Oracle® Enterprise Asset Management

Implementation Guide

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Oracle Enterprise Asset Management Implementation Guide, Release 12.1

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Preface

Intended Audience

Welcome to Release 12.1 of the *Oracle Enterprise Asset Management Implementation Guide.*

Implementation team

See Related Information Sources on page x for more Oracle E-Business Suite product information.

Deaf/Hard of Hearing Access to Oracle Support Services

To reach Oracle Support Services, use a telecommunications relay service (TRS) to call Oracle Support at 1.800.223.1711. An Oracle Support Services engineer will handle technical issues and provide customer support according to the Oracle service request process. Information about TRS is available at http://www.fcc.gov/cgb/consumerfacts/trs.html, and a list of phone numbers is available at http://www.fcc.gov/cgb/dro/trsphonebk.html.

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Structure

1 Oracle Enterprise Asset Management Overview

This chapter provides a high level overview of the Oracle Enterprise Asset Management application.

2 Process Flows

3 Setting Up

This chapter provides Enterprise Asset Management administrators necessary setup information. You can also refer to the Oracle Enterprise Asset Management Implementation Guide for additional information, such as APIs and Profile Options.

4 eAM Profile Options

5 eAM Open Interfaces and APIs

6 eAM Descriptive Flexfields

A GIS Integration: Implementing the Custom Mapviewer

B Windows and Navigation Paths

Related Information Sources

Oracle Enterprise Asset Management 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 Enterprise Asset Management. 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.

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets

users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite 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 E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, 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 E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite 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.

1

Oracle Enterprise Asset Management Overview

This chapter provides a high level overview of the Oracle Enterprise Asset Management application.

This chapter covers the following topics:

- Introduction
- Overview of Oracle Enterprise Asset Management
- Asset Management
- eAM Work Management
- Integration with Other Oracle Application Products

Introduction

Oracle Enterprise Asset Management (eAM) is part of Oracle's *E-Business Suite* and addresses the comprehensive and routine asset maintenance requirements of asset intensive organizations. Using eAM, organizations can efficiently maintain both assets, such as vehicles, cranes and HVAC systems, as well as rotable inventory items, such as motors and engines. To measure performance and optimize maintenance operations, all maintenance costs and work history are tracked at the asset level.

This chapter contains the following topics:

- Overview of Oracle Enterprise Asset Management, page 1-2
- Asset Management, page 1-2
- eAM Work Management, page 1-4
- Integration with Other Oracle Application Products, page 1-5

- Required Products, page 1-5
- Optional Products, page 1-5

Overview of Oracle Enterprise Asset Management

Oracle Enterprise Asset Management (eAM) is a part of Oracle's E-Business Suite, providing organizations with the tools to create and implement maintenance procedures for both assets and rebuildable inventory items. Maintenance procedures are an integral part of an organization's complete asset lifecycle management strategy, enabling an organization to optimize asset utilization. eAM enables users to optimally plan and schedule maintenance activities with minimal disruption to an organization's operations or production. Importantly, it improves resource efficiency, enhances maintenance quality, tracks work history, and records all maintenance costs.

Oracle eAM tracks the performance of assets (including rebuildable, inventory items) using meters, quality plans, and condition monitoring systems. By effectively monitoring an asset's operating condition, effective preventive maintenance strategies can be implemented. In addition to creating preventive maintenance schedules, users can create alternative maintenance strategies for seasonal or production capacity changes.

eAM's comprehensive maintenance functionality supports asset lifecycle strategies for asset intensive industries, including Metals/Mining, Manufacturing, Pulp/Paper, Petrochemicals, Facilities, and Education. eAM eliminates the need for spreadsheets and disparate data repositories, by enabling companies to manage reactive, planned, preventive maintenance, and adopt a centralized, proactive strategy for managing asset maintenance across an enterprise.

eAM enables an organization to do the following:

- Create a preventive maintenance strategy
- Maximize resource availability, including both equipment and labor
- Optimize scheduling and resource efficiency
- Integrate with Oracle's E-Business Suite for enterprise-wide solutions

The following topics are included in this section:

- Asset Management, page 1-2
- eAM Work Management, page 1-4

Asset Management

eAM eliminates the need for point solutions that offer a limited, "flat" view of an asset

by expanding the visibility and ownership of an asset throughout an entire organization. Different entities may describe an asset in several ways:

- Fixed asset to an accounting department
- Leased asset to facilities management
- Piece of production equipment to operations
- Inventory item to materials management
- Maintainable asset to mechanical engineers

Oracle eAM incorporates the above views of an asset through a single entity. An asset is an entity for which users can report problems. Assets can be cooling towers, cranes, buses, buildings, conveyors, or anything that needs work. eAM provides the flexibility to address the many types of assets through the definition of the following:

- Asset groups and attributes
- Asset links to an enterprise
- Asset costs and work history
- Asset activities and meters

By first establishing asset groups, you can define assets and asset characteristics that can be inherited by the assets belonging to that group. Detailed information, such as nameplate data, engineering specifications, property detail, and other searchable characteristics are defined with asset attribute elements and values. Asset groups also define a default master bill of materials (BOM) for assets. This BOM can be edited for specific assets. Virtual assets can be designed to create a network of assets or routings. This combines several assets to a single work activity.

Oracle eAM enables you to quickly identify plants and facilities using an Asset Navigator (See: Defining Asset Numbers, page 3-65). You can view details of an asset, such as cost, hierarchal (parent/child) information, and launch transactions. You can also view current or historical configurations, and work details of an asset. As rotable, inventory items of an asset are removed from and reinstalled into an asset, the asset genealogy and parent/child meter readings are recorded automatically. Attributes, such as cost history, bills of material, and document attachments can be associated with a specific asset.

You can view the locations of assets by using the built-in integration of web-based source map viewers of Google Maps or ESRI. The system also provides the provision to integrate with a third-party HTML based map viewer. Assets can be geocoded and then assets and work can be displayed in the map viewer based on user-entered search criteria. See Google Maps Integration, *Oracle Enterprise Asset Management User's Guide* and ESRI Integration, *Oracle Enterprise Asset Management User's Guide*.

Asset Hierarchies

You can focus on an asset hierarchy, or a set of parent/child relationships of an asset. You can view all associated asset information such as asset details, bill of material, work orders, maintenance activities, quality plans, maintenance costs, contract services, and work order history. You can view cost information for one asset, or view rolled-up costs of its children assets.

Related Topics

Defining Asset Numbers, page 3-65

Obtaining Asset Number Information, *Oracle Enterprise Asset Management User's Guide*

Viewing Asset Number Information, *Oracle Enterprise Asset Management User's Guide*

Viewing Capital Asset and Rebuildable Inventory Work Orders, *Oracle Enterprise Asset Management User's Guide*

Google Maps Integration, *Oracle Enterprise Asset Management User's Guide*

ESRI Integration, *Oracle Enterprise Asset Management User's Guide*

eAM Work Management

Preventive and predictive maintenance strategies are supported by eAM. Preventive maintenance can be based on Day or Runtime intervals, as well as a specific list of dates, for both assets and inventory items. Organizations that practice predictive maintenance can monitor and scrutinize maintenance work history and performance trends with quality plans. They can also study asset conditions by monitoring systems. By combining these strategies, an organization can establish a maintenance strategy that ensures minimal downtime. Oracle Enterprise Asset Management enables you to monitor reliability and predict the need for maintenance in the future. You can identify any breach of performance defined by engineering and immediately alert maintenance, monitor conditions of an asset, collect meter readings, forecast the frequency at which preventive maintenance should be performed, and establish Run to Failure schedules and forecasts, based on predicted failures.

Oracle eAM enables operations and maintenance staff to create work requests to report any problems with an asset. To avoid duplicate work orders for the same issue, you can review any outstanding work requests that are currently assigned to an asset.

A supervisor can approve, place on hold, or reject a work request. An approved work request can be linked to a work order. The status of a work request is then updated when it is linked to a work order.

Related Topics

Obtaining Work Request Information, *Oracle Enterprise Asset Management User's Guide*

Creating and Updating Work Requests, *Oracle Enterprise Asset Management User's Guide*

Work Orders, *Oracle Enterprise Asset Management User's Guide*

Integration with Other Oracle Application Products

Oracle Enterprise Asset Management is part of the Oracle E-Business suite, and directly integrates with Oracle Manufacturing, Oracle Purchasing, Oracle Property Management, Oracle Quality, Oracle Inventory, Oracle Human Resources, Oracle Financials, Oracle Fixed Assets, and Oracle Projects. This enables you to strategically monitor resource and cost planning throughout the enterprise. Improvement programs can be enforced and reviewed to ensure compliance with industry standards by tracking problems through to resolution.

A well-planned maintenance environment depends on the ability of key personnel to view available inventory items, equipment, and skilled personnel. Because eAM is an enterprise solution, you can view the resource availability for assets that are used by operations and coordinate maintenance work to minimize operation disruption. Most importantly, Oracle eAM is designed for the maintenance user who performs the work. Using Oracle's Maintenance User, trades people and supervisors with minimum training can easily perform their work.

Required Products

To implement Enterprise Asset Management, you must have the following required products installed:

- Oracle Inventory
- Oracle Bills of Material
- Oracle Human Resources
- Oracle Cost Management
- Oracle Manufacturing Scheduling
- Oracle Quality
- Oracle Work In Process

Optional Products

To implement Enterprise Asset Management, the following products are not required; however, they are useful in the overall robust eAM solution:

- Oracle Master Scheduling/MRP

- Oracle Property Management
- Oracle Financials
- Oracle Fixed Assets
- Oracle iProcurement
- Oracle Projects
- Oracle Project Manufacturing
- Oracle Purchasing
- Oracle Order Management
- Oracle Time and Labor

2

Process Flows

This chapter covers the following topics:

- Work Execution Implementation Flow
- Preventive Maintenance Implementation Flow

Work Execution Implementation Flow

The Work Execution Implementation flow includes the following steps:

1. Create a Maintenance Work in Process (WIP) Accounting Class.

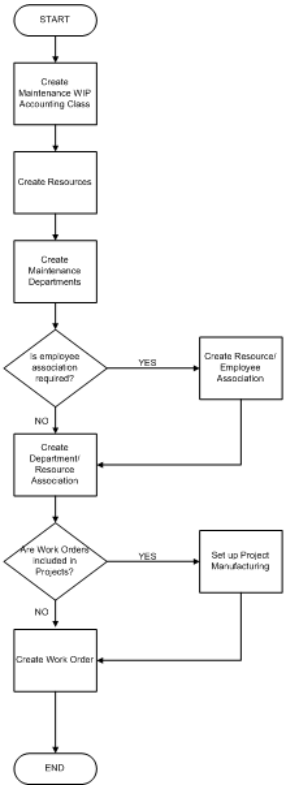
2. Create resources and maintenance departments.

   Decide if employee association is required. If employee association is required, create resource and employee associations and then create department and resource associations. If employee association is not required, create department and resource associations.

3. Decide if work orders are included in projects.

   If they are, set up Project Manufacturing, and then create a Work Order. If Work Orders are not included in projects, create a work order.

Work Execution Implementation Flowchart

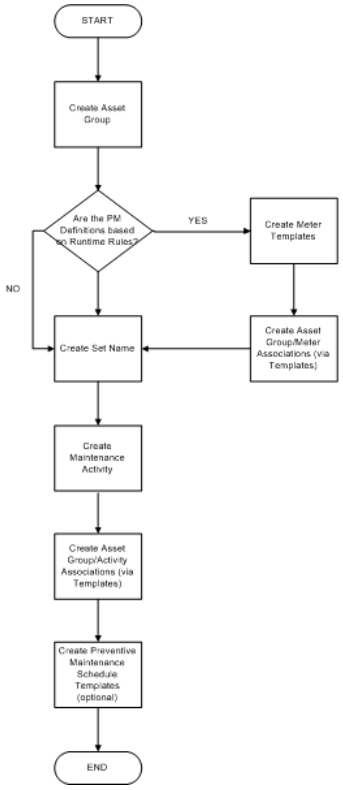


Preventive Maintenance Implementation Flow

The Preventive Maintenance Implementation flow includes the following steps:

First, create an Asset Group. Next, decide if Preventive Maintenance (PM) definitions are based on runtime rules. If they are, create Meter Templates, next Asset Group and Meter associations using those templates, and then create a Set Name. If PM definitions are not based on runtime rules, create a Set Name. Next, create a Maintenance Activity and then Asset Group and Activity associations using templates. Finally, optionally create PM Schedule templates.

Preventive Maintenance Implementation Process Flow



3

Setting Up

This chapter provides Enterprise Asset Management administrators necessary setup information. You can also refer to the Oracle Enterprise Asset Management Implementation Guide for additional information, such as APIs and Profile Options.

This chapter covers the following topics:

- Before You Begin
- Oracle Enterprise Asset Management Setup Overview
- Organization Setup
- Setting Up Organizations
- Enabling Organizations for Enterprise Asset Management
- Setting Up Install Base Parameters
- Setting Up Services Fulfillment Manager Parameters
- Defining eAM Parameters
- General eAM Setup
- Setting Up Areas
- Defining Departments and Resources
- Defining Department Approvers
- Defining Miscellaneous Documents
- Setting Up Electronic Records and Signatures
- Defining Lookups
- Asset Setup
- Using the Activity Workbench
- Rebuildable Item Setup
- Non-Stock Direct Item Setup

- Preventive Maintenance Setup
- eAM Planning and Scheduling
- Defining a Master Demand Schedule Name
- Defining a Material Requirements Plan Name
- Defining Plan Options
- Quality Integration Setup
- Creating Collection Elements
- Creating eAM Quality Collection Plans
- Creating eAM Quality Collection Plans for a Supplier
- Outside Processing Integration Setup
- Setting Up Outside Service Processing
- Setting Up Direct Items
- Cost Management Integration Setup
- Setting Up Cost Categories
- Setting Up Purchase Order Category Associations for Direct Items
- Setting Up eAM Cost Management
- Setting Up Zero Cost Rebuild Item Issue
- Process and Discrete Manufacturing Integration Setup
- Organization Setup
- Associating Assets with Production Equipment
- Encumbrance Accounting
- Project Manufacturing Integration Setup
- Project Definition
- Property Manager Integration Setup
- Setting Up eAM Prerequisites
- Executing the Export Process
- Executing the Asset Number Interface
- Service Integration Setup
- Creating Maintenance Service Request Types
- Enabling Service Requests for Assets and Rebuildables
- Enabling eAM Specific Fields
- Oracle Time and Labor Integration Setup

- Defining Persons as Users
- Creating Eligibility Criteria
- Work Order Billing Setup
- Setting Up Parameters
- Setting up Costs for the Cost Plus Billing Basis
- Setting up Prices for the Price List Billing Basis
- Service Attribute Setup
- Setting Up Billable Material
- Setting Up a Billable Resource
- Setting Up a Billable Activity

Before You Begin

As you plan your implementation of Oracle Enterprise Asset Management (eAM), Oracle recommends that you consider the implementation issues discussed in this section. By carefully planning your implementation, you can save time and reduce errors.

Overview of Setting Up

This section contains a checklist that includes each task to complete the implementation of Oracle Enterprise Asset Management. It lists the steps required to implement Oracle Enterprise Asset Management, along with advanced implementation topics for you to consider. The setup checklist is organized into several subsections.

When installing Oracle Enterprise Asset Management, the installation process automatically creates five responsibilities: Oracle Enterprise Asset Management, Maintenance User Workbench, Maintenance Super User, Self-Service Work Requests, and Self Service Time and Expenses. The Oracle Enterprise Asset Management is a super user responsibility. It includes the necessary functions to set up and implement Oracle Enterprise Asset Management.

Before setting up Oracle Enterprise Asset Management, set up the users and assign their appropriate responsibilities for the implementation.

Related Product Setup Steps

Oracle Enterprise Asset Management setup includes various setup steps within Oracle Applications products. These steps are discussed in detail in the Overview of Setting Up sections of the respective Oracle Product users guides.

Setting Up Underlying Oracle Applications Technology

Ensure that you complete the following setup steps, including:

- Performing system-wide setup tasks, such as configuring concurrent managers and printers
- Managing data security, which includes setting up responsibilities to enable access to a specific set of business data and complete a specific set of transactions, and assigning individual users to one or more of these responsibilities
- Setting up Oracle Workflow

  Note: If you plan to use work requests for reporting maintenance problems in Oracle Enterprise Asset Management, and those work requests need approval by a maintenance department user, then you should set up Oracle Workflow.

Oracle Enterprise Asset Management Setup Overview

Oracle Enterprise Asset Management (eAM) may have unique setups for each organization, including parameters, user defined lookups, and attributes. During the implementation process, the implementation team should discuss system and user options for Enterprise Asset Management. Users implementing Enterprise Asset Management should also have determined the structure of their organizations and user access via the Oracle System Administrator responsibility. This chapter covers the following topics:

- Organization Setup, page 3-5
- General Enterprise Asset Management Setup, page 3-15
- Defining Lookups, page 3-23
- Asset Setup, page 3-47
- Using the Activity Workbench, page 3-80
- Rebuildable Item Setup, page 3-105
- Non-Stock Direct Item Setup, page 3-116
- Preventive Maintenance Setup, *Oracle Enterprise Asset Management User's Guide*
- eAM Planning and Scheduling, page 3-150

- Quality Integration Setup, page 3-157
- Outside Processing Integration Setup, page 3-168
- Cost Management Integration Setup, page 3-178
- Process and Discrete Manufacturing Integration Setup, page 3-187
- Project Manufacturing Integration Setup, page 3-190
- Property Manager Integration Setup, page 3-195
- Service Integration Setup, page 3-199
- Oracle Time and Labor Integration Setup, *Oracle Enterprise Asset Management User's Guide*
- Work Order Billing Setup, page 3-209

Organization Setup

Organization setup is required before you can set up any additional Enterprise Asset Management information. Tasks include:

- Setting Up Organizations, page 3-5
- Enabling Organizations for Enterprise Asset Management, page 3-7
- Defining eAM Parameters, page 3-11

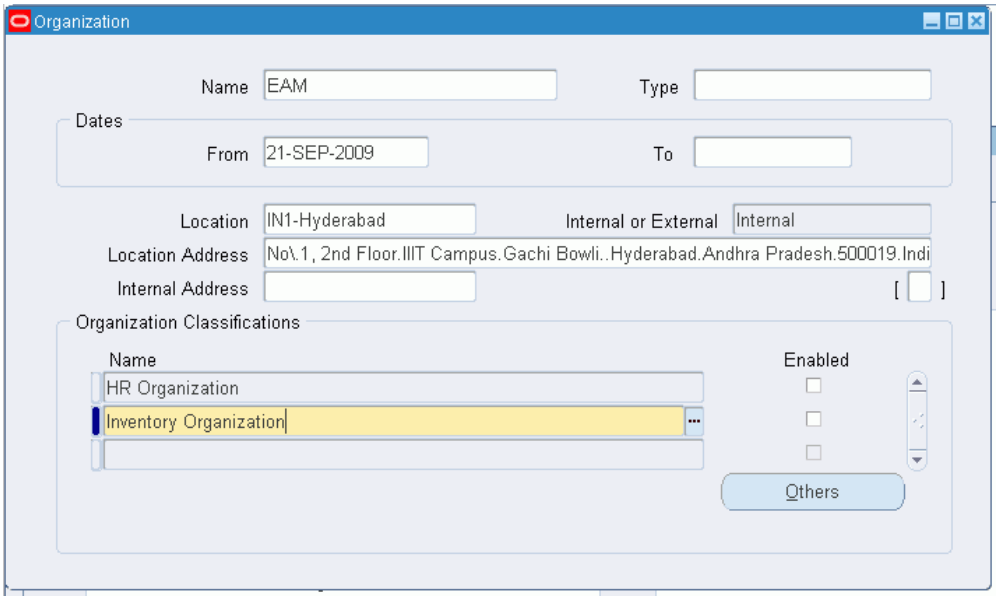
Setting Up Organizations

A valid organization is a requirement for Enterprise Asset Management setup. Decisions are made during implementation as to which organizations are enabled for Enterprise Asset Management. If the decided upon organizations already exist, you can skip this section and proceed to Enabling Organizations for Enterprise Asset Management, page 3-7.

To set up organizations:

1. Navigate to the Organization window.

Organization



2. Enter an organization Name, for example, Seattle Maintenance.

3. Select an organization Type. For information on Type, Dates region fields, Location, Internal or External, Location Address, and Internal Address fields, see: Creating an Organization, *Oracle Human Resources User's Guide*.

4. Save your work. A valid location must be set up before you can save (See: Creating an Organization, *Oracle Human Resources User's Guide*).

5. In the Organization Classifications region, establish this organization as an Inventory Organization. Select Inventory Organization from the Name list of values.

   Note: An eAM organization must be classified as an Inventory Organization. You can classify an eAM as other product organizations, as well.

6. Save your work.

Related Topics

Creating an Organization, *Oracle Human Resources User's Guide*

Enabling Organizations for Enterprise Asset Management

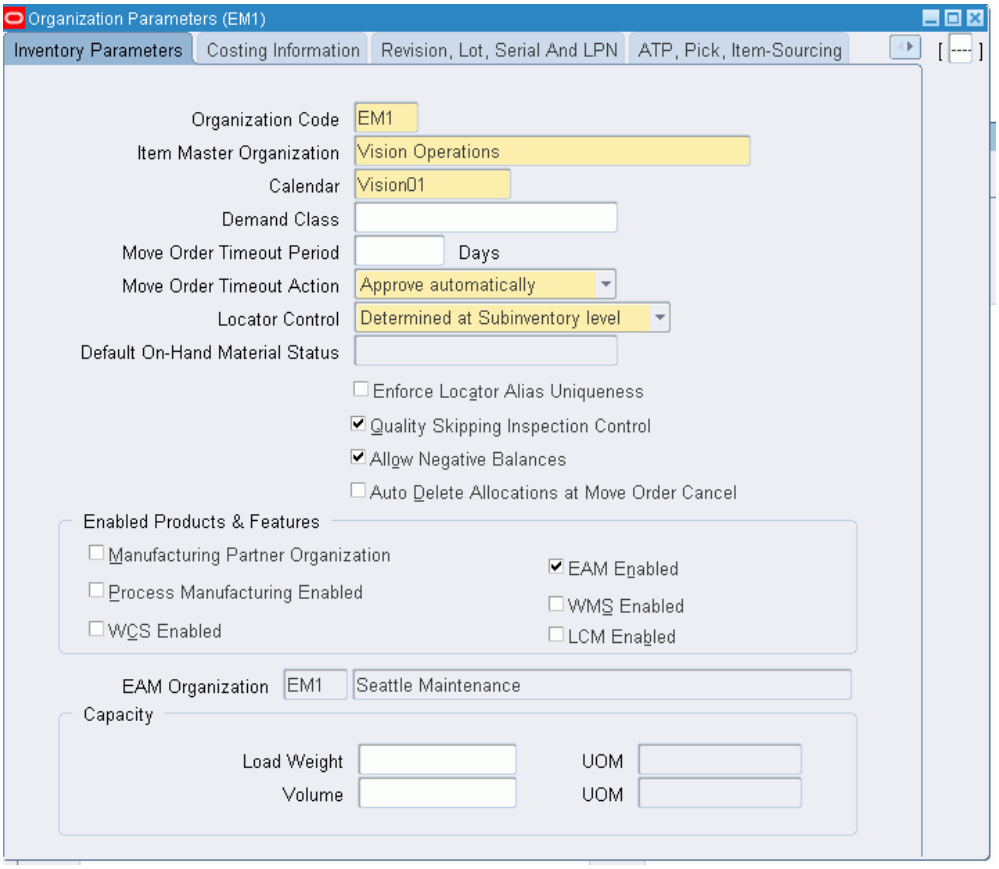
Before you begin implementing Enterprise Asset Management (eAM), decide which organizations are eAM enabled. A valid organization must exist before you can enable the organization for Enterprise Asset Management (See: Setting Up Organizations, page 3-5).

To define an Enterprise Asset Management enabled organization:

You can create a new Enterprise Asset Management enabled organization, or convert an existing organization to an Enterprise Asset Management enabled organization. Oracle recommends that you keep Enterprise Asset Management organizations separate from production organizations. Enterprise Asset Management parameters are on the Inventory Parameters tab, within the Organization Parameters window.

1. Navigate to the Organization Parameters window.

Organization Parameters



2. Enter a valid organization code. For information on how to create an organization, See: Setting Up Organizations, page 3-5.

3. Select the EAM Enabled check box to enable Enterprise Asset Management for this organization. You cannot clear this check box after Enterprise Asset Management items or Enterprise Asset Management parameters are defined in the current organization.

4. If Enterprise Asset Management is enabled for the current organization, the EAM Organization value defaults and is disabled; the current organization code defaults.

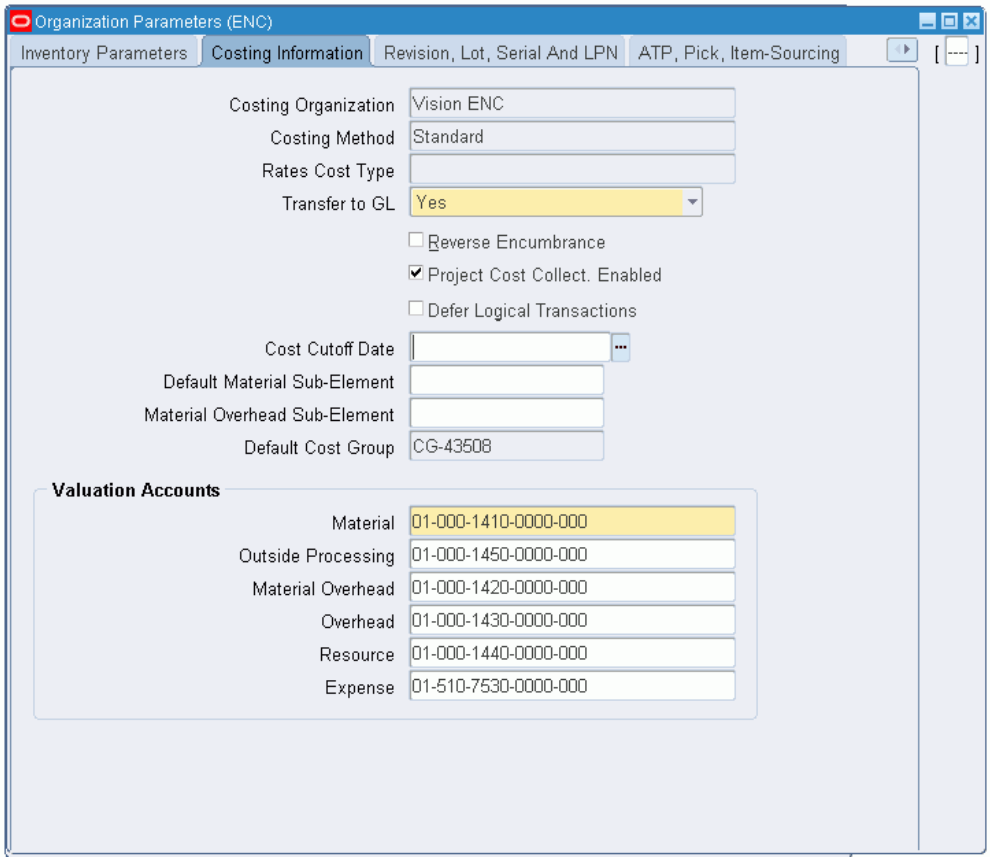
   For organizations that are not Enterprise Asset Management enabled, you can populate the EAM Organization field with an Enterprise Asset Management enabled organization code. The designated eAM organization maintains equipment items for the designated production organization. For example, if the current organization is a production organization, this is how you would identify a maintenance organization that is associated with the production organization (See: Overview of the Process and Discrete Manufacturing Integration, *Oracle Enterprise Asset Management User's Guide*). You can update this field, if asset equipment

association does not exist in this organization.

5. If you are using encumbrance accounting, you must enable this feature.

   Navigate to the Costing Information page.

Costing Information



6. Select the **Reverse Encumbrance** option.

7. Save your work.

Related Topics

Organization Parameters Window, *Oracle Inventory User's Guide*

For more information regarding encumbrance accounting, see Encumbrance Accounting, page 3-190

Setting Up Install Base Parameters

Oracle Enterprise Asset Management is integrated with Oracle Install Base. Therefore, the Install Base parameters must be set up to ensure that assets are created correctly in eAM.

Creating an Internal Party

❒ Before you set up the parameters for Oracle Install Base, you must first create an internal party. The internal party will be used to complete the Install Base setup.

Follow these steps to create an internal party:

1. Navigate to the Customer Support - Asset Maintenance responsibility.
2. Click the Contact Center link.
3. Enter contact or customer details in the header section of the page.
4. Click the Party Information tab.
5. Press the F11 key. This action enables you to access fields in the page.
6. Enter all applicable information for the internal party.
7. Save your work.

