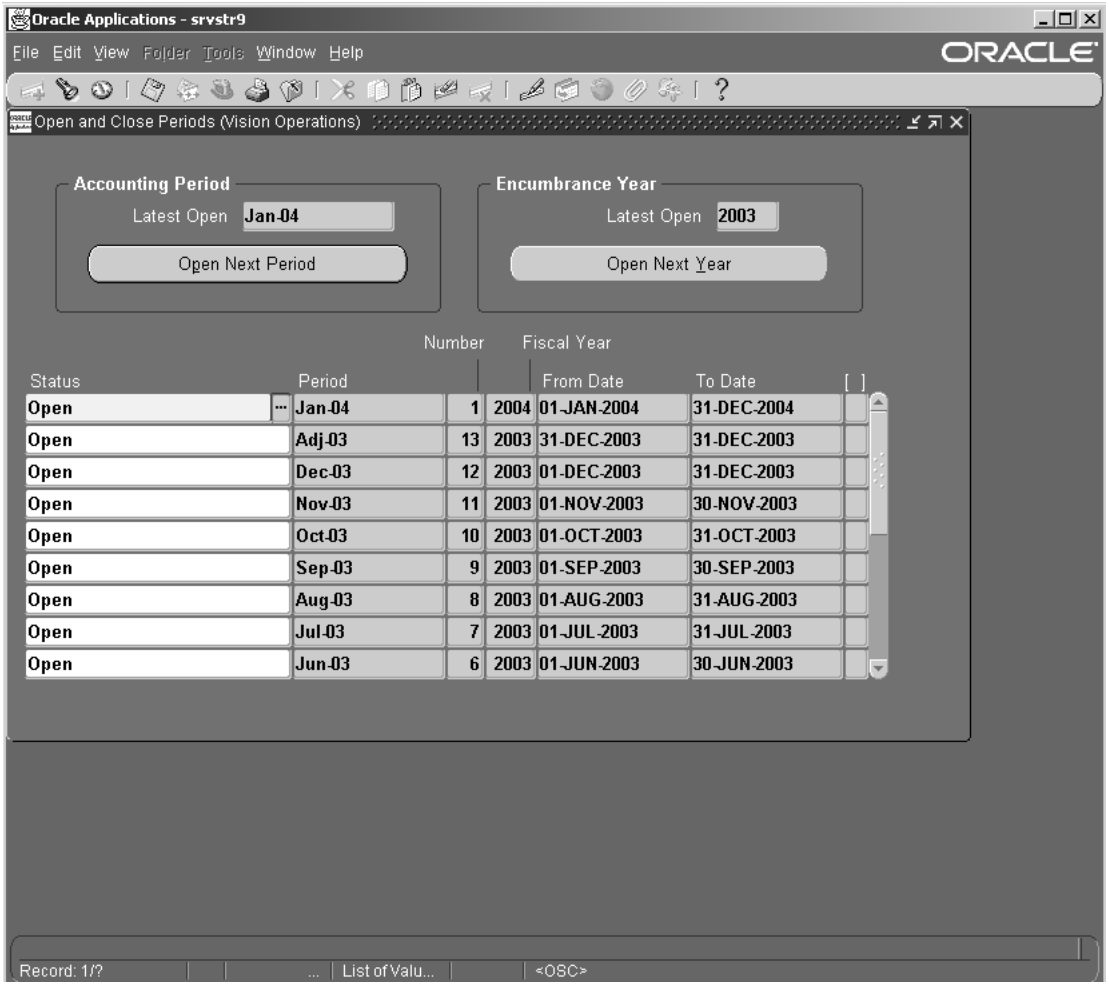


Figure 2–47 Open Accounting Periods Window



3. Save your work.

See Also:

Oracle Purchasing User's Guide

Setting Up Oracle Order Management

Before setting up Oracle Order Management (OM), you must ensure that:

- Oracle Inventory setup is complete
- Supply sub-inventories have been set up
- Oracle Purchasing setup is complete

Setting up Oracle Order management includes:

- Setting up Processing Constraints
- Creating Customers

To set up Processing Constraints:

1. From the Manufacturing and Distribution Manager responsibility, navigate to Order Management > Set Up > Rules > Security > Processing Constraints. The Processing Constraints window appears.
2. Query for the Order Sales Credit entity using the Find icon.
3. In the Constraints field, disable Create, Update, Delete, and Cancel Operations.
4. Click the Applicable To tab. Select the Authorized Responsibilities Radio Button and provide a list of Responsibilities that can perform the above listed actions.
5. Save your work.
6. Query for the Order Line entity.
7. Disable Create, Update, Delete, and Cancel operations for the same.
8. Click the Applicable To tab. Select the Authorized Responsibilities Radio Button and provide a list of Responsibilities that can perform the above listed actions. Save your work.

> **Note:** Setting up Processing Constraints ensures that Order Management users are not able to update Sales Orders created within CMRO.

To define Customers:

1. Navigate to Customers > Standard. The Find/Enter Customers window opens.
2. Define your customers.

Note: For outside order processing, you must set up customers in Order Management identical to the suppliers that you created in Oracle Purchasing. You must do this step for only those suppliers to whom you will be shipping out the parts for service. Oracle recommends that you create customer names to be exactly the same as your supplier name.

See Also:

Oracle Order Management User's Guide

Setting Up Oracle Project

Oracle's CMRO application uses Projects as part of its maintenance planning and production flows. A project is created for each visit work package and project tasks are created for each visit work package. The project tasks are used in the maintenance planning flow to allow the required materials to be pegged to the corresponding visit tasks through Oracle's MRP application. A visit's corresponding project is used in the maintenance execution flow to collect costs associated to resource and material transactions performed in CMRO's Production module. Project Manufacturing's standard billing functionality can be used to generate the required reports for the corresponding visit work packages.

Setting up Oracle Projects includes the following steps:

- Creating a Project Template
- Assigning the Project Template name to an user profile

To create a Project Template:

1. Change responsibility to Project Super User. From the Navigator, select Setup > Projects > Project Templates.
2. Click on New. Enter the required information.
3. Select the Template check box to classify the project as template.
4. Ensure that all Project Class Categories that are marked Required are included, else you cannot approve Project Templates. Save the Project Template.

Note: This template should be created for the applicable inventory master organization. All projects created for maintenance visits use this project template.

5. The Project Status changes to Submitted. For more information about the creation of project templates and the manner in which you use them to create projects and submit for approval, refer to the *Oracle Projects User's Guide.*

To assign the Project Template name to an user profile

1. Change responsibility to System Administrator. From the Navigator, select Profile > System. The Find System profile Values window appears.
2. Find System Profile Value - AHL: Default Project Template ID.
3. Select the Project Template that you created from the Site LOV.
4. Save your work.

Note: You can change most of your user profile options; values you enter in the User Value field overriding the values preset by the System Administrator. A few profile options cannot be changed, but are displayed for informational purposes only. To change the User Profile options, from the Application Developer Responsibility, navigate to Other > Profile. Enter the required values in the Personal Profile Values window.

For for information on System profile options and the procedures for setting them up, refer to the *Oracle Applications System Administrator's Guide.*

Verifying/Updating the Project Created in the Visit Work Package(CMRO)

Each time the maintenance planner creates a project in Visit Work Package(CMRO), the project's parameters must be manually defined.

To verify/update the project created in the CMRO Visit Work Package:

1. Change responsibility to Manufacturing and Distribution Manager. From the Navigator, select Project > Project Definitions > Project Parameters. The Project Parameters window appears.

2. Enter the Visit Number in the Project Number field to search for the project created in Visit Work Package.
3. Verify the Organization name.It should be the same as the Visit Work Package organization.
4. Optionally, change the Cost Group.
5. Optionally, change the Default WIP class.
6. Select the Invoice Transfer tab.Optionally, change the IPV.
7. Make other changes if required.

See Also:

Projects User Guide Release 11i

Setting Up Oracle Enterprise Asset Management

Oracle CMRO uses the same work order system as Oracle Enterprise Asset Management (eAM). It also uses the Oracle eAM functionality to complete operations. Oracle CMRO benefits from Oracle eAM's enhanced integration with Oracle Costing.

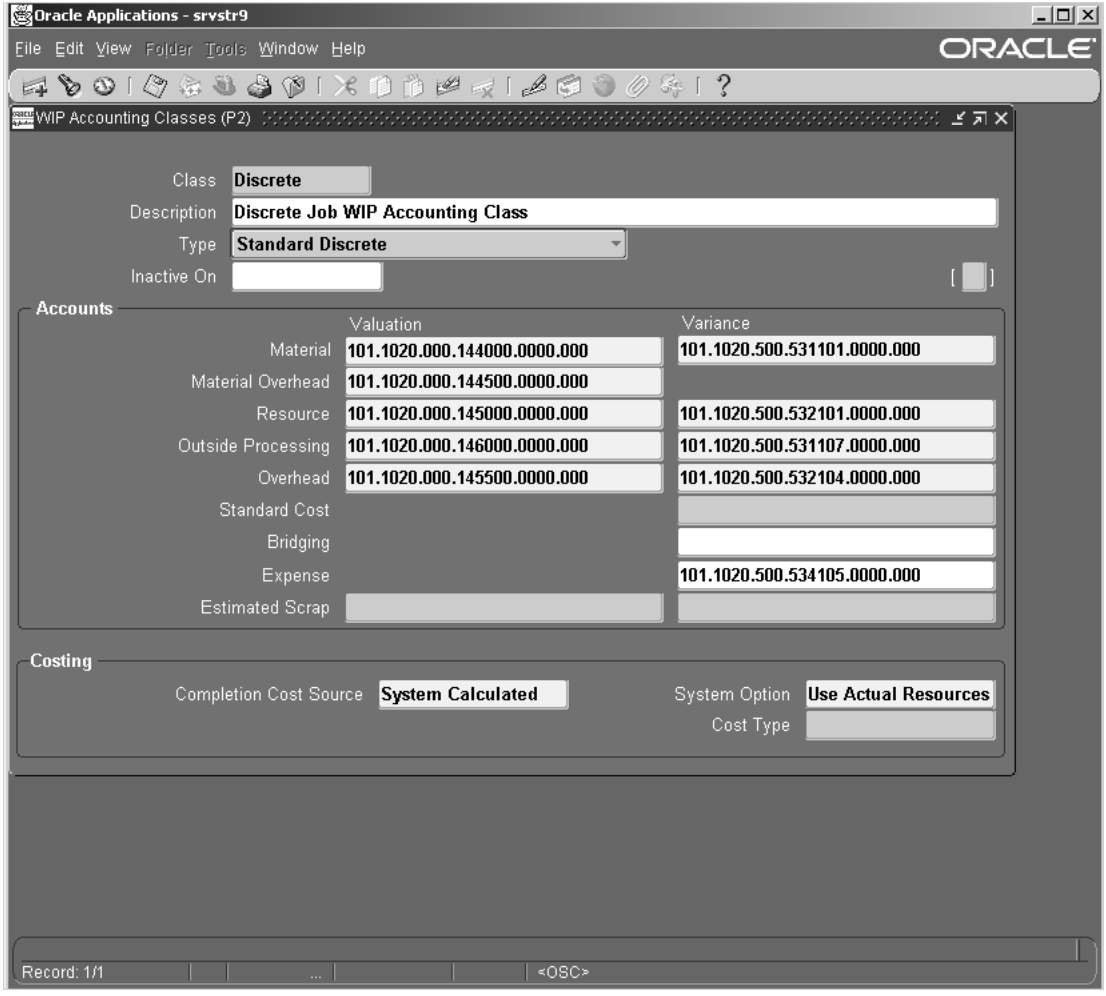
Before setting up Oracle eAM, you must ensure that:

- Oracle Inventory setup is complete
- Oracle WIP setup is complete
- Oracle BOM setup is complete
- Oracle Purchasing setup is complete

To set up Oracle Enterprise Asset Management:

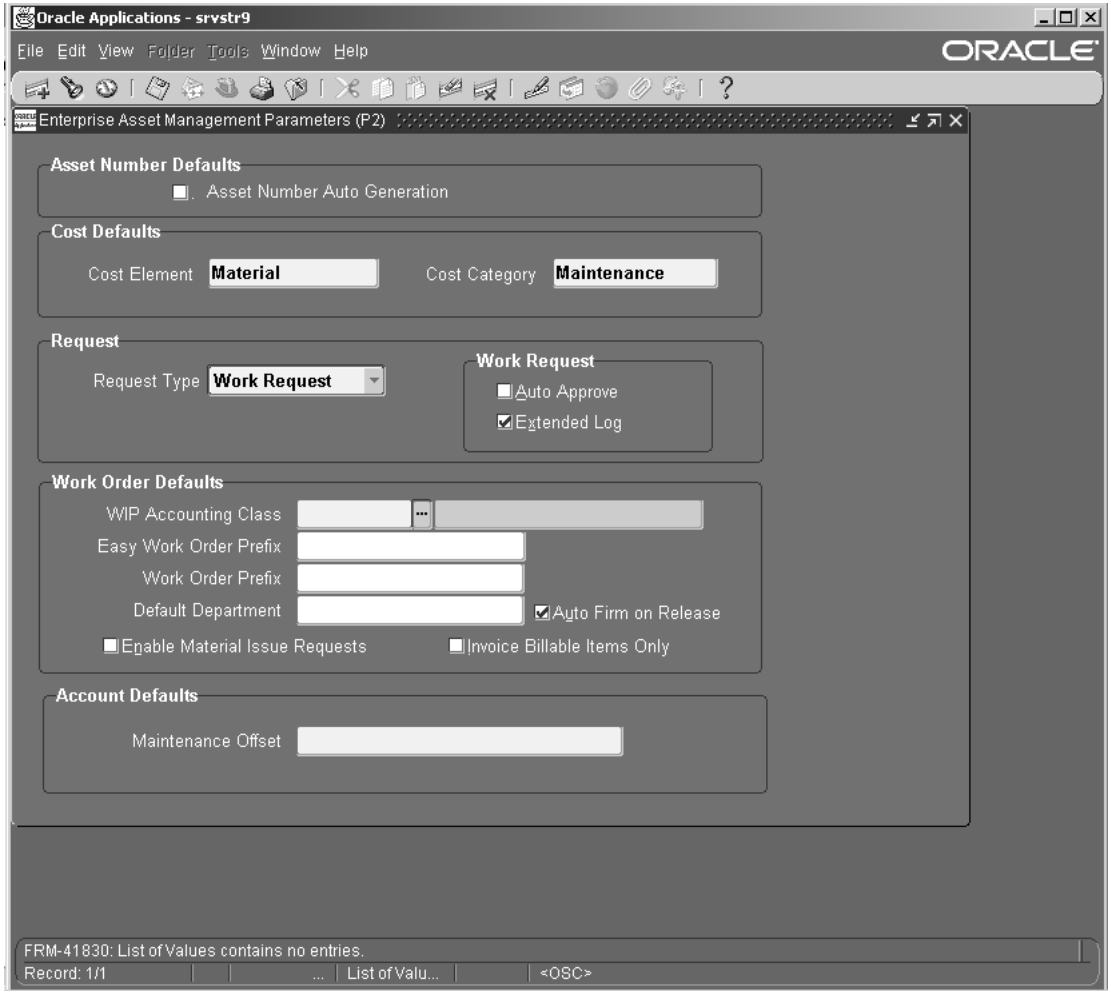
1. Change responsibility to Enterprise Asset Management.
2. Navigate to Setup > WIP > WIP Accounting Classes. Set up the following WIP Accounting Classes:
   - Standard
   - Expense
   - Maintenance
   - Asset Non-Standard

Figure 2–48 WIP Accounting Classes Window



3. Set up the eAM parameters.

Figure 2–49 Enterprise Asset Management Parameters Window

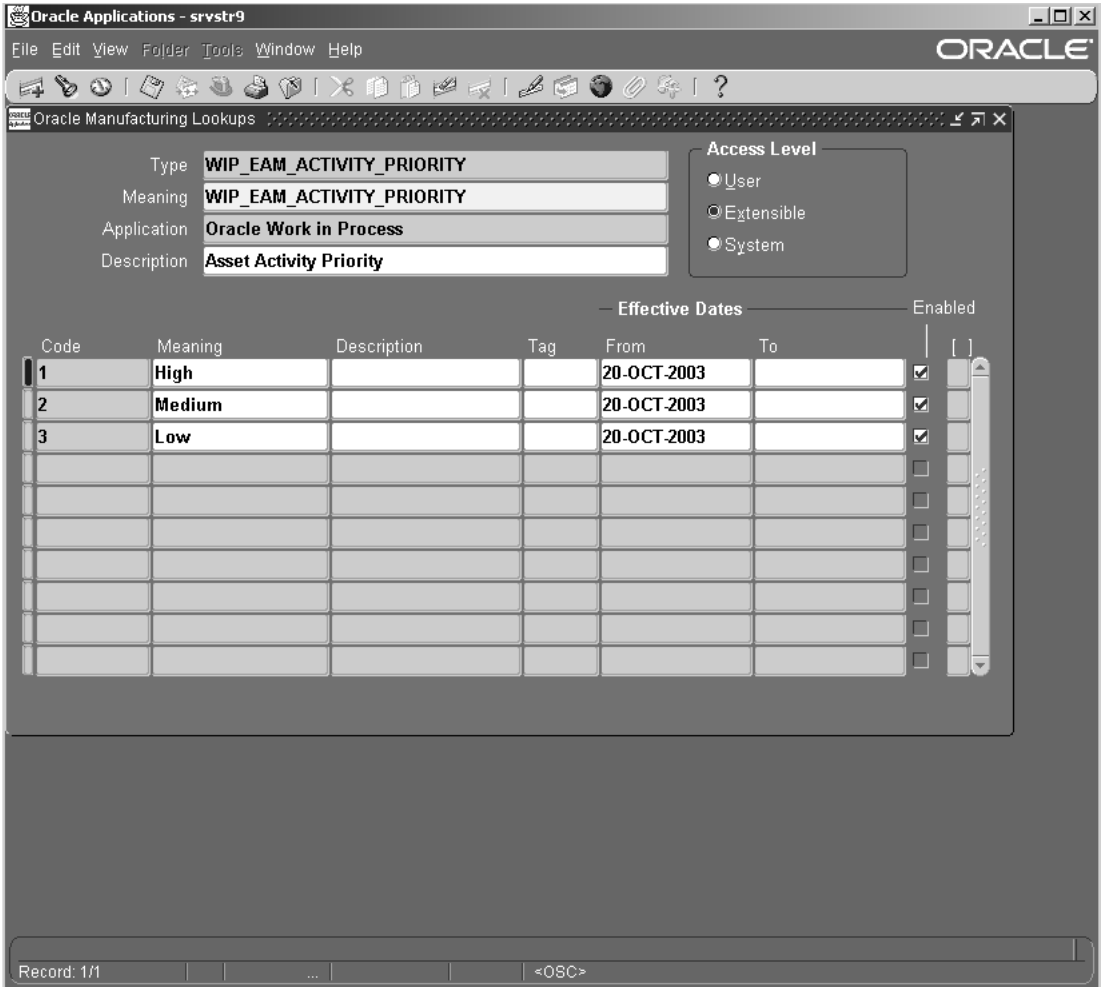


4. Navigate to Setup > Category > Category Codes. Set up the Asset Category Code for structure Asset Management.
5. To establish the Asset Category as the default category, navigate to Set up > Category > Category Sets. The Category Sets window appears.

6. Query for Enterprise Asset Management in the Name field. Select the Category code that you created from the Default Category list of values.
7. Save your work.
8. Navigate to Setup > Lookup. The Oracle Manufacturing Lookups window appears. Query for WIP_EAM_ACTIVITY_PRIORITY lookup in the Type field. Verify that the following values are setup:

Code	Meaning
1	High
2	Medium
3	Low

Figure 2–50 Oracle Manufacturing Lookups Window



See Also:

Oracle Enterprise Asset Management User Guide

Setting Up Oracle Material Requirement Planning (MRP)

Before you set up Oracle MRP, you must ensure that:

- Oracle Inventory setup is complete
- Supply sub-inventories are set up
- Organization Items are set up with MRP Planning enabled
- Oracle Purchasing setup is complete
- Oracle WIP setup is complete
- Oracle eAM setup is complete
- Oracle Project Manufacturing setup is complete
- Profile option INV: Capable to Promise is set to ATP Based on Collected Data
- The ATP Data Collection concurrent program is run

> **Note:** The ATP Data Collection concurrent program can be run from the Oracle Order Management responsibility(Order Management > Scheduling > ATP Data Collection). For more information on ATP Data Collection, refer to the *Oracle Global Order Promising Implementation and User's Guide*.

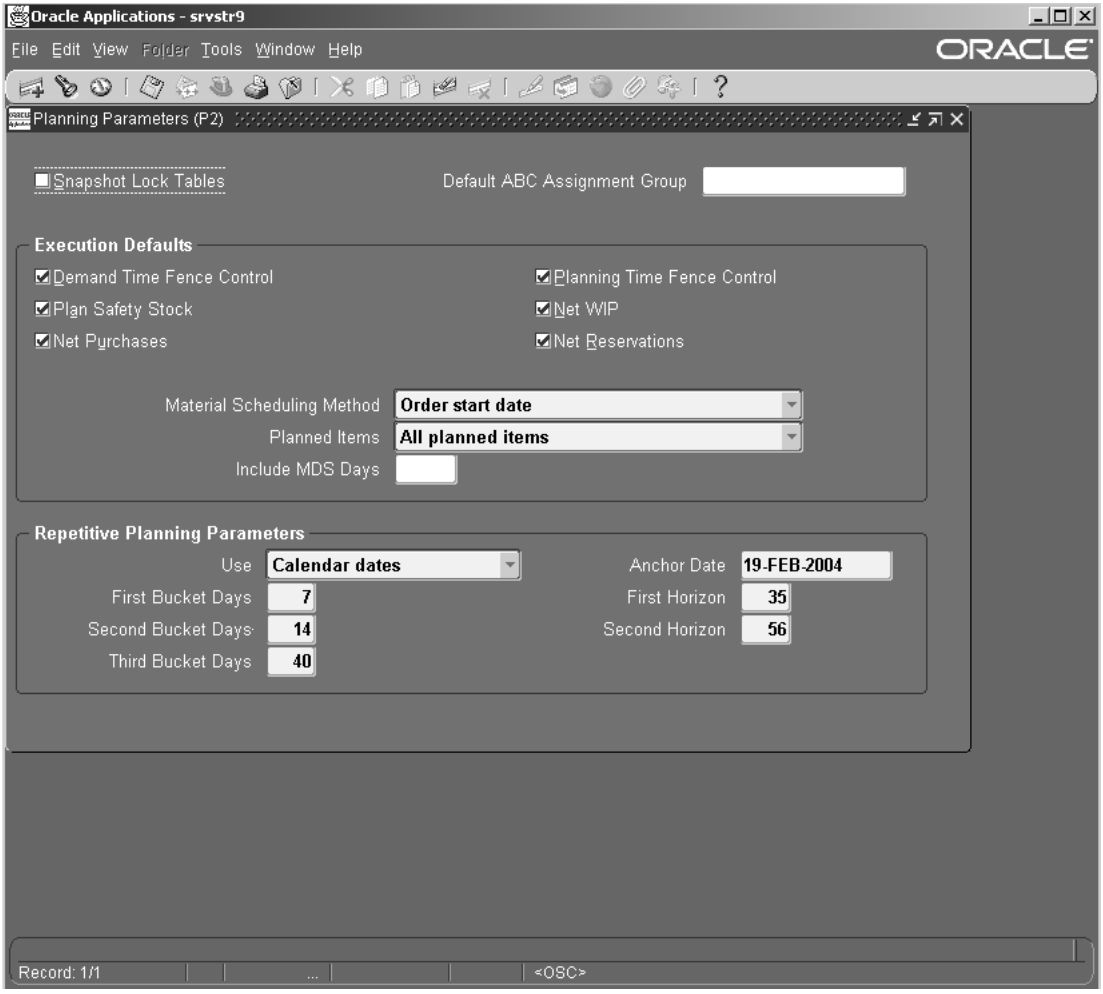
Setting up Oracle MRP includes:

- Setting up MRP parameters
- Setting up Master Demand Schedule (MDS) Names
- Setting up MRP Names

To set up MRP parameters:

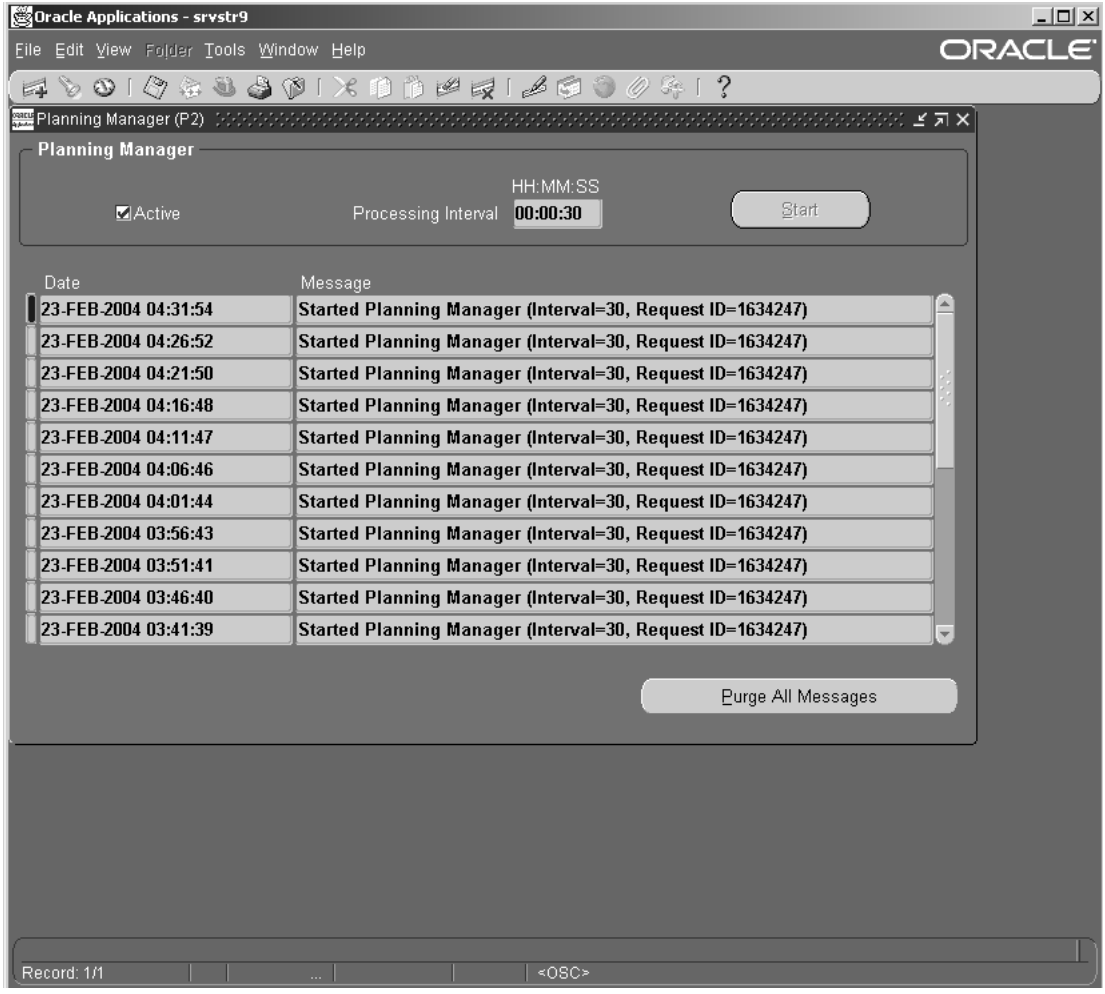
1. Change responsibility to Manufacturing and Distribution Manager. From the Navigator, select Material Planning > Setup > Parameters. The Planning Parameters window opens.
2. Select the Enable Net WIP and Net Reservations check boxes.
3. Select Order start date from the Material Scheduling Method drop-down menu.
4. Select All planned items from the Planned Items drop-down menu.
5. Save your work.