You must perform the following steps in Oracle Install Base:

1. Navigate to the Install Base Administrator responsibility.
2. Under the Setups menu, click the Install Parameters link.
3. Set up the Install Parameters for Install Base.

   Note: See the *Oracle Install Base Implementation Guide* for assistance on how to set up the Install Base parameters.

   See "Set Up Installation Parameters", Setup Steps within Oracle Install Base, *Oracle Install Base Implementation Guide*.

4. Make sure that the Freeze check box has been selected.

   If it is unchecked, then select the check box.

5. Save your work.

Setting Up Services Fulfillment Manager Parameters

Several transactions originating from Inventory and Order Management are processed in Install Base, and these transactions must be serialized.

In order to guarantee the serialization of the transactions, you must perform the following steps to ensure that asset transfers are performed correctly in eAM:

1. Navigate to the SFM System Administrator responsibility.
2. Navigate to Administration, and then click the Queue Console link.
3. Click the Services button.
4. Select the SFM Event Manager Queue Service value.
5. Enter a value of 1 for both the Actual and Target to ensure that the Services Fulfillment Manager is up and running.
6. Save your work.

Related Topics

See "Ensure the Serializability of Transactions Processed in Oracle Install Base," Implementation and Setup for New Users, *Oracle Install Base Implementation Guide*.

Defining eAM Parameters

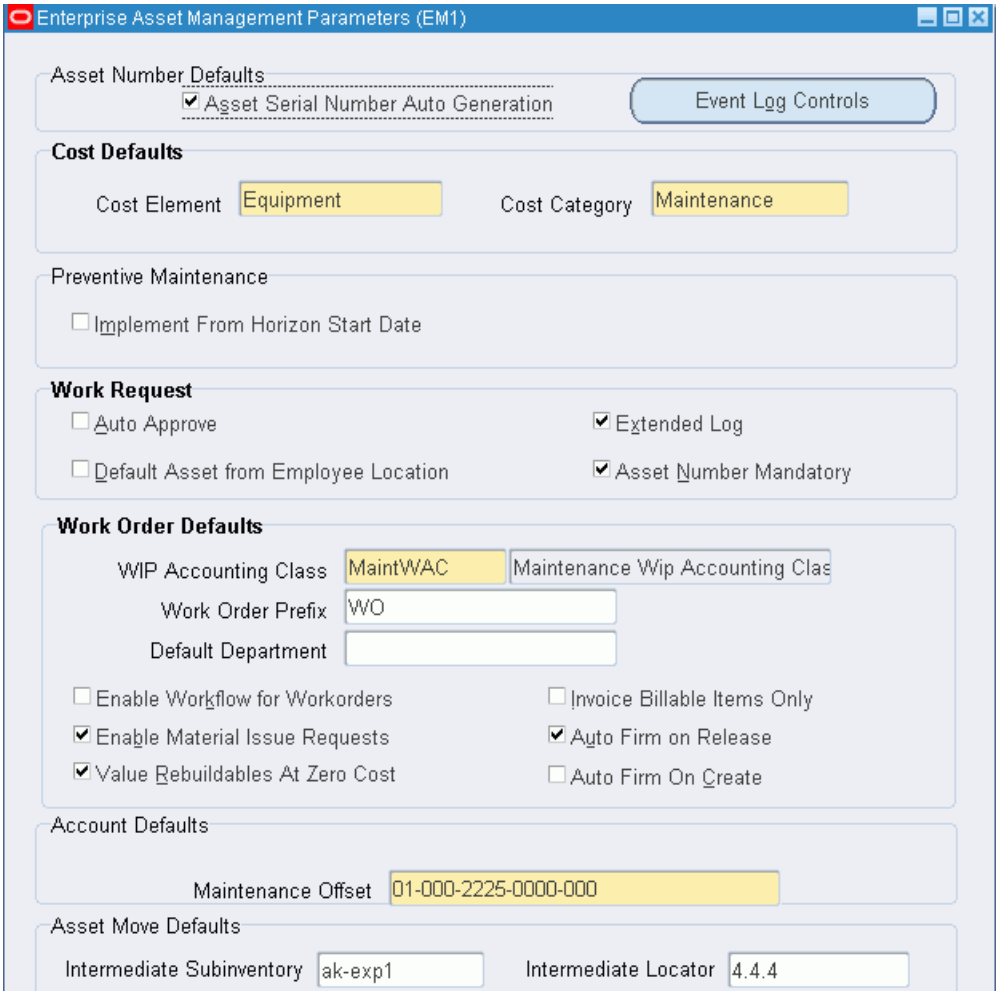
After you have established an Enterprise Asset Management enabled organization, set up specific Enterprise Asset Management parameters that determine organization level defaults for individual transactions. Setup information such as asset number defaults, cost defaults, work request information, and work order defaults.

> **Important:** Before creating eAM Parameters, first create an Asset Subinventory in the current eAM-enabled organization (Inventory > Setup > Organizations > Subinventories). See: Creating Subinventories, *Oracle Inventory User's Guide*.

To define Enterprise Asset Management parameters:

1. Navigate to the Enterprise Asset Management Parameters window.

Enterprise Asset Management Parameters



2. Optionally indicate whether this organization has system generated asset numbers within individual asset groups. See: Defining Asset Groups, page 3-50. You can specify the starting serial number within the Organization Parameters window or the Master Item window, when defining asset groups. If the starting serial number is defined for the asset group, this definition overwrites the starting serial number within the Organization Parameters.

3. Optionally choose Event Log Controls to enable system events that are logged within the current organization. You can select the Log Enabled check box next to the events that you want logged for your assets. See: Asset Operational Logging, *Oracle Enterprise Asset Management User's Guide*.

4. The Cost Defaults region represents default cost information for future Work Orders, without defined cost elements within the work order.

Select an Enterprise Asset Management Cost Element to indicate how to capture cost overheads and any miscellaneous resource costs. Valid values are Equipment, Labor, and Material. See: Overview of eAM Cost Management, *Oracle Enterprise Asset Management User's Guide*.

5. Select a Cost Category to use as the default for departments that do not have a cost category defined. Department costs are then posted to the appropriate cost elements. Values are Maintenance, Operations, Contract, and any other values that you might have added within the extensible lookup table. See: Overview of eAM Cost Management, *Oracle Enterprise Asset Management User's Guide*.

6. In the Preventive Maintenance region, optionally select the Implement From Horizon Start Date check box to bypass past due work order suggestions when executing the Preventive Maintenance process. If this check box is selected, suggested work orders, from the Horizon Start Date forward, are executed.

7. Indicate whether work requests are automatically approved upon creation, or if every user, with the responsibility assigned to the asset's current owning department, receives a notification via Workflow (See: *Oracle Applications Workflow* and Defining Department Approvers, page 3-20). This notification appears within self service, within the responsibility you use to log in.

   If the Auto Approve check box is selected, work requests are created with an Awaiting Work Order status. If the check box is not selected, work requests are created with an Open status.

   > **Note:** A work request status must be Awaiting Work Order before you can associate it with a Work Order. The Awaiting Work Order status indicates that the work request is approved.

8. Optionally select the Default Asset from Employee Location check box to indicate the default asset information when creating a work request. If this check box is selected, the Asset Number information defaults as the Location number exported from Oracle Property Manager. Oracle Property Manager is a separate product.

9. If you choose the Extended Log check box, the system keeps an audit trail of records when defining or updating work requests.

10. Optionally select the Asset Number Mandatory check box to indicate that the Asset Number field is mandatory when creating a work request.

11. Select the WIP Accounting Class default to ensure that Work Orders generated within Enterprise Asset Management have an established account code structure assigned to accept charges incurred by that work order.

    The WIP accounting class codes available are of type, Maintenance. If a Maintenance type WIP accounting class does not exist, you can define a new one. If

you are using encumbrance accounting, you must include a budget account to capture encumbrance amounts. (See: Defining WIP Accounting Classes, *Oracle Work in Process User's Guide*).

> **Note:** Cost Management handles maintenance work orders as nonstandard expense jobs.

12. Optionally enter a Work Order Prefix.

    A prefix enables your organization to identify routine work orders.

13. Optionally select a Default Department.

    Oracle recommends that you select a default department. This department defaults to maintenance work orders as they are entered. If a department does not exist on a work order, you cannot release it.

14. Select the *Enable Workflow for Work Orders* check box to initiate approval processes for work orders and work permits. Work orders and work permits might require approvals or notifications at different stages in their lifecycles. Workflow automates this process. You can set up business events and event subscriptions (or use seeded events and subscriptions) within Oracle Workflow to indicate what events trigger Workflow. Seeded events that you can enable to trigger workflow are: Work Order creation, Work Order release approval, Work Order completion, Work Order status change, Operation completion, Work Permit release approval, Work Permit status update. See: Setting Up Oracle Workflow, *Oracle Workflow User's Guide* and Setting Up the Business Event System, *Oracle Workflow User's Guide* and Planning Your Organization's Approval Process, *Oracle Approval Management User's Guide*).

15. Indicate whether Material Issue Requests are enabled.

    If this check box is selected, the Enable Material Issue Requests check box on eAM Work Orders defaults as selected.

16. Within the Work Order Defaults region, select the Value Rebuildables at Zero Cost to indicate that rebuildable components charge at zero cost (See: Setting Up Zero Cost Rebuild Item Issue, page 3-185). If this check box is selected, rebuildable items issued out of the subinventory expense account are issued at zero cost.

17. Indicate whether only billable items are invoiceable.

    If the Invoice Billable Items Only check box is selected, only billable items can invoice; however, the item needs to be invoiceable (Invoiceable Item and Invoice Enabled check boxes selected within the Master Item window. See: Invoicing Attribute Group, *Oracle Inventory User's Guide*) and the Billing Type check box needs to be selected (See: Work Order Billing Setup, page 3-209).

    If the Invoice Billable Items Only check box is not selected, any item can be invoiced

if it is invoiceable within the Master Item window (Invoiceable Item and Invoice Enabled check boxes selected within the Master Item window). See: Invoicing Attribute Group, *Oracle Inventory User's Guide*.

18. If you select the Auto Firm on Release check box, the dates on the work order cannot automatically reschedule, after the work order is at Released or On Hold statuses.

    You can still manually reschedule a resource on the work order, thereby updating the dates on its corresponding operation and work order.

19. If you select the Auto Firm on Create check box, the dates on the Work Order cannot automatically reschedule, even in Draft and Unreleased statuses.

    You can still manually reschedule a resource on the work order, thereby updating the dates on its corresponding operation and work order.

20. Within the Account Defaults region, select a Maintenance Offset account.

    You can create or break a parent and child (hierarchy) relationship that exists between an asset number and a rebuildable serial number, manually using the Configuration History page. This account records what is sent to Inventory when a Rebuildable is removed from an Asset, and then transferred into inventory.

    For example, if the relationship is broken, the Asset or Rebuildable is sent to either Scrap or Inventory. If the Rebuildable is sent to Inventory, the accounting is as follows:

    Debit Inventory

    Credit Maintenance Offset

21. Within the Asset Move Defaults region, select a default Intermediate Subinventory and Intermediate Locator value.

    Only the expense subinventories associated with your organization are available for selection.

    This intermediate subinventory is the default subinventory to which all the assets undergoing miscellaneous receipt transactions are received while performing the Asset Move transfer. The Intermediate Locator value indicates the number assigned to the expense intermediate inventory.

    See Using the Asset Move Workbench, *Oracle Enterprise Asset Management User's Guide*

22. Save your work.

General eAM Setup

General Enterprise Asset Management Setup tasks include the following:

- Setting Up Areas, page 3-16
- Defining Departments and Resources, page 3-17
- Defining Department Approvers, page 3-20
- Defining Miscellaneous Documents, page 3-21
- Setting Up Electronic Records, page 3-22

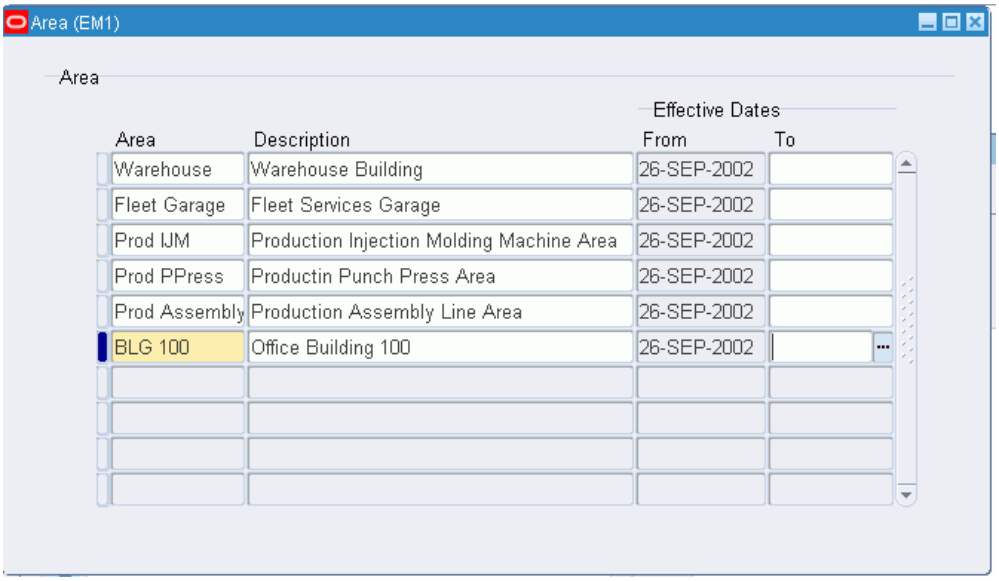
Setting Up Areas

Use areas to logically sort assets by the zones in which they reside. Areas divide the maintenance plant or facility into zones, which help to track and account for assets. Areas are later associated with assets.

To set up Areas:

1. Navigate to the Area window.

Area



2. Using the Add icon on the tool bar, add an area.
3. Enter a Description for this location.
4. The Effective From Date defaults as the system date, but you can optionally update it. Optionally select an Effective To Date to indicate an expiration of the area.

5. Save your work.

Defining Departments and Resources

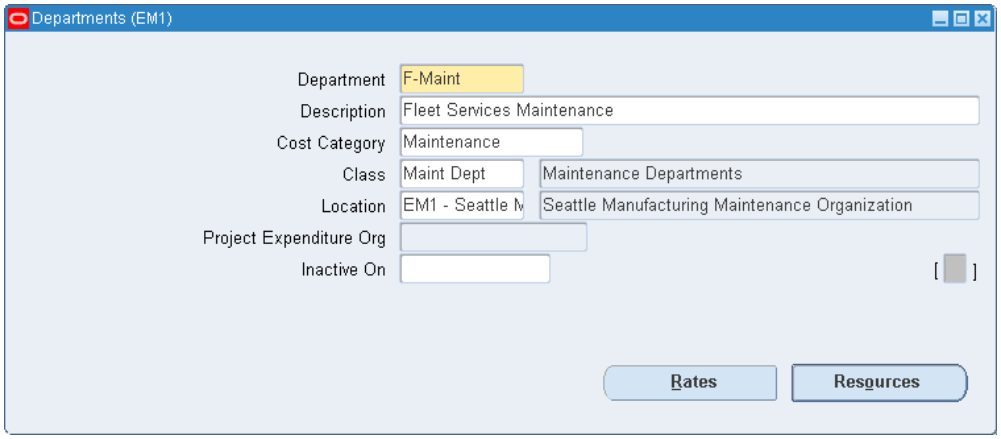
A department represents a crew within your organization. A crew may include people, machines, or suppliers. Departments are also used to collect costs, apply overhead, and compare load to capacity. Assign a department to each operation of a routing and assign resources that are available for that department. The department assigned to each operation of a routing also becomes the assigned department of the corresponding operation within the Work Order, assuming the Work Order is using the routing.

Resources are defined before departments. For information on defining resources, See: Defining a Resource, *Oracle Bills of Material User's Guide*. When you define a department, you specify available resources. A resource represents a craft. You can enter multiple resources for each department. For each resource, you can specify the shifts that the resource is available. For each resource shift, you can specify capacity modifications that change the available hours per day, units per day, or workdays.

To define departments (crews) and resources (crafts):

1. Navigate to the Departments window.

Departments



2. Enter the Department name, unique to the Organization.

3. Optionally select a department Class (See: Creating Department Classes, *Oracle Bills of Material User's Guide*).

4. Select a Location. Enter a location for a department if it is the receiving department following outside processing (See: Overview of eAM Contractor Services, *Oracle Enterprise Asset Management User's Guide* and Outside Processing, *Oracle Work in Process User's Guide*).

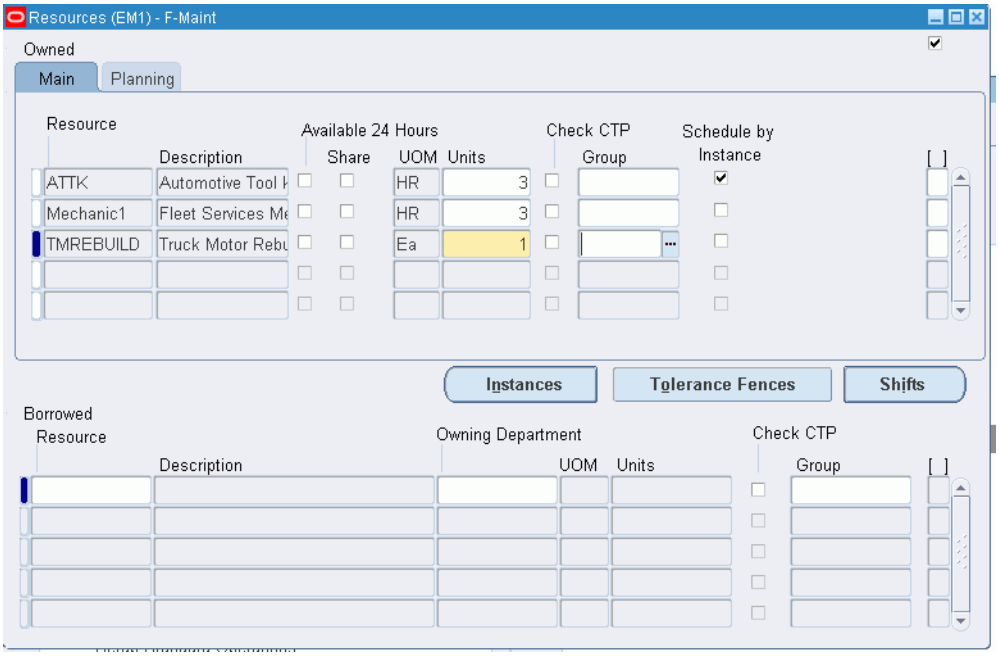
5. Enter a Project Expenditure Organization.

6. Optionally enter an Inactive On date on which you can no longer assign this department to routing operations.

   For instructions on all remaining fields, See: Defining a Department, *Oracle Bills of Material User's Guide (Bills of Material, Routings, Departments)*.

7. Click the **Resources** button to add resources or crafts to the current department.

Resources



8. Enter the Resource to assign to the current department.

9. Optionally, for owned resources, indicate whether the resource is available 24 hours per day. You cannot assign shifts to a resource that is available 24 hours per day.

10. For owned resources, indicate whether this department can share the resource and capacity with other departments.

11. Enter the number of capacity Units (resource units) available for this department, for example, the number of machines for a machine resource.

    Each resource can assign to any number of departments; multiple resources can be assigned to each department.

12. Optionally select the Check CTP check box to indicate that this resource is used in a Capable to Promise (CTP) check (See: Capable to Promise, *Oracle Master*

Scheduling/MRP and Supply Chain Planning User's Guide).

13. Optionally enter a resource Group for the resource in this department.

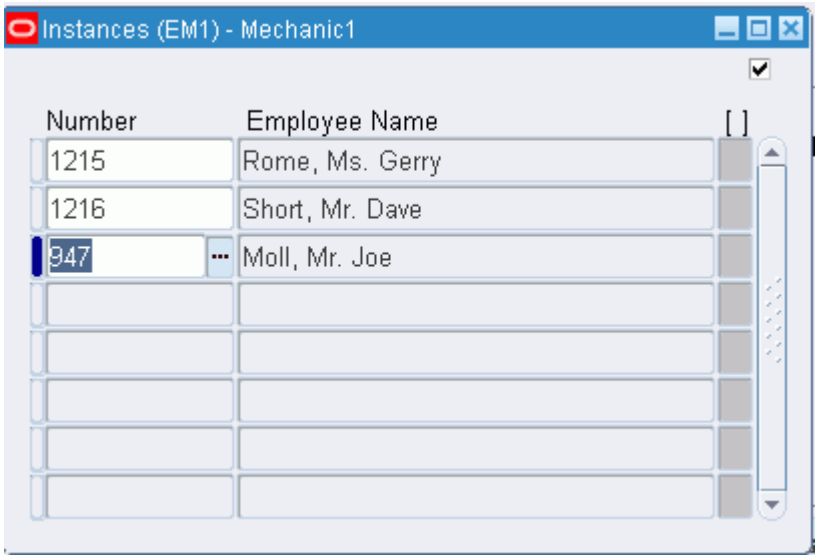
14. Optionally select the Schedule by Instance check box to indicate whether the department resource should be scheduled at the instance level (specific employee name or piece of equipment).

15. For borrowed resources, enter the Owning Department.

16. Select the Planning tab. Optionally enter an Exception Set. The exception sets that you assign help to identify capacity problems (See: Planning Exception Sets, *Oracle Capacity User's Guide*).

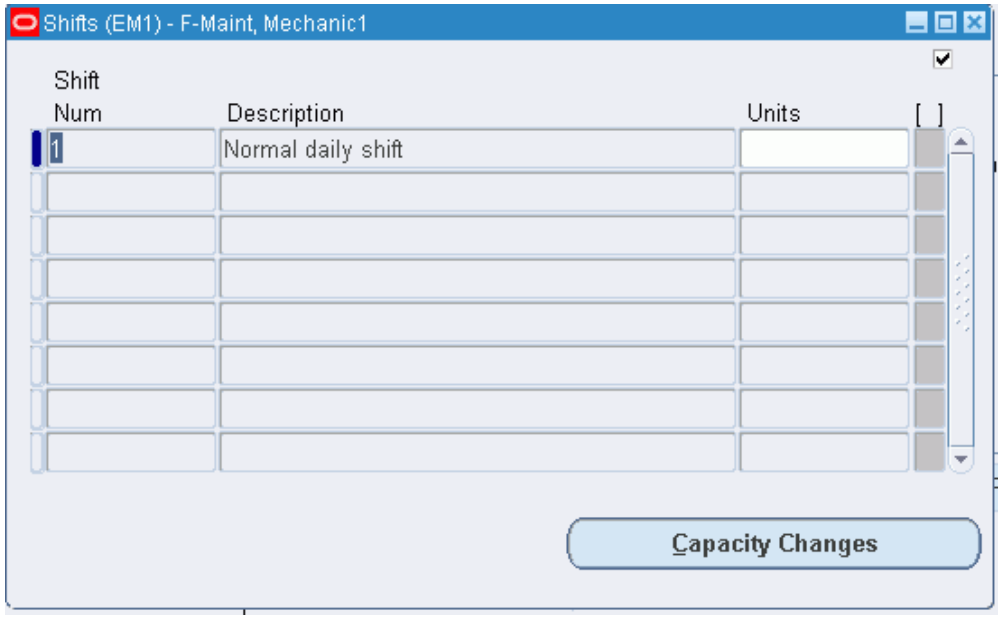
17. Choose Instances to add employees or equipment to the current resource. An instance is a specific employee name or piece of equipment. See: People and Assignments, *Implementing Oracle HRMS*.

Instances



18. Choose Shifts for owned resources that are not available 24 hours per day. This enables you to assign and update shift information for the resource and define capacity changes for a shift.

Shifts



1. Select a Shift Number.

   The shifts available are those assigned to the workday calendar and assigned to the current organization.

2. Choose Capacity Changes to define capacity changes for a shift.

For more information, See: Assigning Resources to a Department, *Oracle Bills of Material User's Guide (Bills of Material, Routings, Departments)*.

Defining Department Approvers

With a responsibility assigned to the current asset's owning department, you can set up department approvers so that Work Request notifications are sent to each approver, via Oracle Workflow (See: Defining Departments and Resources, page 3-17 and Defining Asset Numbers, page 3-65, and *Oracle Applications 12 Workflow*). Approvers can view these notifications on the Enterprise Asset Management Self Service Maintenance Home Page (See: Home, *Oracle Enterprise Asset Management User's Guide*). Everyone who receives the notification can access the work request to change its status, or add additional information to the Work Request log. After one user approves the Work Request, the notification is removed from the users' notification lists, and the work request status transitions from Open to Awaiting Work Order.

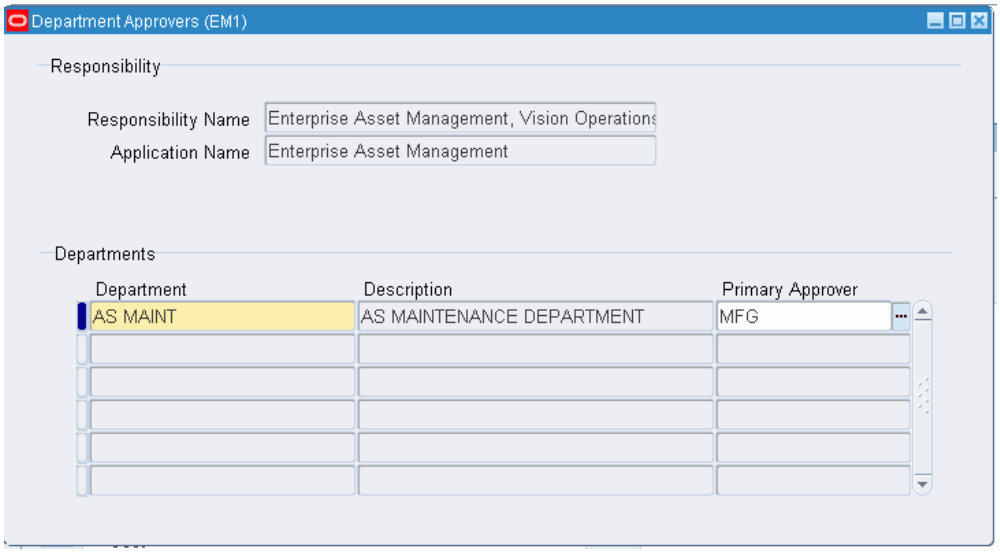
A work request can be rejected. If an approver rejects a work request, the notification is removed from that approver's notification list. You can re-assign a notification to another user for approval or additional information; for example, the originator might

need to provide additional information on the work request.

To define Department Approvers:

1. Navigate to the Department Approvers window.
2. Select a Responsibility Name. A department is assigned to one responsibility.

Department Approvers



3. In the Departments region, select a Department. You can select an unlimited number of departments.
4. Optionally select a Primary Approver for the department from the Name list of values. The list of values contains all users within the current responsibility. If the Primary Approver is not specified, the notification is sent to all users with the particular responsibility.
5. Save your work.

Related Topics

Work Requests, *Oracle Enterprise Asset Management User's Guide*

Home, *Oracle Enterprise Asset Management User's Guide*

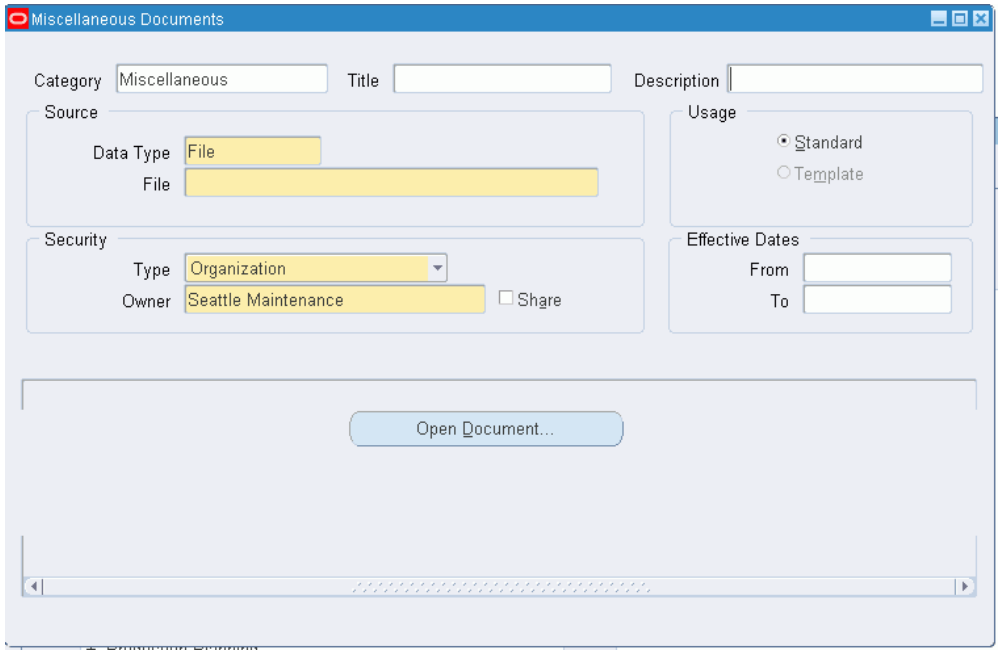
Defining Miscellaneous Documents

You can create text and files, such as spreadsheets, graphics, and OLE objects. You can attach these documents to a maintenance Work Order, asset, or operation.