Figure 2–51 Planning Parameters Window



6. Navigate to Material Planning > Setup > Planning Manager. Select the Active check box. If this check box is not selected, MRP will not pick up MDS entries from Visit Work Package.
7. Save your work.

Figure 2–52 Planning Manager Window

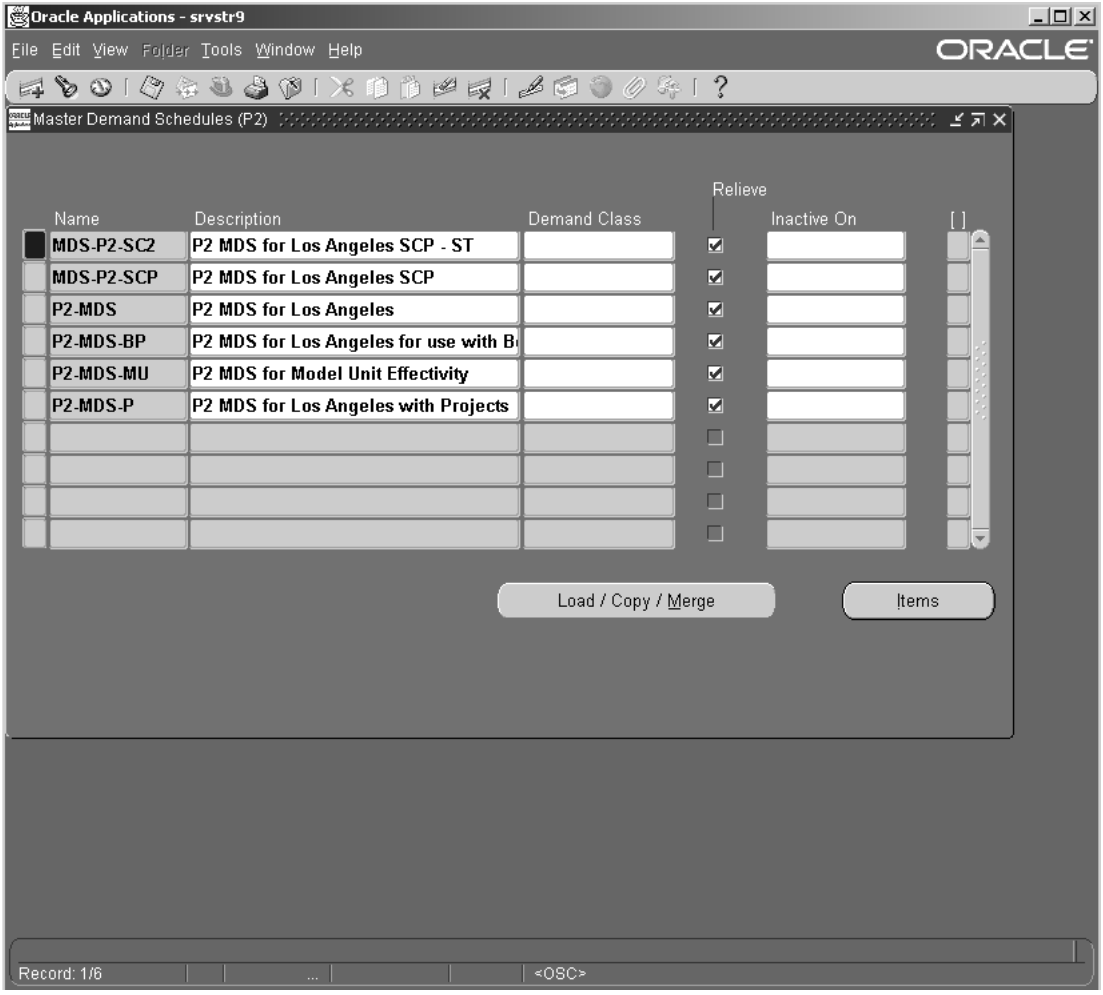


To set up MDS Names:

1. Navigate to Material Planning > MDS > Names. The Master Demand Schedules window appear.

2. Set up the MDS names. It is recommended that you define Names such that the user can easily identify with which subinventory the Master Demand Schedule is going to be associated.
3. Select the Relieve check box.
4. Save your work.

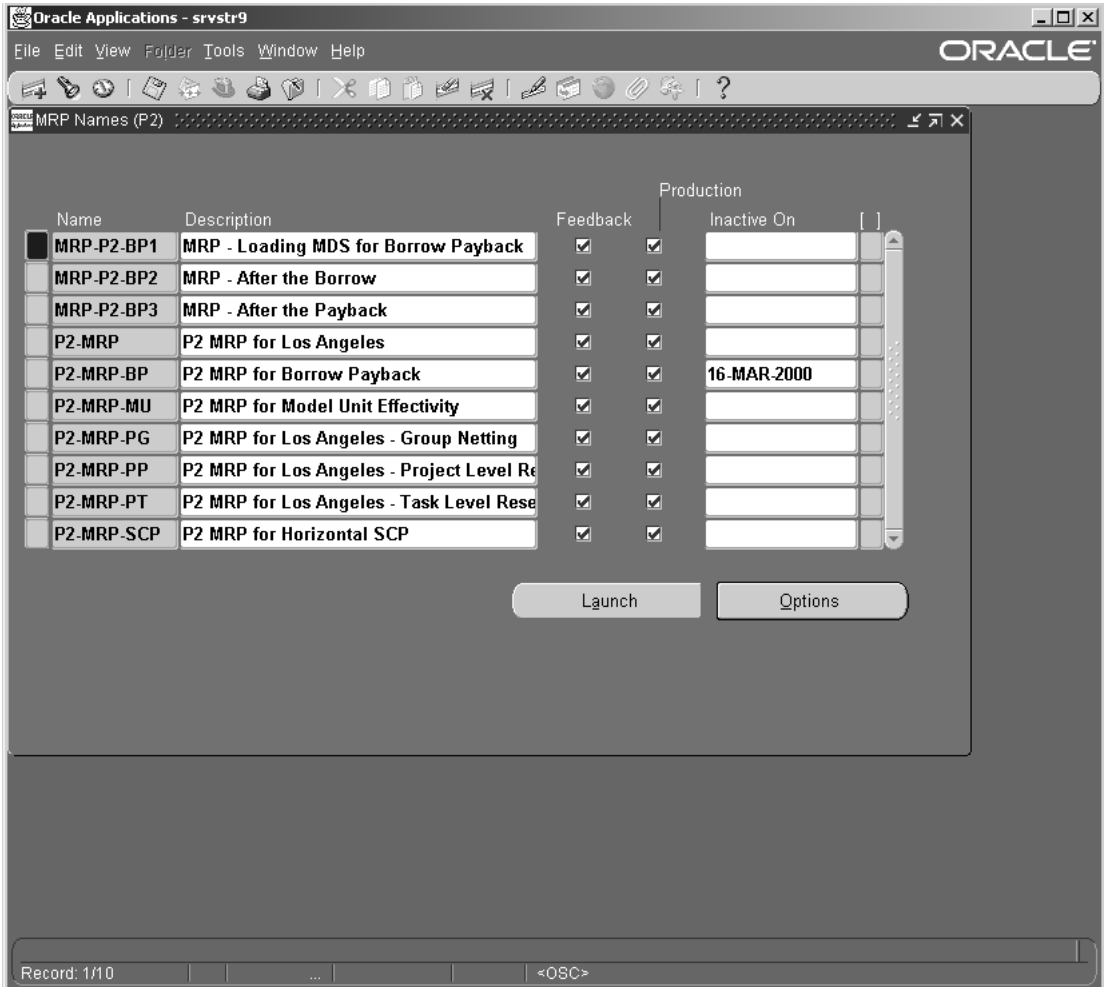
Figure 2–53 Master Demand Schedules Window



To set up MRP Names:

1. Navigate to Material Planning > MRP > Names. The MRP Names window appears.
2. Set up MRP names. Oracle recommends that you define MRP names in such a way that the planner can identify the specific subinventory it will be associated with.
3. Select the Feedback and Production check boxes.

Figure 2–54 MRP Names Window

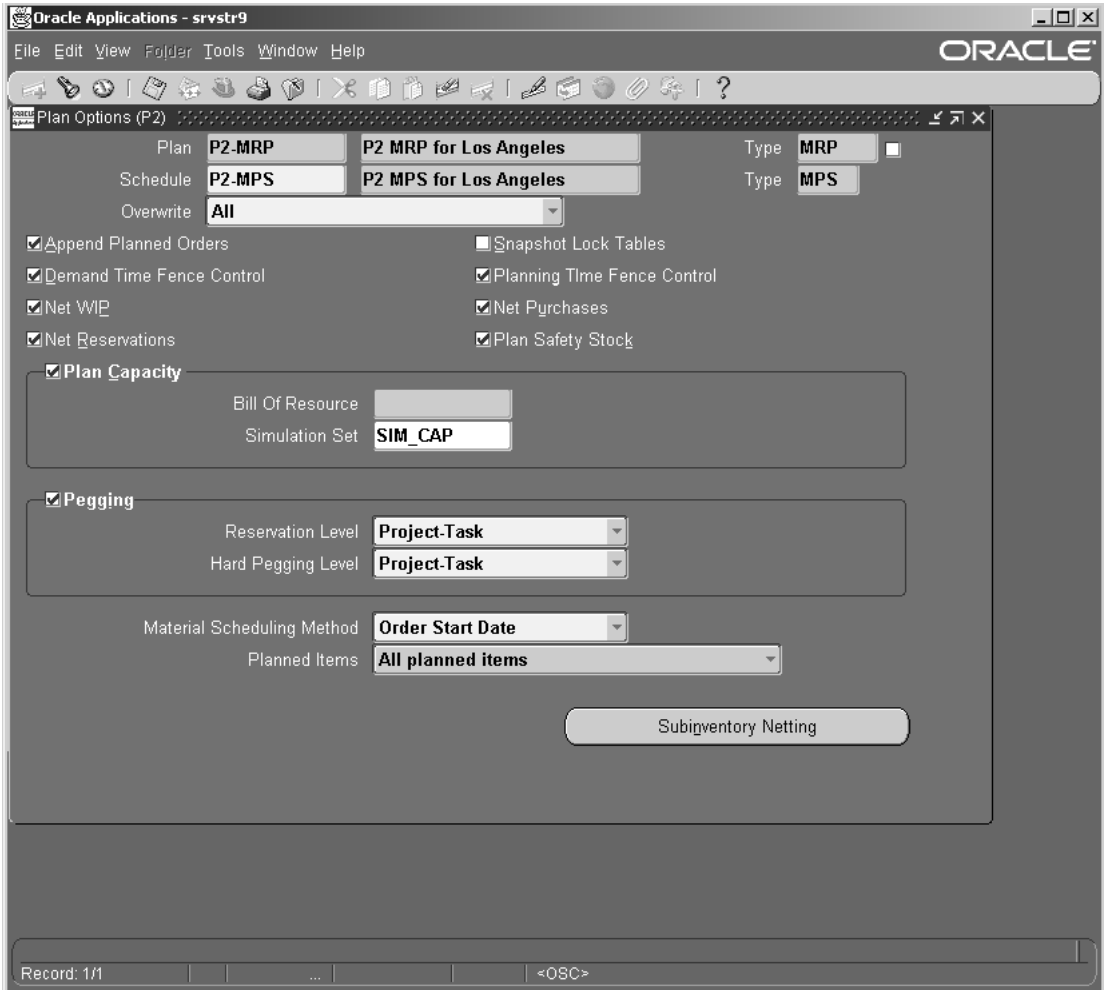


4. Click the Options button. The Plan Options window appears. Select the MDS name from the Schedule list of values. It is recommended that you select the MDS with the same subinventory name as the subinventory you intend to associate with this plan.
5. Select the following check boxes:
   - Append Planned Orders

- Net WIP
- Net Reservations
- Pegging

6. For Reservation Level and Hard Pegging Level, select Project-Task from their corresponding drop-down menus.
7. Select Order Start Date from the drop-down menu for Material Scheduling Method.
8. Select All planned items from the Planned Items drop-down menu.

Figure 2–55 Plan Options Window



9. Click the Subinventory Netting button. Select a single subinventory that will be associated with this plan.
10. Save your work.

Note: The MRP plan must be associated with a single subinventory for MRP/Production Planning to work properly. If you associate multiple sub-inventories with the plan then the Planner/Materials Manager will have to manually check material requirements against availability. It may entail moving materials between sub-inventories in order to meet the job's material requirements.

See Also:

Oracle Materials Requirement Planning User's Guide

Setting Up Oracle Service

Oracle Service provides Oracle CMRO with the functionality to create and update service requirements in a maintenance organization. The association of a service request to a visit task and production job allows the maintenance organization to track the service difficulty (non-routine) to the associated progress or resolution performed by the maintenance personnel.

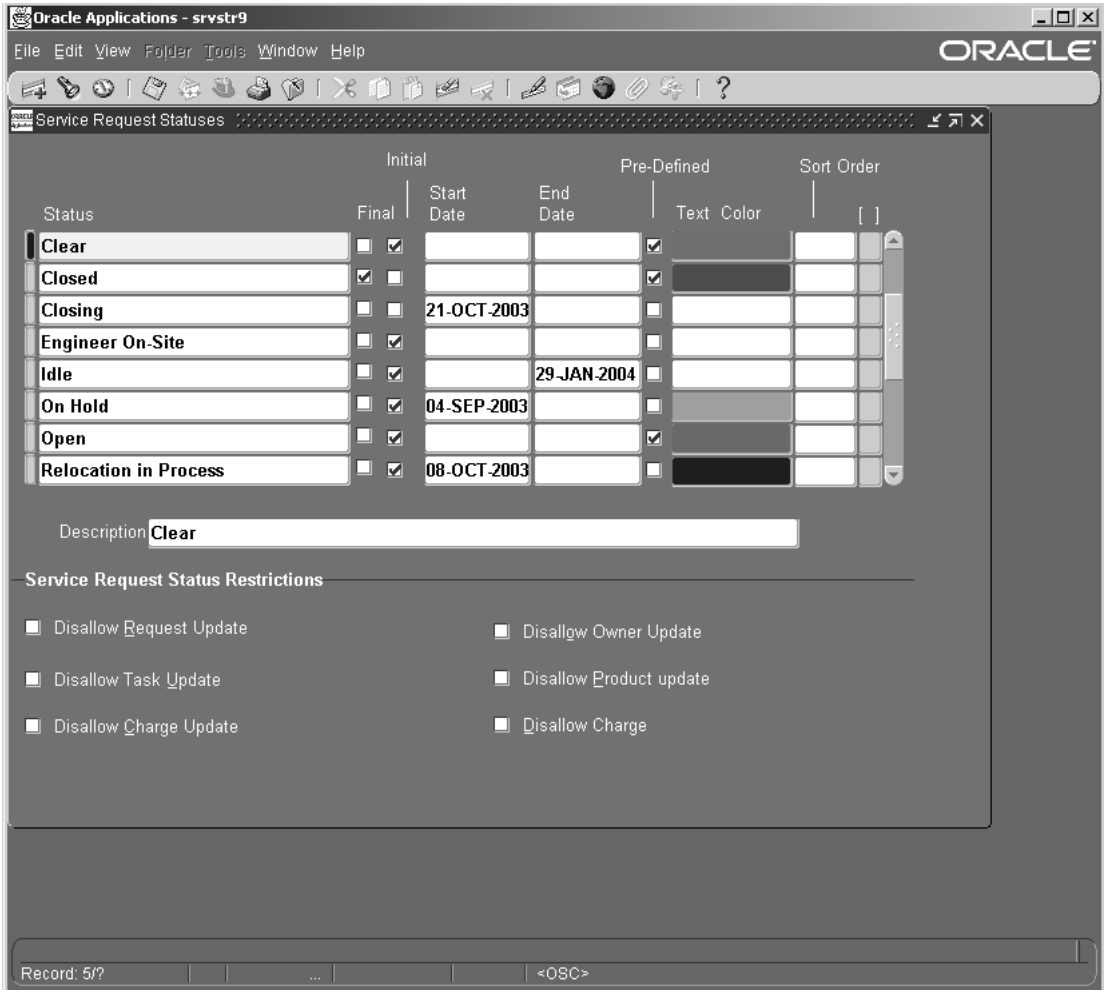
Setting up Oracle Service includes:

- Verifying/ Defining Service Request Type, Status, and Severity
- Setting up the Profile Options

To verify/define Service Request Type, Status, and Severities:

1. Change responsibility to Customer Support. From the Navigator choose Setup > Service Request > Request Status. The Service Request Statuses window appears.
2. You can define the following statuses:
   - New
   - Open
   - Working
   - Assigned
   - Closed

Figure 2–56 Service Request Statuses Window

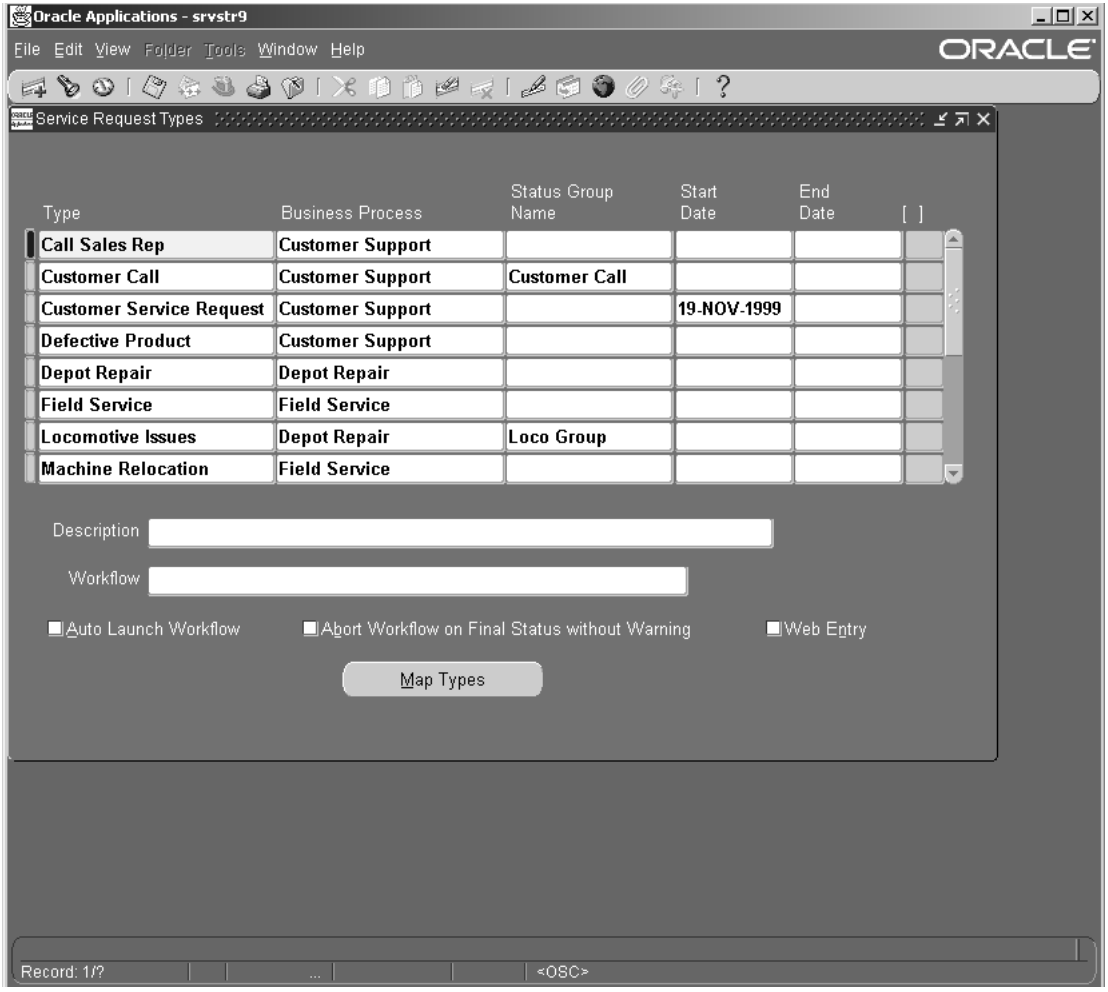


3. Navigate to Setup > Service Request > Request Types. The Service Request Types window appears.

Note: You define service Request Types to categorize your service requests. For each service request type, you can set up related service request statuses that correspond with each service request type

4. You can define the following Request Types:
   - Pilot Log
   - Cabin Log
   - Mechanic Log
   - Inspection Log
   - Technical Problem

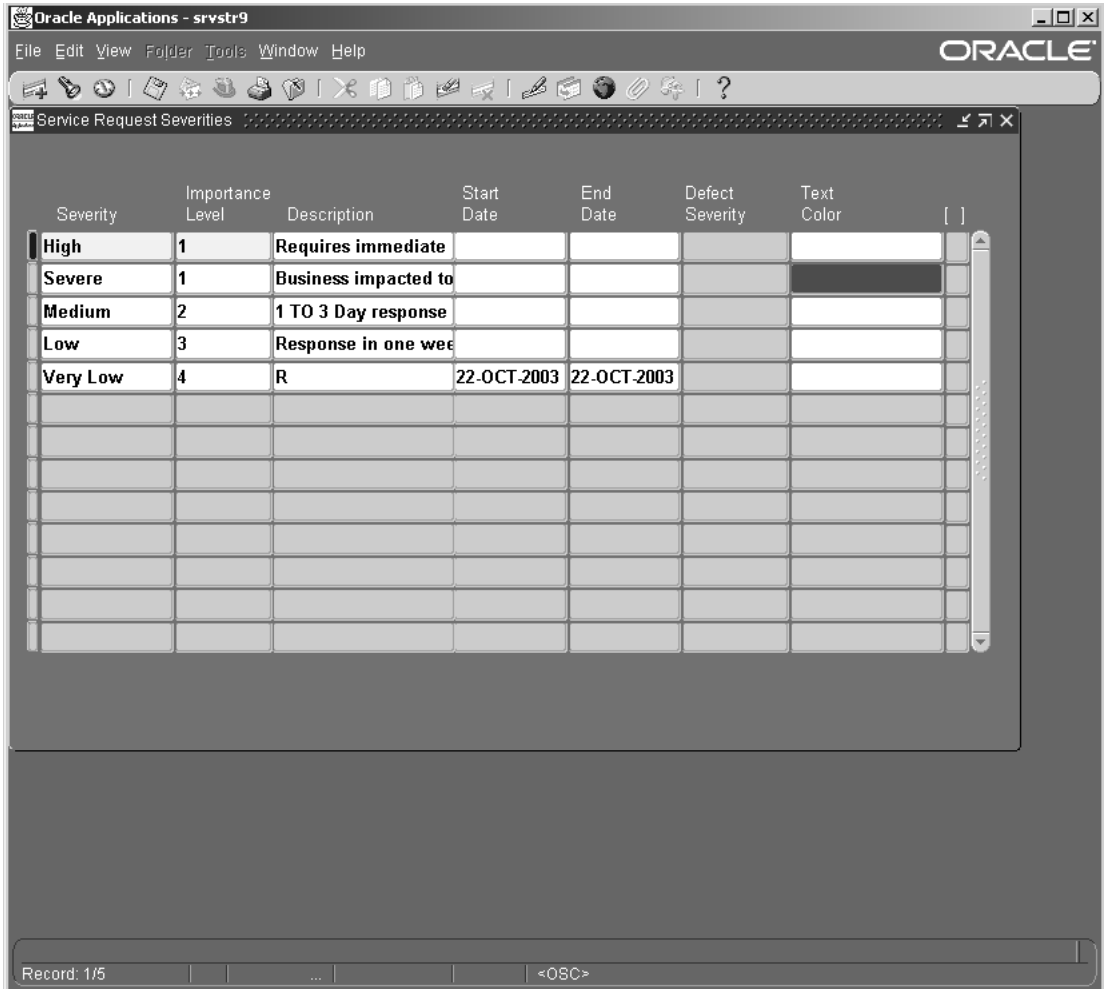
Figure 2–57 Service Request Types Window



5. Navigate to Setup > Service Request > Request Severities. The Service Request Severities window appears.
6. Verify that the following Request Severities are defined:
   - High
   - Medium

- Low

Figure 2–58 Service Request Severities Window



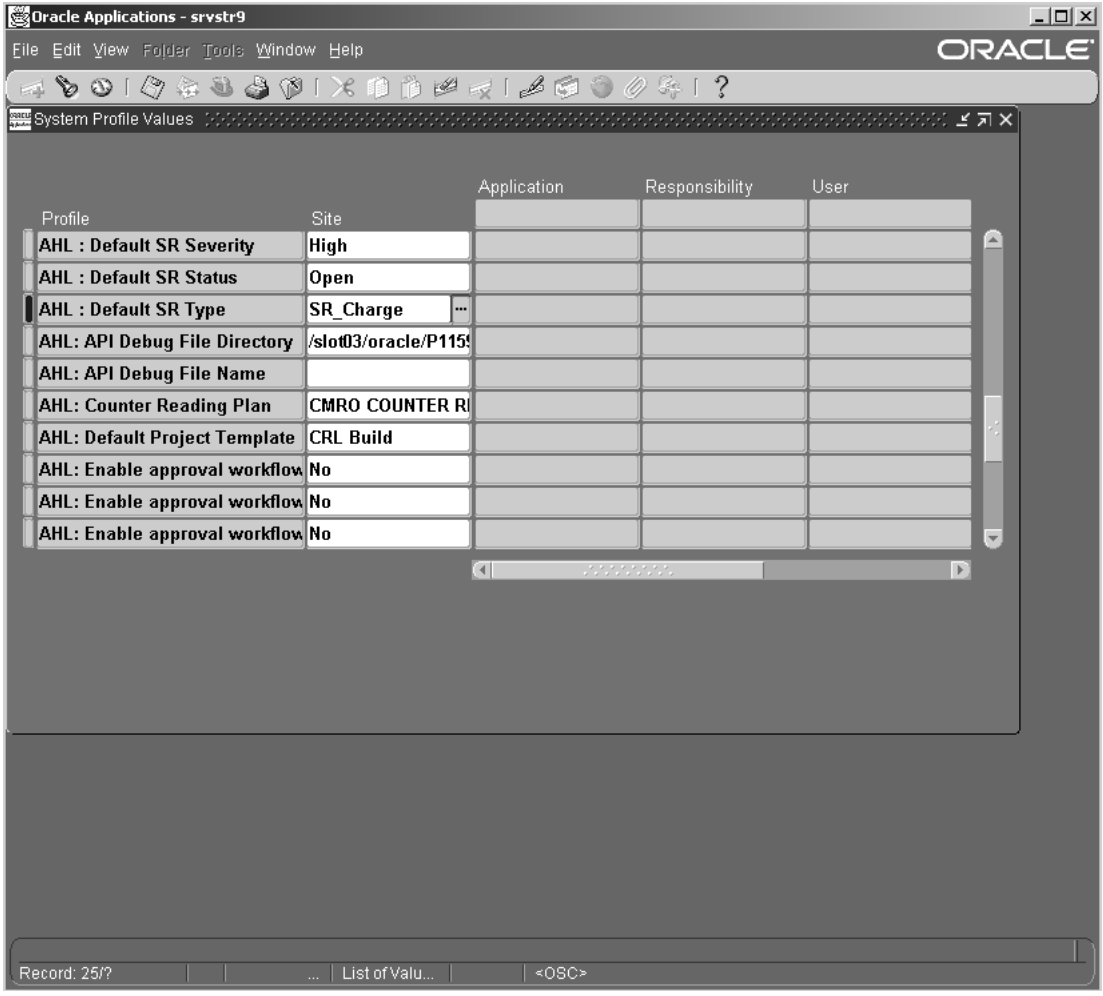
Select values in the Type, Status, and Severity fields, if they are different than the default values. Default values in these fields are governed by the profiles setup. For more information on profiles, see Setting Up Oracle Support Profiles in the *Oracle Support Implementation Guide*.

You can override these defaults if necessary by changing the appropriate profile options. For more information, see Setting Up Support Related Profile Options in the *Oracle Support Implementation Guide*.

To set up the Profile Options:

1. Change responsibility to System Administrator. Navigate to Profile > System. The Find System Profile Values window appears.
2. Find System profile value - AHL: Default SR Customer Name. Select the default Customer Name from the Site LOV.
3. Save your work.
4. Find System profile value - AHL: Default SR Severity. Select the default Severity Value from the Site LOV.
5. Find System profile value - AHL: Default SR Status. Select a default Status Value.
6. Find System profile value - AHL: Default SR Type. Select the default SR Type.
7. Save your work.

Figure 2–59 System Profile Values Window



Note: You can change most of your user profile options; values you enter in the User Value field override values preset by the System Administrator. A few profile options are set for informational purposes only, and cannot be changed.

See Also:

Oracle Customer Support Implementation Guide

Setting Up Oracle Contracts

CMRO's Outside Processing module uses the Oracle Contracts' functionality supporting Loan and Borrow Transaction.

Before you set up Oracle Contracts, you must ensure that:

- Oracle Inventory setup is complete
- Oracle Receivables setup is complete
- Oracle Order Management setup is complete
- Oracle Purchasing setup is complete

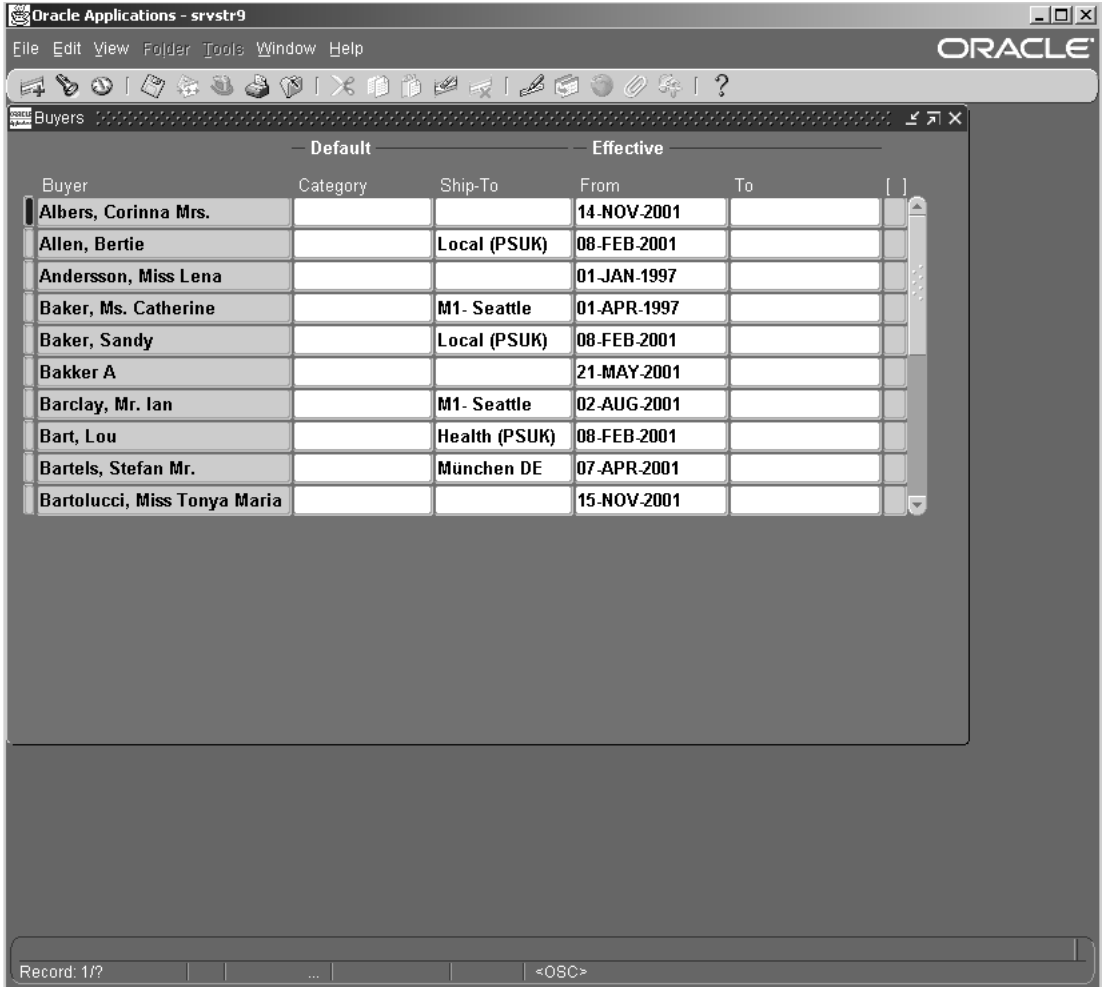
Setting up Oracle Contracts includes:

- Setting up Buyers
- Setting up Suppliers
- Other Setups

To set up Buyers:

1. From the Navigator, select Contract Manager > Setup > Others > Buyer > Buyer. The Find Buyer window appears. Click the New Buyer button.
2. Select a Buyer Name from the list of values.
3. Enter other required data.

Figure 2–60 Buyers Window

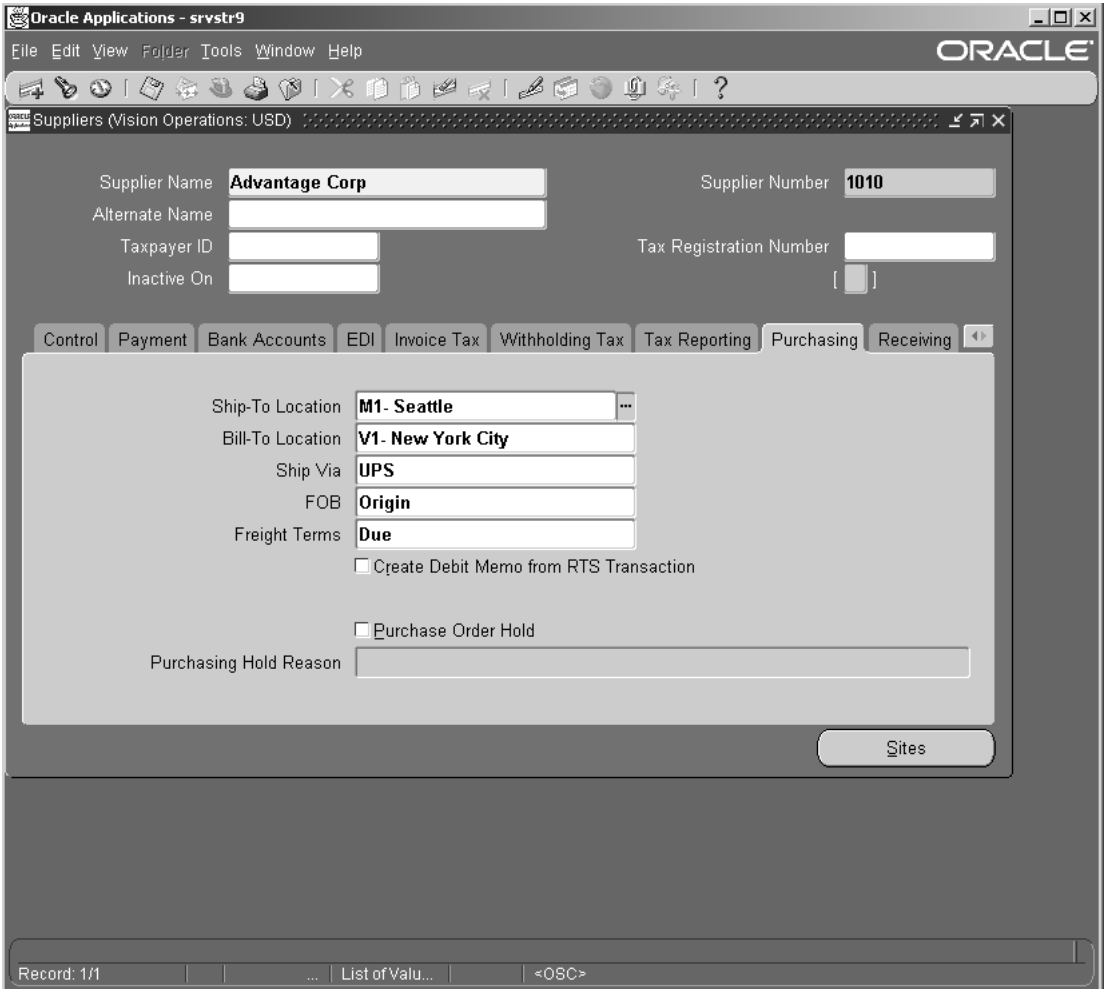


Note: The buyers setup in Oracle Contract will be displayed in the CMRO Select Buyer Name list for the user to select as the OSP Buyer.

To set up Suppliers

1. Navigate to Contract Manager > Setup > Others > Supplier > Entry. The Suppliers window appears.
2. Enter required information.

Figure 2–61 Suppliers Window



Note: These setup suppliers will be available in CMRO OSP Vendor Name list for the user to select.

Other setups:

1. Navigate to Contract Manager > Setup > Contract. Verify the contract setup.
2. Set up Standard Articles and Categories and Sources.
3. Optionally, set up Customers.
4. Set up Contract Groups and Contract Events.

Note: To find the approver of the contracts, you must look at the profile value: OKC: Contract Approver.

See Also:

Oracle Contracts Core Concepts and Procedure Guide

Setting Up Oracle Install Base

After you define the master configuration, a framework exists that describes the general characteristics of the system, including the engineering rules for assembly. The user can then create a unit configuration. Oracle Complex uses the Installed Base' methods to populate the database with transactions representing the as operated configuration of the system.

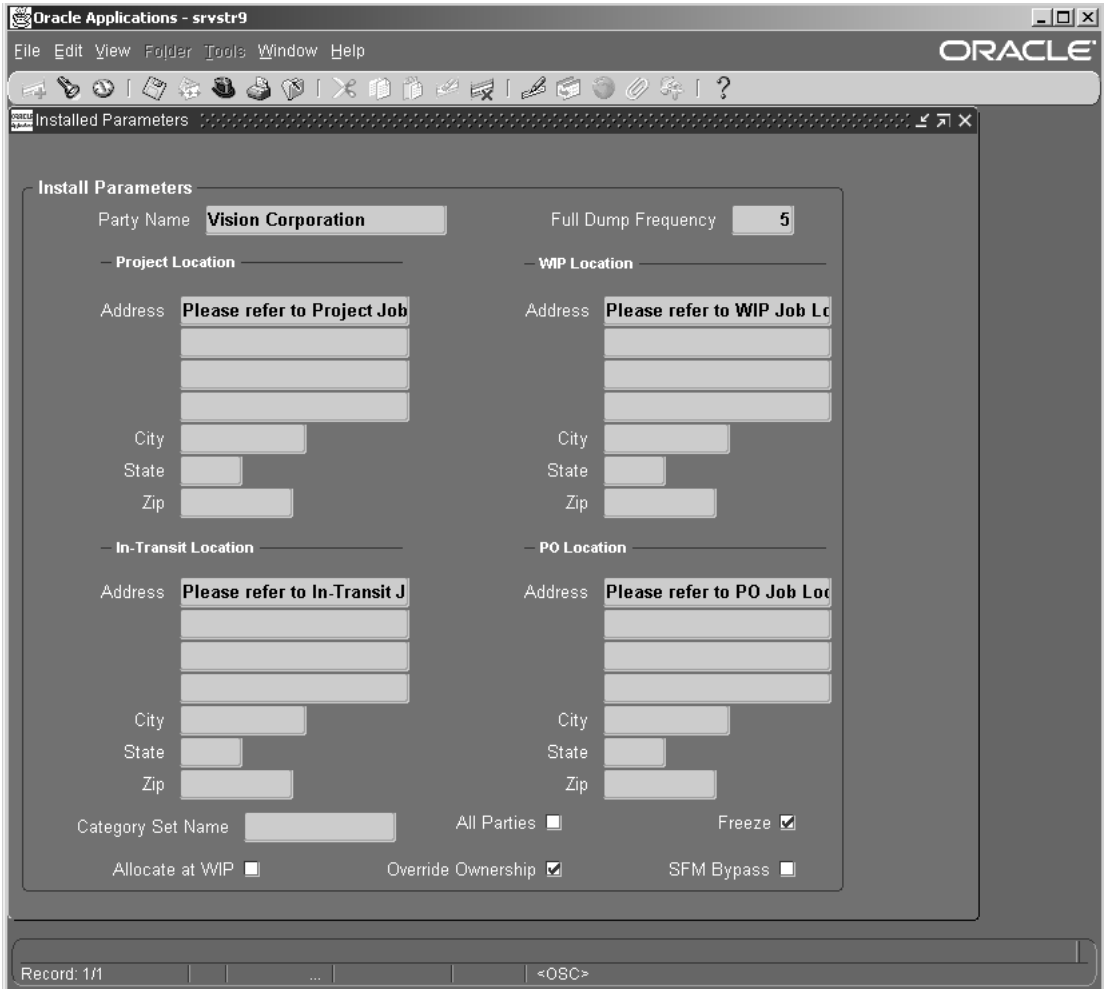
Before you set up Oracle Install Base, ensure that:

- Oracle Inventory setup is complete
- Oracle Counters setup is complete
- Supplier and supplier sites are set up (Purchasing)
- Customer and customer sites are set up (Receivables)

To set up Oracle Install Base:

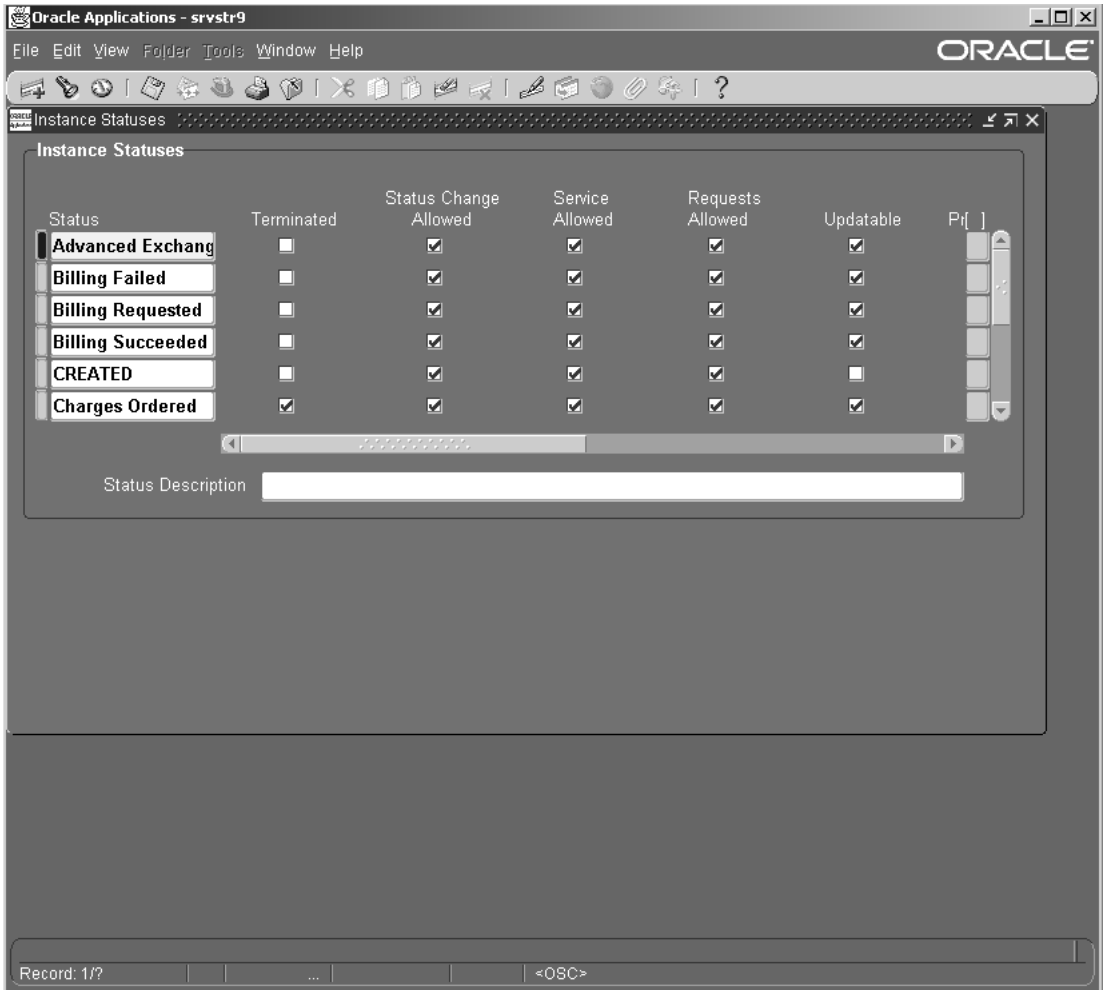
1. Change responsibility to Oracle Installed BaseAdmin. Navigate to Setup > Install Parameters.
2. Set up Install Parameters.

Figure 2–62 Installed Parameters Window



3. Set up Instance Statuses.

Figure 2–63 Instance Statuses Window



4. Optionally, set up Maintain Locations.
5. Set up Asset Locations.

See Also:

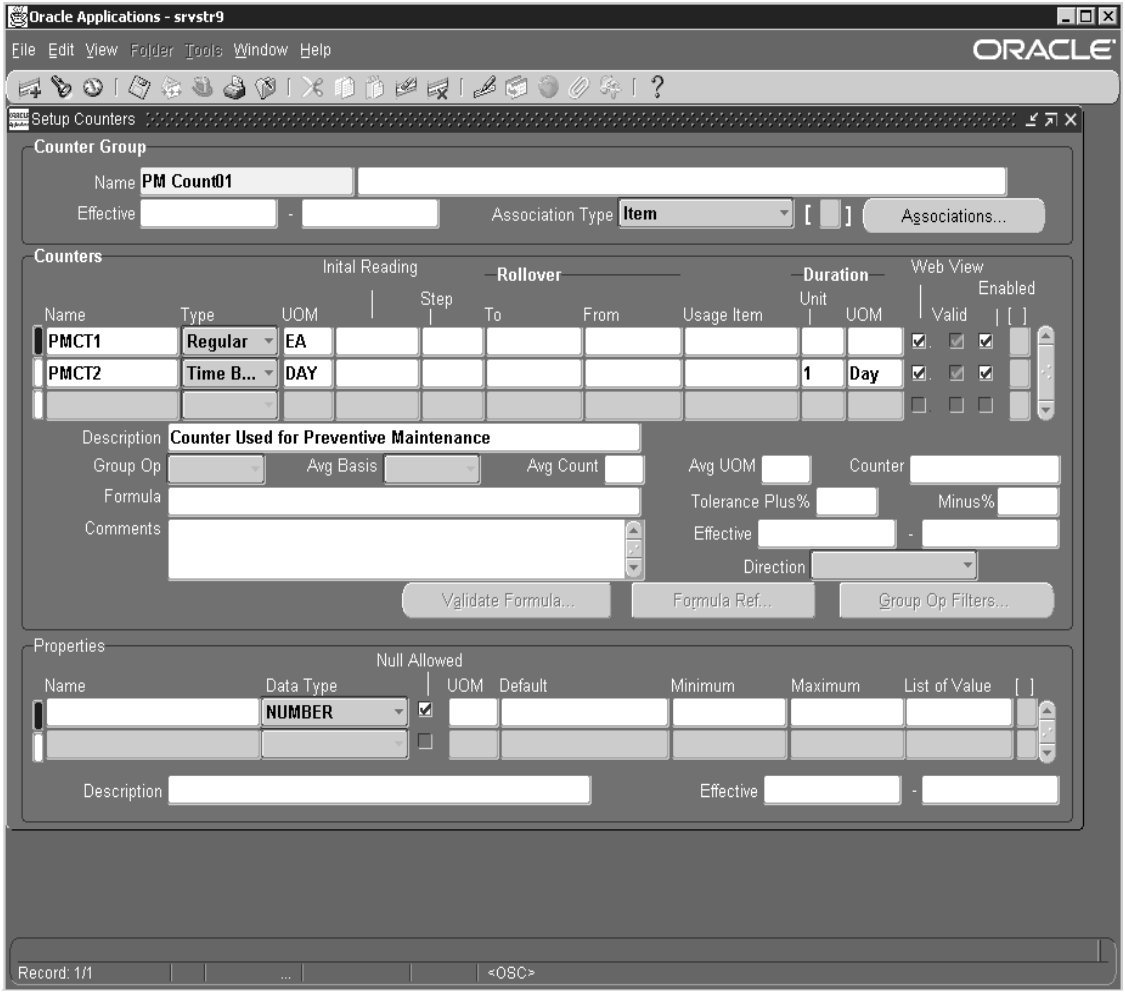
Oracle Install Base Implementation Guide

Setting Up Oracle Counters

To set up Oracle Counters:

1. From the Navigator, select Field Service Manager > Field Service Set Up > Counters > Define Counters.
2. Click the New button. Set up Counter Groups.

Figure 2–64 Setup Counters Window



3. Associate the Counter Groups with the Install Base items.
4. Optionally, associate the Counter Groups with Maintain Locations.

See Also:

Oracle Service Implementation Guide

Setting Up Oracle Quality

Oracle CMRO uses the setup from Route Management and the system profile options in Oracle Quality, to allow maintenance organizations to capture quality elements for operations, jobs, deferrals, scrap management, and capturing counter value snapshots. This gives maintenance facility the flexible integration required to maintain reliable products.

Oracle CMRO provides seeded plan templates for routes, operations, job deferrals, MRB dispositions and counter reading capturing. These templates can either be used as-is or adjusted with additional quality elements, except the counter reading template which is used by CMRO in the background and cannot be changed.

Setting up Oracle Quality includes:

- Setting-up Route and Operation Quality Plans
- Setting-up Job Deferral, MRB Disposition Quality, Non-Routine Job Inspection and Non-Routine Operation Inspection Plans
- Setting up Counter Readings Quality Plan

Setting Up Route and Operation Quality Plans

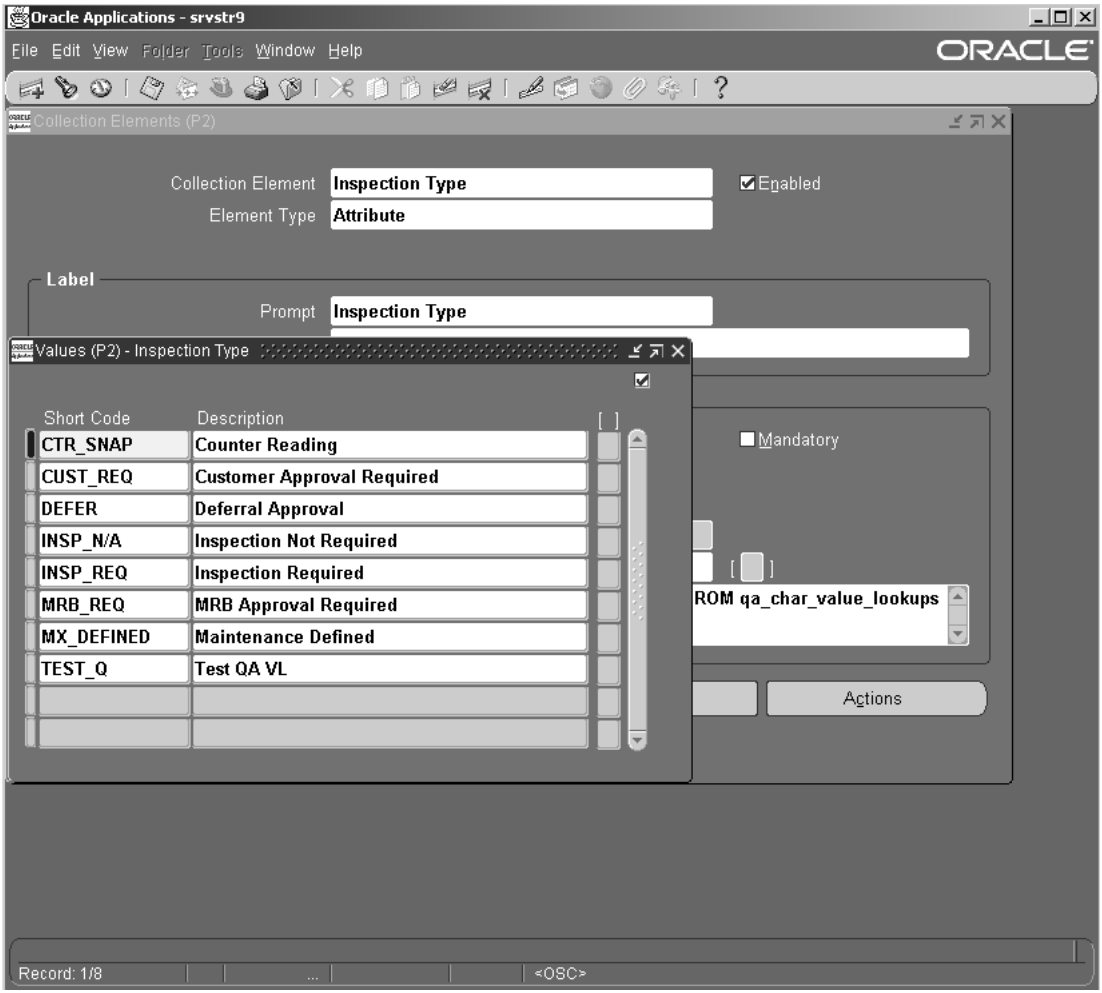
Creating Inspection Types

You can create the different Inspection Types for route and/or operation quality recording. The inspection types are maintained in a seeded collection element called Inspection Type. Creating collection elements, collection element types and collection plan types have no specific CMRO set up requirements.

To create Inspection Types:

1. Change responsibility to Manufacturing and Distribution Manager. From the Navigator, select Quality > Setup > Collection Elements. From the organization list, select the Organization that you want to set-up the quality plan for. The Collection Elements window appears.
2. Query for or find the Collection Element 'Inspection Type'.
3. Click the Values button.
4. Define Inspection Types.

Figure 2–65 Collection Elements Window



Note: The defined inspection types are the values that appear in the list of values for the quality inspection type attribute in routes and operations.