To define miscellaneous documents:

1. Navigate to the Miscellaneous Documents window.

Miscellaneous Documents



2. Select a Data Type. Valid values are File, Short Text, and Web Page.

3. If the Data Type is File, attach the appropriate file. If the Data Type is Web Page, enter the relevant URL. If the Data Type is Short Text, insert the text in the Text field.

   For information on all fields, See: Working With Attachments, *Oracle Applications User's Guide*.

Setting Up Electronic Records and Signatures

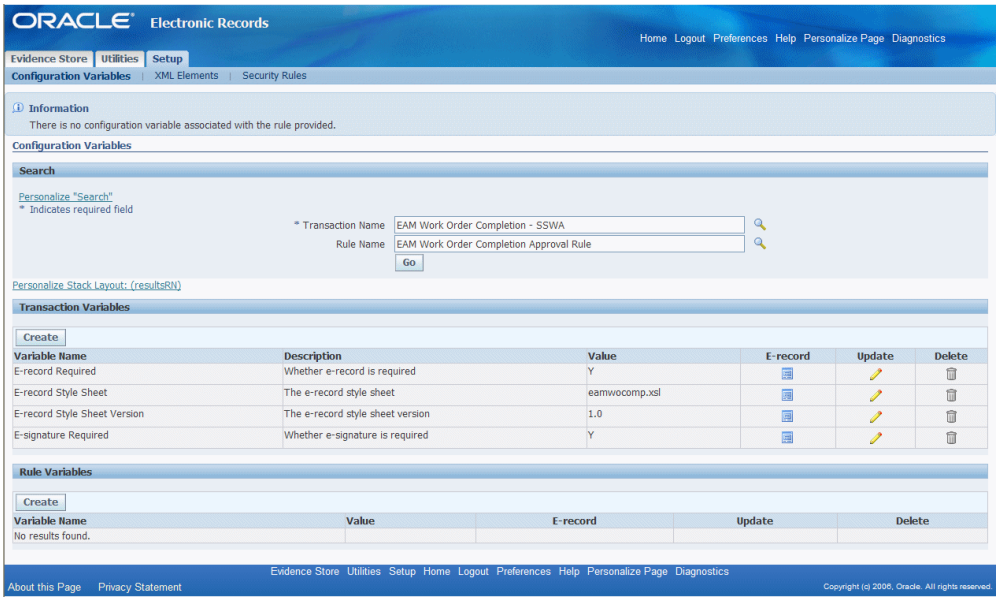
During Work Order completion, you can require Electronic Signatures and Electronic Records. These are provided using the Oracle ERES framework. Electronic Signatures ensure that the person processing the transaction verifies their identity by providing their User Identification and password, during the transaction. Electronic records provide a permanent snapshot of the transaction data that the user is verifying.

To set up electronic records and signatures:

1. Navigate to the Electronic Records page (ERES Administrator: Setup >

Configuration Variables).

Electronic Records



2. Select *EAM Work Order Completion - SSWA* from the **Transaction Name** list of values.

3. Optionally select a **Rule Name**.

4. Choose Create to create Variable Names.

   - Select *E-record Required* from the **Transaction Name** list of values. Set this value to Y.

   - Select *E-signature Required* from the **Transaction Name** list of values. Set this value to Y.

5. Choose Apply.

Defining Lookups

Lookup codes must be decided upon and defined during the implementation process. Lookup codes fall within three categories: extensible, user defined, or system defined. If a lookup code is extensible, the existing lookup codes cannot be modified, but you can add new codes to the table. If lookup codes are user defined, all codes may be modified. If lookup codes are system defined, the existing codes cannot be modified, and new codes cannot be added to the table.

You need to define Asset Lookups, Work Request Lookups, and Work Order Lookups.

This section includes the following topics:

- Activity Types, page 3-24
- Activity Causes, page 3-25
- Activity Sources, page 3-27
- Asset Activity Priorities, page 3-28
- Cost Category Codes, page 3-36
- Criticality Codes, page 3-37
- Asset Import Scope Codes, page 3-31
- Asset Import Statuses, page 3-32
- Asset Log User-defined Events, page 3-33
- Contact Preferences, page 3-35
- Failure Code Types, page 3-39
- Work Request Statuses, page 3-40
- Work Request Types, page 3-41
- Work Order and Work Request Priority Codes, page 3-43
- Work Order Reconciliation Codes, page 3-44
- Work Order Types, page 3-45

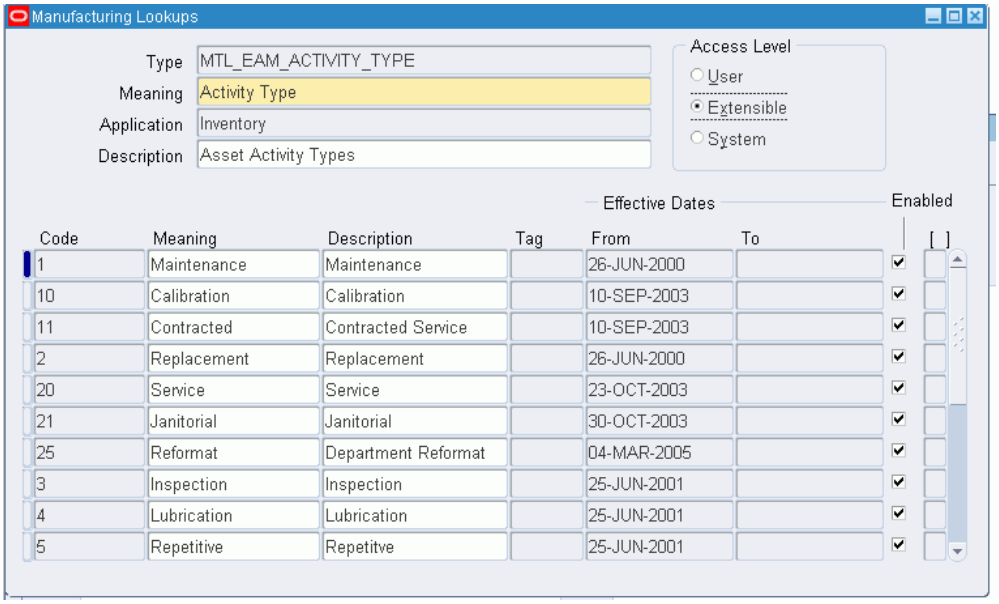
Activity Types

Activity Types are used to describe the type of maintenance work that is performed on an asset (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*). For example, Inspections, Lubrications, Overhauls, Calibration, and Repetitive work. Activity Types are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define activity types:

1. Navigate to the Oracle Manufacturing Lookups window.

Oracle Manufacturing Lookups



2. Select the flashlight Find icon.

3. Select MTL_EAM_ACTIVITY_TYPE from the Type list of values.

4. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

5. Enter the Meaning of the code, for example, Lubrication.

6. Enter a Description for the code.

7. Optionally enter a Tag to categorize lookup values. This field is for informational purposes.

8. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

9. Select the Enabled check box to enable this code for Enterprise Asset Management.

10. Save your work.

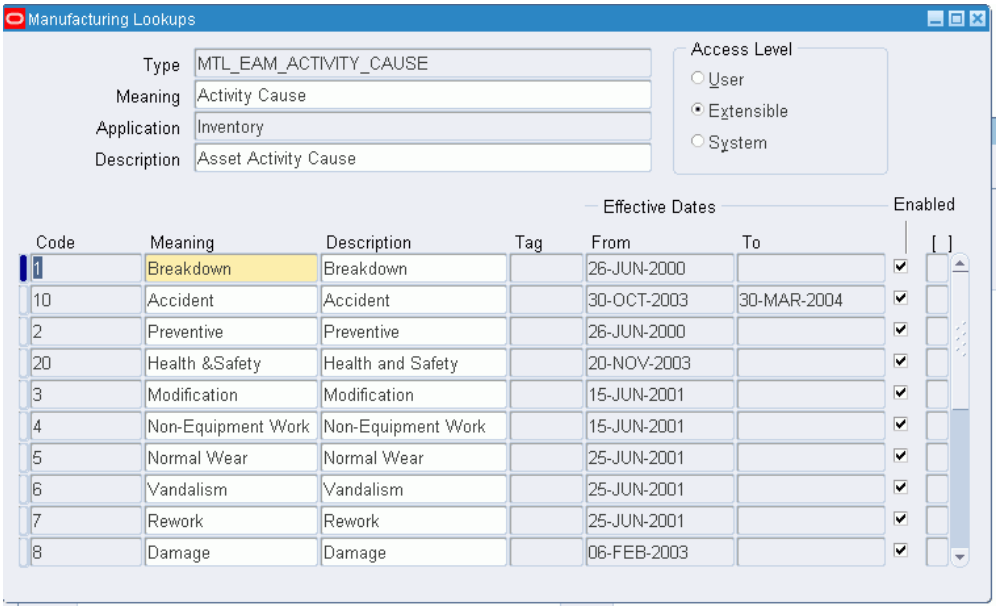
Activity Causes

Activity Cause codes are reasons for an asset failure. For example, Preventive, Normal Wear, Rework, and Breakdown. This information enables you to understand the dynamics that affect an asset's ability to perform. They establish critical data that is used for reporting and analysis of asset failure causes and the frequency of such conditions. Asset Cause Codes are referenced when setting up an Activity (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*). Activity Cause codes are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define activity cause codes:

1. Navigate to the Oracle Manufacturing Lookups window.

Activity Cause Codes



2. Select MTL_EAM_ACTIVITY_CAUSE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, Breakdown.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

9. Save your work.

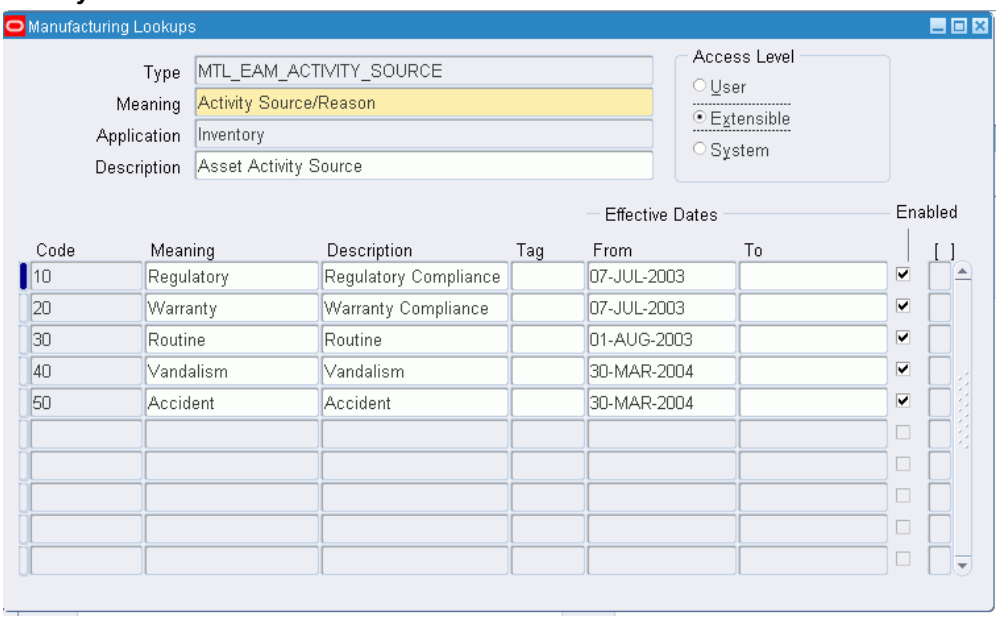
Activity Sources

Activity source codes are reasons activities are executed. For example, warranty compliance, OSHA compliance, or military specification requirements. Activity source codes are referenced when setting up an activity (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*). Activity source codes are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define activity source codes:

1. Navigate to the Oracle Manufacturing Lookups window.

Activity Source Codes



2. Select MTL_EAM_ACTIVITY_SOURCE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

Warning: Do not use alpha codes. Entering of alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, Breakdown.
5. Enter a Description for the code.
6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.
7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.
8. Select the Enabled check box to enable this code for Enterprise Asset Management.
9. Save your work.

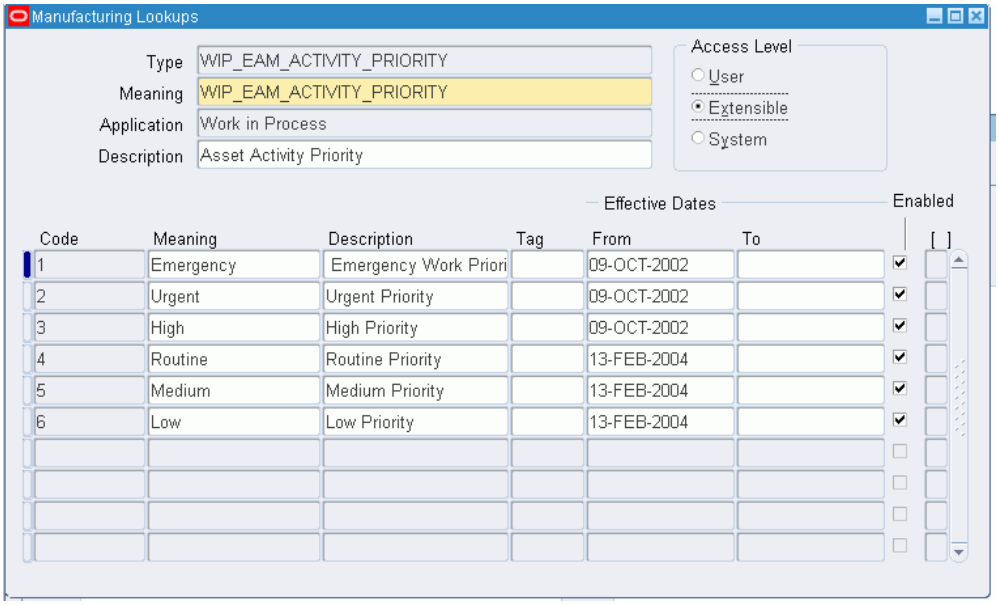
Asset Activity Priorities

Activity priority codes indicate asset activity priority levels, for example, Low, Medium, and High. Activity priorities are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define activity priorities:

1. Navigate to the Oracle Manufacturing Lookups window.

Activity Priorities



2. Select WIP_EAM_ACTIVITY_PRIORITY from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering of alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, High.

5. Enter a Description.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

9. Save your work.

Asset Failure Source Types

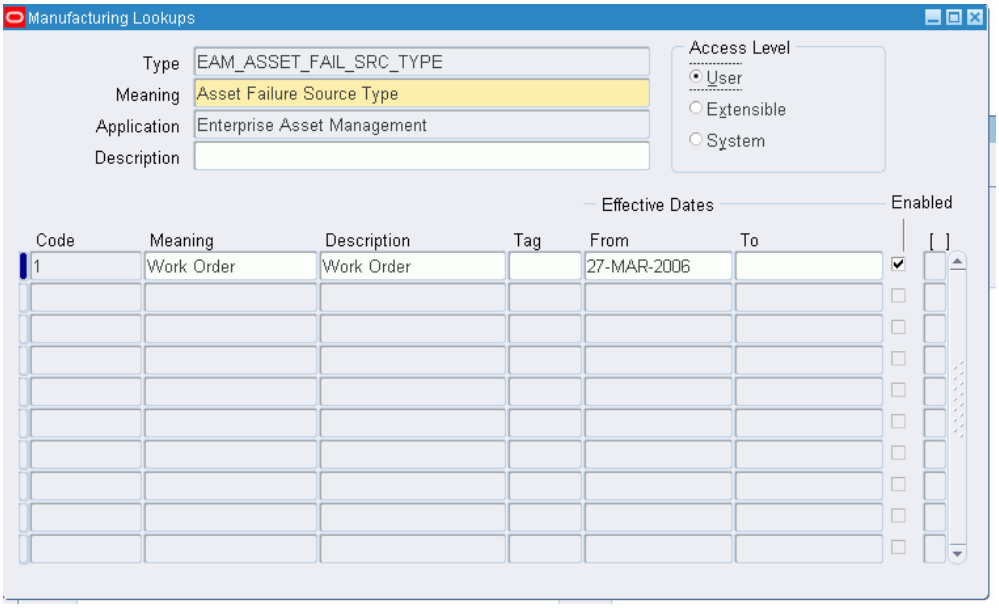
Failure is reported on a work order. Each work order represents one single failure

occurrence (event) for the asset specified on the work order (See: Failure Analysis Overview, *Oracle Enterprise Asset Management User's Guide*). You can optionally add more codes, specifying different source types. For example, you may specify different types of work orders with different source types. Asset failure source types are user-defined (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define asset failure source types:

1. Navigate to the Oracle Manufacturing Lookups window.

Asset Failure Source Types



2. Select EAM_ASSET_FAIL_SRC_TYPE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning, for example, Preventive Maintenance Work Order.

5. Enter a Description.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this.

Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

9. Save your work.

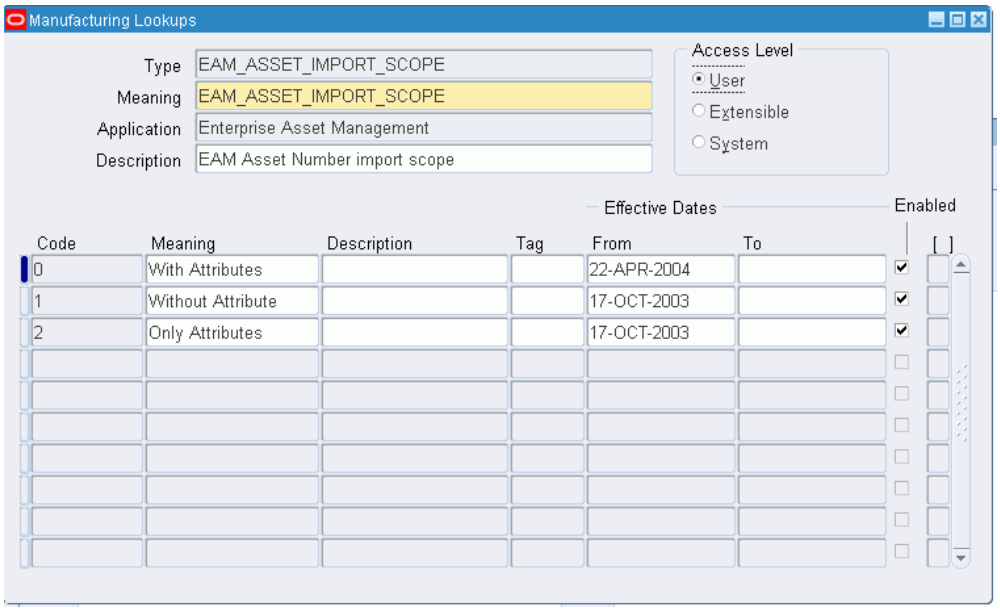
Asset Import Scope Codes

The eAM Asset Number Open Interface enables you to import asset numbers into eAM, using a batch process. You can optionally import Asset Number attributes. You can create new asset numbers and attributes, or update existing asset numbers and attributes. See: eAM Asset Number Open Interface, *Oracle Enterprise Asset Management Implementation Guide*. Define the process' parameter scope codes. Asset import scope codes are user-defined (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define asset import scope codes:

1. Navigate to the Oracle Manufacturing Lookups window.

Asset Import Scope Codes



2. Select EAM_ASSET_IMPORT_SCOPE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning, for example, With Attributes.
5. Enter a Description.
6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.
7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.
8. Select the Enabled check box to enable this code for Enterprise Asset Management.
9. Save your work.

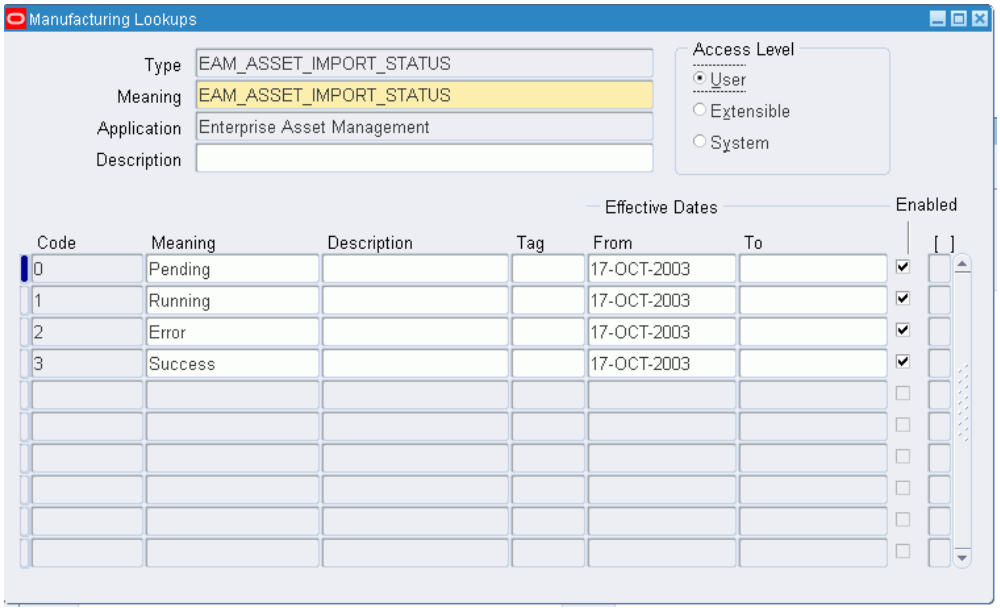
Asset Import Statuses

The eAM Asset Number Open Interface enables you to import Asset Numbers into eAM, using a batch process. You can optionally import Asset Number attributes. You can create new Asset Numbers and attributes, or update existing Asset Numbers and attributes. See: eAM Asset Number Open Interface, *Oracle Enterprise Asset Management Implementation Guide*. Define the process' import statuses. Asset Import Statuses are user defined (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define asset import statuses:

1. Navigate to the Oracle Manufacturing Lookups window.

Asset Import Statuses



2. Select EAM_ASSET_IMPORT_STATUS from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning, for example, Success.

5. Enter a Description.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

9. Save your work.

Asset Log User-defined Events

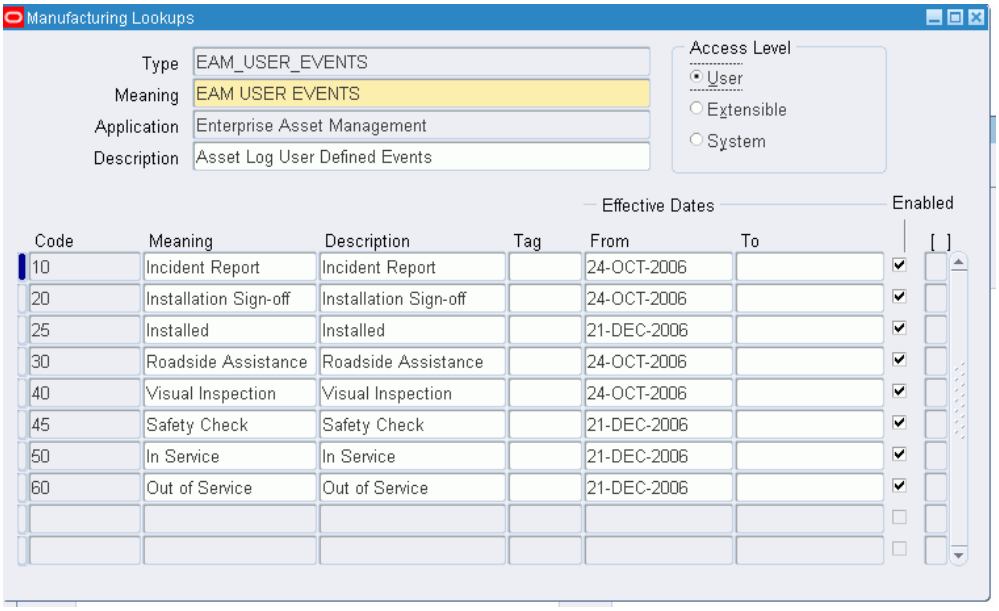
You can define events, and associate them to work order statuses. A Work Order might

require approvals or notifications at different stages of its lifecycle. Workflow automates this process. You can initiate Workflow to generate notifications, approvals, transactions, and update a work order status. These statuses are used within your customized workflow (See: Setting Up Oracle Workflow, *Oracle Workflow User's Guide* and Setting Up the Business Event System, *Oracle Workflow User's Guide*). Asset Log User-defined Events are user-defined (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define asset log user-defined events:

1. Navigate to the Oracle Manufacturing Lookups window.

Asset Log User-Defined Events



2. Select EAM_USER_EVENTS from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code.

5. Enter a Description.

6. The Effective From Date defaults as the system date, but you can update this.

Optionally enter a Effective To Date to indicate an expiration of the code.

7. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

8. Save your work.

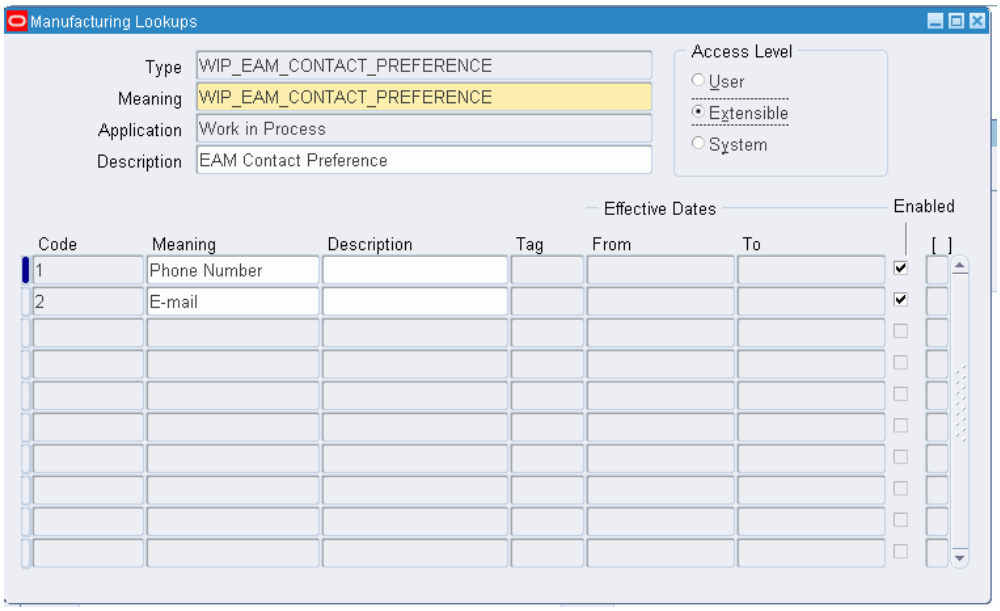
Contact Preferences

You can set up Contact Preferences. Contact preferences are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define contact preferences codes:

1. Navigate to the Oracle Manufacturing Lookups window.

Contact Preferences



2. Select WIP_EAM_CONTACT_PREFERENCE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code.

5. Enter a Description.

6. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

7. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

8. Save your work.

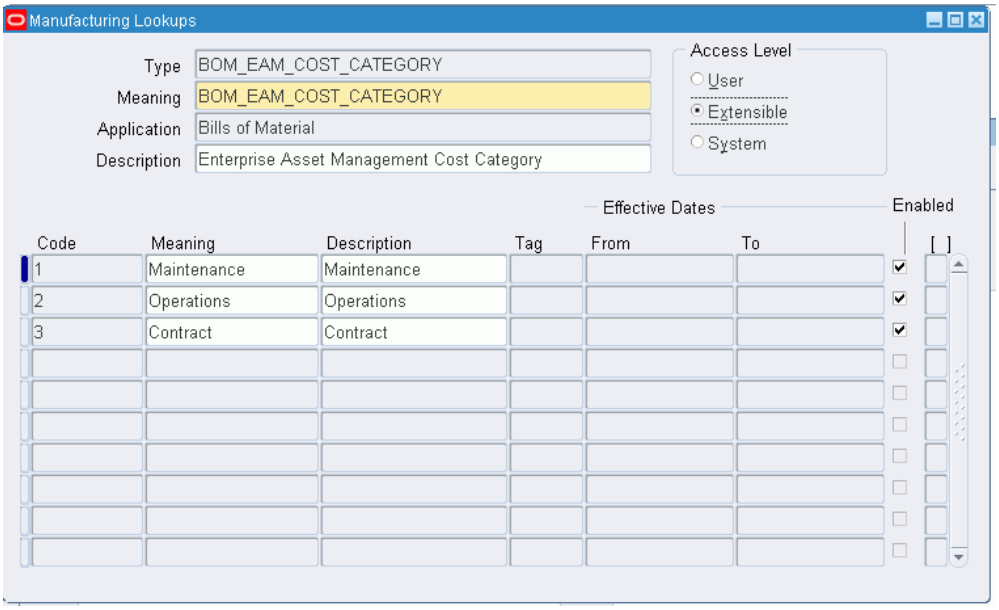
Cost Category Codes

Cost Category codes are used as the default for departments that do not have a cost category defined. Department costs are then posted to the appropriate cost elements. Valid values are Maintenance, Operations, Contract, and any other values that you might add within this extensible lookup table. See: Overview of eAM Cost Management, *Oracle Enterprise Asset Management User's Guide*.