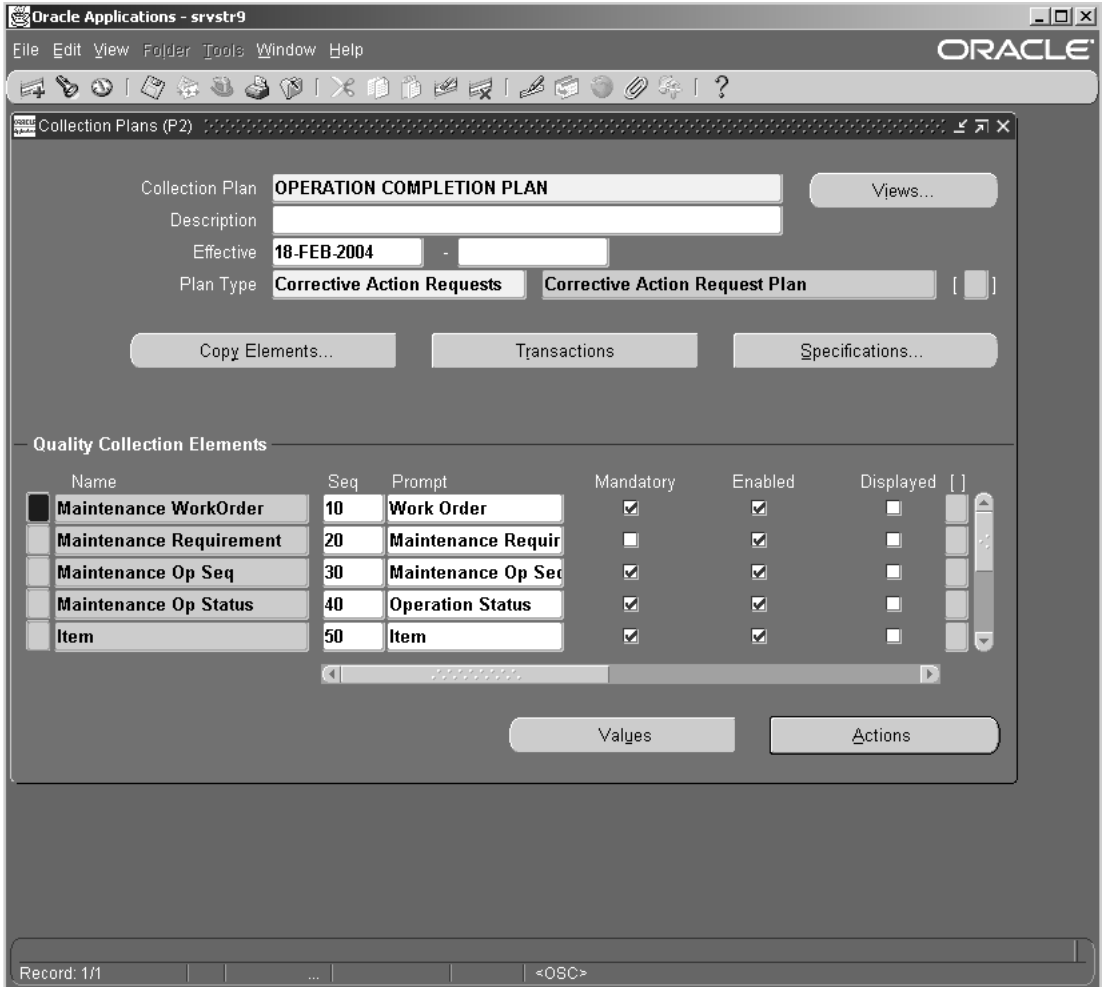
Creating Quality Plans

CMRO provides plan templates with seeded quality elements. Oracle recommends that you use these templates and adjust them for the specific needs rather than creating a plan from scratch, because the template contains collection elements that are automatically populated by CMRO when quality is recorded in production. Should these elements be missing, the procedure would still work, but these attributes would not be recorded. The background attributes contain information about the job, maintenance requirement, item and item instance etc., which allow for a convenient quality reporting and analysis. The templates also contain seeded displayed items that are either mandatory or optional. Those properties can be changed. This approach enables the user to take full advantage of CMRO's out-of-the-box quality functionality together with the flexibility to create completely customized quality plans. Creating and using plan types has no specific CMRO set up requirements.

To create Quality Plans:

1. Navigate to Quality > Setup > Collection Plans. The Collection Plans window opens.
2. Define the collection plan. Select the plan type.
3. Click the Copy Elements button. The Copy From Plan window appears.
4. Select the Plan template that you want to copy from. For CMRO, the options are:
   - Advanced Service Online Route Completion Plan
   - Advanced Service Online Operation Completion Plan

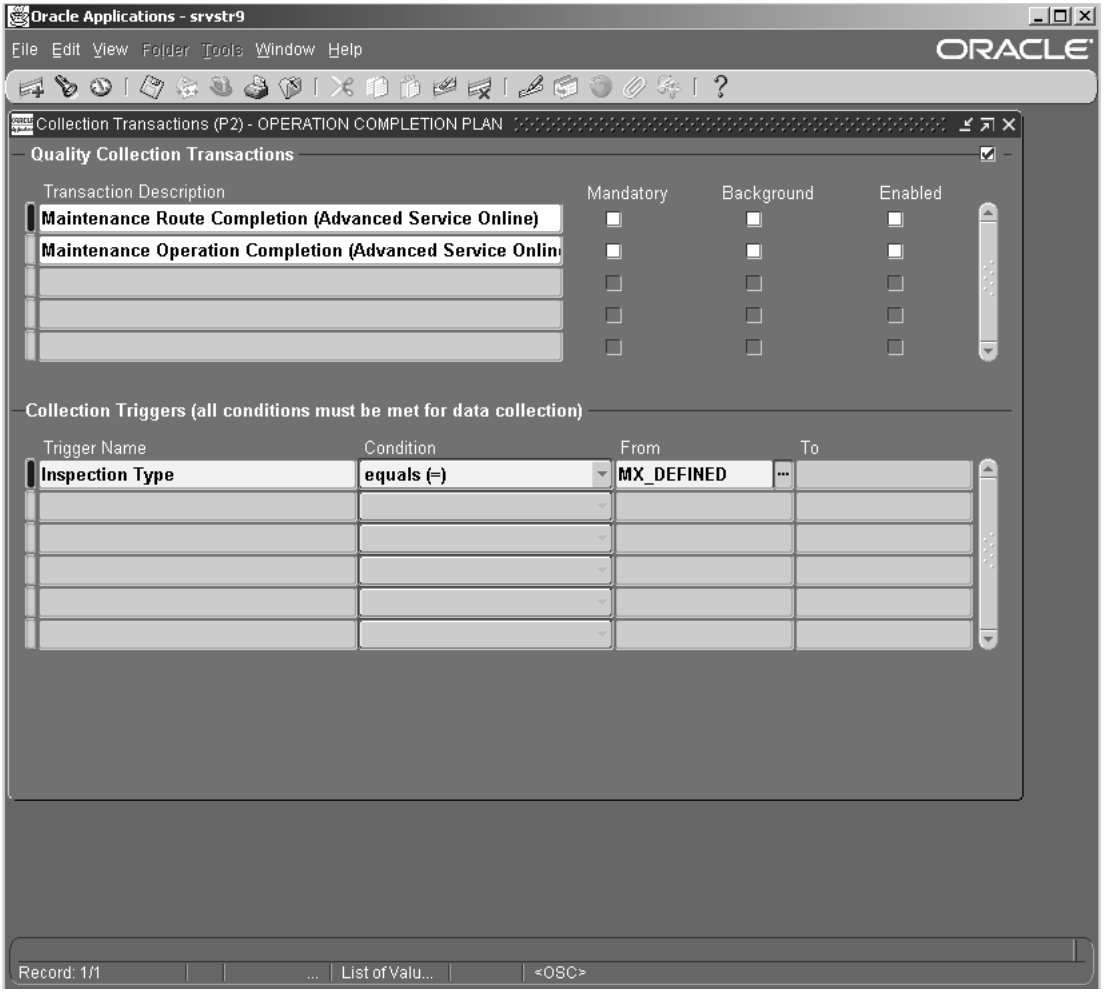
Figure 2–66 Collection Plans Window



5. Click the Transactions button. The Collection Transaction window appears.
6. Select the seeded transaction for either route or operation. The options for CMRO are:
   - Maintenance Route Completion (Advanced Service Online)
   - Maintenance Operation Completion (Advanced Service Online)

7. Define the trigger. Select Inspection Type from the Trigger name list of values. The trigger value is selected from the set-up in the Inspection Type collection element.
8. Save your work.

Figure 2–67 Collection Transactions Window



Note: The Inspection Types created can be associated with a route or operation in route management. When the route and/or operation is going to be instantiated in production the user will have the derived quality plan available for collecting the quality results.

Setting Up Job Deferral, MRB Disposition Quality, Non-Routine Job Inspection and Non-Routine Operation Inspection Plans

Creating Inspection Types

An Inspection Type for Deferral, MRB, Non-routine job and Non-routine operation is defined in a system profile option. The Inspection Type will derive the existing plan in the organization where a job is deferred in, an mrb disposition is initiated and/or a non-routine job/operation is created. You can create the different inspection types for job deferral, mrb disposition, and non-routine quality recording.

To create Inspection Types:

1. Navigate to the Collection Elements window. Query for the Collection Element 'Inspection Type'.
2. Click the Values button. Define Inspection Types for Job Deferral, MRB Disposition, and Non-Routine quality recording.

Note: The defined inspection types appear in the list of values for the system profile option for job deferral and mrb disposition.

Creating Quality Plans

To create Quality Plans:

1. Navigate to the Collection Plans window.
2. Define collection plans for Job deferral, MRB disposition and Non-Routine job/operation using the following plan templates:
   - Advanced Service Online Job Deferral Plan
   - Advanced Service Online MRB Disposition Plan

- Advanced Service Online Route Completion Plan
- Advanced Service Online Operation Completion Plan

3. Add or change quality elements if necessary.
4. Click the Transactions button. Select the following seeded transaction descriptions for job deferral, mrb disposition and non-routine job/operation:
   - Maintenance Job Deferral (Advanced Service Online)
   - MRB Disposition (Advanced Service Online)
   - Maintenance Route Completion (Advanced Service Online)
   - Maintenance Operation Completion (Advanced Service Online)
5. Define the trigger. Select Inspection Type from the Trigger name list of values. The trigger value is selected from the set-up in the Inspection Type collection element.
6. Save your work.

System Profile Options Setup

Set up the following System Profile Options for Job Deferral, MRB disposition and Non-Routine job/operation quality definition:

- AHL: Job Deferral Inspection Type
- AHL: MRB Disposition Inspection Type
- AHL: Non-routine Job Inspection Type
- AHL: Non-routine Operation Inspection Type

Setting Up Counter Readings Quality Plans

Whenever a maintenance requirement is completed in production, CMRO stores the current counter values of the maintained item instance in a Counter Reading Quality Plan. The plan will adjust itself based on the counters defined on the item instance. This procedure is completely transparent to the end user. The user must create a Counter Reading Quality Plan in quality and set up the system profile option to enable counter reading capturing.

Creating Quality Plans

The Counter Readings Quality Plan is created using the template and cannot be adjusted, since the end-user has no influence over the recording of the counter values.

> **Note:** You need to create only one Counter Reading plan because the same is used across all organizations.

To create Quality Plans:

1. Navigate to the Collection Plans window. Define the collection plan.
2. Select the plan type from the Plan Type list of values.
3. Click the Copy Elements button. Select the following plan template: Advanced Service Online Counter Readings Plan

> **Note:** Do not adjust collection elements.

4. Do not define any Transactions.

System Profile Options Setup

For the Counter Reading Quality definition, set up System Profile Option -AHL: Counter Reading Plan.

See Also:

Oracle Quality User's Guide

Setting Up Oracle Content Manager

Oracle Content Manager integrates with Oracle CMRO to provide the user with the capability to upload electronic files. The electronic file upload feature is used within the Document Index module in Oracle CMRO.

To upload electronic files, you must ensure that the following tables are set up in Oracle Content Manager:

Table 2–19 ibc_content_types_b

Attribute	Data
CONTENT_TYPE_CODE	AHL_DOCUMENT
CONTENT_TYPE-STATUS	ACTIVE

Table 2–20 ibc_attribute_types_b

Attribute	Data
ATTRIBUTE_TYPE_CODE	DOCUMENT
CONTENT_TYPE_CODE	AHL_DOCUMENT
DATA_TYPE_CODE	ATTACHMENT
MIN_INSTANCES	1
UPDATEABLE_FLAG	T

If the records are not present in ibc_content_types_b and ibc_attribute_types_b, then run the ahlctype.ldt file. This will ensure that the records are inserted into the appropriate tables.

Note: To upload files, AHL_MEDIA_TYPE lookup must have the value E-File. For more information, refer to the Document Index module setup on page 2-132

CMRO Specific Setups

Oracle Complex Maintenance, Repair, and Overhaul is an integrated, web-enabled software application suite designed to empower complex equipment maintenance organizations. Oracle Complex Maintenance, Repair, and Overhaul supports maintenance processes such as scheduled and unscheduled maintenance visits, component monitoring, job scheduling and routing, labor time collection, cost collection, inventory management, and maintenance document management. It provides models for electromechanical systems and defines rules for assembling units. It also records unit-specific information, allowing quick access to the maintenance history of a product component.

Oracle Complex Maintenance, Repair, and Overhaul is organized as follows:

1. Engineering

- Fleet Maintenance Program (maintenance requirements)
- Route Management (work card authoring)
- Document Index (technical document management)

2. Configuration Management
   - Master Configuration (allowable installations)
   - Unit Configuration (as installed maintenance tracking)
   - Product Classification (logical grouping)
3. Planning
   - Unit Maintenance Plan (active maintenance requirements)
   - Visit Work Package (work scope and resource)
   - Long Term Plan (hangar and visit plan)
4. Execution
   - Production
   - Production Planning
   - Outside Processing

This section includes the following:

- Oracle Complex Maintenance, Repair, and Overhaul Standard Setup on page 2-113
- Oracle CMRO Approval Workflow Setup on page 2-114
- Oracle CMRO Module Setup on page 2-131

Oracle Complex Maintenance, Repair, and Overhaul Standard Setup

CMRO General Setup includes setting up the System Profile options as indicated in the table below.

Table 2–21 System Profiles

Profile	Site(Value)	Descriptions
AHL: Preventive Maintenance Installation	Yes/No	Indicates whether the installation for preventive maintenance is set toYES.
AHL: Turn On Development Debug	Yes/No	Enable/disable debug session
AHL: Turn on File Debug	Yes/No	

Oracle CMRO Approval Workflow Setup

You can set up an Approval Workflow to approve maintenance programs, activities and routes. You can use the built-in Approval Workflow or you can create your own workflow, define a specific approval rule and create a list of approvers for each CMRO object. After setting up profile options, if you do not specify an approval rule, the application uses the default approval rule.

CMRO Approval Workflow setup includes:

- Setting up Profile Options
- Creating Approval User(s) and Role(s)

Setting Up Profile Options

By default, Maintenance Programs, Activities and Routes are automatically approved at the time of creation when you click the Approved button. To set up an Approval process, you must set up the system profile options as indicated in the table below.

Table 2–22 Profile Options

Profile	Value	Description
AHL: Enable approval workflow for Routes	Yes	This enables the approval workflow for the routes
AHL: Enable approval workflow for Maintenance Requirement	Yes	This enables the approval workflow for maintenance programs and activities

Table 2–22 Profile Options

Profile	Value	Description
AHL: Workflow Loop Counter	Requires a numeric value that defines how many times the notification will be re-sent if the user does not respond	-
AHL: Workflow Timeout Minutes	Requires a numeric value that defines the period after which a workflow times out when its progress is halted.	-

Creating Approval User(s) and Role(s)

To activate the enabled workflow, you must set up employees in Oracle Human Resources, create application users and define approval roles for these employees, and create approval rules for the different CMRO objects.

Note: The following set up steps are depending on the use of the seeded approval workflow. If you decide to create your own workflow you will have to adjust these steps to the functionality of this workflow.

Defining Approval Employees in Oracle Human Resources

All approval users need to be defined as employees in Oracle Human Resources.

Note: If you want to notify the approval user via e-mail, then in addition to the application work list notification, you must also set up the e-mail address for the employee in the Office Details window.

For more information on how to set up employees, refer to the *Oracle Human Resources Implementation guide*.

Creating Application User for Approval Employees

Every approval employee needs to have an Oracle Application login. When defining the application user you have to associate the approval employee, set up earlier in HR, to that application user.

Creating Approval Roles

Associating the approval employees to a role is an optional step. If you have set up the employees in Oracle HR and created application users for them, you can associate the employee directly with an approval rule. You can set up the following two types of approval roles:

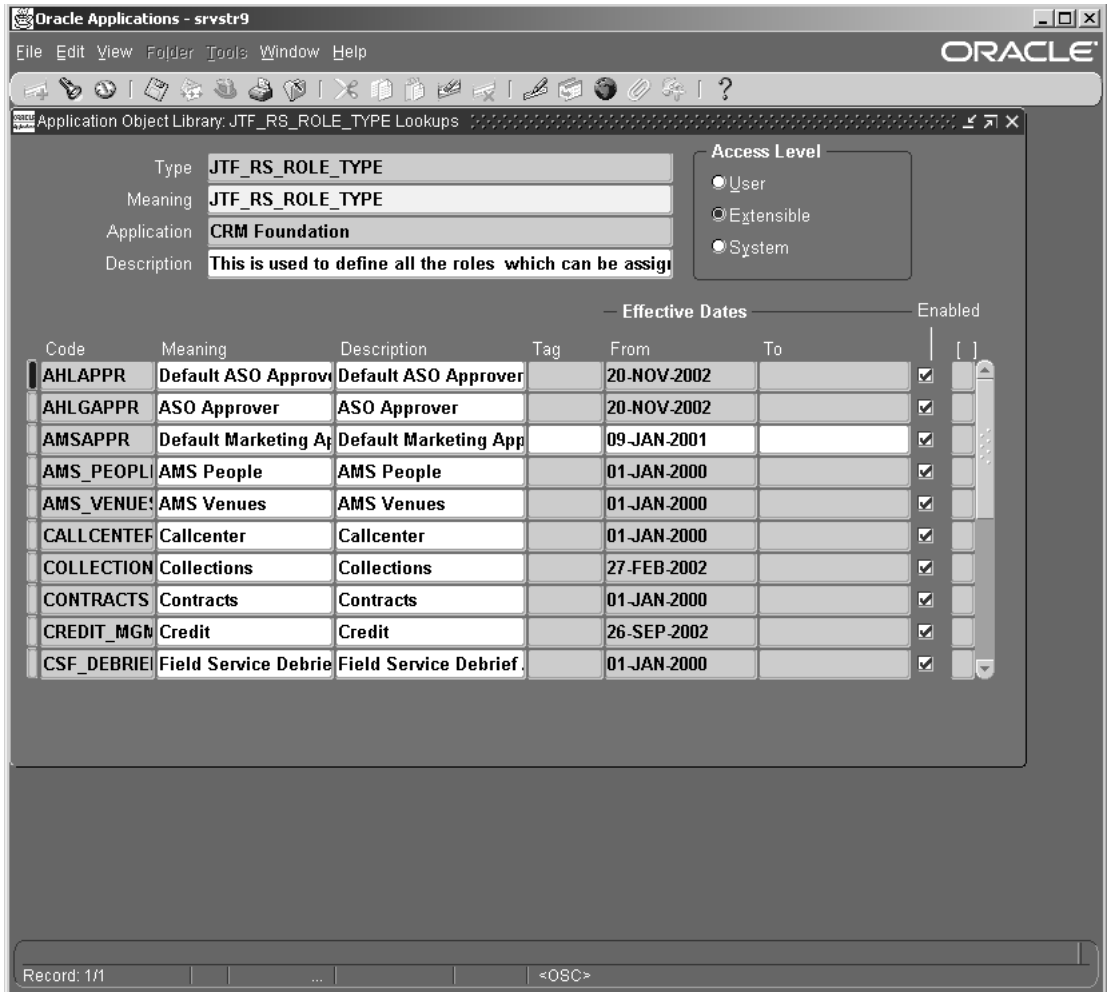
Default Approval Role

CMRO provides a seeded default approval rule that is used when no object specific approval rule is set up. The default approval rule is best used, when the same people in the same hierarchy will approve every CMRO object. In this case you only have to set up one rule with one approval sequence. The default approval rule has also one approval hierarchy with a seeded role defined.

To set up the Role for the Default Approval Rule:

1. Login to the forms environment of Oracle Applications. Select the CRM Resource Manager responsibility.
2. Navigate to Setup > Role Types.
3. Query for JTF_RS_ROLE_TYPE.
4. Create a role type code for the default approval role.

Figure 2–68 Application Object Library Window - Role Type Lookups

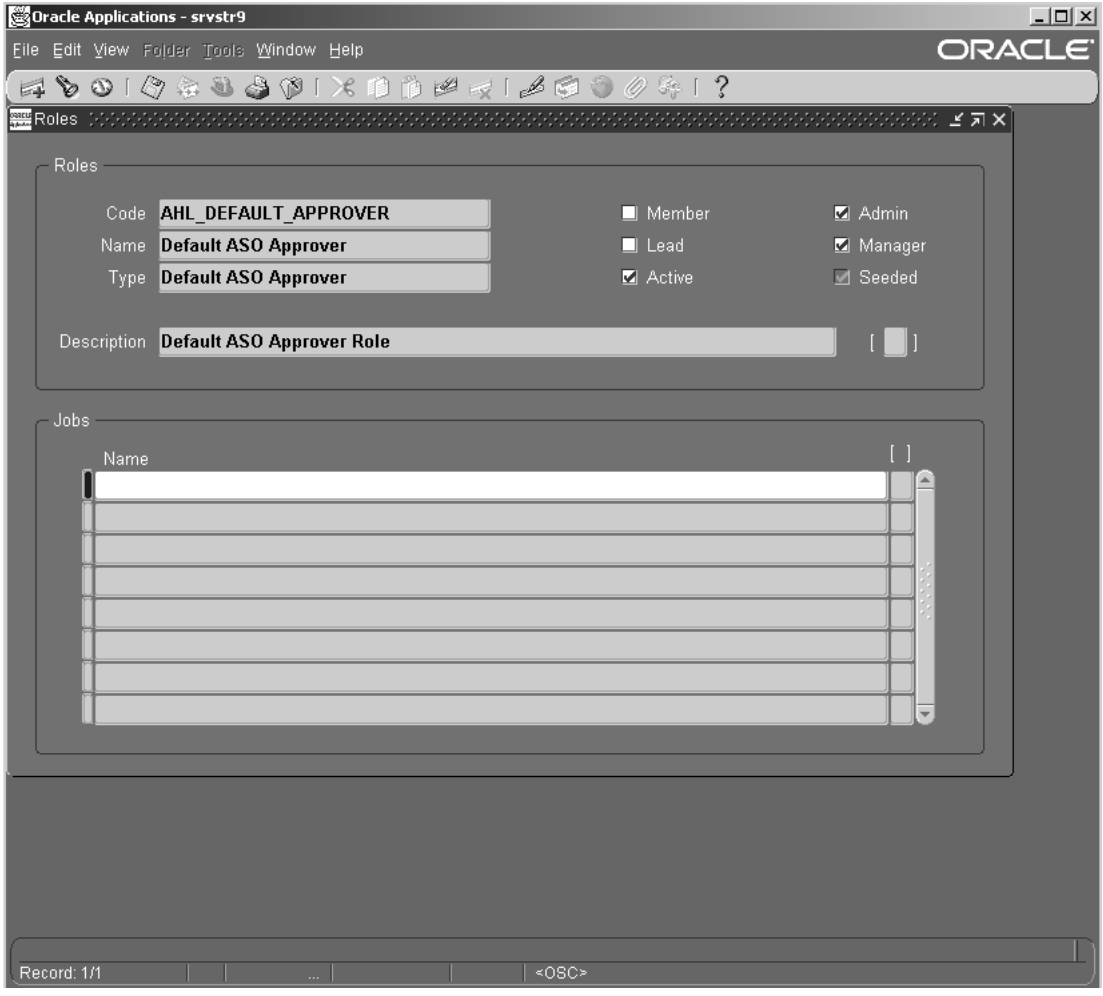


5. Navigate to Setup > Roles.
6. Create a role with the code AHL_DEFAULT_APPROVER.

Note: The code must be defined as described above otherwise the default rule will not recognize this role. The role name can be user defined.

7. Associate the default approval role type code to this role.

Figure 2–69 Roles Window



8. Create additional roles if you need more than one level of approvals. The role codes can be user defined for every additional role used for the default approval rule.

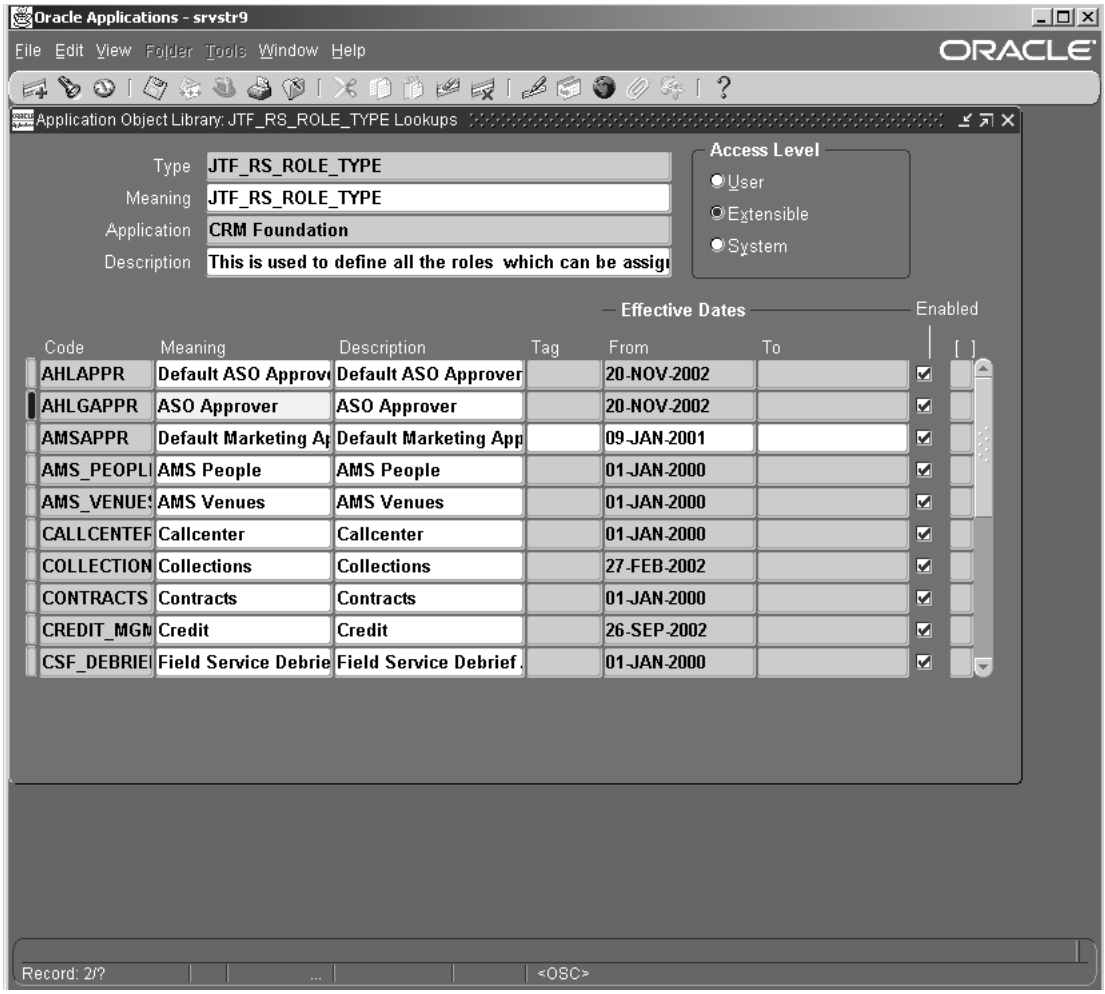
Note: For CMRO approval, only one user can be associated with a role, otherwise the approval workflow will fail. Therefore, you must create as many roles as you have approvers. The sequence of notification will be defined in the approval rule setup.

General Approval Role

Perform the following set up steps if you have specific approval rules for the different CMRO objects:

1. Login to the forms environment of Oracle Applications. From the Navigator, select CRM Resource Manager.
2. Navigate to Setup > Role Types.
3. Query for JTF_RS_ROLE_TYPE.
4. Create role type code(s) for the General Approval Role(s).