To define cost category codes:

1. Navigate to the Oracle Manufacturing Lookups window.

BOM Cost Category Codes



2. Select BOM_EAM_COST_CATEGORY from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

Warning: Do not use alpha codes. Entering alpha codes causes

database errors in the application.

4. Enter the Meaning of the code, for example, High.
5. Enter a Description for the code.
6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.
7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.
8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.
9. Save your work.

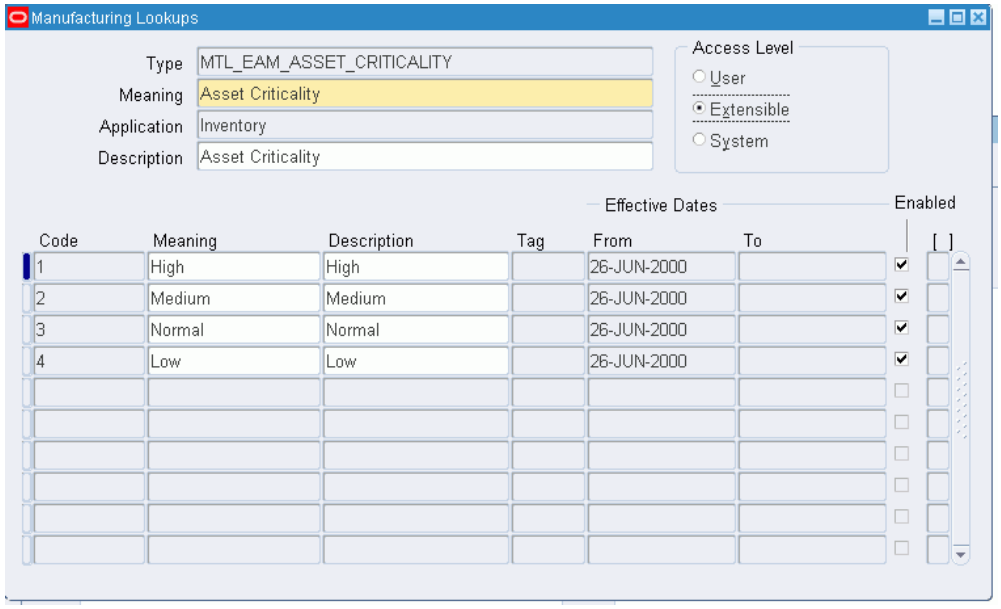
Criticality Codes

Criticality codes suggest the importance of an asset to an organization, for example, High and Low. An asset that has a direct impact on production or that is difficult to replace may be considered a critical asset. Asset criticality codes help you to determine the urgency of requested work. Asset criticality codes are referenced when defining an asset (See: Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*). Asset Criticality Codes are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define asset criticality codes:

1. Navigate to the Oracle Manufacturing Lookups window.

Asset Criticality Codes



2. Select MTL_EAM_ASSET_CRITICALITY from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

   Warning: Oracle recommends that you do not create more than 250 asset criticality codes in order to avoid performance issues.

4. Enter the Meaning of the code, for example, High.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

9. Save your work.

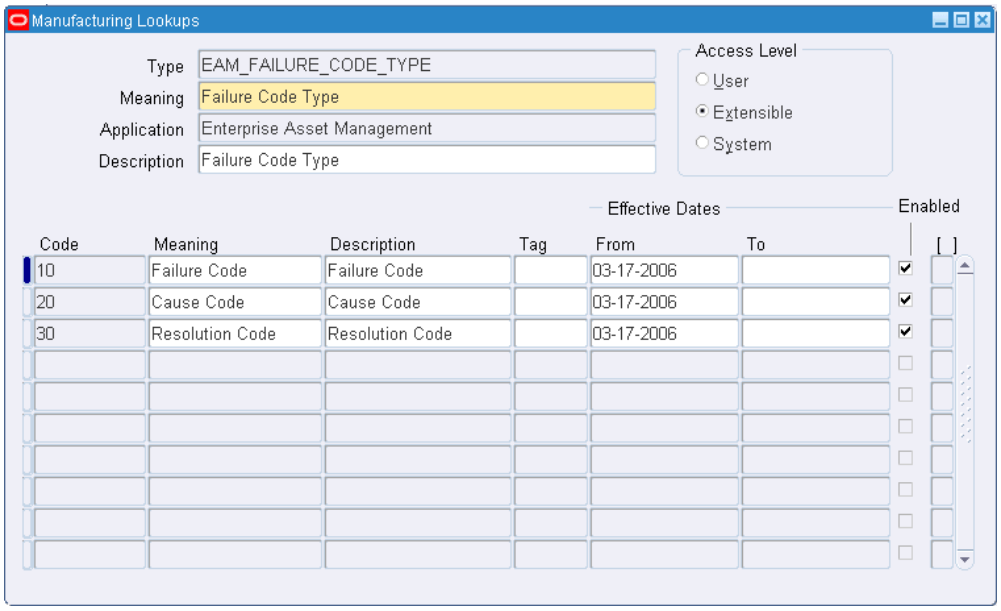
Failure Code Types

Failure codes, Cause codes and Resolution codes are organized into multiple tree structures called Failure Code Sets, which are then assigned to asset groups. Each set provides asset group-specific information on the possible failures of an asset group, the possible causes of each failure, and the possible resolutions for each cause. Assets within an asset group inherit the assigned Failure Code Set. At the work order level, Failure Tracking codes are entered to report a failure, its cause, and resolution. (See: Failure Analysis Overview, *Oracle Enterprise Asset Management User's Guide*). You can optionally update Failure Code Types' meanings.

To define failure code types:

1. Navigate to the Oracle Manufacturing Lookups window.

Failure Code Types



2. Select EAM_FAILURE_CODE_TYPE from the Type list of values.

3. Optionally update the Meaning, for example, Failure Code.

4. Enter a Description

5. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

6. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

7. Select the Enabled check box to enable this code for Enterprise Asset Management.

8. Save your work.

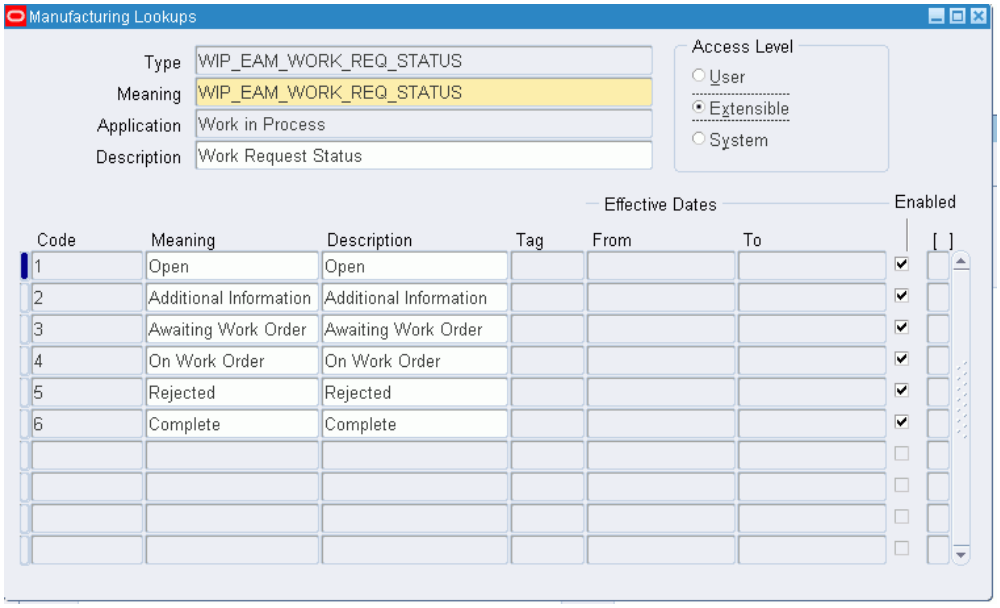
Work Request Statuses

Work Request Approval is the process of changing a Work Request status from Open to Awaiting Work Order. Maintenance Work Orders are linked to Work Requests with a status of Awaiting Work Order. When defining the Enterprise Asset Management parameters (See: Defining eAM Parameters, *Oracle Enterprise Asset Management User's Guide*), if the Auto Approve check box is selected, Work Requests are created with an automatic status of Awaiting Work Order, for that organization. If the check box is not selected, Work Requests are created with a status of Open; any user who receives the notification (See: Defining Department Approvers, *Oracle Enterprise Asset Management User's Guide*) can change the Work Request status to Awaiting Work Order. A plant or facility might need to include additional statuses. Currently, the workflow cannot be customized to work with user-defined Work Request statuses. Work Request Approval statuses are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define Work Request statuses:

1. Navigate to the Oracle Manufacturing Lookups window.

Work Request Statuses



2. Select WIP_EAM_WORK_REQ_STATUS from the Type list of values.

3. Optionally add additional Codes to the pre-existing list of codes. The codes that are pre-existing cannot be deleted, however their Meanings can be modified.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, Open.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. Optionally enter Effective From and To Dates to indicate an expiration of the code.

8. Select the Enabled check box to enable this code for Enterprise Asset Management.

9. Save your work.

Work Request Types

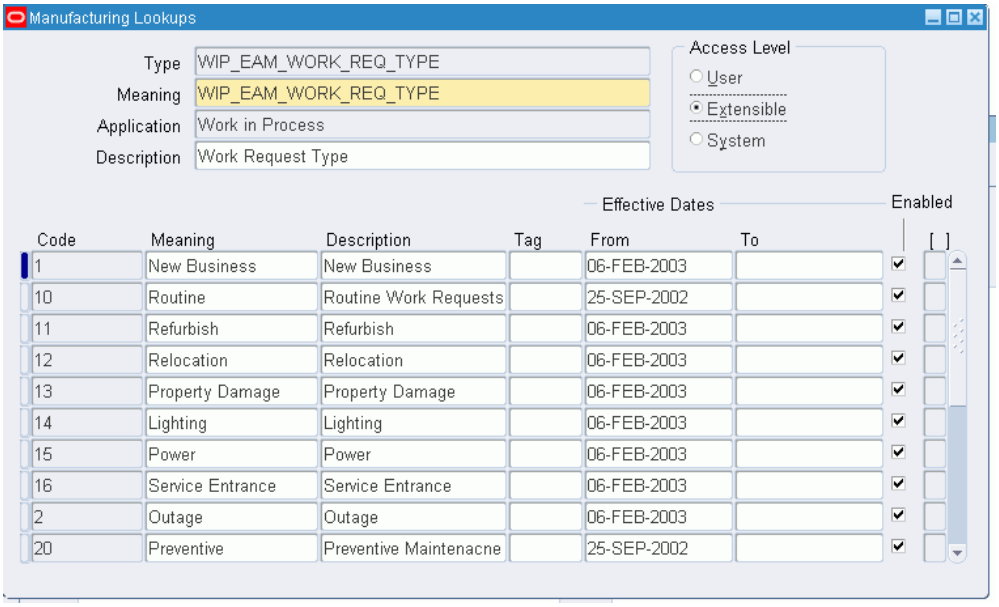
Work Request Types describe and categorize Work Requests. For example, Manual, System, Routine, Capital, and Furniture. Work Request Types are extensible (See:

Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define a Work Request type:

1. Navigate to the Oracle Manufacturing Lookups window.

Work Request Types



2. Select WIP_EAM_WORK_REQ_TYPE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, Manual.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled checkbox to enable this code for Enterprise Asset Management.

9. Save your work.

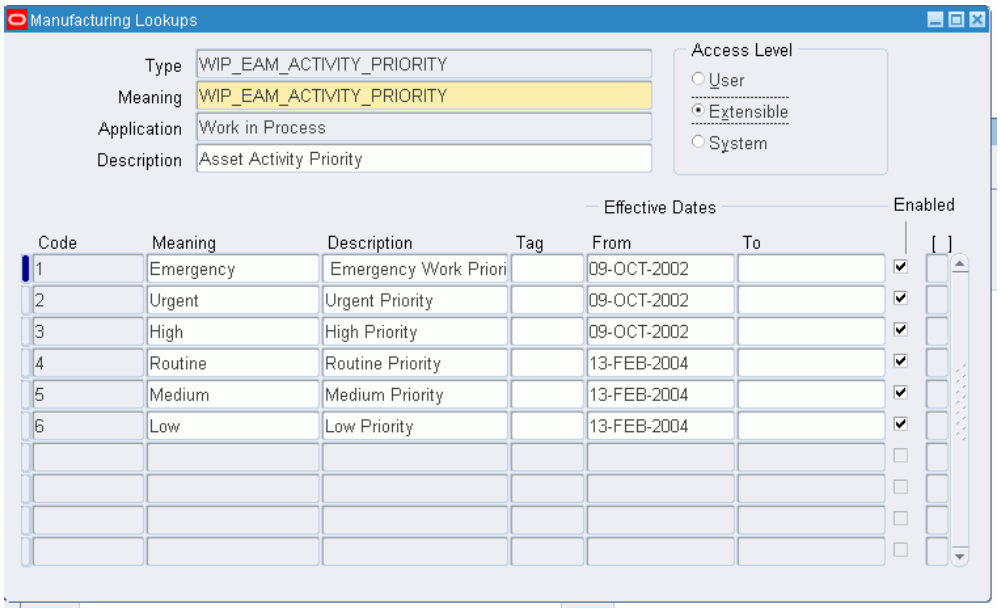
Work Order and Work Request Priority Codes

Work Order Priority Codes contribute to the organization and execution of Work Orders. For example, High, Medium, and Low, or 1,2, and 3, respectively. Typically, a priority is assigned by the people entering Work Requests and Work Orders. The planner or supervisor compares this priority to the asset criticality (See: Asset Criticality Codes, *Oracle Enterprise Asset Management User's Guide*). These codes are entered when creating Activity associations, Work Orders, and Work Requests. Typically, a priority is assigned by the person that enters the Work Request and its related Work Order. Priority specified during Activity association becomes the Work Order priority when a Work Order is created, using the Activity Association (See: Routine Work Orders, *Oracle Enterprise Asset Management User's Guide* and Work Requests, *Oracle Enterprise Asset Management User's Guide*). Work Order Priority Codes are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To create work order priority codes:

1. Navigate to the Oracle Manufacturing Lookups window.

Priority Codes



2. Select WIP_EAM_ACTIVITY_PRIORITY from the Type list of values.

3. Optionally add additional codes to the pre-existing list of codes. The codes that are pre-existing cannot be deleted, however their Meanings can be modified.

Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, High.
5. Enter a Description for the code.
6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.
7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.
8. Select the Enabled check box to enable this code for Enterprise Asset Management.
9. Save your work.

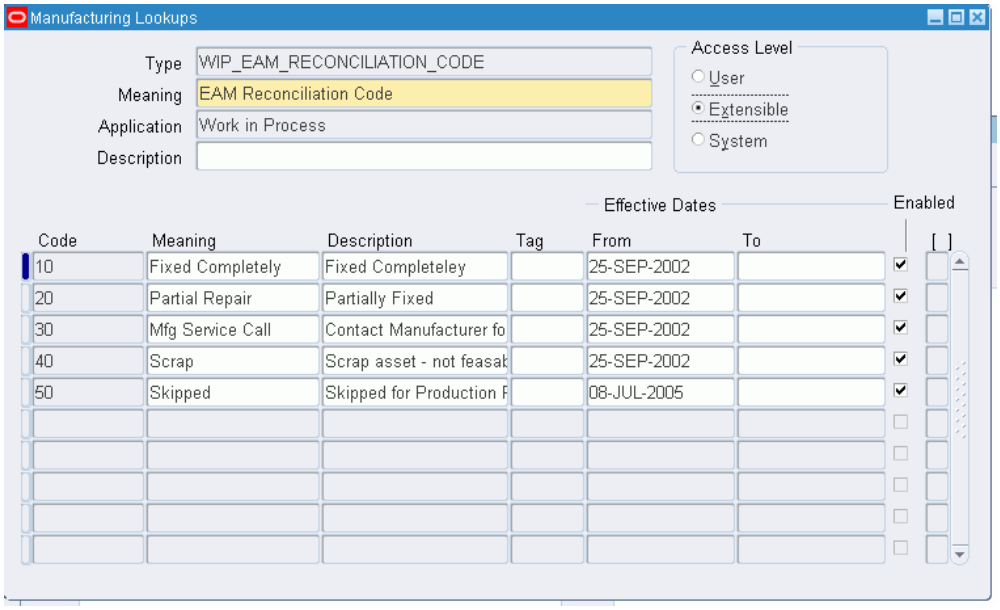
Work Order Reconciliation Codes

Reconciliation Codes detail how Work Orders and operations were completed. These codes usually fall within two categories: Completed as Planned or Partial Completion. You can further define the condition within these two types of completion statuses. These codes enable you to evaluate Work Orders by percentage completed or delayed, and if they were delayed, the reason for the delay. Reconciliation Codes are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define Work Order reconciliation codes:

1. Navigate to the window.

Work Order Reconciliation Codes



2. Select WIP_EAM_RECONCILIATION_CODE from the Type list of values.

3. Enter a numeric Code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, Fixed Completely.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled check box to enable this code for Enterprise Asset Management.

9. Save your work.

Work Order Types

Work order types enable you to differentiate work orders. For example, Routine, and

Rebuild. Maintenance management can use this information to sort and monitor work activity for reporting and budgeting. Work order types are referenced in the activity and work order.

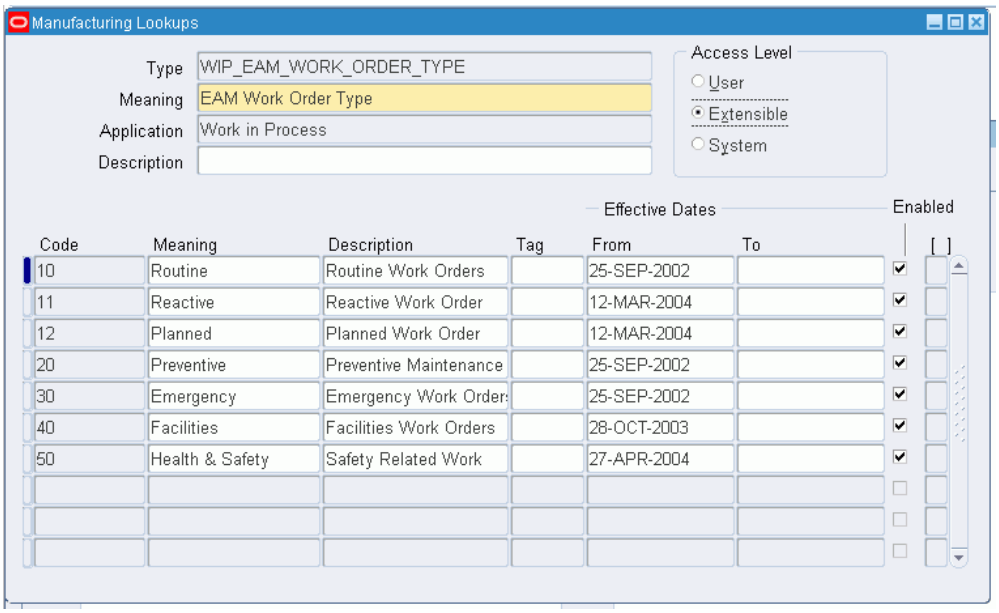
Work order types are created manually or automatically. For example, rebuildable work orders are created automatically or manually (See: Rebuild Work Orders, *Oracle Enterprise Asset Management User's Guide*). Preventive maintenance work orders are created automatically, based on meter readings (See: Preventive Maintenance Work Orders, *Oracle Enterprise Asset Management User's Guide*).

Work order types are extensible (See: Defining Lookups, *Oracle Enterprise Asset Management User's Guide*).

To define work order types:

1. Navigate to the Oracle Manufacturing Lookups window.

Work Order Types



2. Select WIP_EAM_WORK_ORDER_TYPE from the Type list of values.

3. Enter a numeric code. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, Routine.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is for information purposes.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled check box to enable this code for Enterprise Asset Management.

9. Save your work.

Asset Setup

Asset Setup includes the following tasks:

- Setting Up Category Codes, page 3-47
- Defining Asset Groups, page 3-50
- Defining Activities, page 3-53
- Activity Association Templates, page 3-58
- Setting Up Attributes, page 3-61
- Defining Asset Documents, page 3-64
- Defining Asset Numbers, page 3-65
- Defining Asset Routes, page 3-74
- Setting Up Asset Bills of Material, page 3-77

Setting Up Category Codes

Category codes are used as naming conventions for assets by creating classes and subclasses. They are user defined, and used to logically group assets, simplifying the search for Asset Numbers.

For example, Cranes are classified by several different types, such as Overhead Cranes, Jib Cranes, and Mobile Cranes. You can query using the class CRANE, which displays all assets defined as Cranes within that organization. If you enter CRANES.JIB, the system would then narrow the results to just those assets defined as Jib Cranes. With both queries, you can identify assets based on familiar names, rather than numbers.

Category codes are first defined, then added to the Enterprise Asset Management Category Set. After they belong to this category set, they are associated with Asset

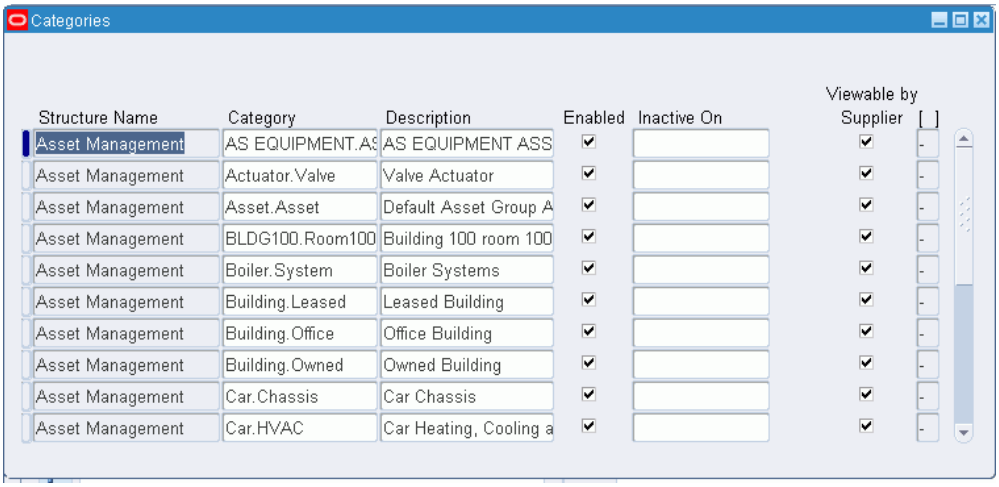
Groups, which tie to individual assets. See also: Defining Categories and Defining Category Sets, *Oracle Inventory User's Guide*.

To set up category codes:

1. Navigate to the Find Categories window. You can find existing category codes, or create new ones.

2. Choose New.

Categories



3. Select the Asset Management category to create a new Class.Subclass from the Structure Name list of values.

4. Enter in a new Category, for example TRUCK.FRKLFT.

5. Add a long Description for this category.

6. Optionally select the Enabled check box to indicate that this category is enabled.

7. Optionally enter an Inactive On date.

8. Optionally select the Enabled for iProcurement check box to indicate that this category is enabled for iProcurement.

9. Optionally select the Viewable by Supplier check box to indicate that this category is viewed by the Supplier.

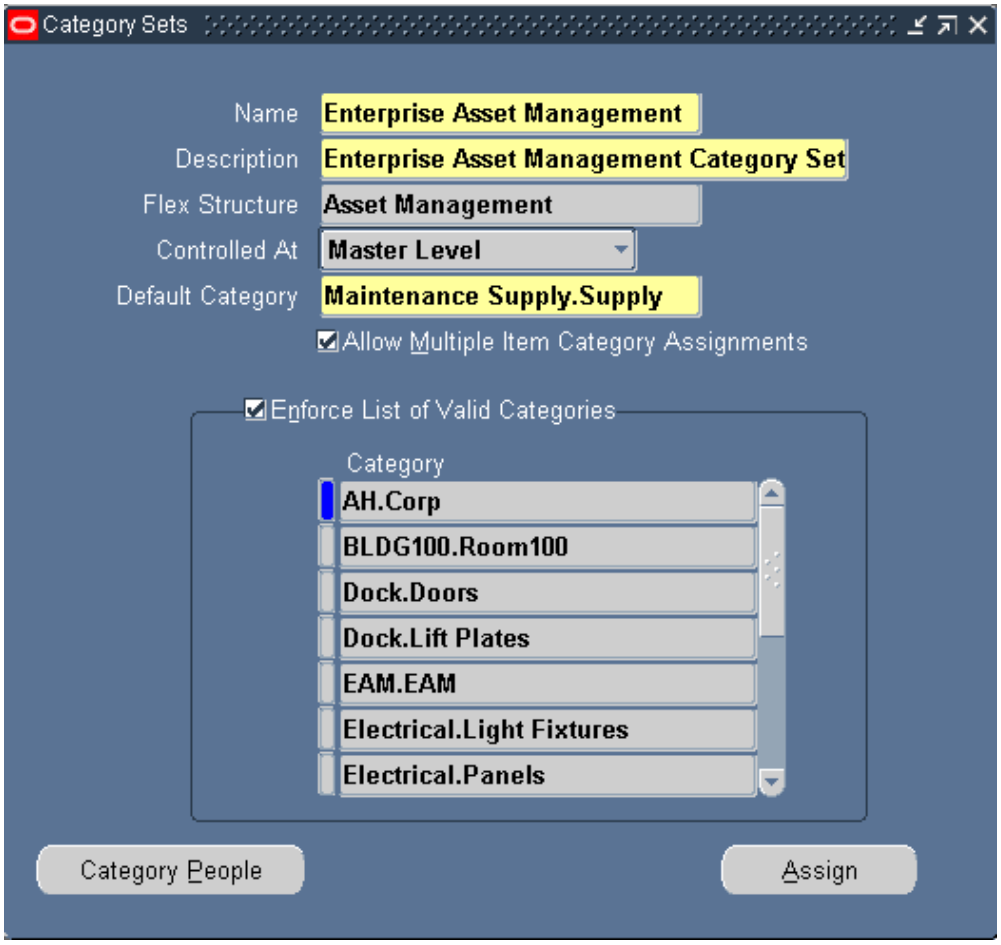
10. Save your work.

To set up category sets:

To associate Category Codes (TRUCK.FRKLFT) with an Asset Group, first define the item category relationship using the Category Sets menu option.

1. Navigate to the Category Sets window.

Category Sets



2. Select the flashlight icon from the tools menu, then select Enterprise Asset Management.

3. A description defaults; you can optionally change it.

4. Select Asset Management from the Flex Structure list of values.

5. Indicate the Controlled At level. Valid values are Master Level, and Organization Level.

6. Enter a Default Category code for the Category Set.

7. If you select Allow Multiple Item Category Assignments, you can define a series of categories, such as Crane.Jib, and Crane.Overhead, that are associated to a single Asset Group.

8. If you select Enforce List of Valid Categories, you are preventing users from entering incorrect categories that are not associated with the Asset Group associated with the asset being created.

9. Enter the Category Codes that you want to associate with this category set.

10. Select Assign to display a table enabling you to associate the categories with an Asset Group.

11. Save your work.

Defining Asset Groups

During implementation, Asset Group (Asset Group or Rebuildable Item) names should be established. Asset Groups represent groups of assets that are virtually identical. Generally, an Asset Group is defined for each Manufacturer and Model Number combination (Make, Model, and Year). Examples include Acme Model 123 Pump and Ford F150 2002 Truck.