Figure 2–70 Application object Library Window

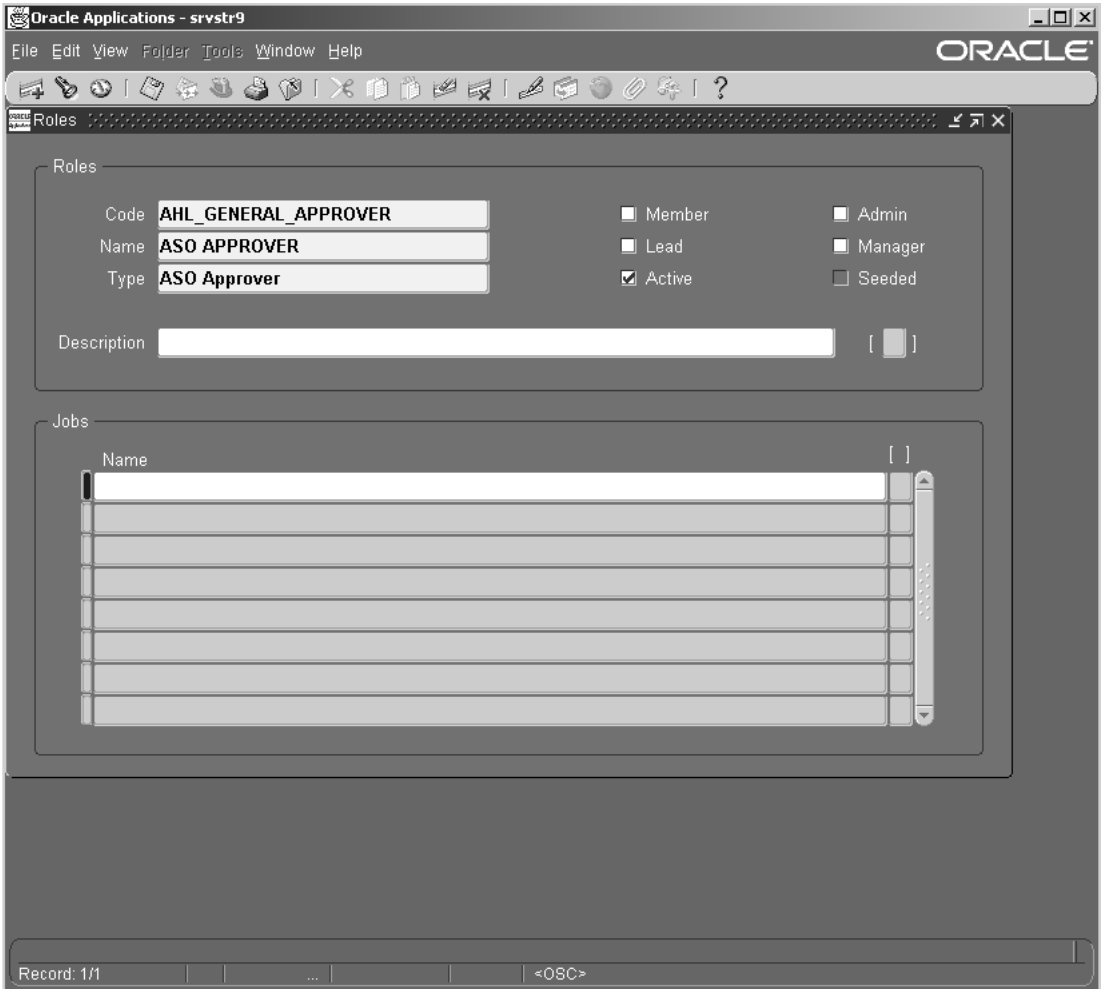


Note: You can create multiple role type codes for grouping the roles together but one is minimum.

5. Navigate to Setup > Roles. Create a role for every possible approver.

6. Associate the appropriate approval role type code to the roles.

Figure 2–71 Roles Window



Importing Resources

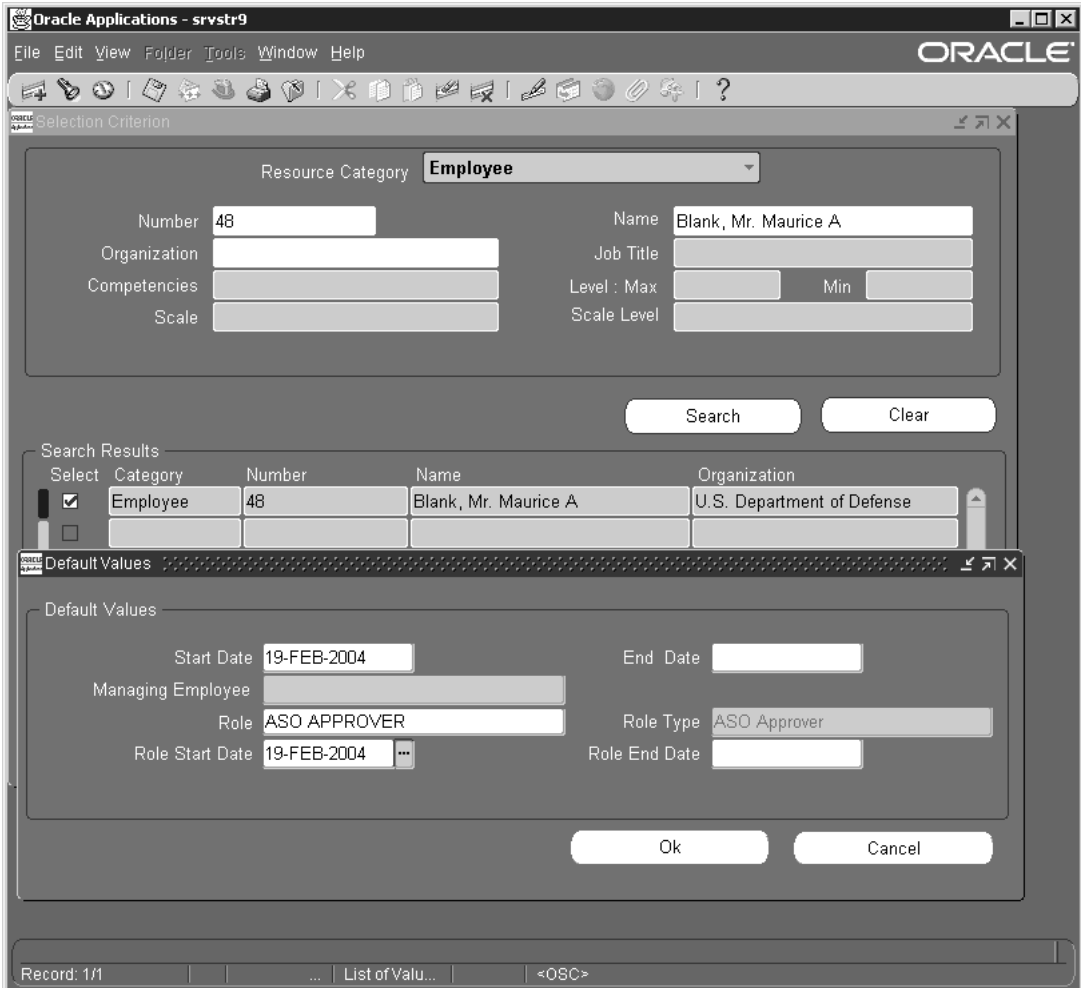
After you have created the employees and the roles, you must map the two together.

Note: As previously mentioned, only one employee can be assigned as a workflow approver. However, the same employee can be the designated approver for multiple roles.

To import resources:

1. From the CRM Resource Manager responsibility, navigate to Maintain Resources > Import Resources.
2. Select the approval employee. Click the Search button.
3. Click Create Resource. Select the appropriate role.
4. Click OK. Click Save Resource.

Figure 2–72 Selection Criterion Window



5. If you want to associate the same employee with an additional role click Details. Add Roles.
6. Repeat steps 1 through 5 for every approval employee.

Creating Approval Rules in CMRO

As mentioned earlier you can either use the seeded default approval rule or specify an object specific approval rule for the different CMRO objects. In the approval details you can either pick a role that you have set up, or a user that has been created as an employee in HR, and is associated with an application login. The sequence in the approval details defines the approval hierarchy.

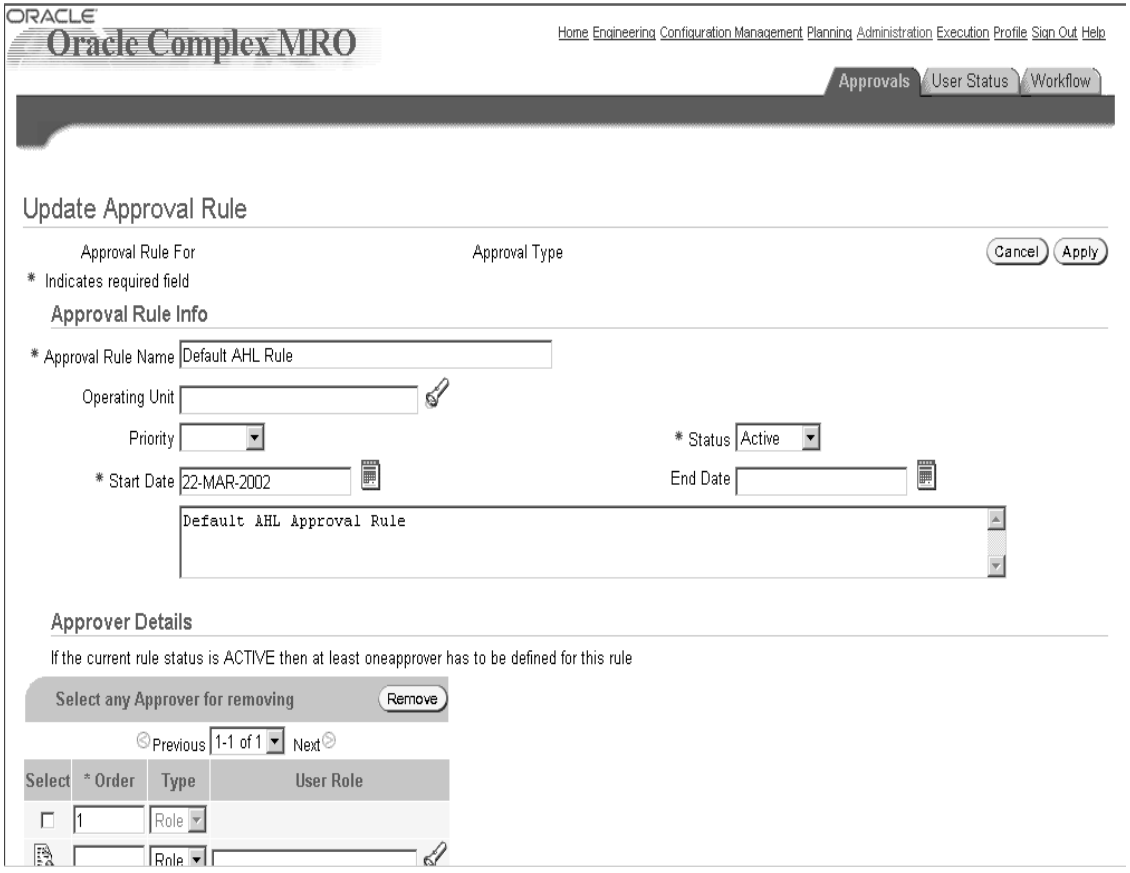
Default Approval rule

To adjust the Default Approval Rule:

1. Login to the jtf environment of CMRO.
2. Click on the Administration link. Click the Go button.
3. Click on the link 'Default AHL Rule'.
4. Add any additional roles or users to the approval details in the sequence you want your objects to be approved.

> **Note:** The first role is seeded. You can either change the hierarchy or delete the seeded role if necessary.

Figure 2–73 Update Approval Rule Page



5. Click Apply.

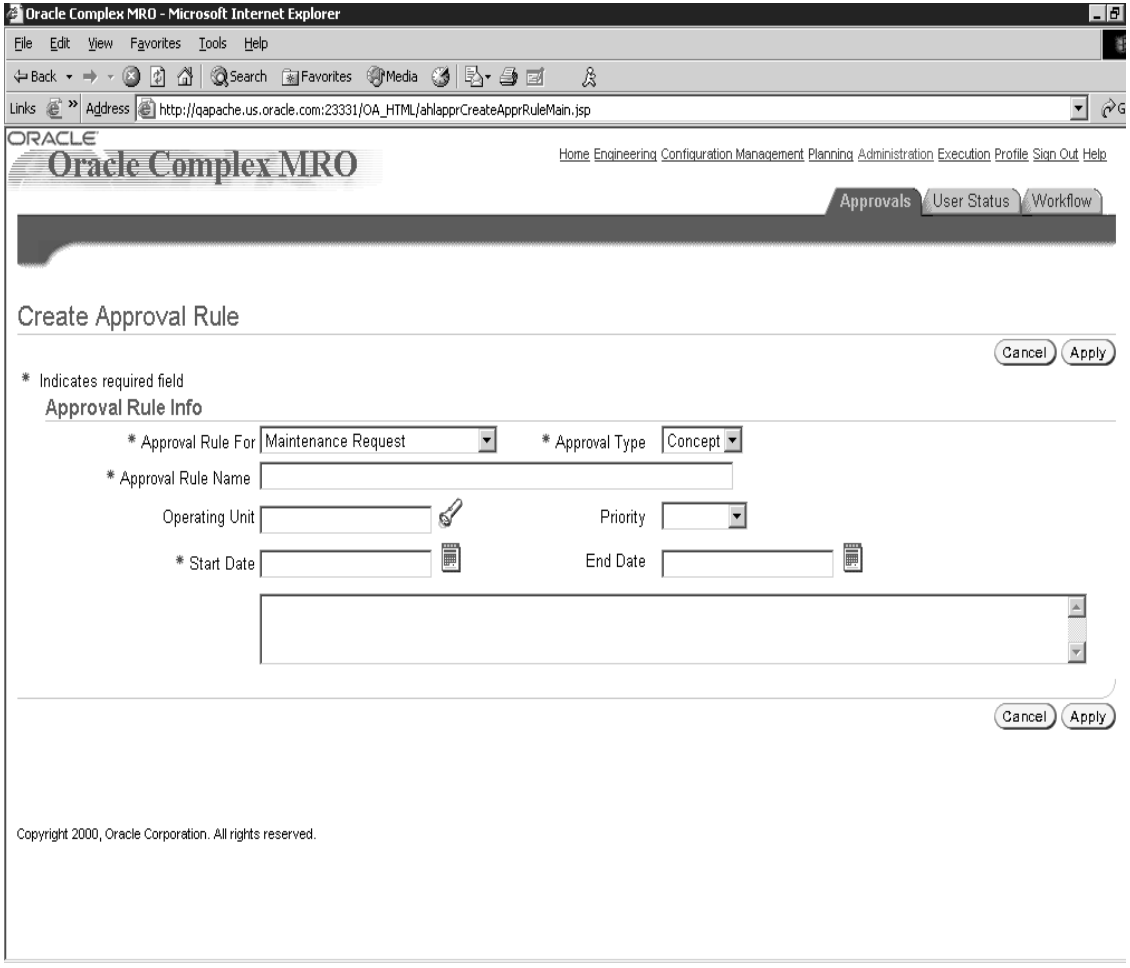
Note: Do not add any values to the operating unit attribute or to the priority attribute. Custom values are currently not supported by Complex Maintenance, Repair, and Overhaul and would cause the workflow to fail. Also, you cannot change the status of the default rule once it is set to Obsolete.

Object Specific Approval Rule

To define approval rules with specific approval hierarchy:

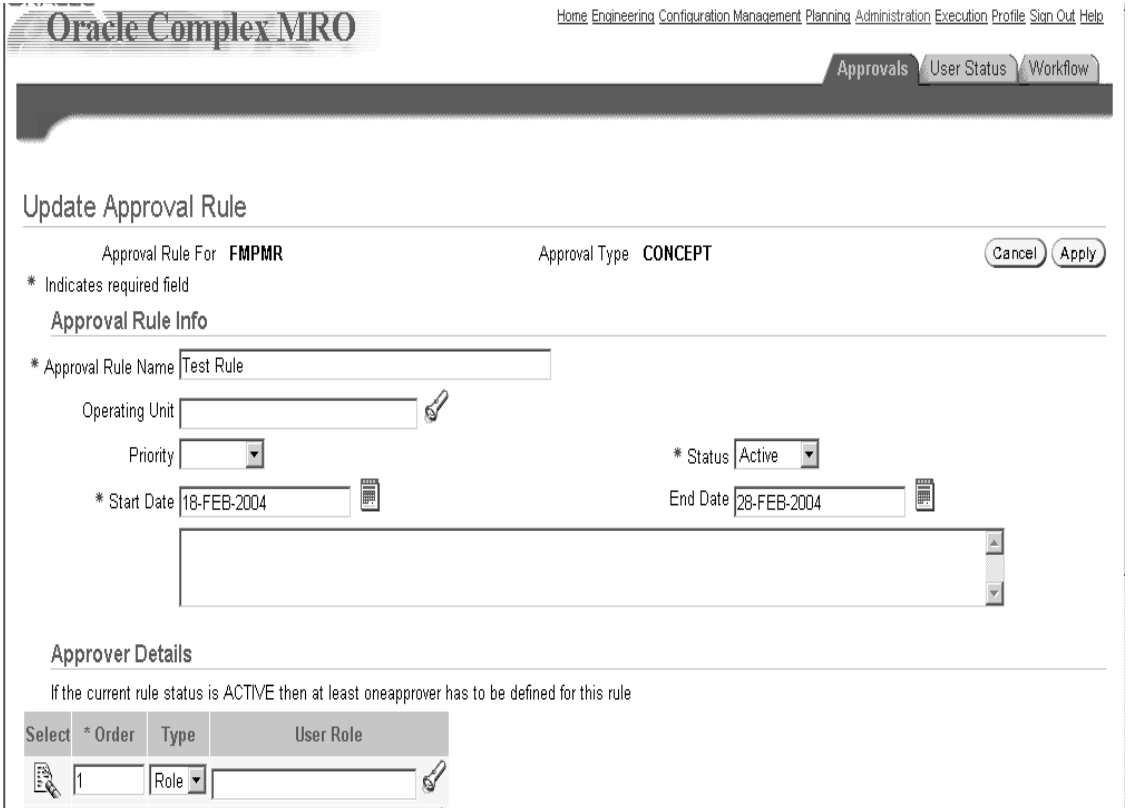
1. Login to the jtf environment of CMRO.
2. Click on the Administration link.
3. Click the Create button.
4. Create Approval Rules for Maintenance Request and/or Route Management.
5. Select Approval Type 'Concept'.

Figure 2–74 Create Approval Rule Page



6. Do not add any values to the operating unit attribute or the priority attribute. Click Apply.
7. Add roles or users to the approval details in the sequence in which you want your objects to be approved.
8. Select Active from the Status list of values.

Figure 2–75 Update Approval Rule Page



9. Click Apply.

Workflow Process Mapping

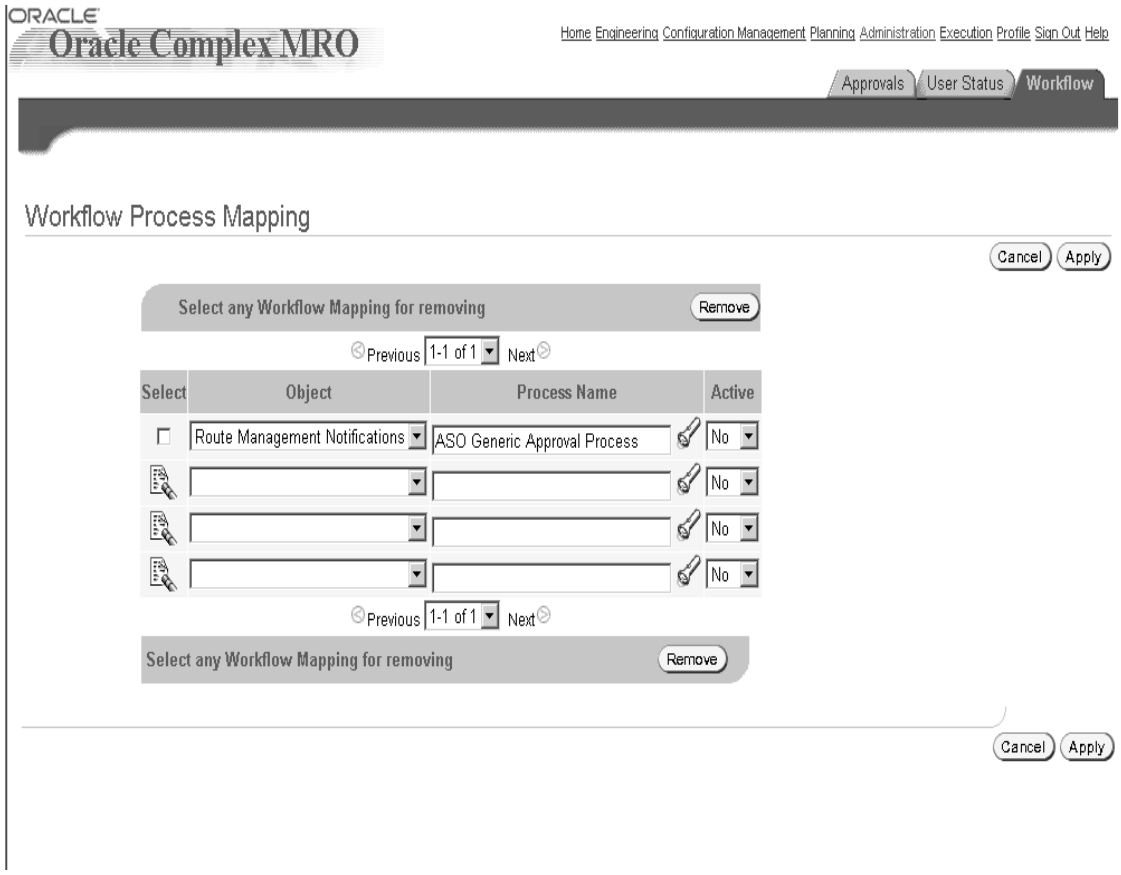
The final step in the approval workflow set up is to map the object with a workflow. As previously mentioned, Oracle recommends that you use seeded workflow that is delivered with CMRO, however a user-defined workflow can be mapped to the CMRO object as well.

To map the workflow with the CMRO object:

1. Login to the jtf environment of CMRO.
2. Click on the Administration link.

3. Click the Workflow tab.
4. If you want to use the same workflow for all of your objects, leave the object field empty, otherwise choose the object, which you want to remove from the drop-down list.
5. Define the desired workflow in the Process Name field. The CMRO default workflow is called ASO Generic Approval Process.

Figure 2–76 Workflow Process Mapping Page



6. Click Apply.

The Approval Workflow

When a Maintenance Program, Activity or Route is sent for approval the user defined in the approval role is notified by e-mail, if it has been setup at employee creation, and/or with an entrance in the work list in Oracle Applications. From the notification, the user can navigate to the notification details and approve the program, activity or route. The workflow moves sequentially through all of the roles defined in the approval rules details until the last user has sent his approval. At this point the status of the approved object will be changed from 'Approval Pending' to 'Approved'.

Oracle CMRO Module Setup

Oracle Complex Maintenance, Repair, and Overhaul enables maintenance organizations to meet customer expectations, and draw maximum benefit by improving the operational readiness of equipment.

Oracle CMRO Module setup includes:

Setting Up Document Index

The Document Index module in Oracle Complex Maintenance, Repair, and Overhaul is the central repository for managing all maintenance documents.

Maintenance personnel can:

- Access an online catalog of documents used in maintenance, repair, and overhaul operations

- Receive, distribute, and control revisions in technical documentation
- Search the database to quickly refer to a document
- Create new documents or document revisions
- Associate subtypes to document types for easy identification
- Upload electronic documents

Maintenance document management involves tracking documents and their revisions, validating document references from multiple levels of maintenance operations, and making them easily accessible to the maintenance personnel.

Setting up Document Index includes defining the lookup values as indicated below.

Note: Lookup codes fall within three categories: extensible, user defined, and system defined. If a lookup code is extensible, the existing lookup codes cannot be modified, but new codes can be added to the table. If lookup codes are user defined, all codes can be modified. If lookup codes are system defined, the existing codes cannot be modified, and new codes cannot be added to the table.

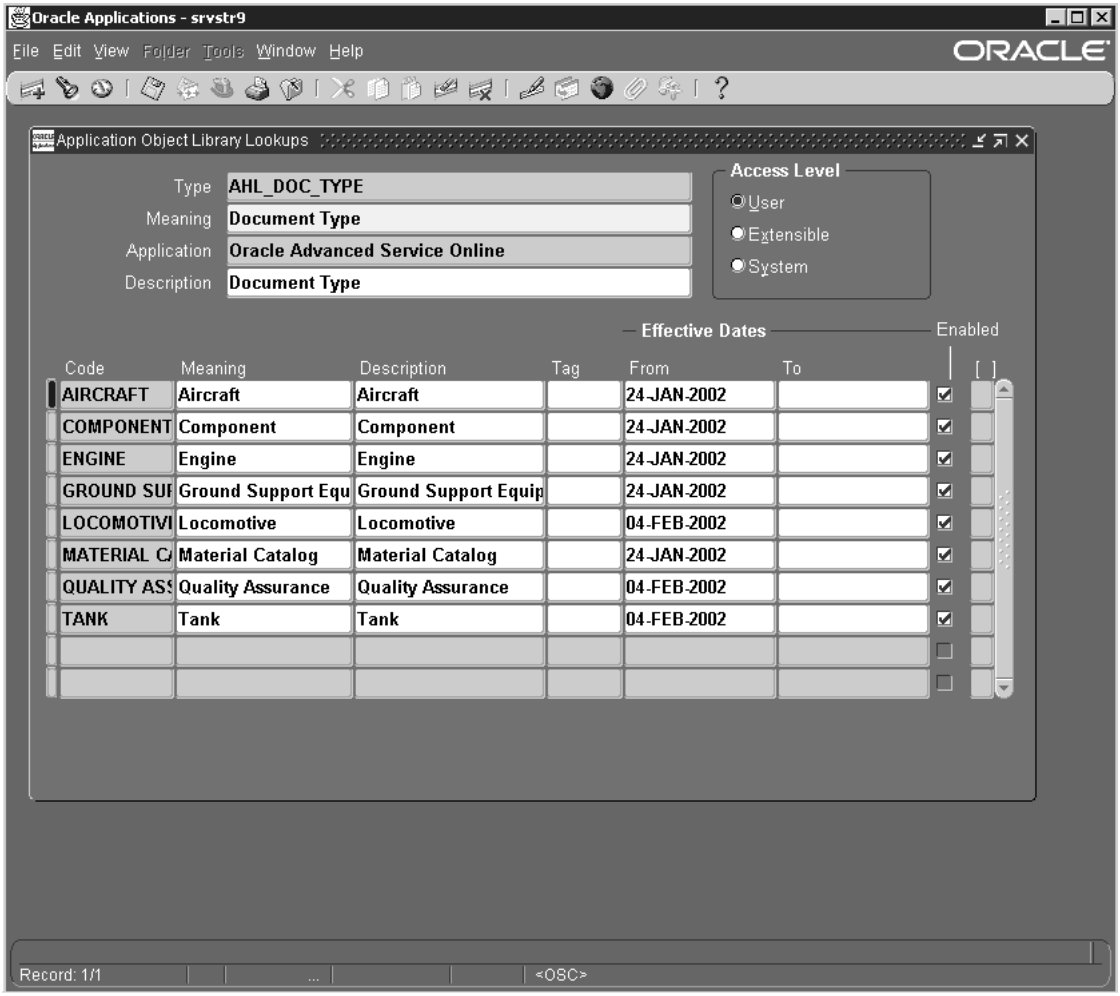
To define lookups for Document Index:

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Operator	AHL_OPERATOR_TYPE	Operator, Owner(User defined)	User
Document Type	AHL_DOC_TYPE	Aircraft, Engine (User defined)	User
Media Type	AHL_MEDIA_TYPE	E-File, CD-ROM, On-line, Paper	Extensible
Status	AHL_SUBSCRIBE_ STATUS_TYPE	Active, Not available	User
Sub-Type	AHL_DOC_SUB_TYPE	Airworthiness Directives, Service Bulletin	User

Attribute	Lookup	Suggested Values	Access Level
Revision Type	AHL_REVISION_TYPE	Temporary Revision, Full Revision	User

Figure 2–77 Application Object Library Lookups Window



Setting Up Route Management

The Route Management module in Oracle Complex Maintenance, Repair, and Overhaul provides a single interface for managing all maintenance tasks.

Maintenance personnel can:

- Prepare and maintain work instructions.
- Search the database for a specific operation for reference purposes, or for editing purposes
- Create an operation or define instructions for carrying out a maintenance task
- Search for maintenance routes, for reference, or for editing route information
- Create a maintenance route
- Associate major and sub zones in a system to a product type to facilitate tracking of maintenance operations on complex electromechanical systems

The intuitive user interface of Oracle Complex Maintenance, Repair, and Overhaul is designed to enable maintenance personnel to handle operational needs as effortlessly and quickly as possible.

Before setting up Route management, you must ensure that:

- ASO Resource is set up
- BOM Resource is set up

Setting up Route Management includes:

- Defining Lookup values
- Setting up Flexfields

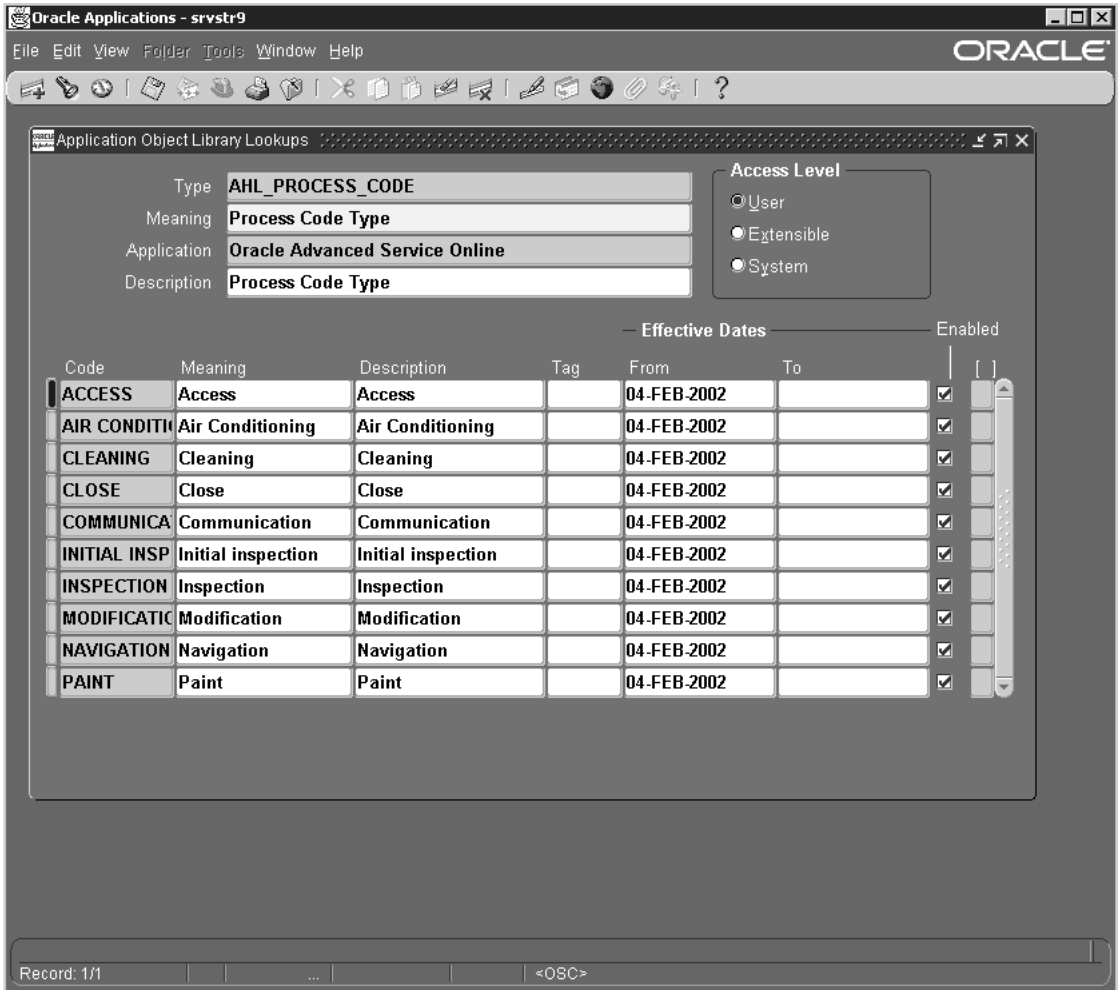
To define lookups for Route Management:

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Operation Type	AHL_ROUTE_TYPE	Aircraft, Engine, Ground support	User

Attribute	Lookup	Suggested Values	Access Level
Major Zone	AHL_MAJOR_ZONE	Cargo Compartment, Cockpit	User
Sub Zone	AHL_SUB_ZONE	AFT Fuselage, Cabin	User
Status	AHL_REVISION_STATUS	Approved Pending, Complete	System
Status Type	AHL_SUBSCRIBE_ STATUS_TYPE	Active, Available	User
Sub-Type	AHL_DOC_SUB_TYPE	AD, SB	User
Revision Type	AHL_REVISION_TYPE	Temporary, Full Version	User
Process	AHL_PROCESS_CODE	Access, Cleaning, Close	User

Figure 2–78 Defining Lookup: AHL_PROCESS_CODE



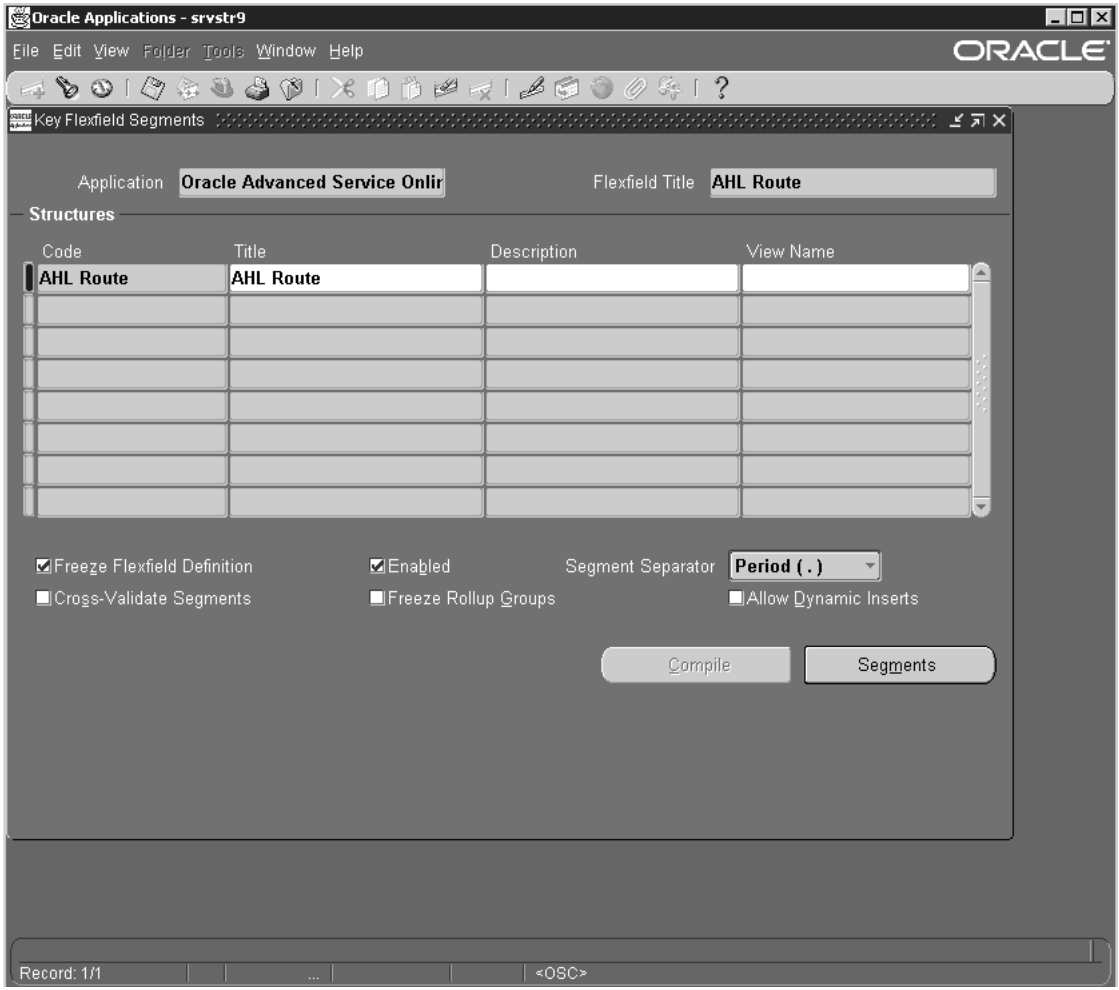
To set up Flexfields:

Validate Existence of Route Flexfield

Note: To enable Route Management, you must set up a key flexfield to define the System attribute.

1. Login into the forms environment with Application Developer Responsibility.
2. Navigate to Flexfield > Key > Segments.
3. Query for Flexfield Title 'AHL Route'. Query should return the record.

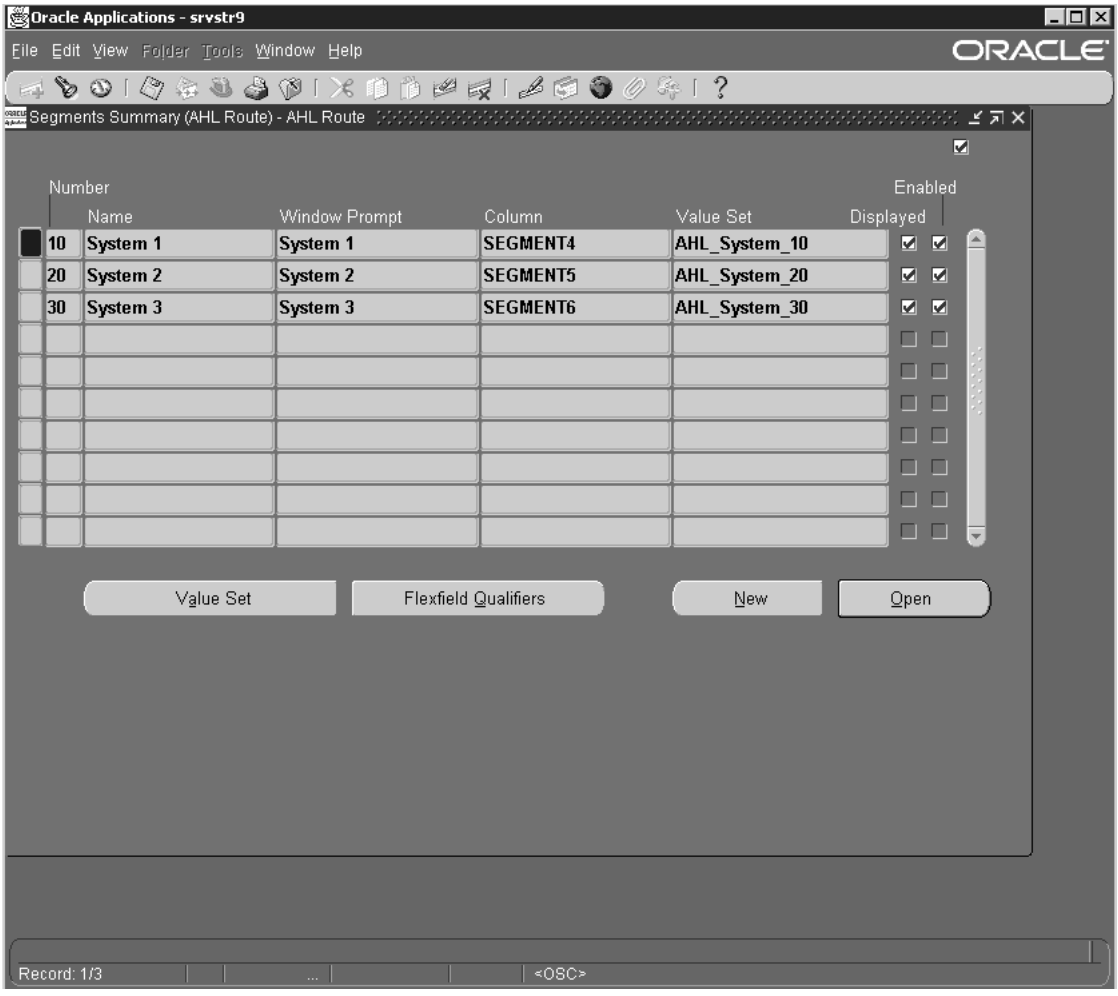
Figure 2–79 Key Flexfield Segments Window



Add segments to this flexfield

1. Click the Segments button.
2. Enter Records for System Flexfield Segment.

Figure 2–80 Segments Summary Window

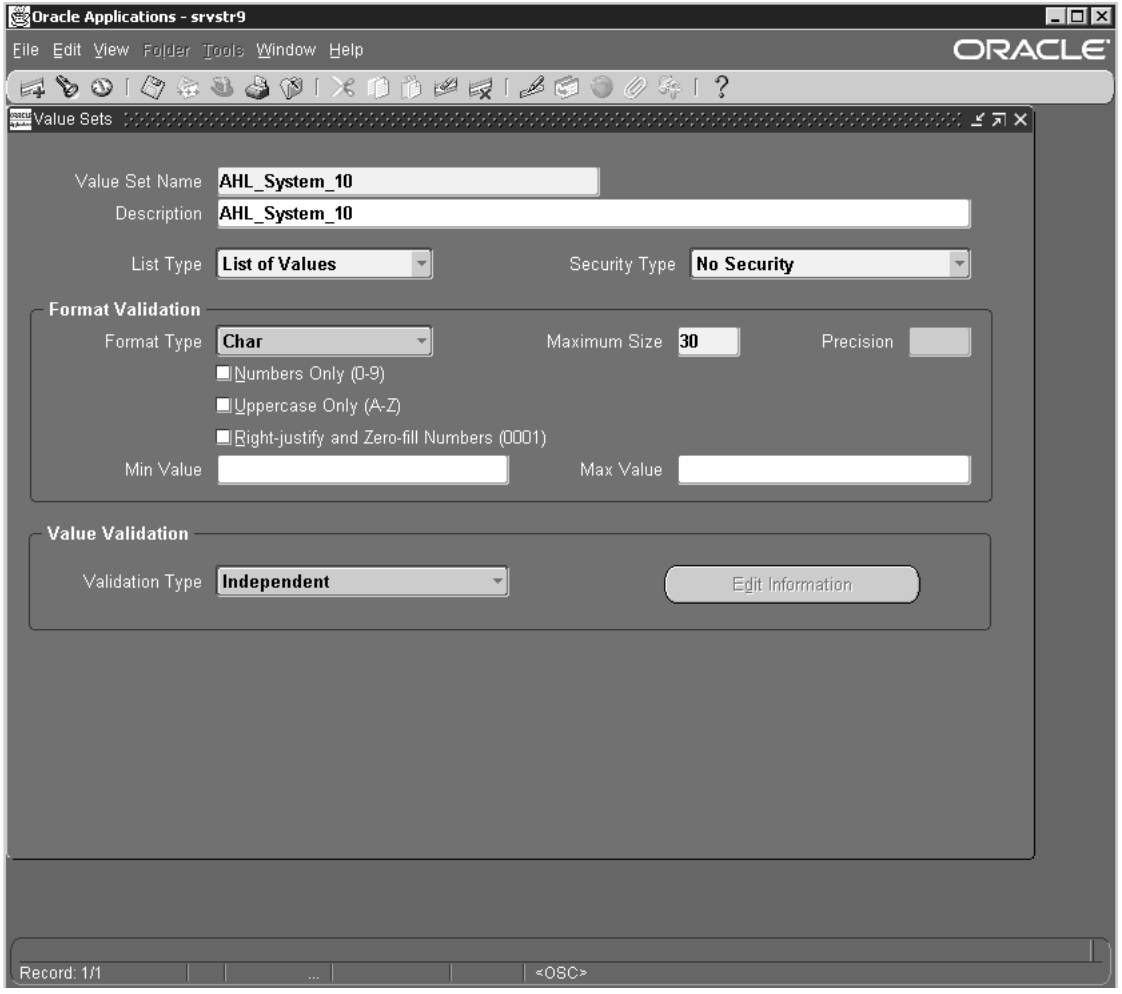


Create Value Sets to be used by Flexfield Segments

1. Click the Value Set button.
2. Define Value Set Name.
3. Define List Type as 'List of Values'.

4. Define Security Type as 'No Security'.
5. Define Format Type as 'Char'.
6. Define Validation Type as 'Independent'.

Figure 2–81 Value Sets Window

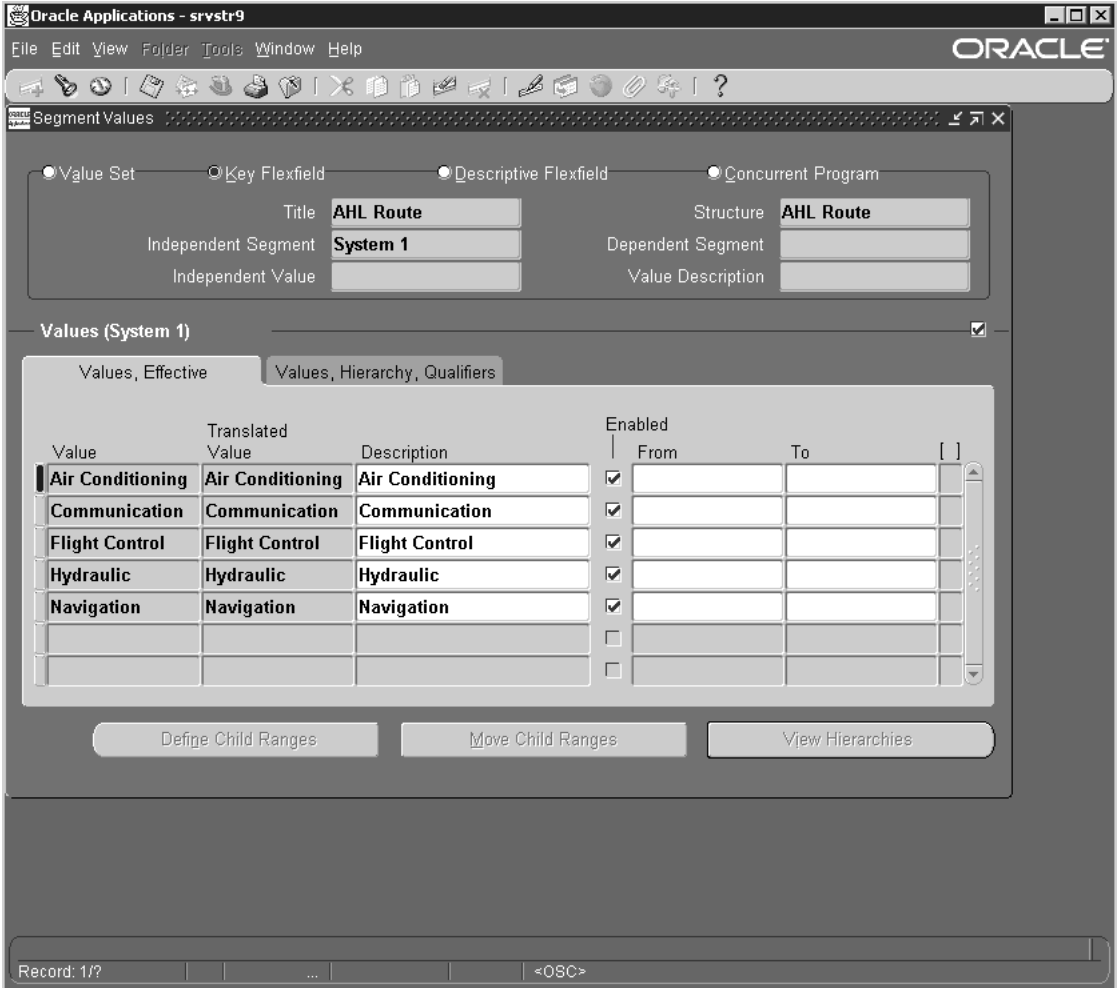


7. Update Flexfield Segments with the Value Sets.

Create values for Value Sets

1. Navigate to Flexfield > Key > Values.
2. Find the Value Sets for the System Flexfield.

Figure 2–82 Segment Values Window



3. Add the desired values to the Value Set.

Setting Up Product Classification

The Product Classification module in Oracle Complex Maintenance, Repair, and Overhaul enables maintenance engineers to create and maintain product classifications. Product Classification provides a hierarchy within which parts and units can be grouped.

Maintenance Personnel can:

- Search the database to quickly refer to a product classification
- Create new product classifications or product classifications revisions
- Edit and copy product classifications
- Associate documents to a nodes product classifications
- Attach parts or units to product classifications
- View maintenance requirements associated to a product classification node
- View Utilization forecast of a product classification
- Check for completeness of primary product classifications
- Launch the approval process for a draft product classification

Product Classification allows organizations to provide a multilevel hierarchy that logically groups products together. Product classifications are used mainly to define maintenance requirements and documents applicability as well as provide a basis for analysis and reporting.

Setting up Product Classification includes defining the lookup values as indicated below.

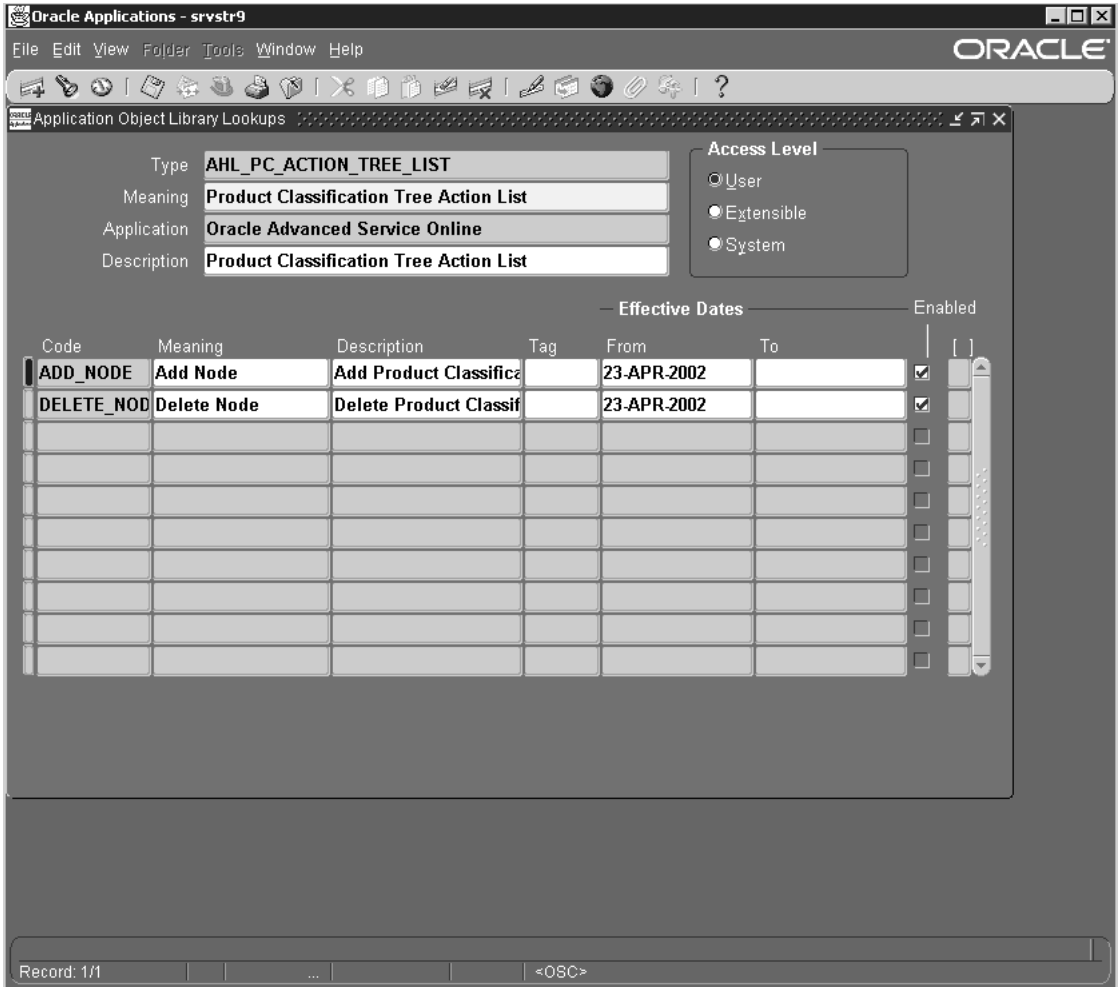
To define lookups for Product Classification:

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Status	AHL_PC_STATUS	Approval Pending, Approval Rejected, Complete, Draft	User
Status	AHL_PC_EDIT_STATUS	Complete, Draft	User

Attribute	Lookup	Suggested Values	Access Level
Association Type	AHL_PC_ASSOS_TYPE	Unit, Part	User
Action	AHL_PC_ACTION_TREE_LIST	Add Node, Delete Node	User
Action	AHL_PC_FMP_TREE_ACTION_LIST	Attach	User

Figure 2–83 Defining Lookup: AHL_PC_ACTION_TREE_LIST



Setting Up Master Configuration

The Master Configuration module in Oracle CMRO provides models of electromechanical system assemblies. A master configuration model will form the basis of a unit in combination with business rules that specify the systems and subsystems that may be included in the assembled unit.

Maintenance personnel can:

- Search the database for master configurations of electromechanical system assemblies
- Create system assembly master configurations
- Search for alternate parts that may be used in place of specified components in an assembly

Before setting up Master Configuration, you must ensure that:

- Inventory (Item Master) set up is complete
- Approval Workflow is set up (This step is optional if the user selects the default approval workflow)

Setting up Master Configuration includes defining the lookup values as indicated below.

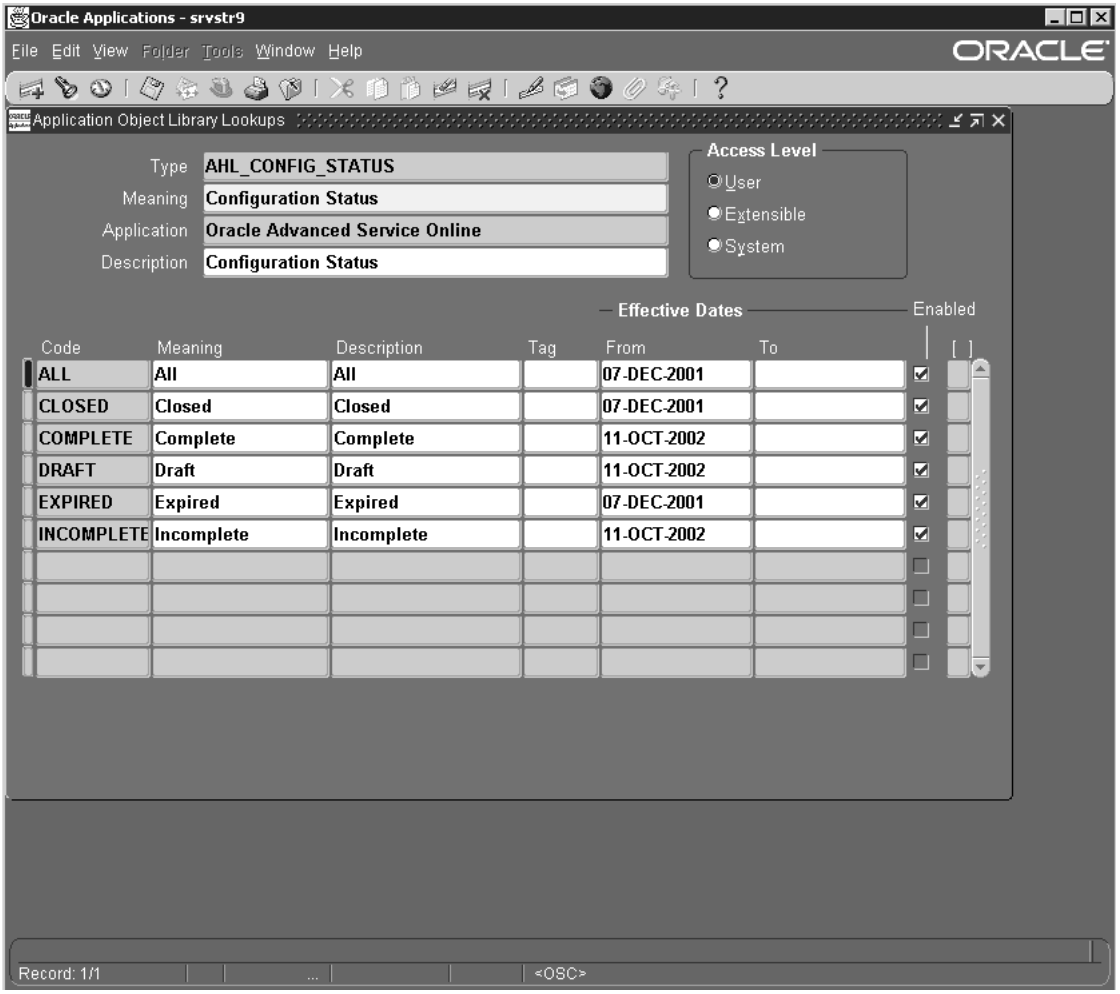
To define lookups for Master Configuration

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Status	AHL_CONFIG_STATUS	All, Closed, Complete, Expired, Incomplete, Draft	System
Action	AHL_MC_ACTION_TREE_LIST	Add, Copy, Delete	System
Necessity	AHL_POSITION_NECESSITY	Mandatory, Optional	User
Rule code (Position ratio list)	AHL_COUNTER_RULE_TYPE	Bird Strike, Heavy Landing	User
Interchange (Edit Alternate)	AHL_INTERCHANGE	1-Way, 2-Way, No Interchange, Superseded By	Extensible

Attribute	Lookup	Suggested Values	Access Level
Type (Edit Alternate)	AHL_ITEM_TYPE	Delete, Obsolete, Prime, Interchangeable, Reference, Superseded Item	Extensible

Figure 2–84 Defining Lookup:AHL_CONfIG_STATUS



Setting Up Unit Configuration

The Unit Configuration module in Oracle Complex Maintenance, Repair, and Overhaul enables organizations to describe the structure of an assembled electromechanical system. The as-constructed configuration of an assembly will determine the specific maintenance program required to ensure the operational readiness of that unit.