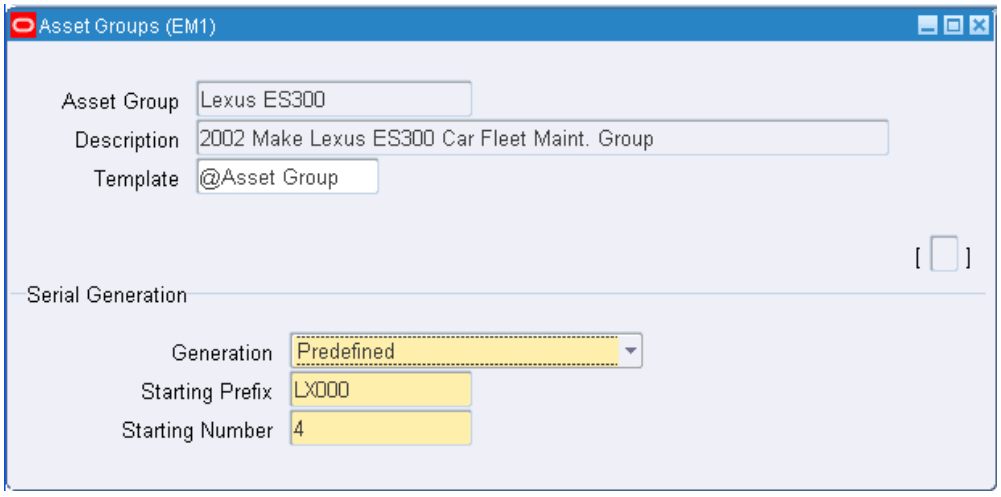
> **Note:** If you have assets in your organization that are virtually identical (for example, the same manufacturer and model), consider creating an asset group for those assets.

> **Note:** The Asset Groups window does not support electronic signatures. If you create an asset group, the record does not contain your electronic signature.

To set up asset groups:

1. Navigate to the Asset Groups window.

Asset Groups



2. Enter the name of the Asset Group.

3. Enter a Description for this Asset Group, up to 240 characters.

4. Select the @Asset Group Template to quickly apply attribute values, and to ensure that the appropriate attributes are applied.

> **Note:** You can create Asset Groups using the template described above, or you can copy an Asset Group from an existing Asset Group (See: Defining Items, *Oracle Inventory User's Guide*).

The following table presents the necessary attribute values that are applied automatically to the Asset Group, when using the template:

Asset Group Attributes

Attribute	Value
User Item Type	Asset Group
Item Status	Active
Inventory Item	Enabled
Transactable	Disabled

Attribute	Value
Serial Number Generation	Predefined
Effectivity Control	Model/Unit Number
EAM Item Type	Asset Group

5. In the Serial Generation region, select Predefined for the Generation value.

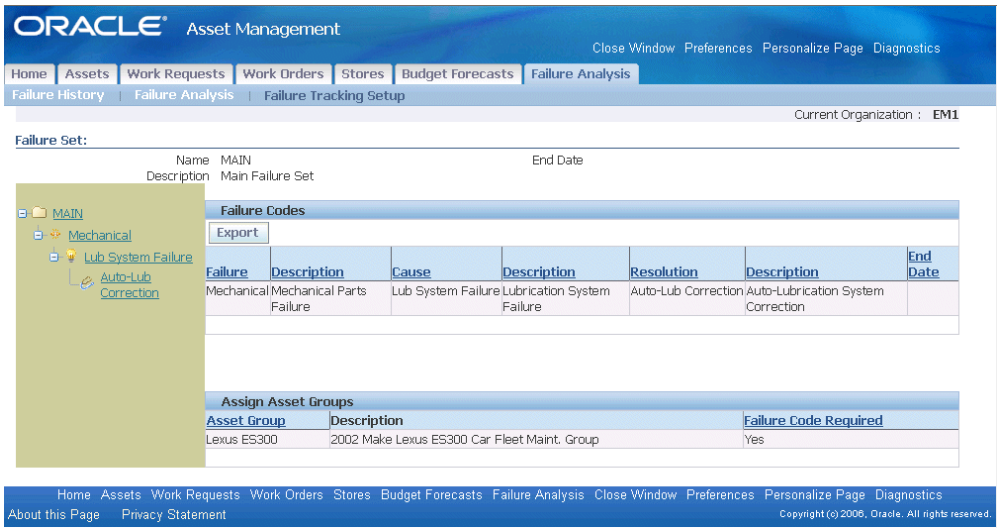
6. Define a Starting Prefix and Starting Number for this Asset Group. If Serial Generation is set at Item Level for the Organization, the system defaults the prefix, along with the starting number sequence, when a new Asset Number is created for this Asset Group.

7. Save your work.

To access failure analysis information:

You can access the Failure Set page to view failure tracking codes that are assigned to the current Asset Group.

1. From the Asset Groups window, select Maintain Failure Set from the Tools menu. If the asset group does not have an associated Failure Set, this menu option is disabled. See: Defining Failure Codes and Sets, *Oracle Enterprise Asset Management User's Guide* and Failure Analysis Overview, *Oracle Enterprise Asset Management User's Guide*.



2. Close the window.

To associate asset groups with multiple organizations:

1. From the Asset Groups window, select Item Details from the Tools menu.
2. Select the Organization Assignment tab.
3. Enter additional organizations in the available table.
4. After saving your work, you can create Assets for this Asset Group.

Defining Activities

Activities provide you with a standard template of jobs, which are applied to Work Orders, such as Routine or Preventive Maintenance. After these Activity Templates are created, they are associated with one or more Asset Numbers or Rebuildables (See: Activity Association Templates, page 3-58 and Rebuildable Item/Activity Association, page 3-111). They are also associated to a maintenance BOM (See: Setting Up Activity Bills of Material, page 3-93) and activity routing (See: Defining Asset Routes, page 3-99), containing the materials and resources needed for operations, respectively. When Work Orders are created for assets associated to the Activity, the material and resources associated with the current Activity automatically copy to the Work Orders created.

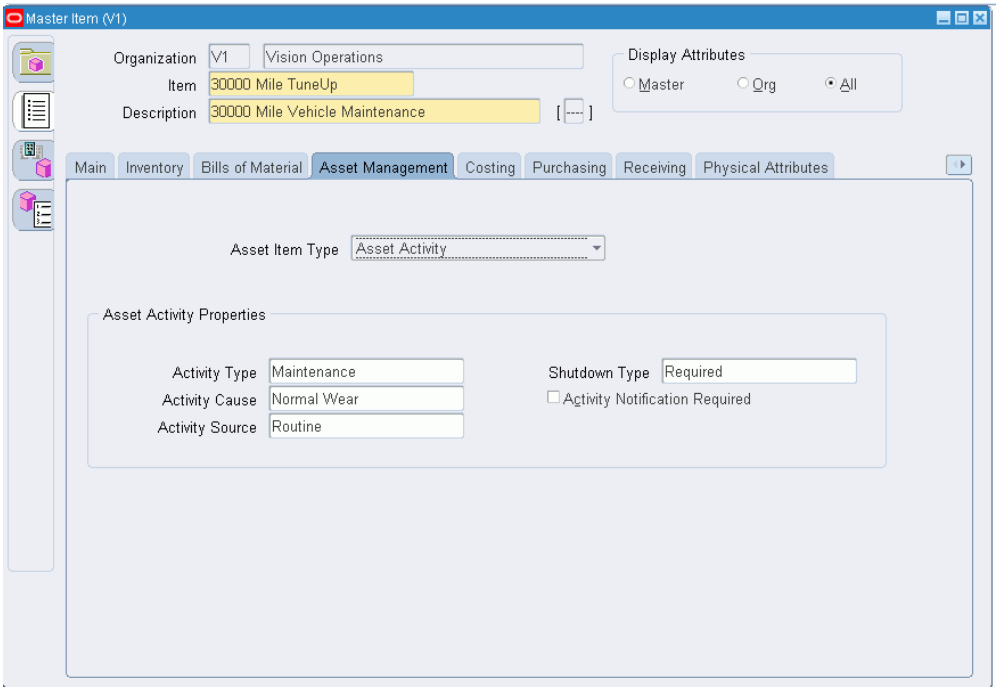
There are three methods you can use to create an Activity. You can create an Activity within the Master Activity (Master Item) window, create Activities from the Activity Workbench, and create Activities from within a Maintenance Work Order.

To set up activities within the Master Activity window:

1. Navigate to the Activity (Master Item) window. The Master Item window is used to

create Asset Groups, Activities, and rebuildable.

Master Item



2. Enter the name of the activity in the Item field.

3. Enter a Description for this activity, up to 240 characters.

4. Use the @Activity template to quickly apply attribute values, and to ensure that the appropriate attributes are applied.

    1. Select Tools from the Tools menu, and then select Copy From.

    2. Select the @Activity template.

        Note: You can create Activities using the template described above, or you can copy an Activity from an existing Activity (See: Defining Items, *Oracle Inventory User's Guide*).

The following table presents the necessary attribute values that are applied automatically to the Activity, when using the template:

Activity Attributes

Attribute	Value
User Item Type	Activity
Item Status	Active
Inventory Item	Enabled
EAM Item Type	Activity

5. Select the Asset Management tab.

   In the Activity Property region, optionally enter an Activity Type to indicate the type of maintenance for this Activity. It is used when defining a Work Order. It should remain generic, and should not describe the job in detail. For example, Inspection, Overhaul, Lubrication, Repair, Servicing, or Cleaning.

6. Optionally select an Activity Cause to specify what situation caused this work to generate. For example, Breakdown, Vandalism, Normal Wear, or Settings.

7. Optionally select an Activity Source. Activity Source codes are reasons activities are executed. For example, Warranty Compliance, OSHA Compliance, or Military Specification Requirements. See: Activity Sources, page 3-27.

8. Optionally select a Shutdown Type. This indicates whether a shutdown is necessary to perform this maintenance activity. For example Required, and Not Required. This field is for information purposes.

9. Optionally select an Activity Notification Required value to indicate whether the asset requiring work is mobile, and should be brought into the shop for repairs. This field is for information purposes.

10. Save your work. After saving your work, this activity can be associated with an asset (See: Activity Association Templates, page 3-58).

To associate activities to multiple organizations:

1. From the Master Item window, select TOOLS from the Tools menu.

2. Select the Organization Assignment.

3. Enter additional organizations in the available window.

4. Save your work.

To associate Assets with activities:

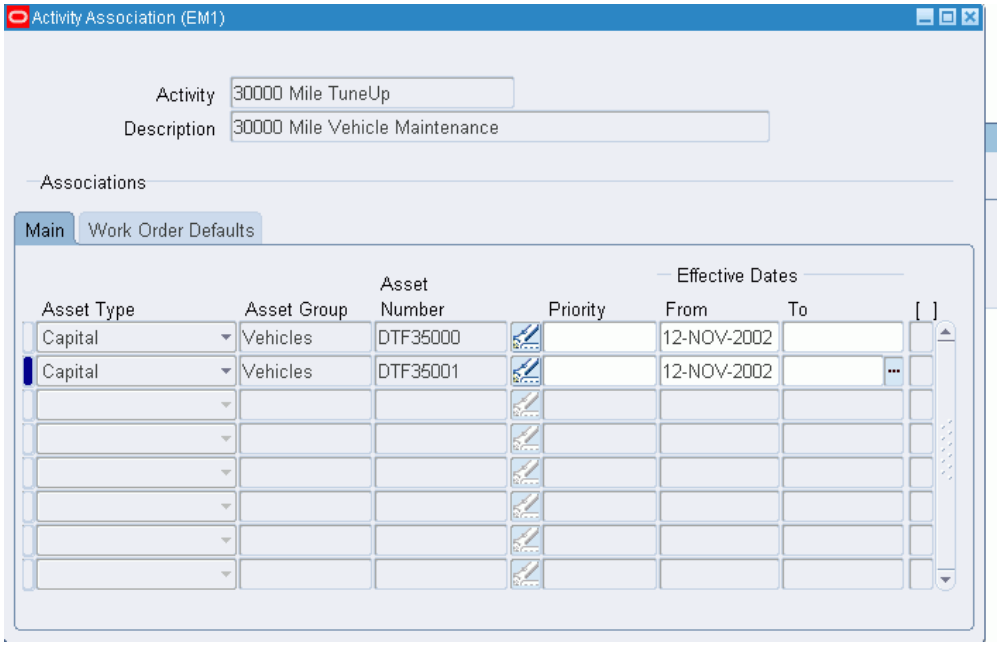
After you have defined Asset Groups (See: Defining Asset Groups, page 3-50), Assets (See: Defining Asset Numbers, page 3-65), and Activities, you can associate the Activities with assets and/or rebuildables. However, you can streamline the creation of Activities and associations using an Activity Association Template (See: Activity Association , page 3-58Templates). Assets are associated with Activities before entering the Activity into a Preventive Maintenance Schedule.

> **Note:** The Activity Workbench is generally used to streamline your Activity setups, including Asset Number/Activity associations (See: Using the Activity Workbench, page 3-80). Also, you can streamline the creation of Activity associations using an Activity Association Template. For example, when you create an Asset Group, and then Asset Numbers within that group, you do not need to utilize the Association window to associate those Asset Numbers with an Activity. If you create an Activity Association Template, the Activity that you associate with the current Asset Number's Asset Group automatically determines the Activity that is associated with the current Asset Number (See: Activity Association Templates, page 3-58).

You can also use Oracle Web Services to automatically create, update and search for asset activity associations. These public interfaces enable you to more easily convert data from another instance or another system. These web services are annotated and available in the I-Repository along with other public Oracle APIs. (See: *Oracle Manufacturing APIs and Open Interfaces Manual* for more information on APIs.)

1. Navigate to the Activity Association window.

Activity Association



2. Select an Activity.

3. Within the Main tab, select Asset or Rebuildable from the Item Type list of values. This field works directly with the Asset Group and Asset Item fields. If Asset is selected, the Asset Group refers to the Asset Group, and the Asset Number refers to the Asset Number. If Rebuildable is selected, the Asset Group refers to the Rebuildable Item, and the Asset Number refers to the specific serial numbers for the current Rebuildable Item.

4. Select an Asset Group. If Asset is populated in the Item Type field, Asset Groups are available.

5. Select an Asset Number. Asset Numbers associated with the previously selected Asset Group are available. Asset Numbers are always serial controlled. If you had selected a Non-serialized Rebuildable in the Asset Group field, then an Asset Number value is not required.

6. Optionally select a Priority Code. This field is for information purposes.

7. Optionally enter Effective Dates. If the Effective From field is left blank, it defaults to the system date. If the Effective To field is left blank, it defaults to NULL.

8. Within the Activity tab, the Activity Cause defaults from the Activity definition (See: Defining Activities, page 3-53), specifying what situation caused this work to generate. For example, Breakdown, Vandalism, Normal Wear, or Settings.

Optionally you can select an Activity Cause.

9. The Activity Type defaults from the Activity definition (See: Defining Activities, page 3-53). This code indicates the type of maintenance activity to perform for this Activity. It is used when defining a job or a standard job. This code should remain generic, and should not describe the job in detail. For example, Inspection, Overhaul, Lubrication, Repair, Servicing, or Cleaning. Optionally you can select an Activity Type.

10. Optionally select the Tagging Required check box to indicate whether tag out procedures are required. The Area may need securing for operations required for carrying out a Work Order. Tags are generally printed and placed on an asset, warning the plant that the asset is shutdown, and should not be started. This check box helps the planner isolate those jobs that require a tagout. This is for information.

11. The Owning Department responsible for this activity or asset defaults from the Asset Number definition (See: Defining Asset Numbers, page 3-65). Optionally you can select an Owning Department. This is normally a Planner or Supervisor.

12. Optionally select a Shutdown Type. This indicates whether a shutdown is necessary to perform this maintenance activity. For example Required, and Not Required. This field is for information purposes. This value defaults from the Master Activity information that was created within the Master Item window. See: Defining Activities, page 3-53.

13. Optionally select a WIP Accounting Class. You can update the value that defaults from the Enterprise Asset Management Parameters information, for the current organization. See: Defining eAM Parameters, page 3-11.

14. Optionally select an Activity Source. Activity Source codes are reasons activities are executed. For example, Warranty Compliance, OSHA Compliance, or Military Specification Requirements. See: Activity Sources, page 3-27. This value defaults from the Master Activity information that was created within the Master Item window. See: Defining Activities, page 3-53.

15. Save your work.

Activity Association Templates

Activities provide you with a standard template of jobs, which are applied to Work Orders, such as Routine or Preventive Maintenance. After these Activity Templates are created, they are associated with one or more Asset Numbers or Rebuildables (See: Activity Association Templates, *Oracle Enterprise Asset Management User's Guide* and Rebuildable Item/Activity Association, *Oracle Enterprise Asset Management User's Guide*). They are also associated to a maintenance BOM (See: Setting Up Activity Bills of Material, *Oracle Enterprise Asset Management User's Guide*) and activity routing (See:

Defining Asset Routes, *Oracle Enterprise Asset Management User's Guide*), containing the materials and resources needed for operations, respectively. When Work Orders are created for assets associated to the Activity, the material and resources associated with the current Activity automatically copy to the Work Orders created.

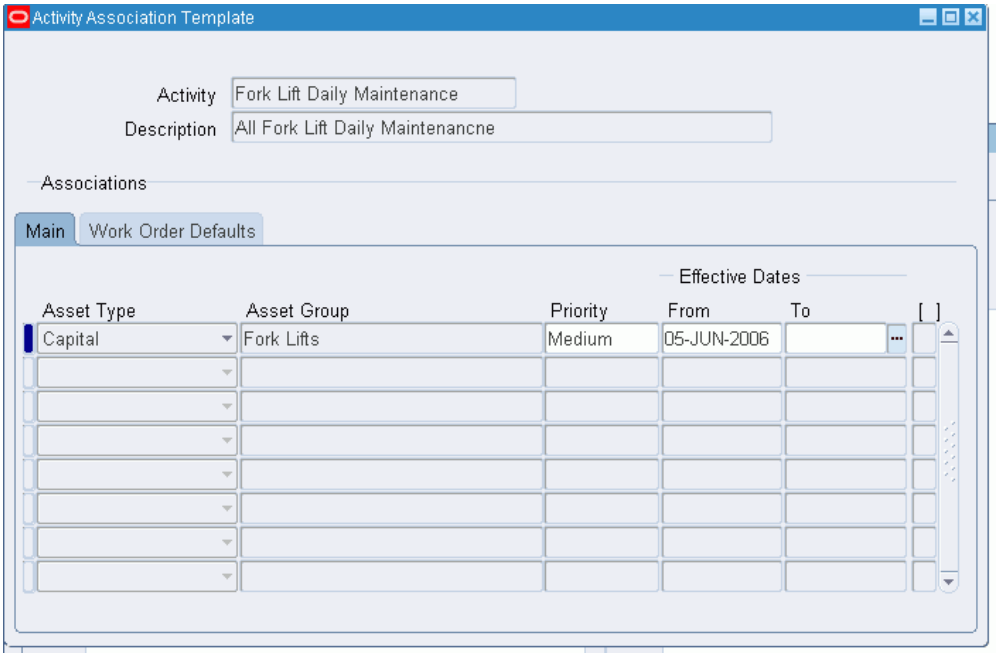
You can streamline the creation of Activity associations using an Activity Association Template. For example, when you create an Asset Group, and then Asset Numbers within that group, you do not need to utilize the Association window to associate those Asset Numbers with an Activity. If you create an Activity Association Template, the Activity that you associate with the current Asset Number's Asset Group automatically determines the Activity that is associated with the current Asset Number.

> **Note:** The Activity Workbench is generally used to streamline your Activity setups, including Activity Association Templates (See: Using the Activity Workbench, *Oracle Enterprise Asset Management User's Guide*).

To create activity association templates:

1. Navigate to the Activity Association Template window.

Activity Association Template



2. Select a valid Activity. The Activity needs to already have been created within the Master Item window.

3. Within the Main tab, select an Item Type of Asset or Rebuildable.

4. Select an Asset Group. After this record is saved, this Asset Group is associated with the current activity. Each asset number created within the current asset group is automatically associated with the current activity.

5. Optionally select a Priority code. This value defaults from the Master Activity information created within the Master Item window.

6. Optionally enter Effectivity Dates for this Activity Template.

7. Within the Activity tab, optionally select an Activity Cause. This value specifies what situation caused this work to generate. For example, Breakdown, Vandalism, Normal Wear, or Settings. This value defaults from the Master Activity information created within the Master Item window. See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*.

8. Optionally select an Activity Type to indicate the type of maintenance for this Activity. It is used when defining a work order. It should remain generic, and should not describe the job in detail. For example, Inspection, Overhaul, Lubrication, Repair, Servicing, or Cleaning. This value defaults from the Master

Activity information created within the Master Item window. See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*.

9. Optionally select the Tagging Required check box to indicate whether tag out procedures are required. The Area might need to be secured for operations required for carrying out a work order. Tags are generally printed and placed on an asset, warning the plant that the asset is shutdown, and should not be started. This check box helps the planner isolate those jobs that require a tagout. This is for informational purposes only.

10. Optionally select an Owning Department. This value defaults from the Enterprise Asset Management Parameters information for the current organization. See: Defining eAM Parameters, *Oracle Enterprise Asset Management User's Guide*.

11. Optionally select a Shutdown Type to indicate whether a shutdown is necessary to perform this maintenance activity. For example Required, and Not Required. This field is for informational purposes. This value defaults from the Master Activity information that was created within the Master Item window. See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*.

12. Optionally select a WIP Accounting Class. This value defaults from the Enterprise Asset Management Parameters information for the current organization. See: Defining eAM Parameters, *Oracle Enterprise Asset Management User's Guide*.

13. Optionally select an Activity Source. Activity Source codes are reasons activities are executed. For example, Warranty Compliance, OSHA Compliance, or Military Specification Requirements. See: Activity Sources, *Oracle Enterprise Asset Management User's Guide*. This value defaults from the Master Activity information that was created within the Master Item window. See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*.

14. Save your work.

Setting Up Attributes

You can define common characteristics data specific to Asset Groups, such as Facility Information, Engineering Specifications, Regulation Requirements, Horsepower, Voltage, and Square Footage, by creating Attribute Groups using descriptive flexfields. After the Attribute Group is created, you can then assign it to an Asset Group. This enables you to define additional characteristics data when defining an asset associated with the Asset Group. This provides extensive query capabilities. Attribute groups are descriptive flexfields, defined by segments and values.

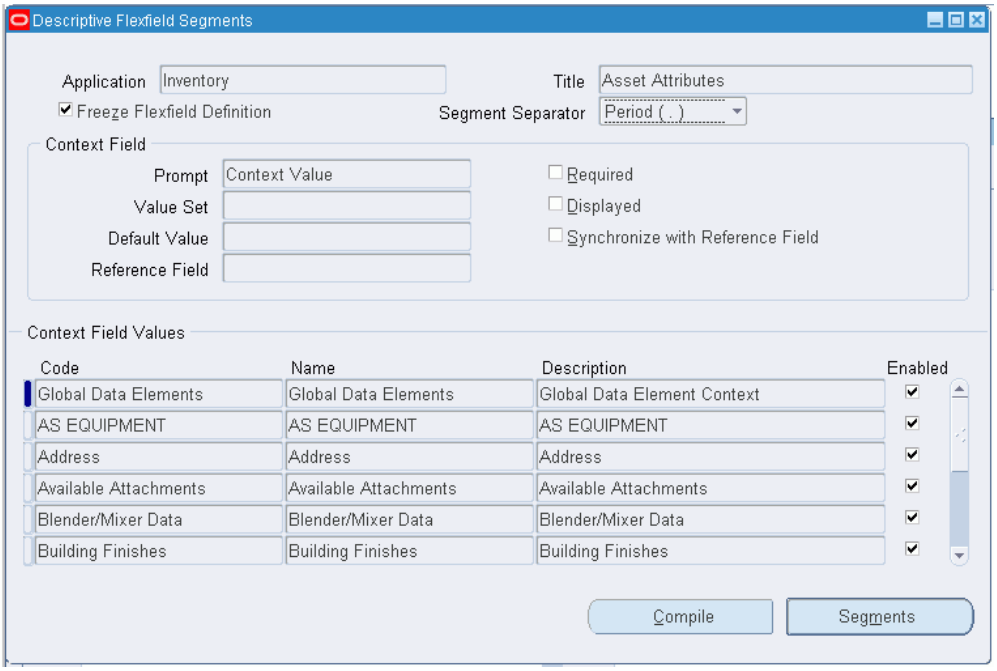
For example, you can define an Attribute Group, Front Loader Nameplate data. This group can then be associated with the CARS Asset Group. When defining an asset within the CARS Asset Group, you can optionally utilize the attributes to specify nameplate data (specified data such as make, year, and model) for the asset. This creates

a simplified way of entering specified data (See: Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*) related to a specific Asset Group.

To set up attributes:

1. Navigate to the Descriptive Flexfield Segments window.

Descriptive Flexfield Segments



2. Select the flashlight icon from the tool bar, and then select the Oracle Inventory Application with the Title, Asset Attributes.

3. Unfreeze the Flexfield Definition by clearing the Freeze Flexfield Definition check box.

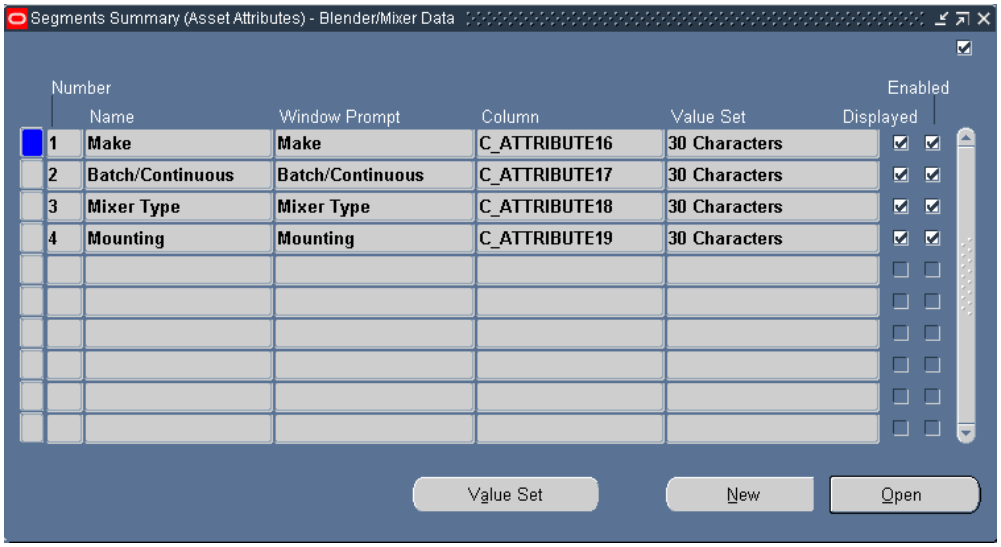
4. In the Context Field Values region, select a row, then click the New icon. A blank row is added for you to create an attribute group.

5. Enter the attribute group name in the Code field.

6. Optionally enter a Description for this attribute group.

7. Select Segments to add attributes to the attribute group you just created.

Segments Summary



8. Enter a Number to sequence the data.

9. Define the Name of the specific attribute. The Window Prompt defaults to this name.

10. Select a Column value.

11. Select a Value Set, or optionally choose Value Set to create a new one.

12. If the Displayed check box is selected, this attribute appears for you when defining data for an asset within the Asset Group (for example, CARS) associated with the attribute group (for example, NAMEPLATE) in which this attribute (for example, Make) resides.

13. Optionally select the Enabled check box to enable the attribute for availability when defining assets (See: Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*).

14. Save your work, and return to the Descriptive Flexfield Segments window.

15. Select the Freeze Flexfield Definition check box. Failure to do this prevents you from querying the segments from the Attribute window.

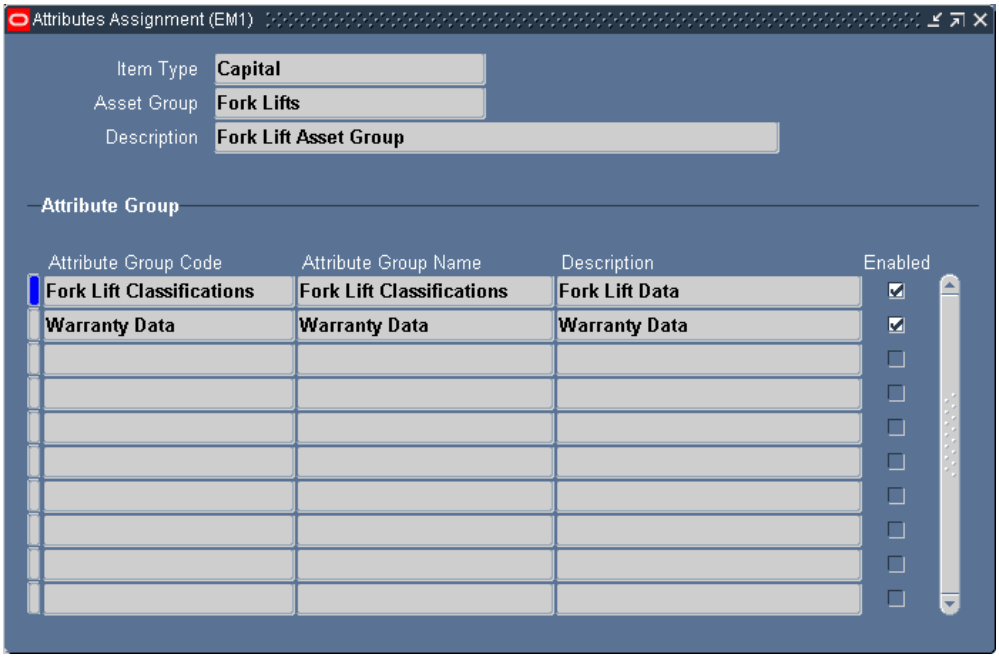
16. Save your work.

To associate the Attribute Group with an Asset Group:

1. Navigate to the Attributes Assignment window.

In the below example, any asset created within the CARS Asset Group has the NAMEPLATE attribute group available as an option for data entry.

Attributes Assignment



2. Select an Asset Group. See: Defining Asset Groups.

3. Select an Attribute Group Code.

   You can have an unlimited number of Attribute Groups associated with an Asset Group.

4. Save your work.

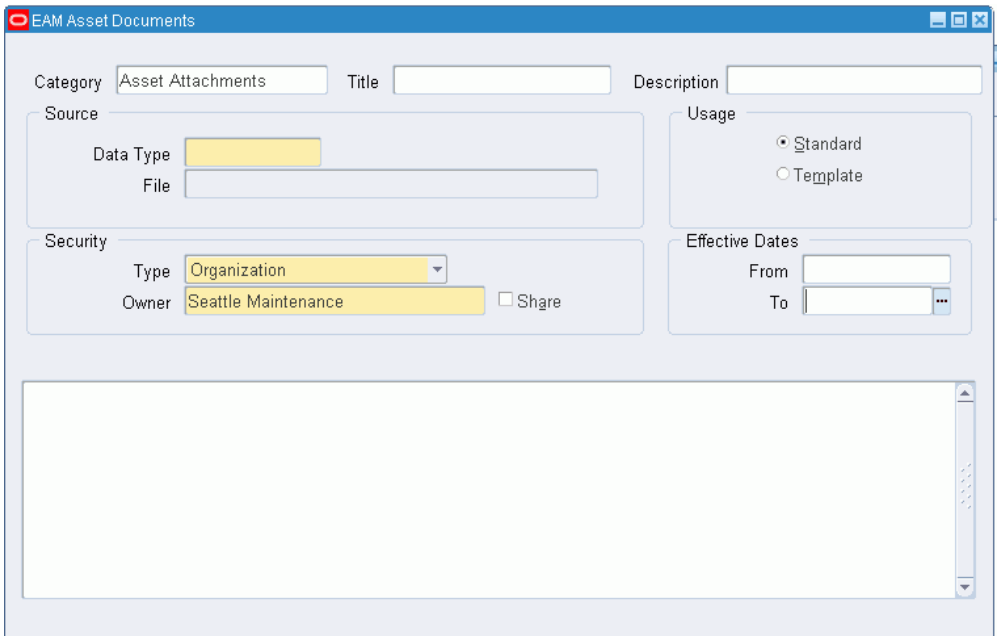
Defining Asset Documents

You can attach existing documents to an asset, and create text to associate with an asset. You can attach text, URLs, or files, such as spreadsheets, graphics, and OLE objects. When creating a work order for an asset with attachments, you can attach the asset's attachments to the Work Order. For this to function, the appropriate attachment category, Asset Attachments (1), must be associated with the attachment function, EAMWOMDF (See: Working With Attachments, *Oracle Applications User's Guide*.

To define asset documents:

1. Navigate to the EAM Asset Documents window.

EAM Asset Documents



2. Select a Data Type.

3. If the Data Type is File, attach the appropriate File. If the Data Type is Web Page, enter the relevant URL. If the Data Type is Short Text, insert the text in the text field.

   For information on all fields, See: Working With Attachments, *Oracle Applications User's Guide*.

Defining Asset Numbers

Enterprise Asset Management provides three methods in which you can enter a new asset. You can create them individually, by copying information from an existing asset, utilize the multiple asset entry method, or use the Import Asset Number interface.

You can also use Oracle Web Services to automatically create, update and search for asset numbers. These public interfaces enable you to more easily convert data from another instance or another system. These web services are annotated and available in the I-Repository along with other public Oracle APIs. (See: *Oracle Manufacturing APIs and Open Interfaces Manual* for more information on APIs.)

> **Warning:** You cannot use "_" or "%" when creating an asset number using Oracle eAM.

In addition, when an asset is received and delivered to Inventory, an asset number is created automatically.

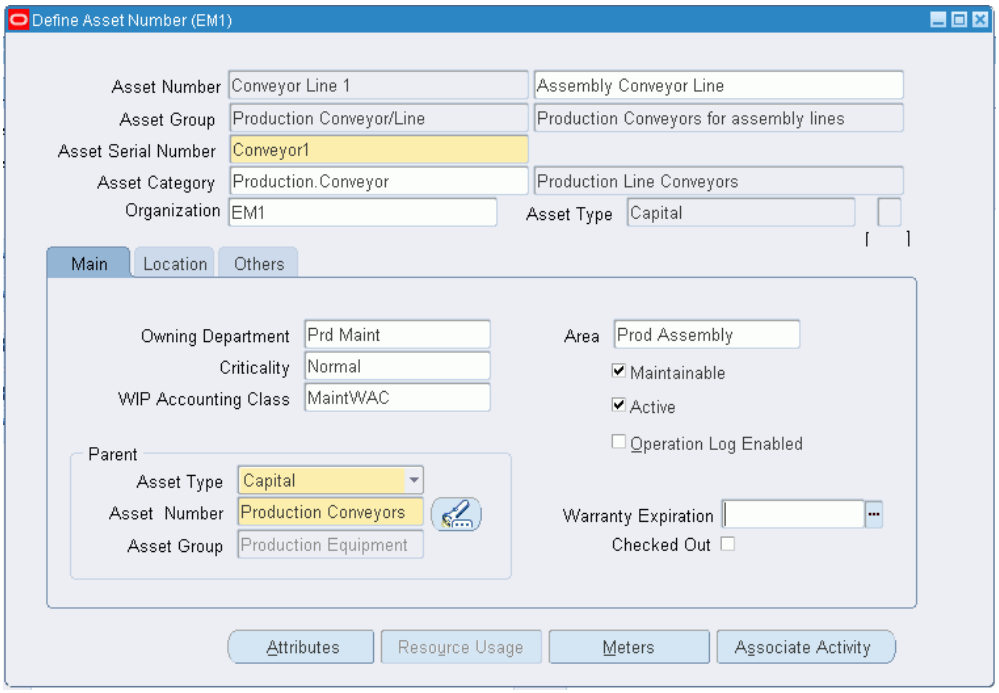
Prerequisites

You must set up the following task prior to defining asset numbers in Oracle eAM:

- Define asset groups. See: Defining Asset Groups, *Oracle Enterprise Asset Management User's Guide*

To define assets individually:

1. Navigate to the Define Asset Number window.



2. Enter an Asset Number if you do not have them automatically generated, or accept or modify the default, if you have automatic number generation enabled (See: Defining eAM Parameters, *Oracle Enterprise Asset Management User's Guide*).

   After an asset is saved, it cannot be deleted. The asset can be deactivated if there are no open work orders or work requests for the asset, and if the asset is not part of an asset hierarchy.

3. Optionally enter an Asset Description, up to 240 characters.

4. Select an Asset Group. This asset group is associated with this asset.

   Note: After an Asset Group is associated with an asset and then saved, it cannot be changed.

5. Enter a value in the Asset Serial Number field, or accept the default value that appears if automatic number generation is enabled.

   Note: The Asset Serial Number can be modified to be identical to the Asset Number.

   The Asset Serial Number might have a non-unique value across organizations, but the Asset Number must be globally unique, regardless of the defaulting value. When an asset number generates automatically at receipt by the Deliver to Inventory transaction, it defaults to the Item Instance number. You can change it, as long as it is a globally unique number.

6. Optionally associate this asset to an Asset Category. This is the Class and Subclass code, such as CRANE.OVERHEAD or BUILDING.FLOOR. See: Setting Up Category Codes and Sets, *Oracle Enterprise Asset Management User's Guide*.

7. Optionally, change the defaulted **Organization**. This organization may be different than the eAM-enabled organization that maintains the asset. You can define an Asset Group and Asset Number directly in the production organization.

   You can define an Asset Group in an organization that is not eAM-enabled, if it is associated with an eAM-enabled organization in its Organization parameters.

   In this Define Asset Number window, you can define an asset number for asset groups defined in the eAM-enabled organization itself, and also for asset groups that are defined in organizations that are maintained by the eAM organization, by specifying the organization is this field. The list of values includes the eAM-enabled organization, as well as all organizations that are not eAM-enabled but are associated with the eAM-enabled organization in their Organization Parameters.

8. Within the Main tab, optionally select an owning Department for this asset to represent the crew responsible for the asset. Notifications regarding work requests are sent to the Primary Approver of the work request's associated asset's current owning department (See: Defining Department Approvers, *Oracle Enterprise Asset Management User's Guide* and Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*).

9. Optionally select a Criticality code to indicate the importance of the asset to the organization. This field is for information purposes.

10. Optionally select a WIP Accounting Class to identify the Expense cost elements associated with the work performed, such as materials, labor, and resources.

11. Optionally enter the area where this asset resides. This is a user-defined listing of logical areas of work. For example, North Plant, East Wing, or Area 1 (See: Setting Up Areas, *Oracle Enterprise Asset Management User's Guide*).

12. Indicate whether this asset is maintainable. If the Maintainable check box is selected, you can create work requests and work orders for this asset.

    For example, you can create an asset for cost-tracking purposes. For example, you might want to view the cost for all top level assets in an asset hierarchy, but you do not want to maintain those assets. In this situation, do not select this check box.

    > **Note:** After work orders are created for this asset, you cannot clear this check box unless those work orders are at Complete, Canceled or Closed statuses.

13. Optionally select the Active check box to indicate that the asset is functioning, for example, maintenance work orders can be created for this asset. This check box change when you activate or deactivate an asset from the Tools menu.

14. Indicate whether Asset Operational Logging is enabled for this asset. If you select the Operation Log Enabled check box, you can view all current and past asset operational information, such as Check Out, Check In, associated work requests and work orders. You can remove or add a child asset, remove a parent asset, activate or deactivate the asset, transfer the asset to another location, and receive or issue the asset into/from Inventory. By default, logging is turned off for an asset. See: Asset Operational Logging, *Oracle Enterprise Asset Management User's Guide*.

15. Within the Parent region, optionally select a parent Asset Number to establish asset hierarchy information. Work order costs roll up through the Parent/Child hierarchies defined, and can roll up to any level within an asset hierarchy. This enables you to review all cost associated with an asset or asset hierarchal view.

    > **Note:** When a child asset is transferred to another eAM organization, it is still included in the parent hierarchy. The organization that the asset currently resides in appears in parentheses. Transferring the asset does not remove the asset from the asset hierarchy. You must remove the asset manually, to remove the asset from its hierarchy.

16. The Checked Out check box indicates whether the current asset is checked in or out. You can check out an asset to view asset details, enter collection plan data, enter meter information, and optionally create a work request, within Maintenance Super User. This check box is protected against update. See: Asset Operational Logging, *Oracle Enterprise Asset Management User's Guide*.

17. Within the Location tab, the Subinventory and Locator fields are view-only, displaying the subinventory location of this asset within Inventory and its Locator segments. If this asset if received into Inventory, these fields are populated.

    You can specify the geocode information with details of latitude, longitude and

direction for the asset. This information is used to display the assets in the chosen map viewer.

18. Optionally select a Location Code to specify a physical location for this asset. The Address field simultaneously populates with the selected Location Code's associated Address. The previously defined area is organization-specific and not associated with a physical location.

    If your asset does not reside in a subinventory, you can specify an external location for it. You can only select an external location that is defined as a HZ location. You may optionally define external locations with a location code.

    Valid Location Codes are defined within Oracle Install Base.

19. The Address defaults as the populated Location Code's associated address. You can optionally select a different address. If the current asset is in stores, the address of the Location's organization appears (See: Stores, *Oracle Enterprise Asset Management User's Guide*).

20. Optionally select a Production Organization. The list of values displays the production inventory organizations maintained by the current asset's organization. See: Enabling Organizations for Enterprise Asset Management, *Oracle Enterprise Asset Management User's Guide*for information on designating eAM organizations to maintain equipment items for designated production organizations.

21. Select an Equipment Item. This is mandatory if you populated the Production Organization field. Items that were defined with an equipment template (See: Item Templates, *Oracle Inventory User's Guide*), or with the Equipment item attribute enabled (See: Physical Attributes, *Oracle Inventory User's Guide*), are available.

22. Enter an **Equipment Serial Number**. This is mandatory if you populated the Production Organization field. This is the specific name of the component within the Equipment Type, defined above, if an asset resides directly in the Production Organization, and its asset group is defined directly in the Production Organization as Equipment. You can view the Production Organization and the Asset Serial Number, but you cannot update them.

23. Optionally enter the Number if Oracle Fixed Assets is installed. This represents a fixed Asset Number that belongs to a fixed asset category, associated with the asset.

24. The Property Management fields, Location Name and Location Code, default from a Property Manager export process (Export Locations to Enterprise Asset Management), if Oracle Property Management is installed. These fields are disabled. These values cannot be changed.

    Note: Before the above information is passed from Property Manager into Enterprise Asset Management, Asset Groups need to

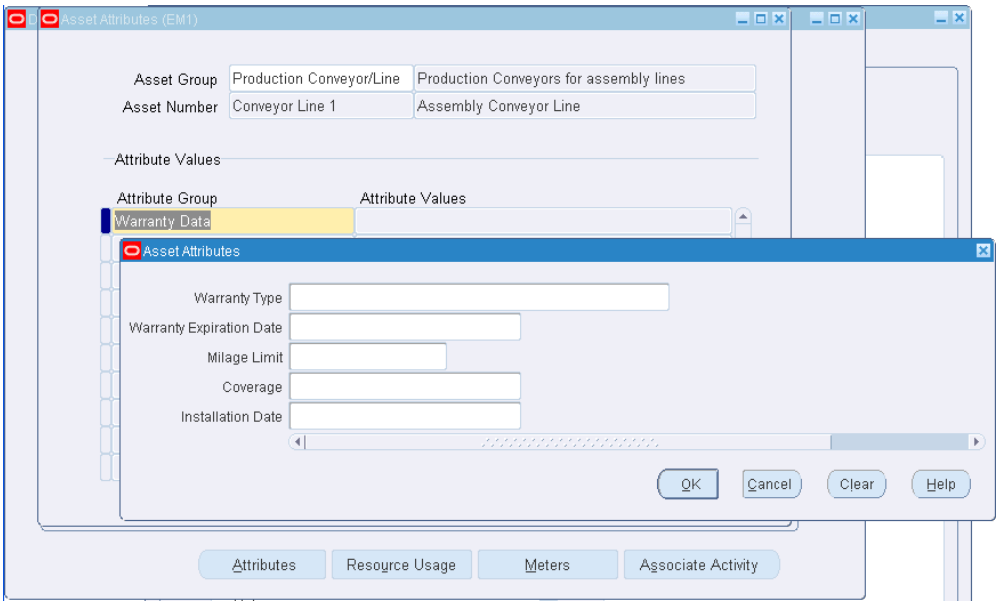
first be established. See: Defining Asset Groups, *Oracle Enterprise Asset Management User's Guide*.

25. Optionally choose Location Details to view or update Property Manager field information.

26. Optionally select Attributes to enter attribute values for the asset (See: Setting Up Attributes, *Oracle Enterprise Asset Management User's Guide*).

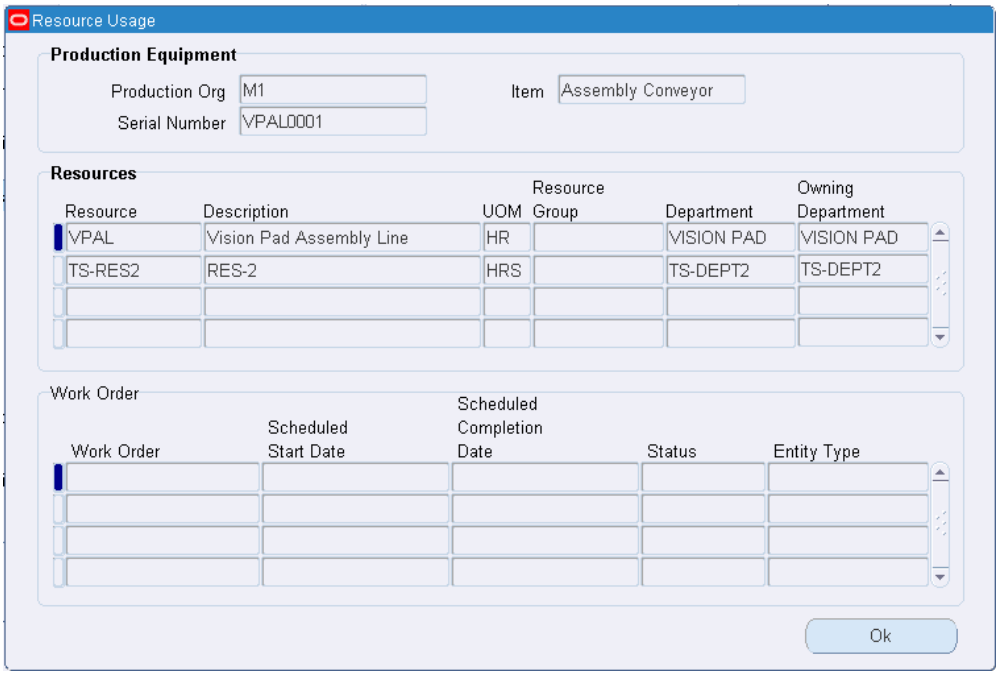
    Existing, enabled attribute groups appear (See: Setting Up Attributes, *Oracle Enterprise Asset Management User's Guide*). These attribute groups are optional. You do not need to enter values for all existing attribute groups. From this window, you cannot generate attribute groups.

Asset Attributes



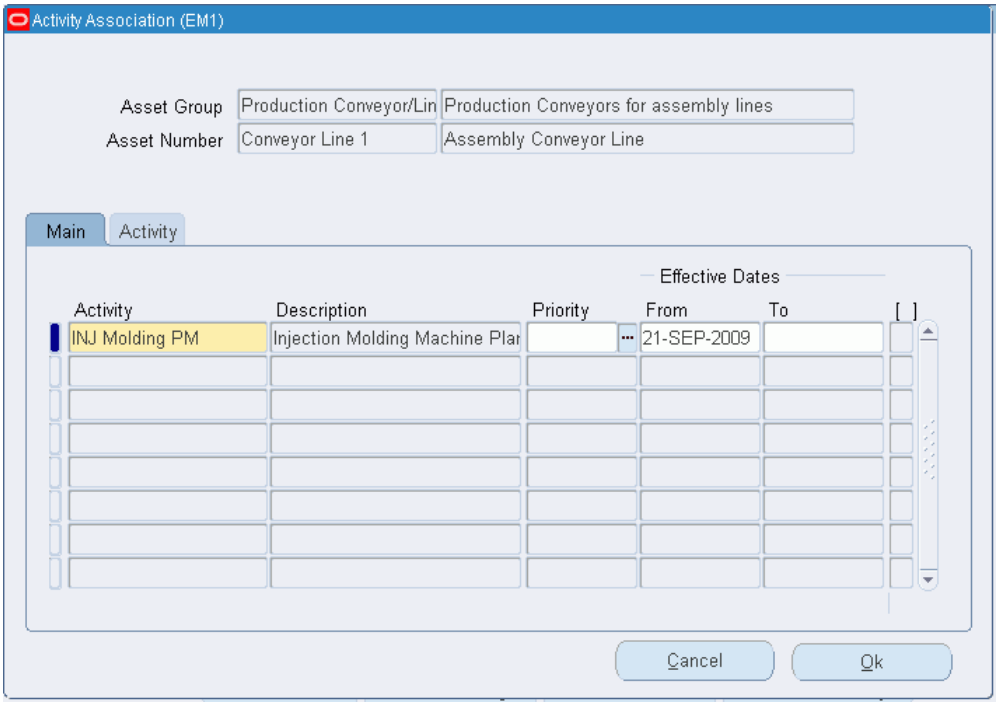
27. You can choose Resource Usage if the fields in the Production Equipment region are populated. This enables you to view production work orders using the equipment that corresponds with this asset number as a resource.

Resource Usage



28. Optionally select Associate Activity to directly associate this Asset with an Activity. See: Activity Association Templates, *Oracle Enterprise Asset Management User's Guide* .

Activity Association



29. Optionally enter file, URL, or text attachments to this asset by choosing the paperclip Attachments icon. You can then choose Document Catalog to add asset specific documents. See: Defining Asset Documents, *Oracle Enterprise Asset Management User's Guide*.

30. Save your work.

To copy assets from existing assets:

You can copy asset information from existing assets. When using this method, everything copies to the new asset, including attributes and attachments. Equipment Serial Numbers are not copied. You are prompted to enter the Equipment Serial Number, when saving.

1. Navigate to the Define Asset Number window.

2. Select an Asset Group. This Asset Group is associated with this asset.

3. Enter an Asset Number if you do not have them automatically generated, or accept or modify the default, if you have automatic generation enabled (See: Defining eAM Parameters, *Oracle Enterprise Asset Management User's Guide*). After an asset has been saved, it cannot be deleted. The asset can be deactivated if there are no open Work Orders or Work Requests for the asset, and if the asset is not part of an

asset hierarchy.

4. Optionally enter an Asset Description, up to 240 characters.

5. From the Tools menu, select *Copy Asset Number from*.

6. Select the desired Asset.

7. Optionally associate this Asset to an Asset Category. This is the Class and Subclass code, such as CRANE.OVERHEAD, or BUILDING.FLOOR. See: Setting Up Category Codes and Sets, *Oracle Enterprise Asset Management User's Guide*.

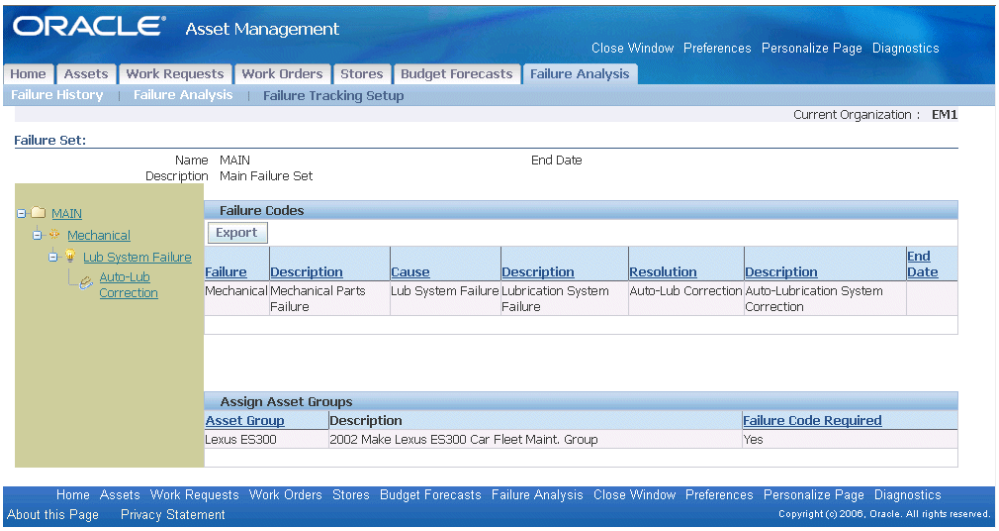
8. Select an owning Department for this asset. E-mail notifications, regarding Work Requests, are sent to the Primary Approver of the Work Request's associated asset's owning department (See: Defining Department Approvers, *Oracle Enterprise Asset Management User's Guide* and Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*).

9. Save your work.

To access failure analysis information:

You can access the Failure Set page to view failure tracking codes that are assigned to the current Asset Number.

1. From the Define Asset Number window, select Maintain Failure Set from the Tools menu. If the Asset Number does not have an associated Failure Set, this menu option is disabled. See: Defining Failure Codes and Sets, *Oracle Enterprise Asset Management User's Guide* and Failure Analysis Overview, *Oracle Enterprise Asset Management User's Guide*.



2. Close the window.

To deactivate an asset:

1. Navigate to the Define Asset Number window.
2. Select the flashlight Find icon to display the Find Asset Number window.
3. Select an Asset Number to deactivate.
4. From the Tools menu, select De-Activate Asset Number.
5. Save your work.

To activate an asset:

1. Navigate to the Define Asset Number window.
2. Select the flashlight Find icon to display the Find Asset Number window.
3. Select a Deactivated Asset Number to activate.
4. From the Tools menu, select Re-Activate Asset.
5. Save your work.

Defining Asset Routes

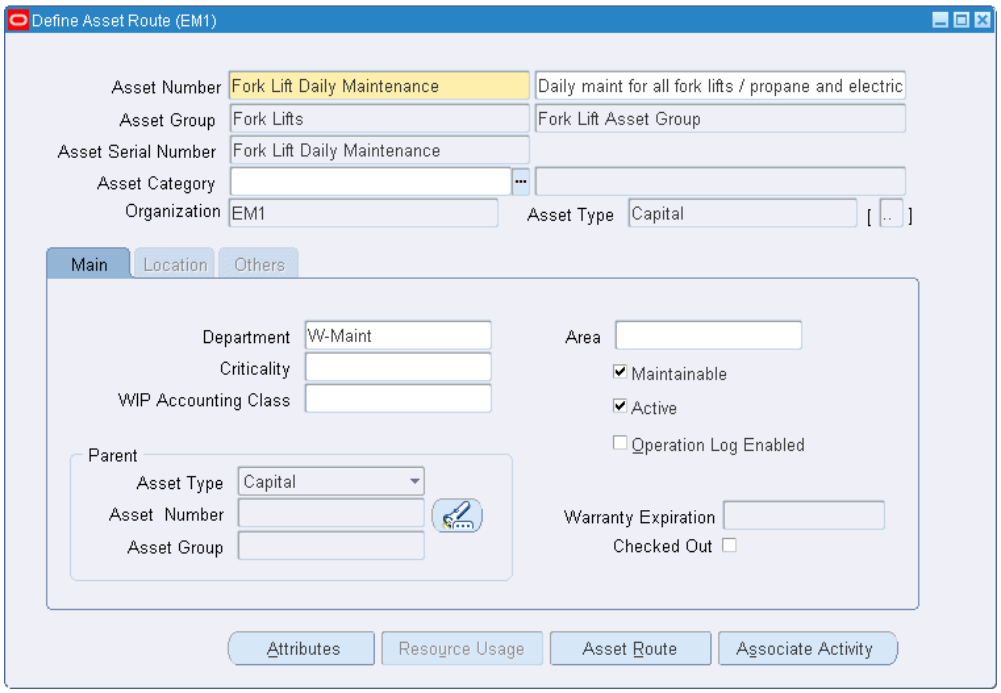
You might need to perform an Activity on multiple Asset Numbers. To eliminate the possibility of creating multiple Work Orders for the same Activity, you can define Asset Routes. You can define a Preventive Maintenance schedule for your Asset Route to

specify when an Activity should be scheduled for the Asset Route. You can define day interval rules for Asset Routes.

To define asset routes:

1. Navigate to the Define Asset Route window.

Define Asset Route



2. Enter the name of the Asset Route in the Asset Number field.

3. Select an Asset Group.

4. The Asset Serial Number defaults to the Asset Number. You can optionally select the next serial number for the current organization.

   The Asset Serial Number might have a non-unique value across organizations, but the Asset Number must be globally unique, regardless of the defaulting value.

5. Optionally associate this Asset Route to an Asset Category. This is the Class and Subclass code, such as CRANE.OVERHEAD or BUILDING.FLOOR. See: Setting Up Category Codes and Sets, *Oracle Enterprise Asset Management User's Guide*.

6. Within the Main tab, optionally select an owning Department for this Asset Route. This represents the crew responsible for the asset. Notifications, regarding Work Requests, are sent to the Primary Approver of the Work Request's associated asset's current owning department (See: Defining Department Approvers, *Oracle Enterprise*

Asset Management User's Guide and Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*).

7. Optionally select a Criticality code to indicate the importance of the Asset Route to the organization. This field is for information purposes.

8. Optionally select a WIP Accounting Class to identify the Expense cost elements associated with the work performed, such as materials, labor, and resources.