Maintenance personnel can:

- Initiate proper maintenance activities to resolve issues
- Create unit configurations from existing master configurations
- Search for unit configuration records that exist in the database
- Add new part information to the database
- Search for, and update existing part information

The Unit Configuration module in Oracle CMRO is a key feature that enables maintenance organizations to determine services required. Even if two units have the same part number, or belong to the same product family, their configurations are normally different due to the operation and maintenance history of each unit. Unit Configuration provides models of individual tracked parts to support unit-specific information.

Before setting up Unit Configuration, you must ensure that Master configuration is set up and products are available for association at the unit level.

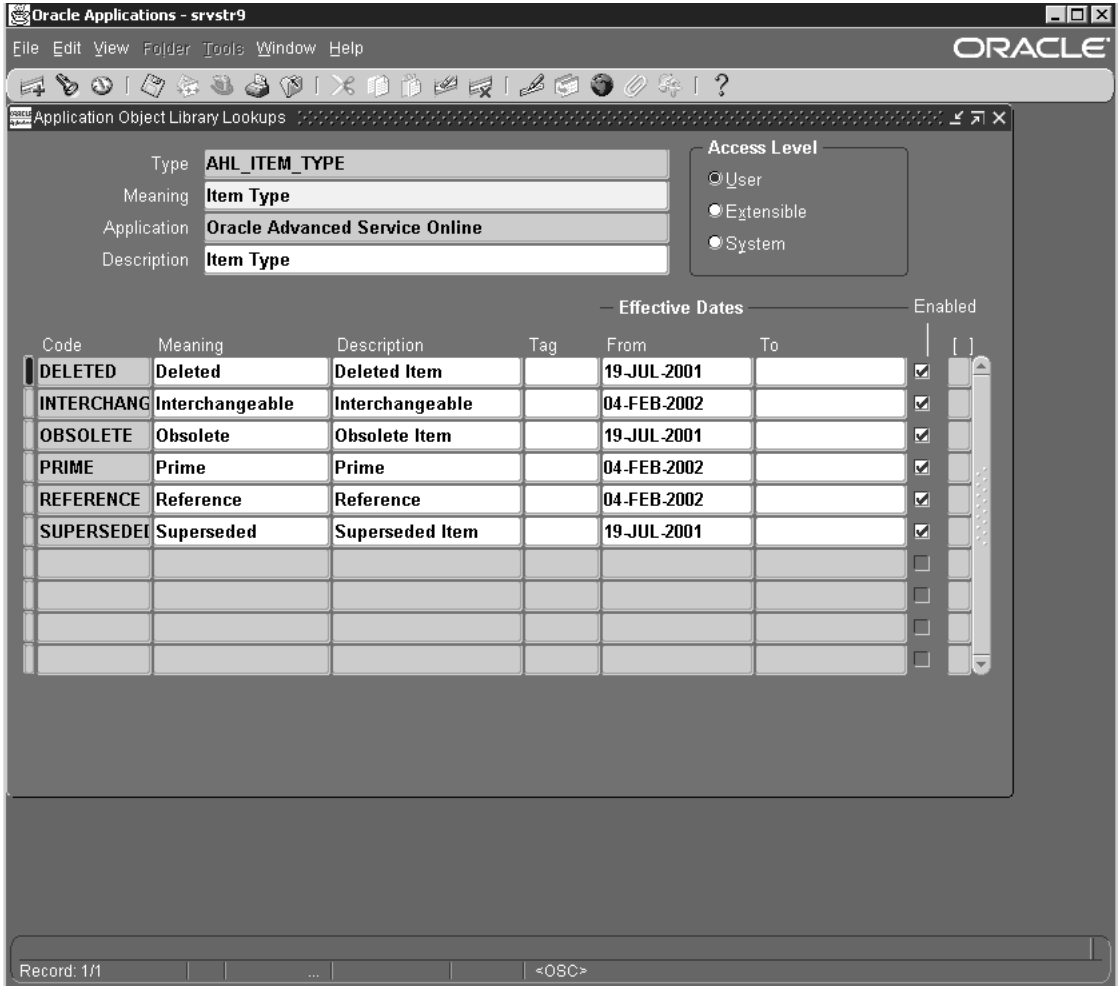
Setting up Unit Configuration includes defining lookup values and setting up attributes as indicated below.

To define lookups for Unit Configuration

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Status	AHL_CONFIG_STATUS	All, Close, Complete	User
Tag	AHL_SERIALNUMBER_TAG	Actual, From Inventory, Temporary	User

Figure 2–85 Defining Lookup: AHL_ITEM_TYPE

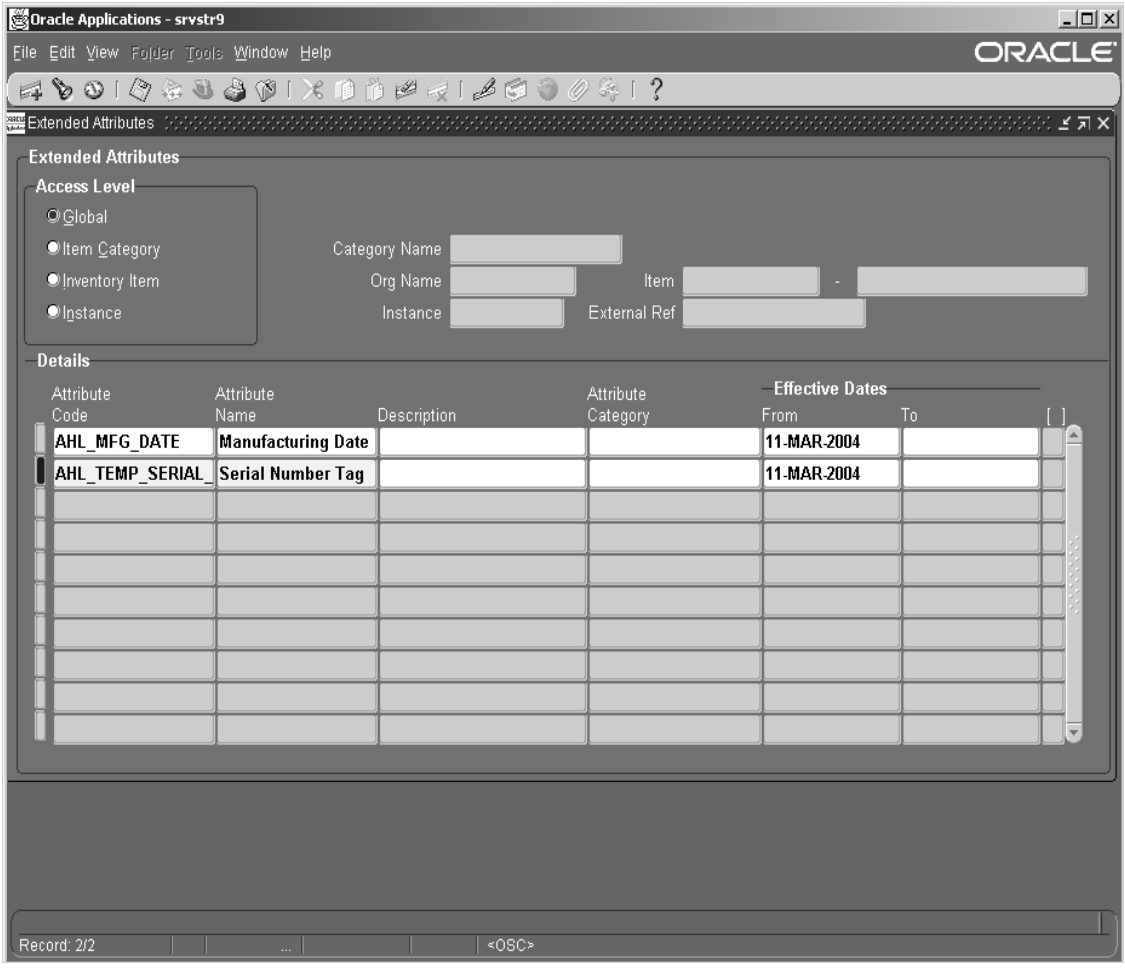


To set up attributes

1. Change responsibility to Oracle Install Base Admin.
2. From the Navigator, select Setups > Extended Attribute Template. The Extended Attributes window appears.
3. Set up the attributes as indicated in the table below.

Table 2–23 Extended Attributes Window

Attribute Code	Attribute Name
AHL_MFG_DATE	Manufacturing Date
AHL_TEMP_SERIAL	Serial Number Tag



4. Save your work.

Setting Up Fleet Maintenance Program

The Fleet Maintenance Program module in Oracle CMRO enables maintenance organizations to record, organize, and plan maintenance requirements. Maintenance planners can create maintenance requirement records and attach attributes to these records. The attributes attached to the record enables maintenance planning and increased operational efficiency while accomplishing a requirement.

Maintenance planners can:

- Search the database for a specific maintenance requirement for reference, or for editing purposes
- Create a maintenance requirement record in the database
- Attach documents, maintenance routes, actions, effectivities, and maintenance requirement relationships to the record
- Create revisions for maintenance requirements that are complete
- View items that are affected by a maintenance requirement

The Oracle CMRO Fleet Maintenance Program module serves as a repository for scheduled maintenance and associated information.

Before setting up Fleet Maintenance Program, you must ensure that:

- Lookup values are set up
- System profile options are set up in Oracle Application: Profile system value
- Route Management is set up
- Product Classification is set up
- Master Configuration is set up
- Unit Configuration is set up
- Set up ASO Visit Work Package

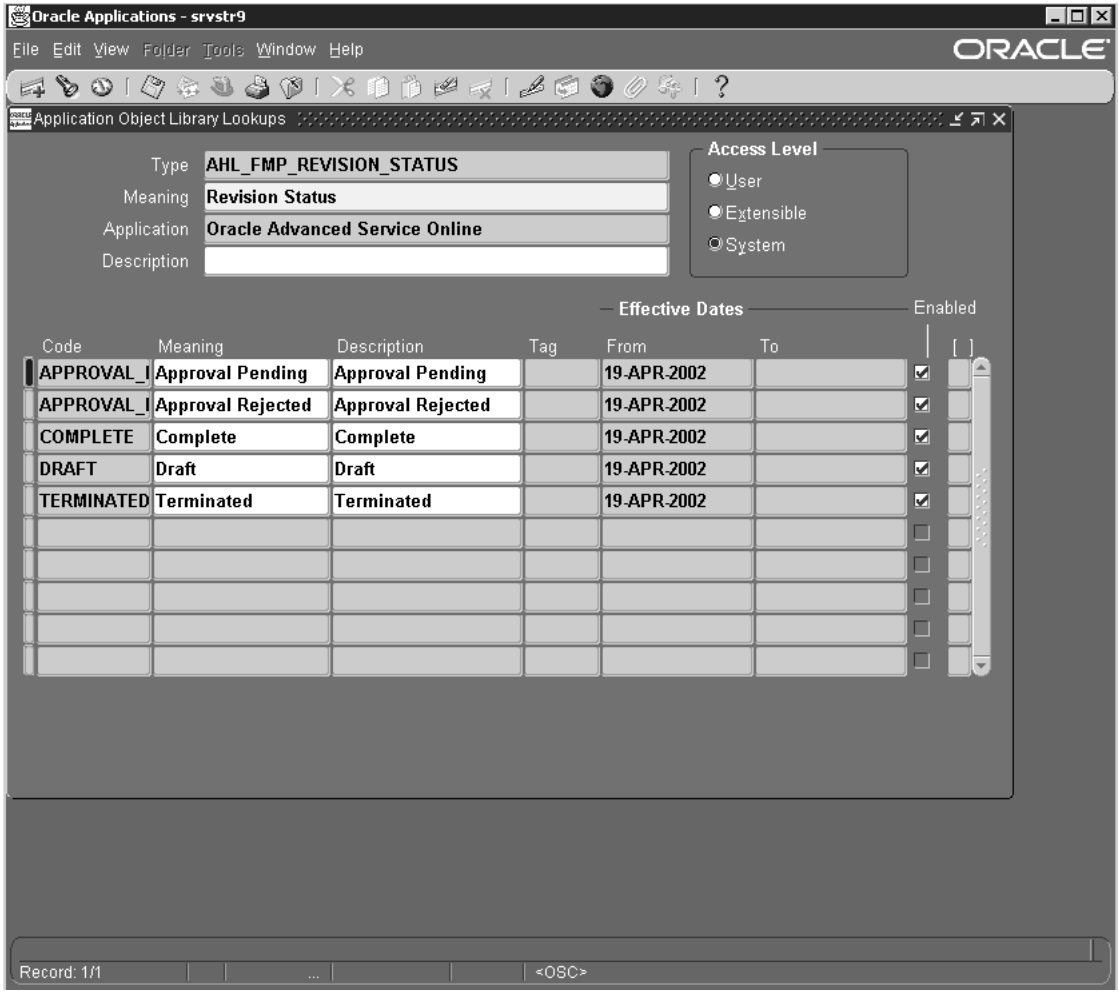
Setting up Fleet Maintenance Program includes defining the lookup values as indicated below.

To define lookups for Fleet Maintenance Program:

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Program Type	AHL_FMP_MR_ PROGRAM_TYPE	Corrosion Prevention, Progressive Maintenance, Company Test, Phase Check, etc.	Extensible
Category	AHL_FMP_MR_ CATEGORY	Power plant, airframe, component, ground equip., etc.	Extensible
Status	AHL_FMP_REVISION_ STATUS	approval pending, approval rejected, complete, draft, terminated	System
Program Subtype	AHL_FMP_MR_ PROGRAM_SUBTYPE	A, B, C	Extensible
Implement Status	AHL_FMP_MR_ IMPLEMENT_STATUS	mandatory, optional-implement, optional-do not implement	System
Whichever Comes	AHL_FMP_THRESHOLD_ FIRST	First, Last	System
Service Type	AHL_FMP_MR_SERVICE_ TYPE	On, Off	System
Show	AHL_FMP_MR_SHOW_ REPETITIVE	All, Next	System
Relationship Type	AHL_FMP_MR_ RELATIONSHIP	Child, Parent	System
Status (Overview UI)	AHL_FMP_MR_SEARCH_ STATUS	active, all, approval pending, approval rejected, complete, draft, terminated	System
Dependency (will it be enable for this release)	AHL_FMP_MR_ROUTE_ SEQUENCE	Execute before, Execute after	System

Figure 2–86 Defining Lookup:AHL_FMP_REVISION_STATUS



Setting Up Unit Maintenance Plan

The Unit Maintenance Plan module in Oracle Complex Maintenance, Repair, and Overhaul ensures that all maintenance requirements are met on or prior to their due date. It also provides demand estimates over a planning time window by forecasting the due date of maintenance requirements associated with a unit. It

searches and displays maintenance requirements that are due for an equipment unit and provides maintenance personnel instant access to maintenance requirements, due date estimation, accomplishment history, and planning information for a unit configuration.

Maintenance personnel can:

- Maintain utilization forecasts
- View the serviceable time remaining of a unit
- Model repetitive maintenance requirements over a specified time period
- Calculate the due dates of maintenance requirements
- Associate maintenance requirements to a visit

Unit Maintenance Plan serves as a repository of the maintenance requirements related to units and any related subassemblies or components. It also enables forecasting of usage to determine due dates for fleet maintenance activities.

Before setting up Unit Maintenance Plan, you must ensure that:

- Look up value is set up in Oracle Application
- System profile is set up in Oracle Application: Profile system value
- Product Classification is set up
- Master Configuration is set up
- Unit Configuration is set up
- Set up CMRO Visit Work Package

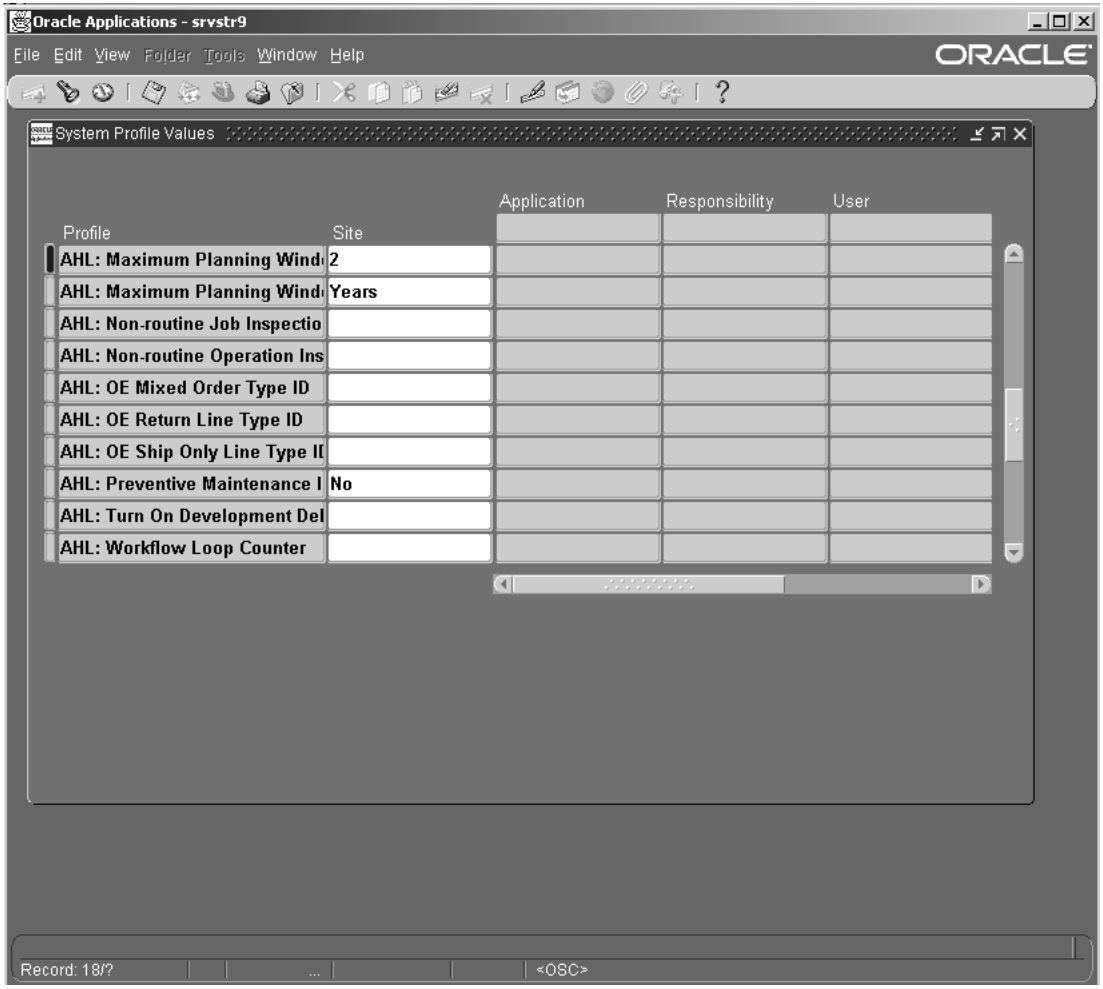
Setting up Unit Maintenance Plan includes:

- Setting up System Profiles
- Defining Look up values

To set up the System Profile Options:

1. Login using the System Administrator responsibility. Navigate to the System Profile Values window.
2. Set up the following System Profiles:
    - AHL: Maximum Planning Window (Number)
    - AHL: Maximum Planning Window (UOM)

Figure 2–87 System Profile Values Window



These profile options determine the period that is taken into account when calculating the due date and repetitive MR in Unit Maintenance Plan. For example, the user may set the following values for the profile options:

AHL: Maximum Planning Window (Number) = 2

AHL: Maximum Planning Window (UOM) = Years

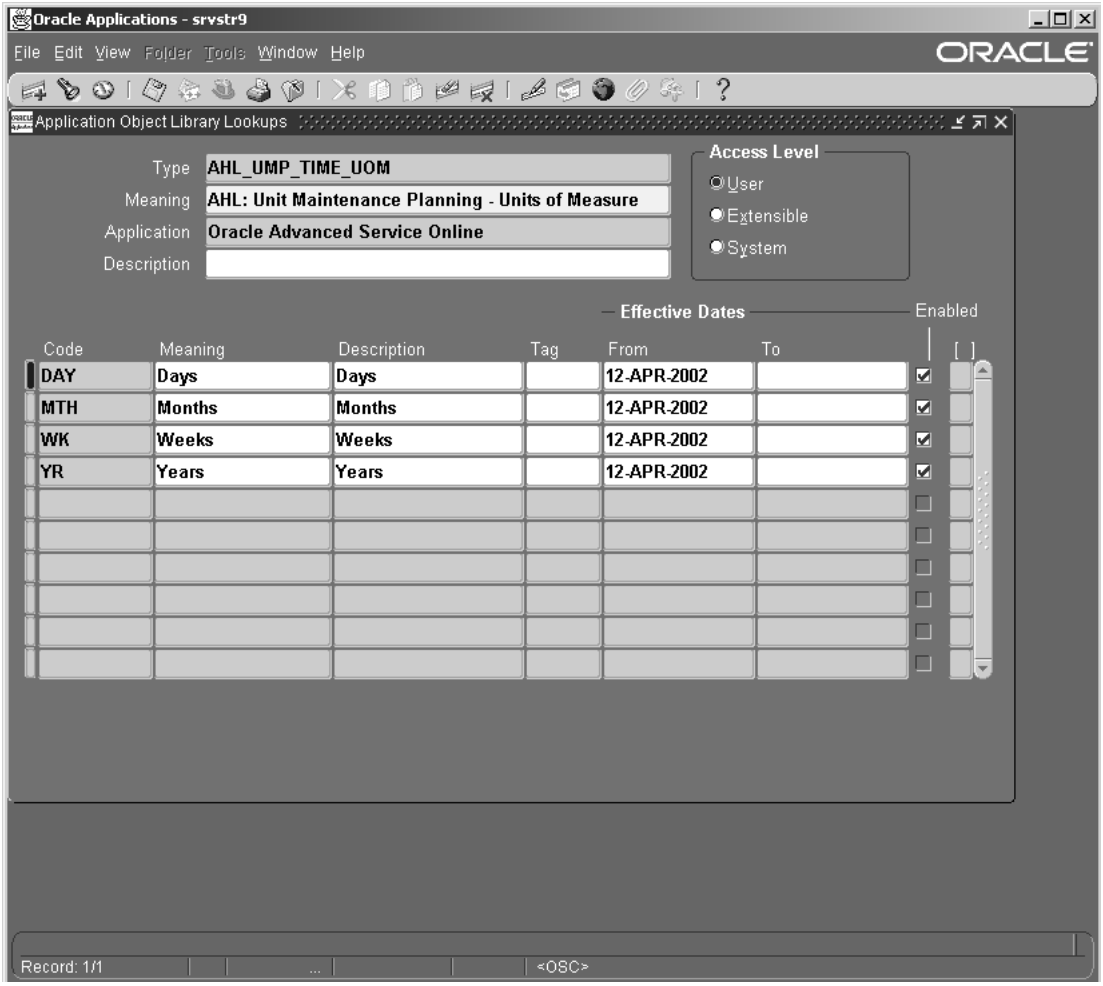
This means that the rolling planning windows in Unit Maintenance Plan (UMP) is two years. The concurrent program used to calculate the due date and repetitive MR will calculate all due dates within two years starting from calculation date (current date).

To define lookups for Unit Maintenance Plan

1. Change responsibility to Application Developer.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Use in System Profile list box 'Site's	AHL_UMP_TIME_UOM	Days, Weeks, Months, Years	User
Select Unit Maintenance Plan and…	AHL_UMP_SMR_ ACTIONS	Associate to Visit, Calculate Due date, Initialized Maintenance Requirement, View Detail and History, View Group Maintenance Requirement, View Threshold	User
Status	AHL_UNIT_EFFECTIVITY_ STATUS	All, Accomplished, Deferred, Exception, Initial Accomplishment, First Due, Terminate by new revision, Opened, Scheduled, Terminate	User
Message	AHL_UNIT_EFFECTIVITY_ MESSAGE	Deferred, Init_due, Init_accomplished	User

Figure 2–88 Defining Lookup:AHL_UMP_TIME_UOM



Concurrent Program Setup

Program: Building Unit Effectivities

Short Name: AHLUEFF

Application: Oracle Complex MRO

Description: Building Unit Effectivities

Setting Up Visit Work Package

The Visit Work Package module provides planning capabilities including creation, organization, and scheduling of maintenance visits based on maintenance requirements. It allows creation and management of visit templates based on equipment types enabling efficient visit package creation for equipment units of a type. The Visit Work Package permits association of tasks with visits and visit templates, and definition of task hierarchy and cost structure.

Maintenance planners can:

- Create maintenance visit records, new, or from a template
- Search for, retrieve, and update existing visit records
- Associate tasks with visits: planned tasks, tasks that are required but not scheduled, and ad hoc tasks that are not associated with maintenance routes
- Search for, retrieve, and update tasks associated with a visit
- Create visit templates, new, or from an existing visit record
- Search for, retrieve, and update existing visit templates
- Search for, retrieve, and update visit template tasks
- Create shift schedules for department workers based on planned visits
- Search for and retrieve existing department shifts

Visit Work Package enables maintenance planners to organize a maintenance visit execution for an equipment unit.

Before setting up Visit Work Package (VWP), you must:

- Verify Projects (VWP exports visit objects to Oracle Projects)
- Verify HRMS (VWP uses HR's organization information)
- Verify Installed base (VWP uses IB's item instance information about maintainable assets)
- Verify Inventory (VWP uses Inventory's information to describe maintainable asset types)
- Verify Support (VWP associates Service Requests with maintenance visit tasks)

- Verify Unit Maintenance Plan (associates UMP MR to VWP)
- Verify Fleet Maintenance Program
- Create Project Template

Setting up Visit Work Package includes:

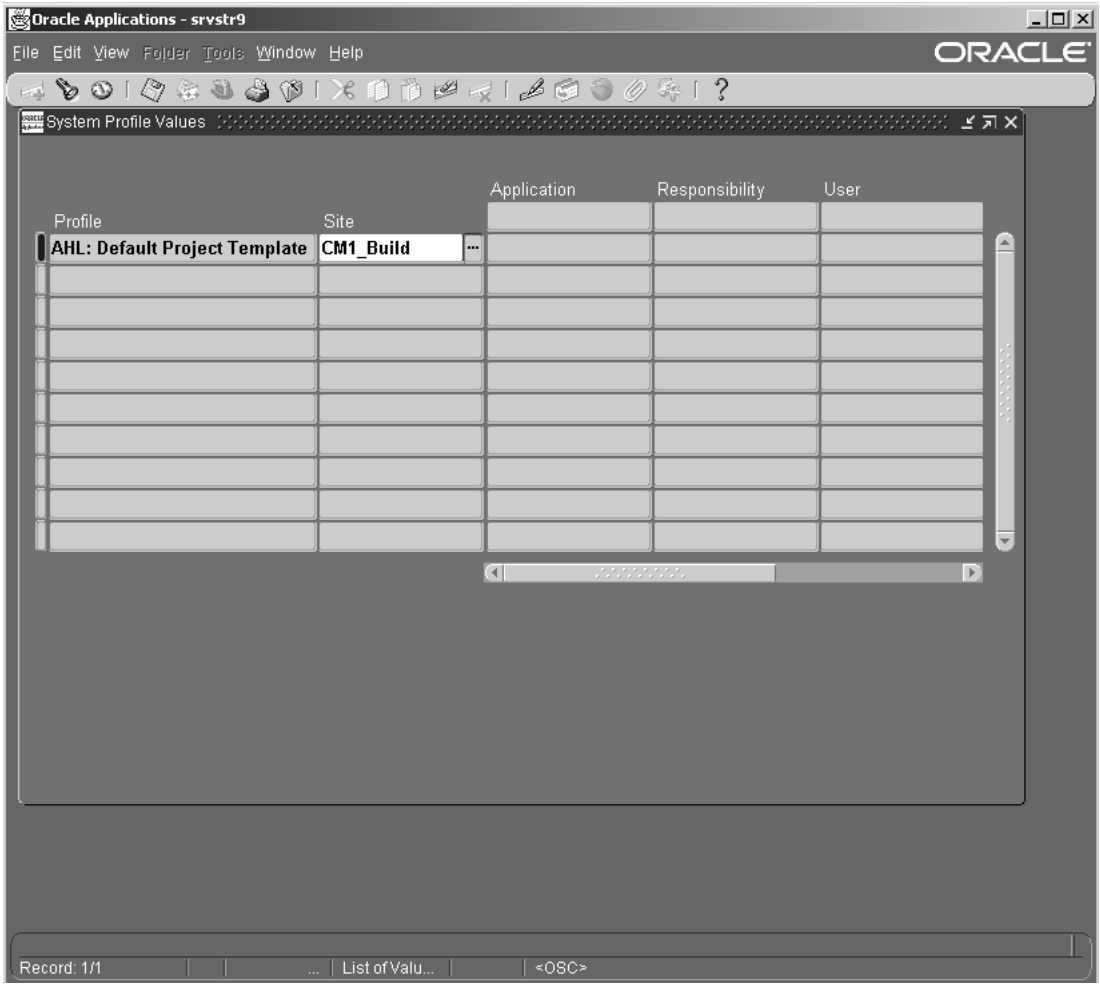
- Setting up System Profile Options
- Defining lookups

To set up System Profile Options:

1. Login using the System Administrator responsibility. Navigate to the System Profile Values window.
2. Set up System Profile Option:

AHL: Default Project Template ID (Name of the Project template that will be used as default)

Figure 2–89 System Profile Value - AHL: Default Project Template

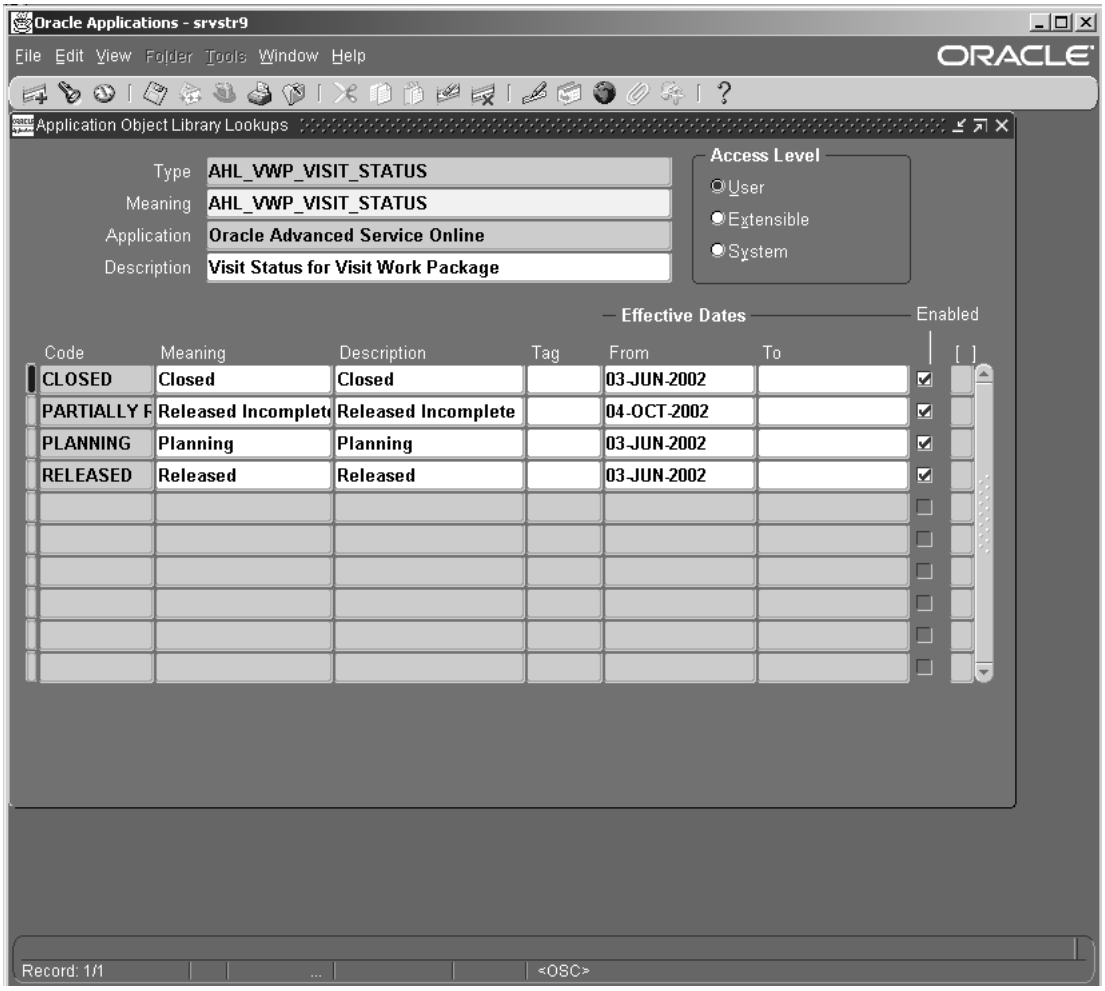


To define lookups for Visit Work Package:

1. Change responsibility to Application Developer.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Status	AHL_VWP_VISIT_STATUS	Closed, Released Incomplete, Planning, Released	User
Visit Type	AHL_PLANNING_VISIT_ TYPE	A-Check, B-Check, C-Check	User
Category	AHL_LTP_SPACE_ CATEGORY	Category 1, Category 2…	User
Assign Status	AHL_VWP_ASSIGN_ STATUS	Fully Assigned, Partial Assigned	User
Hour List	AHL_VWP_HOURS	00, 01…	User
Task Hierarchy	AHL_VWP_TASK_ HIERARCHY	Before, After	User
Task Type	AHL_VWP_TASK_TYPE	Planned, Un-Planned, Summary, Un-associate	User
Visit Number	AHL_VWP_VISIT_ NUMBER	Multiple	User

Figure 2–90 Defining Lookup: AHL_VWP_VISIT_STATUS



Setting Up Long Term Planning

The Long Term Planning module is used by a maintenance planner to plan maintenance requirements for visits based on the optimal use of maintenance resources. Maintenance planners using Long Term Plan make a complete

assessment of the resources available at all maintenance locations. The planner can schedule maintenance visits, assess capacity and reserve required materials.

Maintenance personnel can:

- Assess Maintenance Workload Capacity by analysis of available labor by skill, level and certification, available tools, materials, and location capabilities balanced against known workloads
- Create a Visit in order to group events together for long and short term capacity planning, and to facilitate scheduling to a maintenance base
- Define a Visit's Resource Requirements to allow accurate scheduling and capacity planning
- Analyze capacity versus work load requirements
- Run simulations in order to evaluate different scheduling scenarios before implementing actual plan changes

Long Term Plan maximizes maintenance scheduling by balancing maintenance requirements with available maintenance capacity. The maintenance planner is able to do this by balancing forecasted maintenance requirement information from Unit Maintenance Plan against projected maintenance capacity.

Setting up Long Term Planning includes defining the lookup values as indicated below.

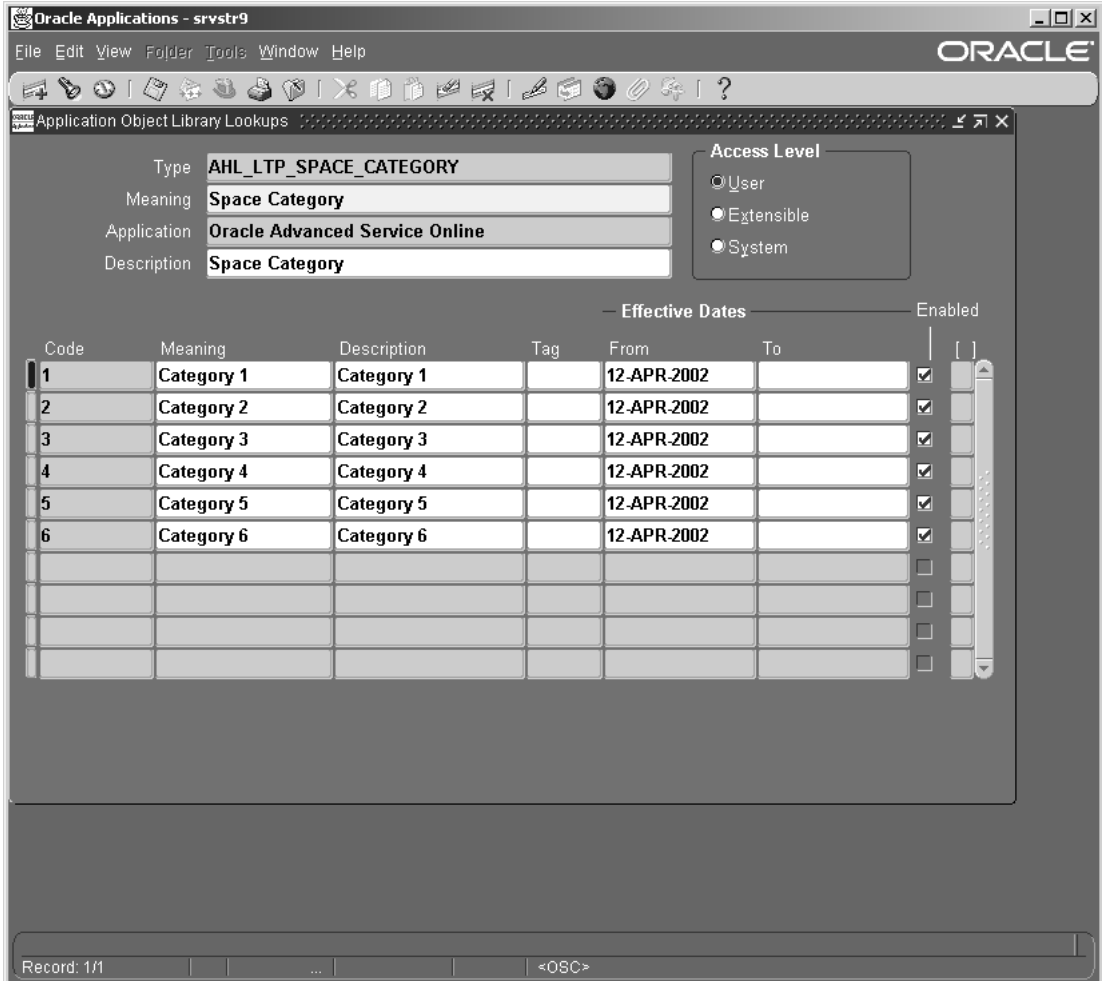
To define lookups for Long Term Planning

1. Login using the Application Developer Responsibility.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Category	AHL_LTP_SPACE_CATEGORY	Category 1, Category 2…	User
Display Only	AHL_LTP_VISITS_DISPLAY_ONLY	Scheduled, Unscheduled	User
Status	AHL_LTP_SPACE_STATUS	Inactive, Active	User
Period UOM	AHL_LTP_DISPLAY_PERIOD	Days, Months, Weeks	User

Attribute	Lookup	Suggested Values	Access Level
Visit Type	AHL_PLANNING_VISIT_TYPE	A-Check, B-Check, C-Check	User

Figure 2–91 Defining Lookup: AHL_LTO_SPACE_CATEGORY



Setting Up Production

The Production module enables the execution of routine and non-routine tasks and associated with a Visit. It also supports the execution of tasks against an Install Base Tracked Item.

Maintenance personnel can:

- Search for Routine and Non-Routine Jobs using filtered search elements
- Create Jobs from visit tasks for Scheduled, Unscheduled, and Convenience maintenance
- Create Service Requests to track reported problems when an item has a service difficulty
- Create Operations to Non-Routine Jobs for work definition and tracking
- Maintain jobs by adjusting the schedule, the status, completing, deferring, and selecting the actual start and end for a job
- Maintain operations by updating the operations, adding, removing, or updating the material and resource requirements
- Maintain Quality using Route setup from Route Management for Job and Operation compliance

Maintenance schedulers can create jobs, initiate service for material and parts change transactions, and perform job operation maintenance.

Setting up Production includes:

- Setting up System Profile Options
- Defining Lookups

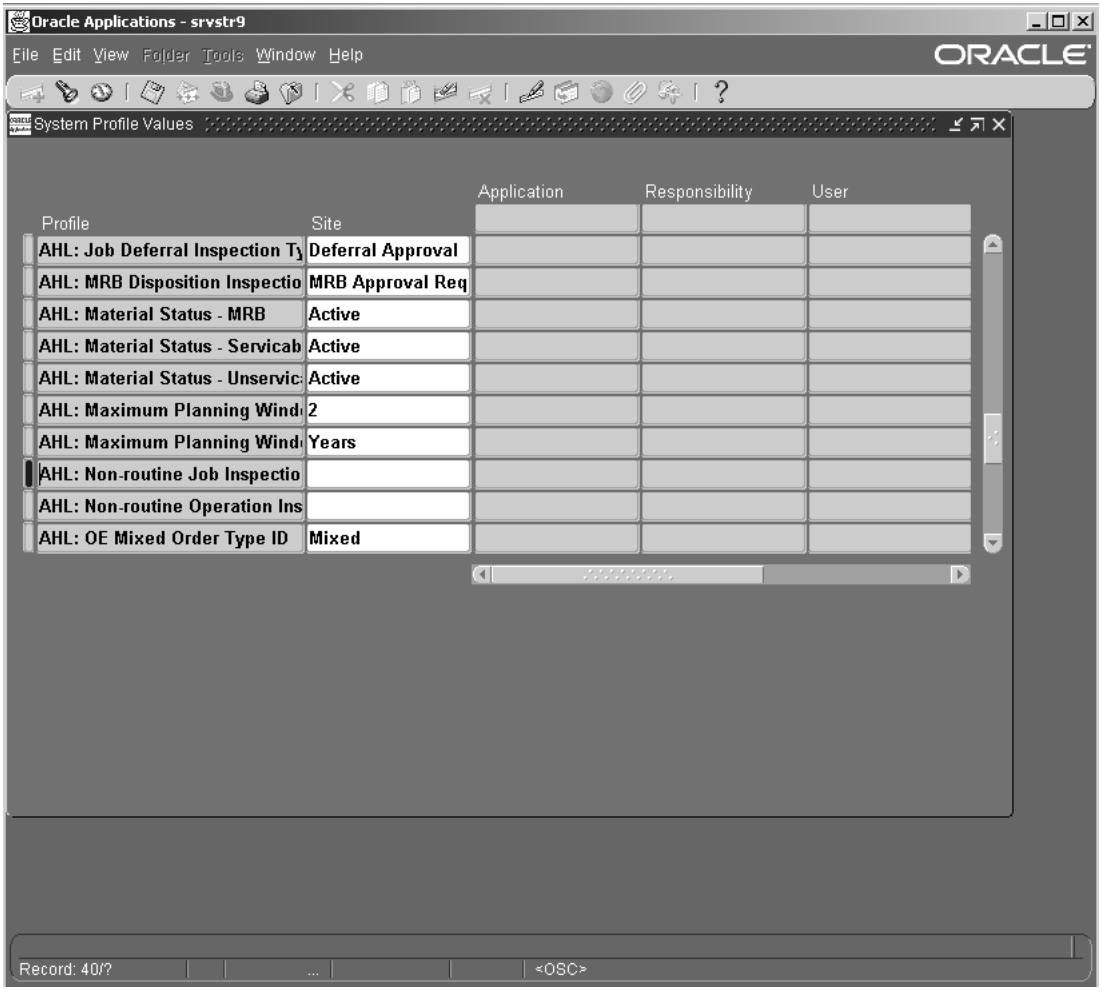
To set up System Profile Options:

1. Login using the System Administrator responsibility. Navigate to the System Profile Values window.
2. Set up System Profile Options as described in the table below.

Profile	Site(Value)	Description
AHL: Job Deferral Inspection Type	Deferral Approval	The Quality plan inspection type used for Production Job deferrals

Profile	Site(Value)	Description
AHL: MRB Disposition Inspection	MRB Approval Required	The Quality plan inspection type used when a tracked item is returned an MRB subinventory
AHL: Material Status - MRB	Active/Non-Active	The status that triggers the Quality inspection requirement for MRBand a service request creation, when an tracked item is being returned inthe condition associated with this status to a subinventory with the status associated
AHL: Material Status - Serviceable	Active	The status indicating a serviceable item. This status is used toensure that installed items meet the condition associated with this status and are issued from a subinventory with this status associated
AHL: Material Status - Unserviceable	Active	The status that triggers the Service Request creation, when a tracked item is being returned in the condition associated with this status to a subinventory with the status associated
AHL: Non-routine Operation Inspection	-	Used to determine if non-routine operation required inspection
AHL: OE Mixed Order Type ID	P -Mixed	Order type to create a OSP order
AHL: OE Return Line ID	P- Return	Line type to create a OSP order
AHL: OE Ship Only Line Type ID	P- Standard	Line type to create a OSP standard only ship line
AHL: Validate Alternate Items	Yes/No	Enabled/disable organization validation on alternate items for UC

Figure 2–92 System Profile Values

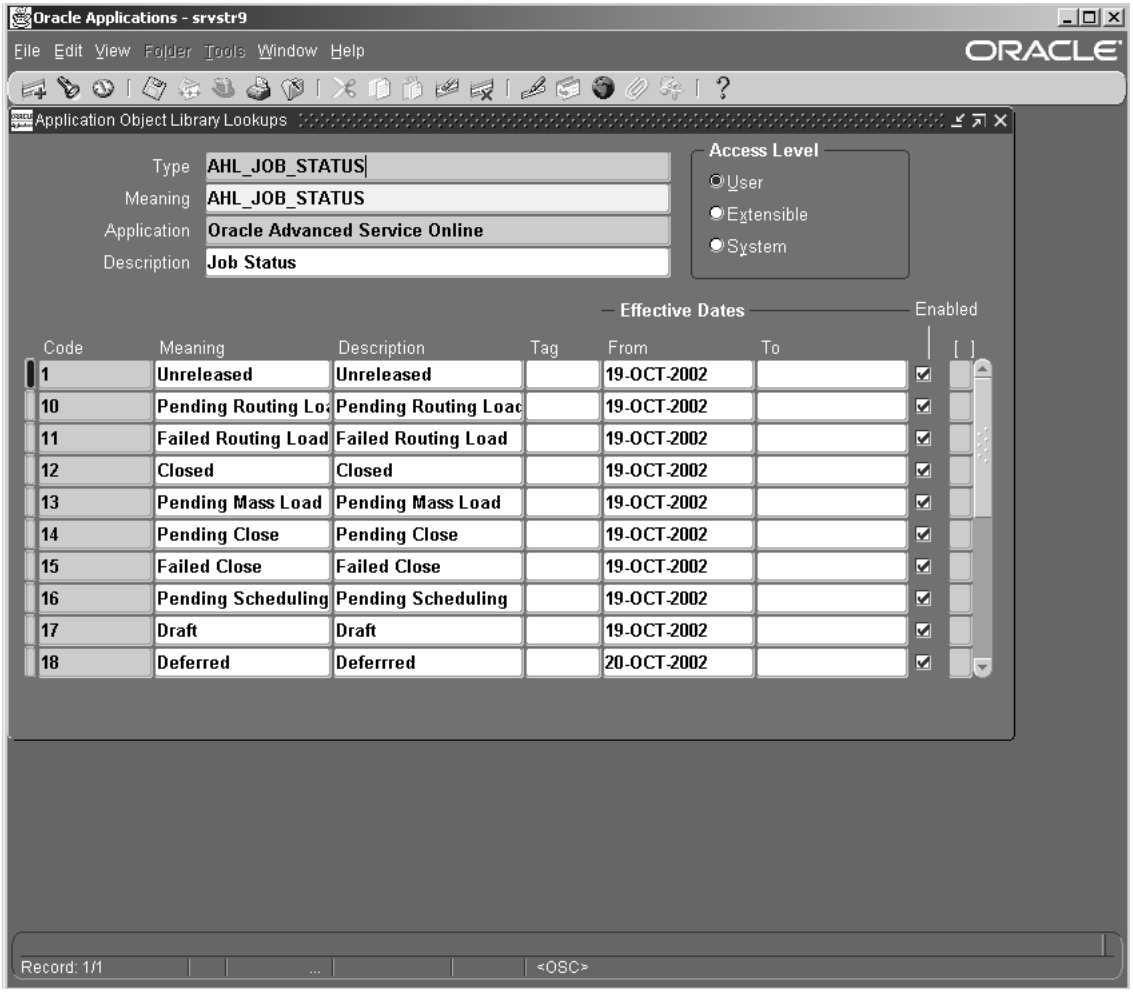


To define lookups for Production:

1. Change responsibility to Application Developer.
2. Navigate to the lookups window and define the lookups as indicated in the following table.

Attribute	Lookup	Suggested Values	Access Level
Job Status	AHL_JOB_STATUS	Unreleased, Released, Pending Routing Load, Failed Bill load, Deferred, Pending Bill Load, Draft, Cancelled, Pending Scheduling, On Hold, Failed close, Pending Close, Complete No-Charge, Pending Mass Load, Complete, Closed, Failed Routing load,	User
Display Only	AHL_LTP_VISITS_ DISPLAY_ONLY	Scheduled, Unscheduled	User
Status	AHL_LTP_SPACE_STATUS	Inactive, Active	User
Period UOM	AHL_LTP_DISPLAY_ PERIOD	Days, Months, Weeks	User
Visit Type	AHL_PLANNING_VISIT_ TYPE	A-Check, B-Check, C-Check	User

Figure 2–93 Defining Lookup:AHL_JOB_STATUS



A

Windows and Navigation Paths

Windows and Navigation Paths

This appendix provides the default navigator paths for the windows used in the Oracle Complex Maintenance, Repair, and Overhaul(CMRO). The following table provides the default navigation paths. Brackets [ ] indicate a button.

Default Navigation Paths for Standard Application Windows

Table A–1 CMRO- Related Windows and Navigation Paths

Window Name	Navigation Path
Accounting Information	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Inventory Organization > Others > Accounting Information
Additional Organization Information	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Organizations > HR Organization > Others
Application Object Library Lookups	Application Developer: Application > Lookups > Application Object Library
Application Object Library: JTF_RS_ROLE_TYPE Lookups	CRM Resource Manager: Setup > Role Types
Approval Groups	Manufacturing and Distribution Manager: Purchasing > Setup > Approvals > Approval Groups
Buyers	Manufacturing and Distribution Manager: Purchasing > Setup > Personnel > Buyers
Category Sets	Enterprise Asset Management: Set up > Category > Category Sets

Table A–1 CMRO- Related Windows and Navigation Paths

Window Name	Navigation Path
Collection Elements	Manufacturing and Distribution Manager: Quality > Setup > Collection Elements
Collection Plans	Manufacturing and Distribution Manager: Quality > Setup > Collection Plans
Department Classes	Manufacturing and Distribution Manager: Bill of Materials > Setup > Department Classes
Department Subinventories	Warehouse Manager Mgmt Super User: Setup > Warehouse Configuration > Resources > Associate Departments & Subinventories
Departments	Manufacturing and Distribution Manager: Bill of Materials > Routings > Department
Enterprise Asset Managment Parameters	Enterprise Asset Management: Setup > Parameters
Exp Org Defaults	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Project Expenditure/Event Organization > Others
Find Buyer	Contract Manager: Setup > Others > Buyer > Buyer
Find Categories	Enterprise Asset Management: Set up > Category > Category Codes
Find Organization window	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Organizations
Find System Profile Values	System Administrator > Profile > System
Find/Enter Customers	Manufacturing and Distribution Manager: Order Management: Customers > Standard
Installed Parameters	Oracle Installed BaseAdmin > Setup > Install Parameters
Instance Statuses	Oracle Installed BaseAdmin > Setup > Instance Statuses
Inventory Accounting Periods	Manufacturing and Distribution Manager: Inventory > Accounting Close Cycle > Inventory Accounting Periods
Key Flexfields Segments	Application Developer: Flexfield > Key > Segments
Master Demad Schedules	Manufacturing and Distribution Manager: Material Planning > MDS > Names
Master Item	Manufacturing and Distribution Manager: Inventory > Items > Master Items
Material Status Definition	Warehouse Manager Mgmt Super User: Setup > Transaction Setup > Inventory Transactions > Material Status

Table A–1 CMRO- Related Windows and Navigation Paths

Window Name	Navigation Path
MRP Names	Manufacturing and Distribution Manager: Material Planning > MRP > Names
Open and Close Periods	Manufacturing and Distribution Manager: Purchasing > Financial > Accounting > Open and close periods
Oracle Manufacturing Lookups	Enterprise Asset Management: Setup > Lookup
Organization Parameters	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Inventory Organization > Others > Inventory Information
Parent Organization	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Organizations > HR Organization > Others > Parent organization
Personal Profile Values	Application Developer > Other > Profile
Planning Manager	Manufacturing and Distribution Manager: Material Planning > Setup > Planning Manager
Planning Parameters	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > MRP Organization > Others
Planning Parameters	Manufacturing and Distribution Manager: Material Planning > Setup > Parameters
Processing Constraints	Manufacturing and Distribution Manager: Order Management > Set Up > Rules > Security > Processing Constraints
Project Manufacturing Parameters	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Project Manufacturing Organization > Others
Project Parameters	Manufacturing and Distribution Manager: Project > Project Definitions > Project Parameters
Project Type Class Information	Manufacturing and Distribution Manager: Inventory > Setup > Organizations > Project Task Owning Organization > Others > Project Type Class Information
Resources	Manufacturing and Distribution Manager: Bill of Materials > Routings > Resources
Roles	CRM Resource Manager: Setup > Roles
Search Approval Rules	Advanced Service Online User: Administration > Approvals
Segment Values	Application Developer: Flexfield > Key > Values
Selection Criterion	CRM Resource Manager: Maintain Resources > Import Resources

Table A–1 CMRO- Related Windows and Navigation Paths

Window Name	Navigation Path
Service Request Severities	Customer Support: Setup > Service Request > Request Severities
Service Request Statuses	Customer Support: Setup > Service Request > Request Status
Service Request Types	Customer Support: Setup > Service Request > Request Types
Setup Counters	Field Service Manager : Field Service Set Up > Counters > Define Counters
Subinventories	Manufacturing and Distribution Manager: Inventory > Setup > Organization > Subinventories
Subinventories Summary	Warehouse Manager Mgmt Super User: Setup > Warehouse Configuration > Warehouse > Subinventories
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WIP Accounting Classes	Enterprise Asset Management: Setup > WIP > WIP Accounting Classes
WIP Accounting Classes	Manufacturing and Distribution Manager: WIP > Setup > WIP Accounting Class
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