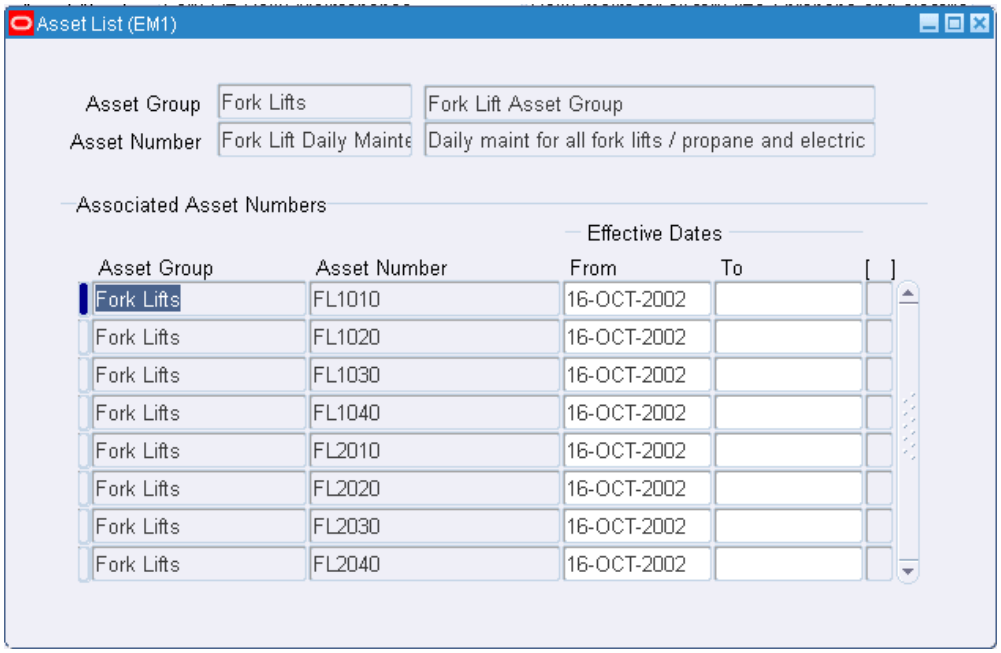
9. Optionally enter the Area where this Asset Route resides. This is a user defined listing of logical areas of work. For example, North Plant, East Wing, or Area 1 (See: Setting Up Areas, *Oracle Enterprise Asset Management User's Guide*).

10. Indicate whether this Asset Route is maintainable. If the Maintainable check box is selected, you can create Work Requests and Work Orders for this Asset Route.

11. Optionally select the Active check box to indicate that the asset route is functioning. This check box change when you activate or deactivate an asset route from the Tools menu.

12. Choose Asset Route to display the Asset Route window.

Asset Route



13. In the Associated Asset Numbers region, select an Asset Group.

14. Select an Asset Number. Asset Numbers associated with the previously selected Asset Group are available.

    You can associate an unlimited number of Asset Numbers.

15. Optionally enter Effective Dates. If the Effective Date From field is left blank, the system date defaults.

16. Save your work.

> **Note:** Asset Numbers can associate with Asset Routes. An Asset Route cannot associate with another Asset Route.

Setting Up Asset Bills of Material

You can identify and select the required items that make up an asset. A bill of material (BOM) is used to list all items and components that make up a particular asset, and is defined for each asset group. The items defined on an asset BOM are standard inventory components (See: Defining Items, *Oracle Inventory User's Guide*).

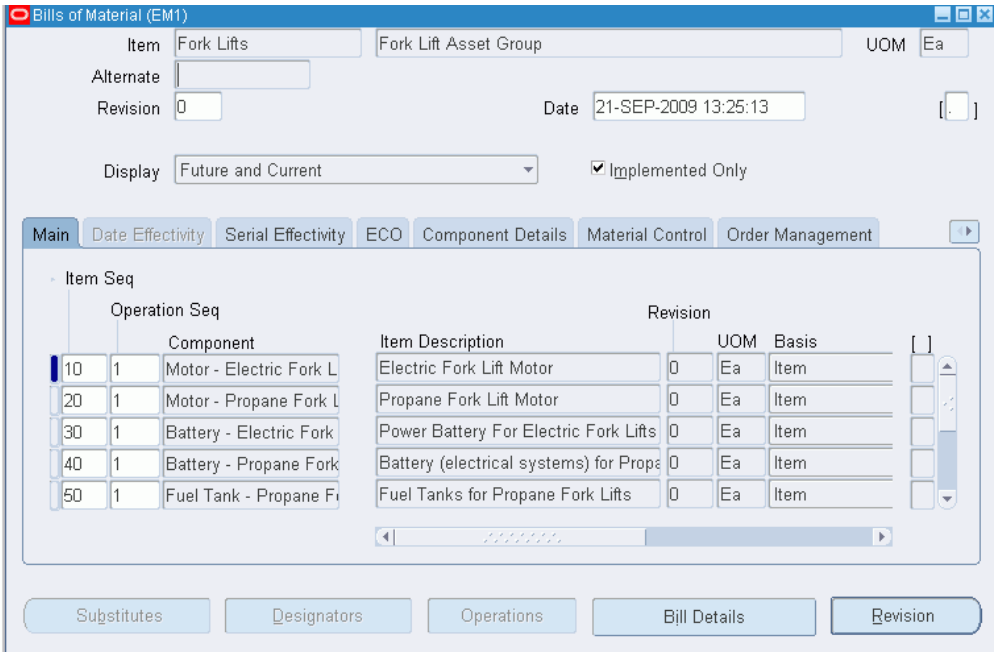
> **Note:** Even if you are not using Project Manufacturing applications,

Project Parameters are defined for your eAM enabled organization to successfully create Asset Groups. This is required because an Asset BOM is of type Model/Unit Effective and this BOM type is currently allowed if PJM organization parameters are set up for the eAM enabled organization to which the Asset Group has been assigned. To define Project Parameters, open the Project Parameters window using Project Manufacturing Super User responsibility and without entering any data in the window, save the record. If you plan to use Project Manufacturing, see: Project Manufacturing Integration Setup, *Oracle Enterprise Asset Management User's Guide* for information on defining Project Parameters.

To set up an Asset BOM:

1. Navigate to the Bills of Material window.

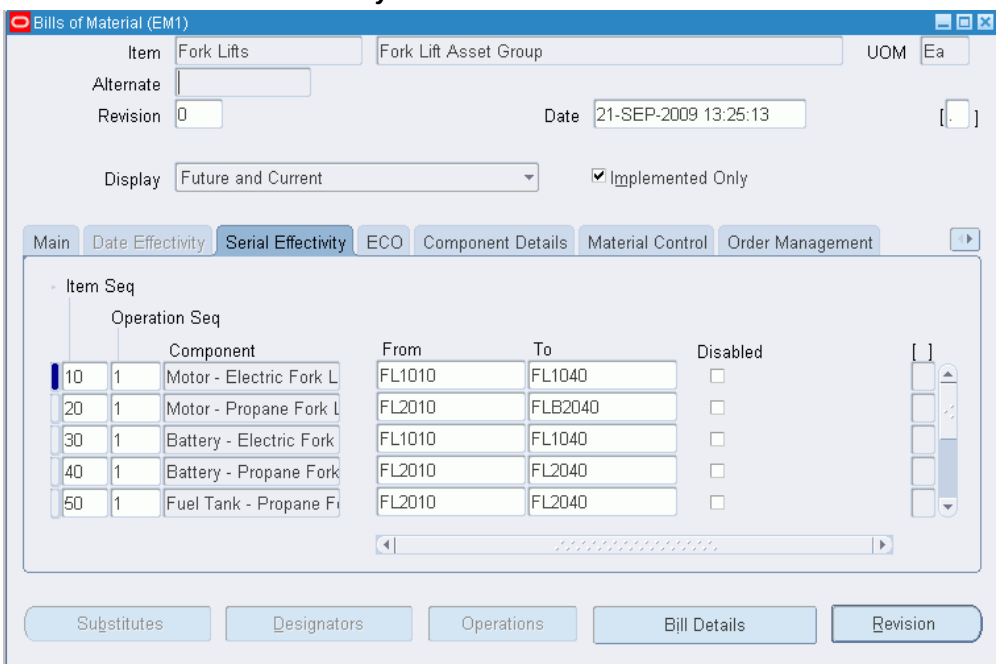
Bills of Material



2. Select an Asset Group from the Item list of values.
3. Within the Main tab, the Item Sequence and an Operation Sequence values default.
4. Enter the inventory Component to make up the Asset Number.
5. Enter the Quantity of that component necessary for the asset.

6. Select the Serial Effectivity tab.

Bills of Material - Serial Effectivity

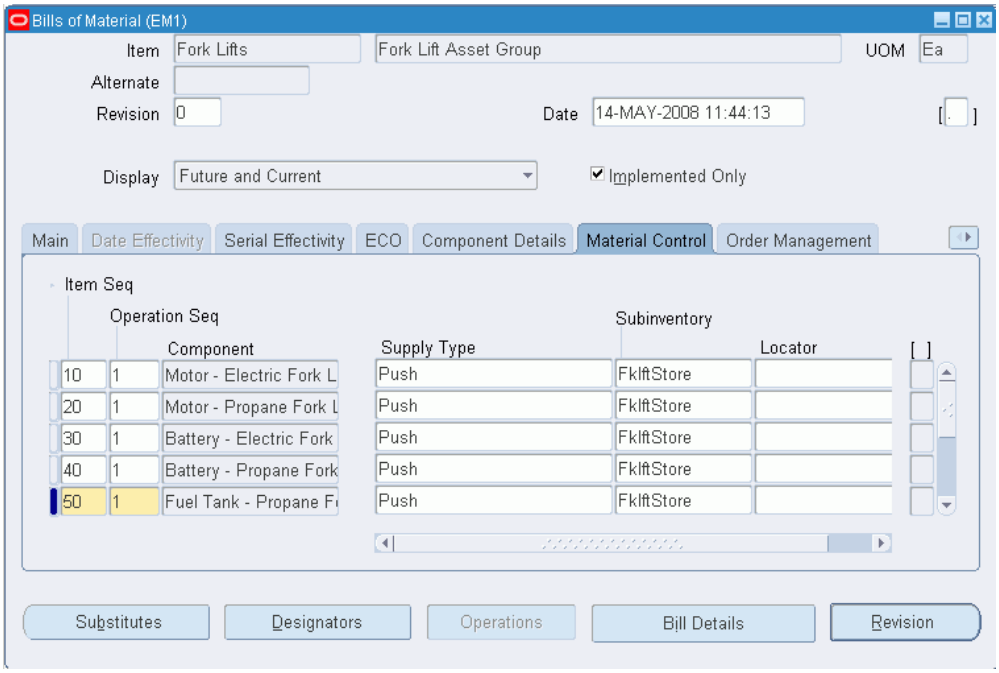


7. Select the Asset Number (Asset Numbers are always serialized) that the inventory items are associated with, in the From and To fields. Asset Numbers associated with the current Asset Group are available.

   If the Component is installed in all Asset Numbers within the Asset Group, enter 0 in the From field, and leave the To field blank.

8. Optionally select the Material Control tab, and enter a subinventory location or source locator for this asset BOM. If the Auto Request Material option is selected at the BOM level, material allocation will be initiated when the work order is released, and the source subinventory and source locator values you enter will override these values in the Inventory sourcing rules. If the Auto Request Material option is not selected, you can specify a source subinventory and source locator for your material when you perform a material request or a One-Step Material Issue.

Material Control



9. Save your work.

   For information on all remaining fields, See: Creating a Bill of Material, *Oracle Bills of Material User's Guide*.

Related Topics

Defining Activities, *Oracle Enterprise Asset Management User's Guide*

Using the Activity Workbench, *Oracle Enterprise Asset Management User's Guide*

Rebuildable/Activity Association, *Oracle Enterprise Asset Management User's Guide*

Using the Activity Workbench

You can use a central workbench to manage your organization's activity functions. Using the Activity Workbench, you can view, create (See: Defining Activities, page 3-53), query, and manage all of your activities. From this central workbench, you can view, create, and update maintenance routes, maintenance BOMs, Preventive Maintenance schedules, and suppressions associated with your activities. You can create various copy functions within a single activity, across multiple Activities, as well as between work orders and activities or asset activity associations. You can view or update Last Service for the asset activity association, as well as view cost estimates for the activity. These copy functions save time and standardize processes across your organization.

This section includes the following topics:

- Defining Activities, page 3-81
- Navigating the Activity Workbench, page 3-85
- Setting Up Maintenance Bills of Material, page 3-93
- Associating Asset Numbers with Activities, page 3-96
- Defining Maintenance Routes, page 3-99
- Creating Activity Templates, page 3-103

Defining Activities

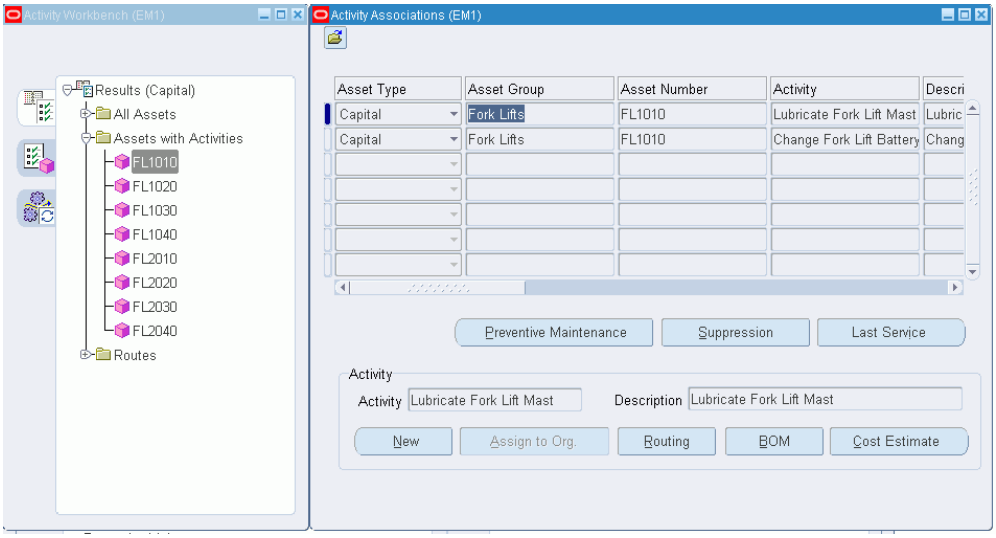
There are three methods you can use to create an activity:

- Within the Master Activity (Master Item) window.
- From the Activity Workbench.
- Within a maintenance work order.

To set up activities using the Activity Workbench:

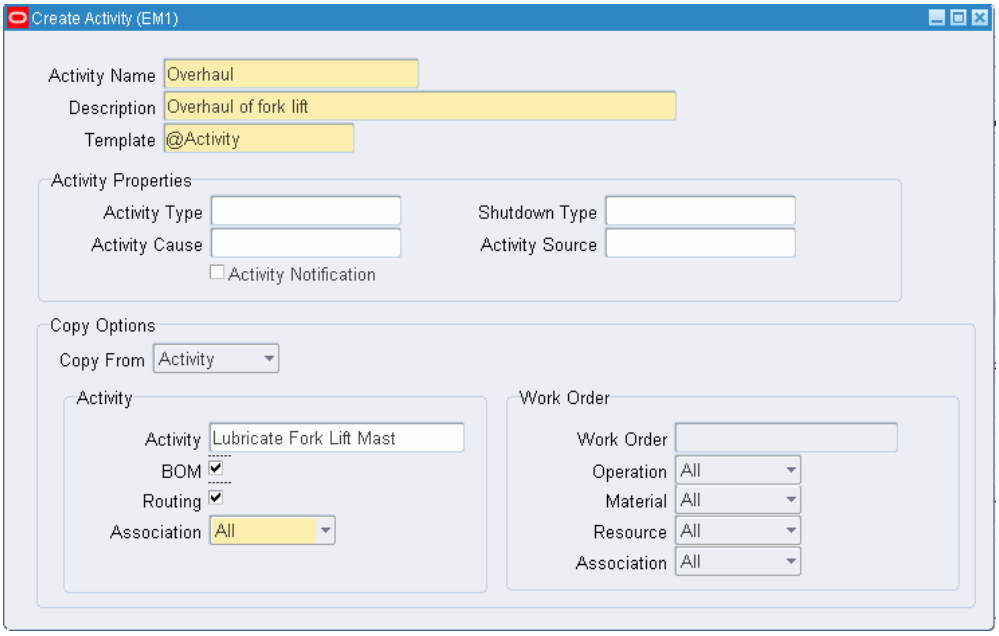
1. Navigate to the Activity Workbench window.
2. Choose Launch.

Activity Association



3. To create an activity, select New.

Create Activity



4. Enter an Activity Name.

5. Enter an Activity Description.

6. Choose an activity Template. This automatically links the properties associated with an Activity. The @Activity template is created for you. You can create your own Activity Templates, as well.

7. Within the Activity Properties region, optionally select an Activity Type (See: Activity Types, *Oracle Enterprise Asset Management User's Guide*). The value defaults from the Template properties above.

8. Within the Activity Properties region, optionally select an Shutdown Type. The Shutdown Type is user defined, and indicates whether an activity shutdown is required. For example, the Shutdown Type can refer to whether the Asset Activity association shutdown is required before the activity is performed. The value defaults from the Template properties above. This field is for information purposes.

9. Within the Activity Properties region, optionally select an Activity Cause (See: Activity Causes, *Oracle Enterprise Asset Management User's Guide*). The value defaults from the Template properties above.

10. Within the Activity Properties region, optionally select an Activity Source (See: Activity Sources, *Oracle Enterprise Asset Management User's Guide*). The value defaults from the Template properties above.

11. The Activity Notification check box is informational until a future release.

12. You can optionally create an activity by copying it from another activity or a work order. Within the Copy Options region, select the entity to copy information from. Valid values are Activity and Work Order. If you select Activity, the values within the Activity region are relevant, and the values within the Work Order region are irrelevant. If you select Work Order, the values within the Work Order region are relevant, and the values within the Activity region are irrelevant.

13. Within the Activity region, if Activity is populated in the Copy From field, optionally select an Activity name. This is the Activity from which you are copying.

14. Within the Activity region, if Activity is populated in the Copy From field, optionally select the BOM check box to indicate that the Maintenance Bill of Material, associated with the current Activity within the Activity region, copies to the new Activity Name.

    For example, in the screen shot, the Maintenance Bill of Material, associated with the 3000 Mile Truck Maint, copies to Oil Change.

15. Within the Activity region, if Activity is populated in the Copy From field, optionally select the Routing check box to indicate that the routings associated with the current Activity within the Activity region copies to the new Activity Name.

    For example, in the screen shot, routings that are associated with the 3000 Mile Truck Maint copy to Oil Change.

16. Within the Activity region, if Activity is populated in the Copy From field, select All or None from the Association list of values.

    - *All*: All asset and rebuildable associations related to the current activity within the Activity region copy to the new activity.

    - *None*: No asset and rebuildable associations related to the current activity within the Activity region copy to the new Activity.

17. Within the Work Order region, if Work Order is populated in the Copy From field, select an existing maintenance work order.

18. Within the Work Order region, if Work Order is populated in the Copy From field, select All or None from the Operation list of values.

    - *All*: All operations associated with the current work order, populated in the Work Order field, copy to the new Activity.

    - *None*: No operations associated with the current work order, populated in the Work Order field, copy to the new Activity.

19. Within the Work Order region, if Work Order is populated in the Copy From field, select All, Issued, or None from the Material list of values.

    - *All*: All material associated with the current work order, populated in the Work Order field, copies to the new Activity.

    - *Issued*: Material issued to the current work order, populated in the Work Order field, copies to the new Activity.

    - *None*: No material associated with the current Work Order, populated in the Work Order field, copies to the new Activity.

20. Within the Work Order region, if Work Order is populated in the Copy From field, select All, Issued, or None from the Resource list of values.

    - *All*: All resources associated with the current Work Order copy to the new Activity.

    - *Issued*: Resources issued to the current Work Order copy to the new Activity.

    - *None*: No resources associated with the current Work Order copy to the new Activity.

21. Within the Work Order region, if Work Order is populated in the Copy From field, select None, Current, or All from the Association list of values.

    - *None*: No Assets and Rebuildables, associated with the current Work Order,

associate with the new Activity.

- *Current*: An Asset and/or Rebuildable, associated with the current Work Order, associates with the new Activity.
- *All*: All Assets and/or Rebuildables, associated with the current Work Order's Activity, associate with the new Activity.

22. Save your work. After saving, the new Activity is automatically assigned to the current organization.

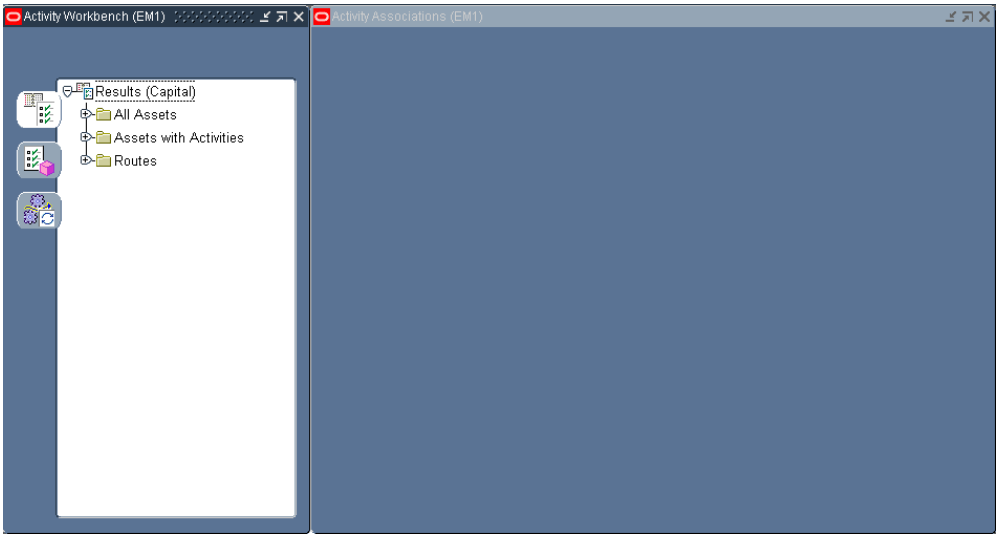
Navigating the Activity Workbench

The Activity Workbench enables you to manage all of your organization's Activity functions. Before launching the Activity Workbench, you can narrow your data selection; the Activity Workbench provides a query capability as you enter the Activity Workbench. The top portion of the window enables you to query by Asset Type, Asset Number, Asset Group, Area, Asset Category, Owning Department, and provides you the choice of including children assets within asset hierarchies. The bottom portion of the window enables you to query by Activity, Activity Type, Activity Source, Shutdown Type, and Activity Cause. You can also select data that is between specified Effective dates.

To navigate the Activity Workbench:

1. Navigate to the Activity Workbench window.
2. Optionally narrow your data selection by selecting criteria within the Activity Workbench window. If you make selections, you can view those selections after you launch the Activity Workbench.
3. Choose Launch.
4. Optionally select the Results (Capital) tab.

Results (Capital) tab, Activity Workbench



5. Optionally expand the Results (Capital) folder.

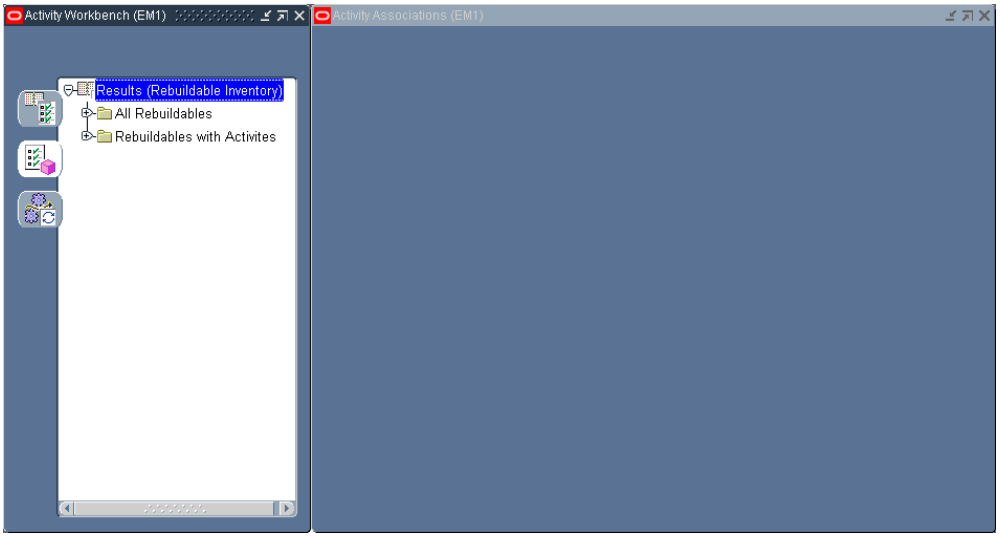
   - Optionally expand the All Assets folder to display all Asset Numbers, based on your chosen selection criteria. You can select an asset and view related Activity information within the corresponding Activity Associations window. Within the corresponding Activity Associations window, you can associate Activities with the current asset.

   - Optionally expand the Assets with Activities folder to display all Asset Numbers that are currently associated with one or more Activities, based on your chosen selection criteria. You can select an asset and view its related Activity information within the corresponding Activity Associations window. Within the corresponding Activity Associations window, you can view, create, or update preventive maintenance schedule definitions, create or update Suppression definitions, view or update last service information, view the parts list, and view or update the maintenance routing.

   - Optionally expand the Routes folder to display all Asset Routes that are currently associated with one or more Activities, based on your chosen selection criteria. You can select an Asset Route and view related Activity information within the corresponding Activity Associations window.

6. Optionally select the Results (Rebuildable Inventory) tab.

Results (Rebuildable Inventory) tab, Activity Workbench



7. Optionally expand the Results (Rebuildable Inventory) folder.

8. Optionally expand the All Rebuildables folder.

   - Optionally expand the Serialized folder to display all Rebuildable Serial Numbers, based on your chosen selection criteria, within the Activity Workbench window. You can select a Rebuildable Serial Number and view related Activity information within the corresponding Activity Associations window. Within the corresponding Activity Associations window, you can associate Activities to the current Rebuildable Serial Number.

   - Optionally expand the Non-serialized folder to display all Non-serialized Rebuildables, based on your chosen selection criteria, within the Activity Workbench window. You can select a Non-serialized Rebuildable and view related Activity information within the corresponding Activity Associations window. Within the corresponding Activity Associations window, you can associate Activities to the current Serialized Non-rebuildable.

9. Optionally select the Rebuildables with Activities folder.

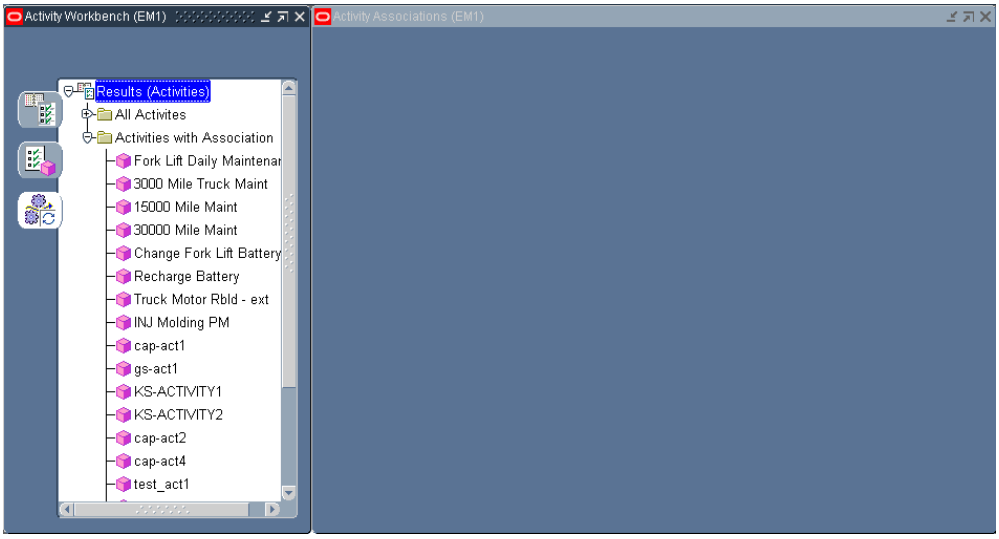
   - Optionally expand the Serialized with Activities folder to display all Rebuildable Serial Numbers that are currently associated with one or more Activities, based on your chosen selection criteria, within the Activity Workbench window. You can select a Rebuildable Serial Number and view related Activity information within the corresponding Activity Associations window. Within the corresponding Activity Associations window, you can create or update preventive maintenance schedule definitions, create or update Suppression definitions, view or update last service information, view the parts

list, view or update the maintenance routing, and view cost estimations for a Rebuildable Serial Number and Activity combination.

- Optionally expand the Non-serialized with Activities folder to display all Non-serialized Rebuildables that are currently associated with one or more Activities, based on your chosen selection criteria, within the Activity Workbench window. You can select a Non-serialized Rebuildable and view related Activity information within the corresponding Activity Associations window. Within the corresponding Activity Associations window, you can create or update preventive maintenance schedule definitions, create or update Suppression definitions, view or update last service information, view the parts list, view or update the maintenance routing, and view cost estimations for a Rebuildable Serial Number and Activity combination.

10. Optionally select the Results (Activities) tab.

Results (Activities) tab, Activity Workbench



11. Optionally expand the All Activities folder to display all valid Activities, based on your chosen selection criteria, within the Activity Workbench window. You can select an Activity and view its related Activity information within the corresponding Activity Associations window, if an association exists. You can associate an Asset Number with the current, selected Activity using the corresponding Activity Associations window. You can select an Activity within the Activity Workbench pane, and then view its related information within the corresponding Activity Associations window. For a selected Activity, you can create a new Activity, create or update its associated Maintenance Routing, create or update the associated Maintenance BOM, and view cost estimations.

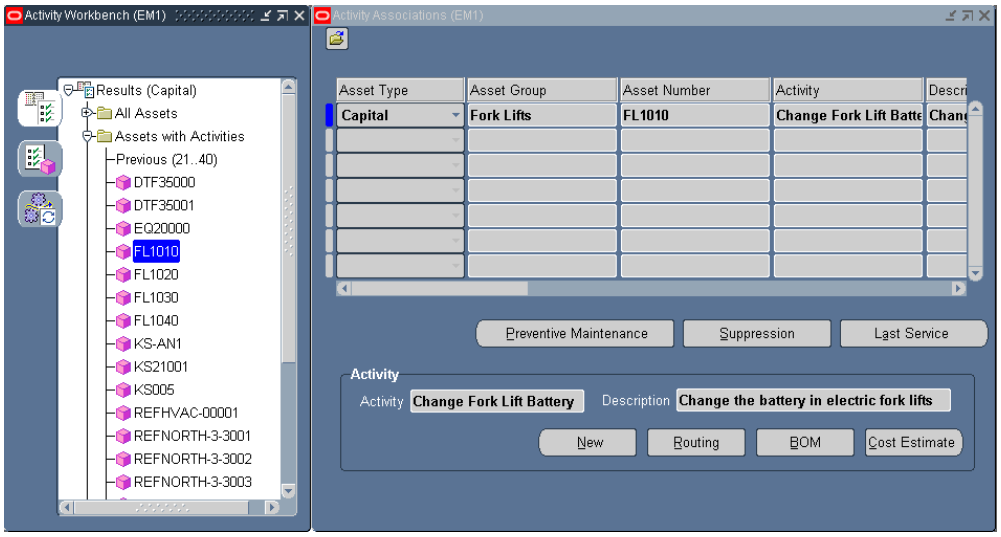
12. Optionally expand the Activities with Association folder to display all Activities that are associated with an Asset Number, based on your chosen selection criteria, within the Activity Workbench window. You can select an Activity within the Activity Workbench pane, and then view its related information within the corresponding Activity Associations window. For a selected Activity, you can create a new Activity, create or update its associated Maintenance Routing, create or update the associated Maintenance BOM, and view cost estimations.

To create or update a PM schedule definition:

You can view, create or update a Preventive Maintenance (PM) Schedule definition for Activity/Asset Number and Activity/Asset Route combinations.

1. Within the Activity Workbench pane, select any one of the three tabs: Results (Capital), Results (Rebuildable Inventory), or Results (Activities).

Activity Workbench



2. If you selected Results (Capital), expand either the Assets with Activities or Routes folders, then select an Asset Number or Route, respectively. You cannot create or update a PM Schedule definition for an Asset Number that is not associated with an Activity.

   If you selected Results (Rebuildable Inventory), expand the Rebuildables with Activities folder, expand either the Serialized with Activities or Non-serialized with Activities folder, then select a Serialized or Non-serialized Rebuildable, respectively. You cannot create or update a PM Schedule definition for an Asset Number that is not associated with an Activity.

   If you selected Results (Activities), expand the Activities with Association folder, then select an Activity.

3. Choose Preventive Maintenance. The PM Schedules window displays all PM Schedule definitions for the current Activity/Asset Number or Activity/Asset Route combination.

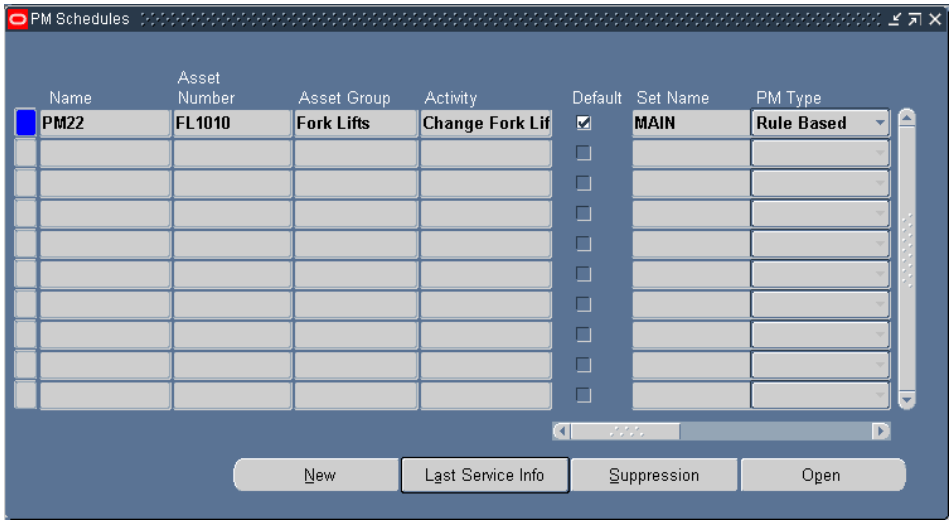
    1. Optionally choose New to create a new PM Schedule definition.

    2. Optionally choose Last Service Information to create or update Last Service Information.

    3. Optionally choose Suppression to create or update a suppression definition, associated with the current Activity/Asset Number or Activity/Asset Route combination.

    4. Optionally select a PM Schedule definition, and then choose Open to view its details.

PM Schedules



4. Close the window.

5. Save your work.

To create or update an activity suppression:

You can view, create, or update suppression definitions for Activity/Asset Number and Activity/Asset Route combinations.

1. Within the Activity Workbench pane, select any one of the three tabs: Results (Assets), Results (Rebuildables), or Results (Activities).

2. If you selected Results (Assets), expand either the Assets with Activities or Routes

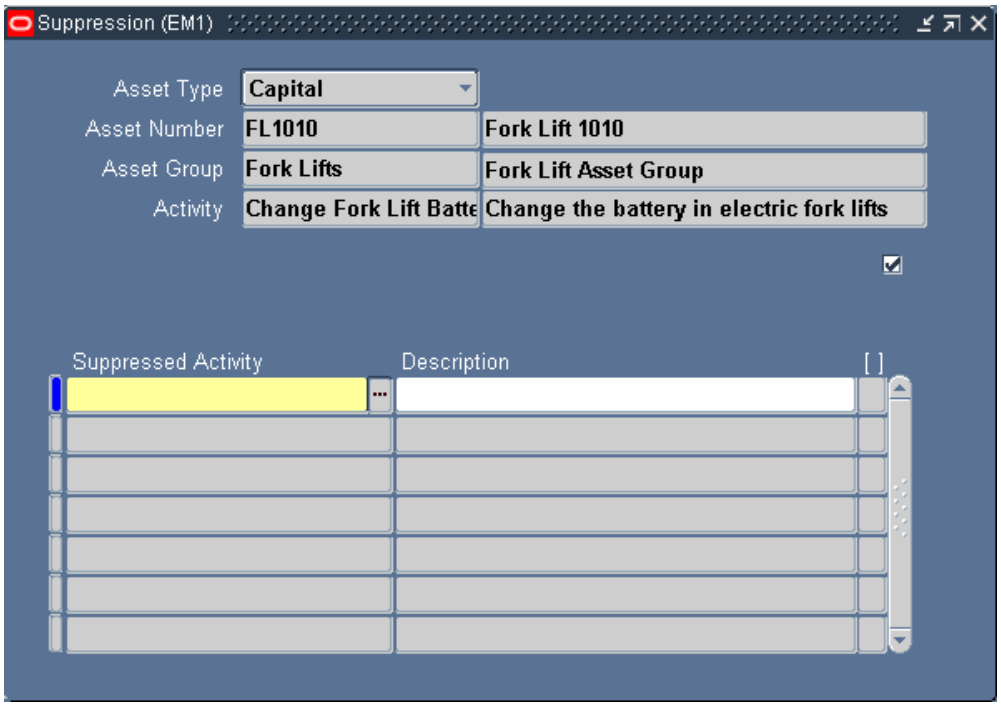
folders, then select the Asset Number or Route, respectively. You cannot create or update a suppression definition for a Asset Number that is not associated with an Activity.

If you selected Results (Rebuildables), expand the Rebuildables with Activities folder, expand either the Serialized with Activities or Non-serialized with Activities folder, then select a Serialized or Non-serialized Rebuildable, respectively. You cannot create or update a suppression definition for a Asset Number that is not associated with an Activity.

If you selected Results (Activities), expand the Activities with Association folder, then select an Activity.

3. Choose Suppression.

Suppression



4. Add or update the Suppression Activity associated with the current Activity.

5. Save your work.

To view or update last service information:

You can view or update last service information for Activity/Asset Number and Activity/Asset Route combinations.

1. Within the Activity Workbench pane, select any one of the three tabs: Results

(Assets), Results (Rebuildables), or Results (Activities).

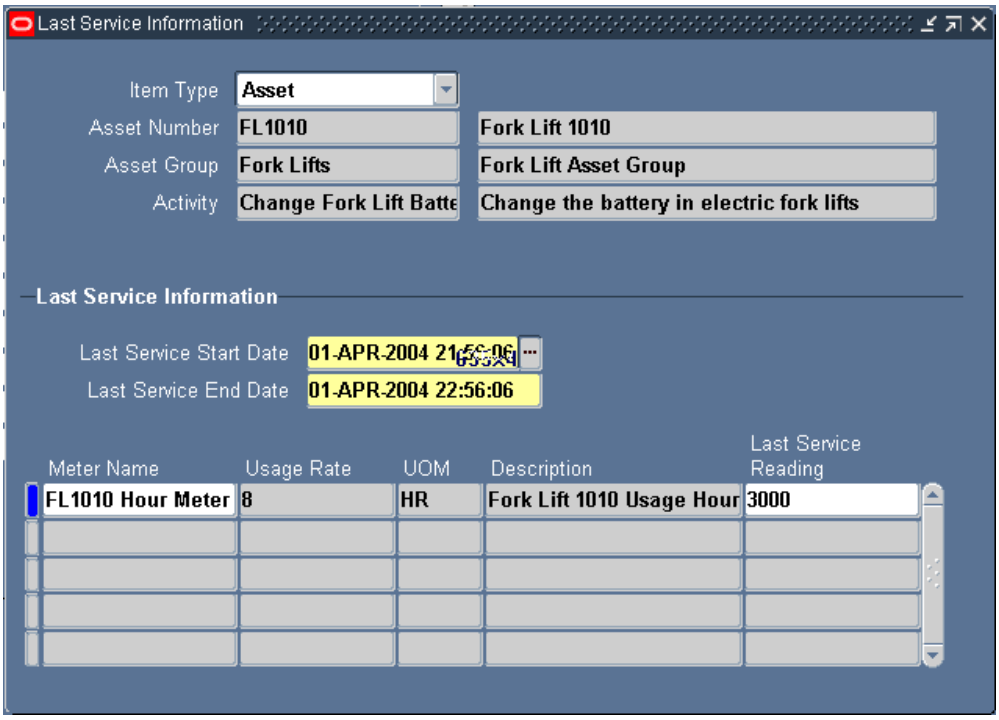
2. If you selected Results (Assets), expand either the Assets with Activities or Routes folders, then select the Asset Number or Route, respectively.

   If you selected Results (Rebuildables), expand the Rebuildables with Activities folder, then expand either the Serialized with Activities or Non-serialized with Activities folder, and finally select a Serialized or Non-serialized Rebuildable, respectively.

   If you selected Results (Activities), expand the Activities with Association folder, then select an Activity.

3. Choose Last Service to view or update last service information.

Last Service Information



4. Save your work.

To view estimated cost information:

You can view estimated cost information for an Activity. Estimating Activity costs is often necessary for planning and budgeting purposes.

1. Within the Activity Workbench pane, select any one of the three tabs: Results (Assets), Results (Rebuildables), or Results (Activities).

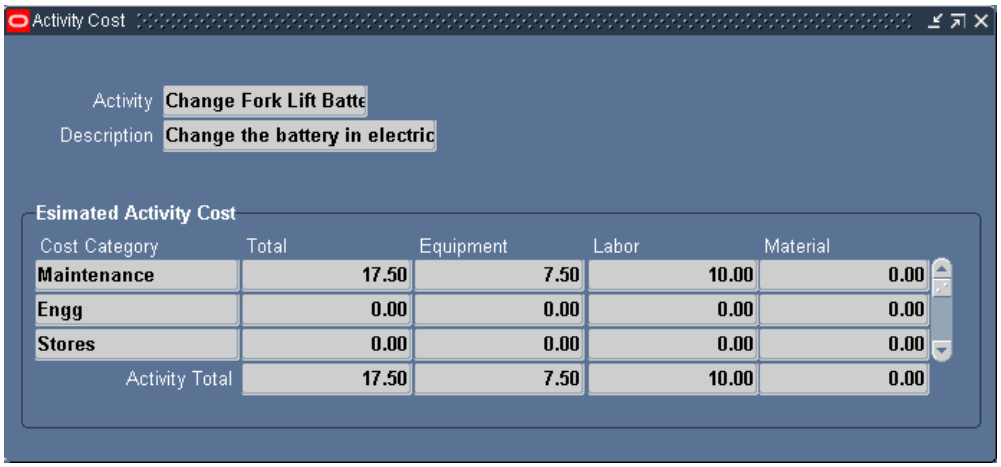
2. If you selected Results (Assets), expand either the Assets with Activities or Routes folders, then select the Asset Number or Route, respectively.

   If you selected Results (Rebuildables), expand the Rebuildables with Activities folder, then expand either the Serialized with Activities or Non-serialized with Activities folder, and finally select a Serialized or Non-serialized Rebuildable, respectively.

   If you selected Results (Activities), expand the Activities with Association folder, then select an Activity.

3. Choose Cost Estimate to view the Activity's cost estimation information.

Activity Cost



Setting Up Maintenance Bills of Material

You can identify and select the required items used by an Activity. A bill of material (BOM) is used to list all inventoried or Direct Items needed to perform a particular Activity, and is defined for each Activity. For example, you might have an Activity titled, Fork Lift Daily Maintenance. The items necessary to perform this Activity include water, fork lift lubrication oil, filled propane tanks, and shop rags. As Maintenance BOMs are created, they are associated to an Activity (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*).

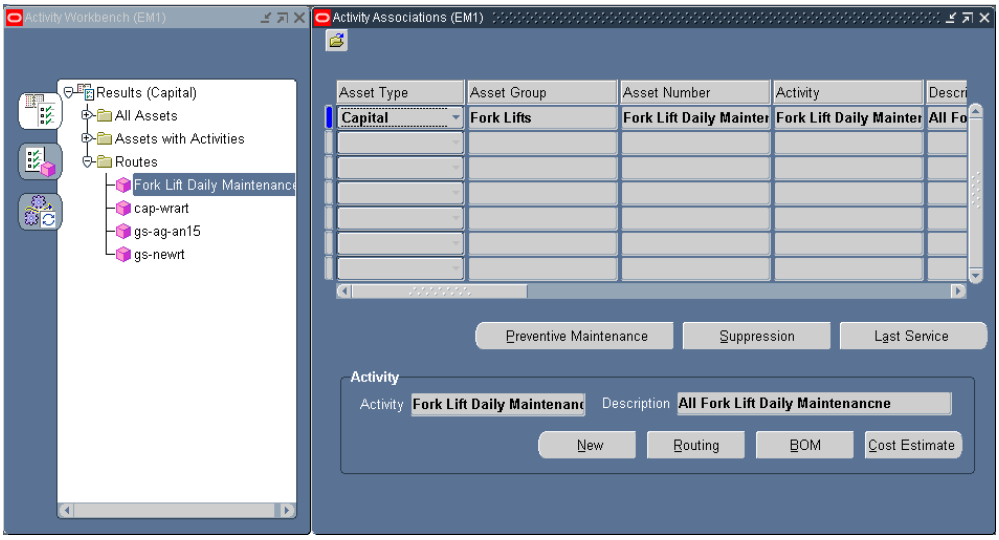
When a work order is created for an activity, the Maintenance BOM corresponding to the Activity explodes to the work order (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*); all components specified in the maintenance BOM are copied to the work order as material requirements.

To set up a maintenance BOM:

1. Navigate to the Activity Workbench window.

2. Choose Launch.

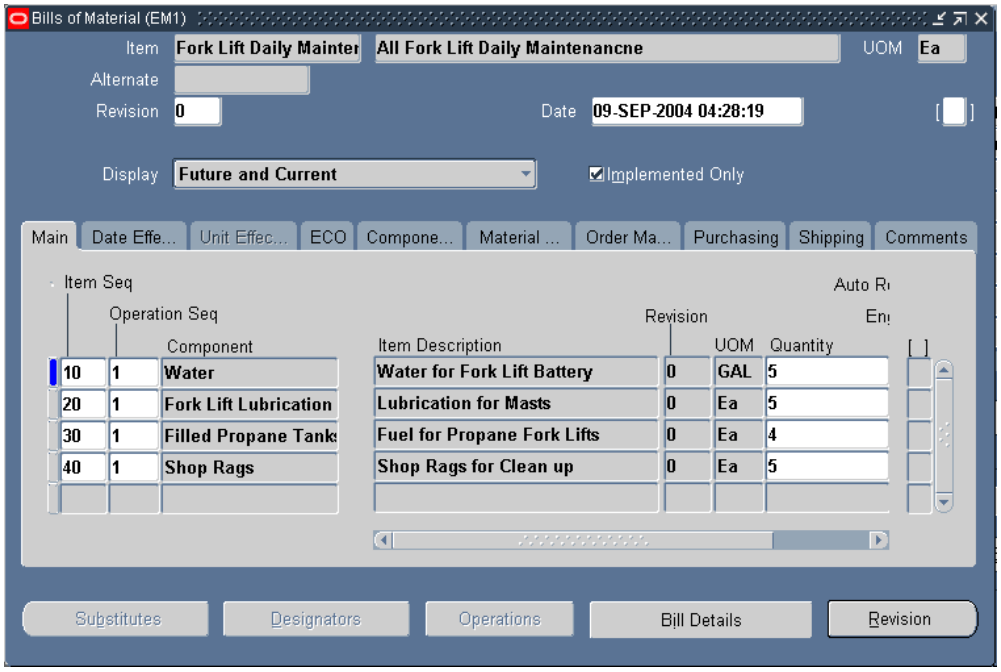
Activity Workbench



3. Within the Activity Workbench pane, select the Activity for which you wish to define the Bill of Material.

4. Choose BOM.

Bills of Material



5. Select an Activity from the Item field list of values.

6. Select the Main tab. The Item Sequence defaults.

7. Enter the Operation Sequence that this Component (material item necessary for the operation sequence, NOT rebuildable item) is needed for (See: Defining Maintenance Routes, *Oracle Enterprise Asset Management User's Guide*).

8. Enter necessary Components and their Quantities that are required to perform the activity. You can enter an unlimited number of inventory and non-inventory, direct items.

   Note: The Purchasing tab is enabled for Maintenance and Asset Bills of Material, and contains attributes specific to non-stockable, inventory items.

9. Optionally select the Auto Request Material check box to indicate that requisitions and purchase orders are created automatically, for the current component or Direct Item, when the work order is released.

10. Optionally select the Date Effectivity tab to specify effectivity dates per component.

11. Save your work.

For information on all remaining fields, See: Creating a Bill of Material, *Oracle Bills of Material User's Guide*

For information on defining activities using the Activity Workbench, See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*.

Associating Asset Numbers with Activities

After you have defined asset groups, asset numbers, and activities, you can associate the activities with assets and rebuildables. However, you can streamline the creation of activities and associations using an activity association template. Assets are associated with activities before entering the activity into a preventive maintenance schedule (See: Entering PM Scheduling Definitions).

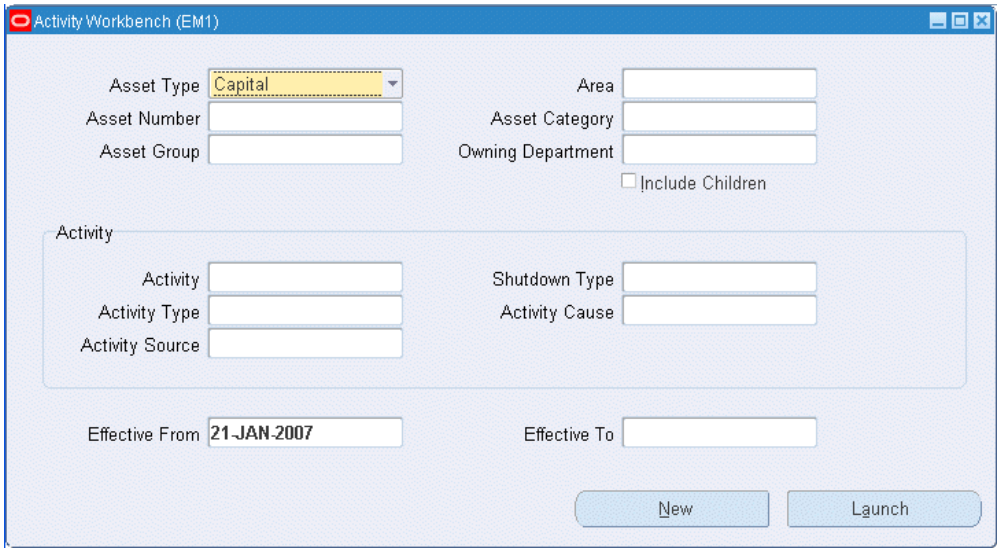
> **Note:** You can streamline the creation of Activity associations using an Activity Association Template. For example, when you create an Asset Group, and then Asset Numbers within that group, you do not need to utilize the Association window to associate those Asset Numbers with an Activity. If you create an Activity Association Template, the Activity that you associate with the current Asset Number's Asset Group automatically determines the Activity that is associated with the current Asset Number (See: Activity Association Templates, *Oracle Enterprise Asset Management User's Guide*).

- Defining Asset Groups, *Oracle Enterprise Asset Management User's Guide*
- Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*
- Defining Rebuildable Serial Numbers, *Oracle Enterprise Asset Management User's Guide*
- Defining Activities, *Oracle Enterprise Asset Management User's Guide*
- Activity Association Templates, *Oracle Enterprise Asset Management User's Guide*

To associate Asset Numbers (capital or rebuildable inventory) with Activities using the Activity Workbench:

1. Navigate to the Activity Workbench window.

Activity Workbench



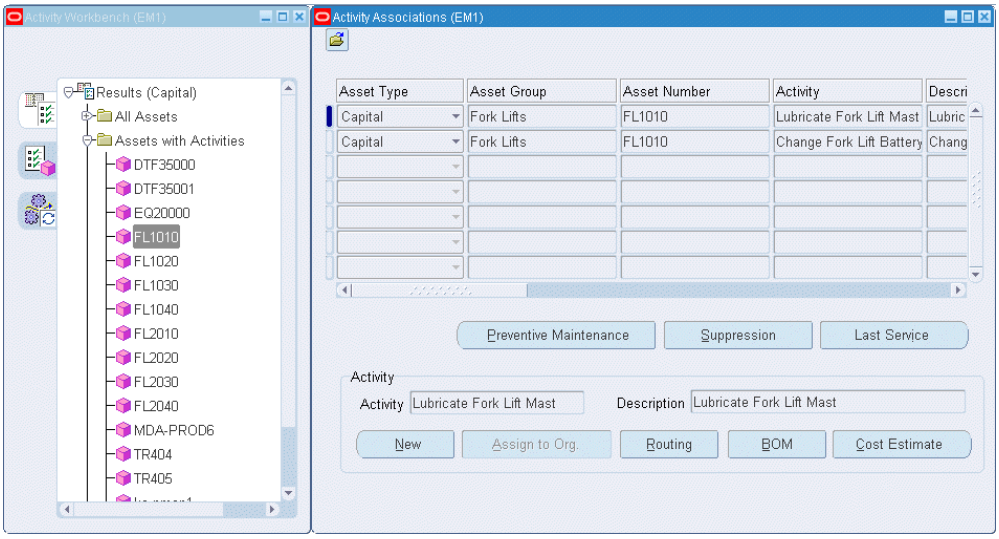
2. Select Asset or Rebuildable from the Item Type list of values. The item type determines the type of Asset Number you are associating with the Activity.

3. Optionally narrow your data selection by selecting the Asset Number you intend to associate with an Activity.

4. Optionally narrow your data selection by selecting and Activity.

5. Choose Launch.

Activity Workbench and Activity Associations



6. Depending on the Item Type chosen while performing step 2, select the corresponding tab within the Activity Workbench pane. For example, if you selected an Item Type of Asset, select the Results (Assets) tab. If you selected an Item Type of Rebuildable, select the Results (Rebuildables) tab.

7. Expand the All Assets (within the Results (Assets) tab) or All Rebuildables (within the Results (Rebuildables) tab) folder. If you specified an Asset Number while performing step 3, that Asset Number appears.

8. Select an Asset Number by highlighting it. The Activity Associations window appears. If the Asset Number is already associated with one or more Activities, those rows display within the window.

9. Select the next available row and then select an Asset Group.

10. Select an Asset Number. Asset Numbers associated with the previously selected Asset Group are available. Asset Numbers are always serial controlled. If you had selected a Non-serialized Rebuildable in the Asset Group field, then the Asset Number field is not required.

11. Select an Activity.

12. When an asset is transferred from one organization to another, its maintenance may be handled by a new eAM organization. Any activities that are assigned to the asset are visible in the Activity Workbench, within the new eAM organization. Activities that are not currently assigned to the new organization are displayed in blue.

    Choose **Assign to Org** to assign the selected activities to the new organization.

13. Save your work.

Defining Maintenance Routes

Operations are the instructions or tasks to perform a repair. Because each operation is associated with a department, each operation contains assigned resources, for example, trades people, outside service providers, and equipment (See: Defining Departments and Resources, *Oracle Enterprise Asset Management User's Guide*). A Maintenance Route is the set of operations or jobs necessary to perform an Activity. When a Work Order is created for an Activity, the Maintenance Route corresponding to the Activity explodes to the Work Order (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*); all operations specified in the Maintenance Route are copied to the Work Order as its operations.

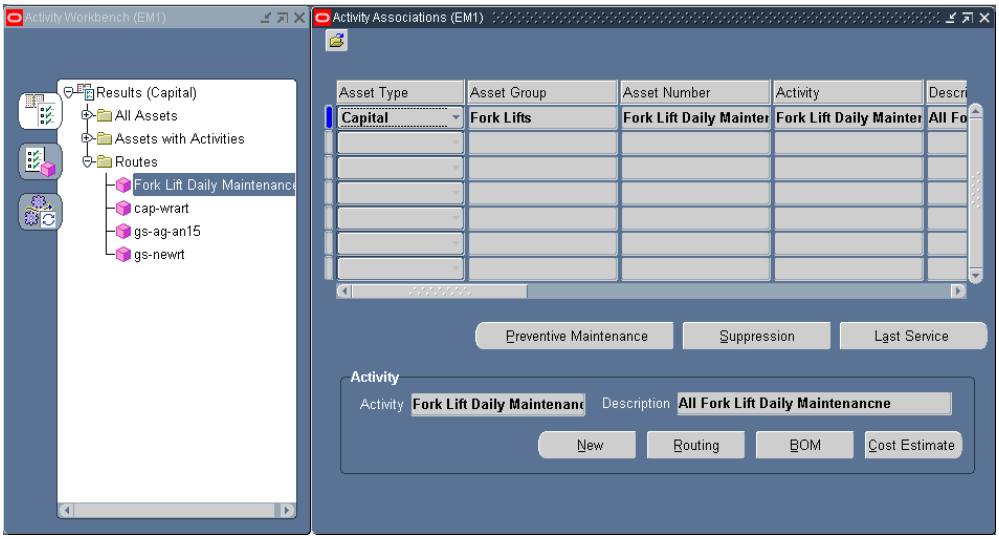
Maintenance Routes are not Asset Routes. For information on Asset Routes, See: Defining Asset Routes, *Oracle Enterprise Asset Management User's Guide*.

Enterprise Asset Management operations differ from manufacturing operations because manufacturing operations are performed sequentially, whereas eAM operations are not performed sequentially. In Enterprise Asset Management, operations may not be sequential. You can specify that one operation is dependent on another. Also, it is possible that two unrelated operations can happen concurrently. One operation can depend on multiple operations. Multiple operations can depend on one operation. The dependency may not be totally connected.

To define a maintenance route:

1. Navigate to the Activity Workbench window.
2. Choose Launch.

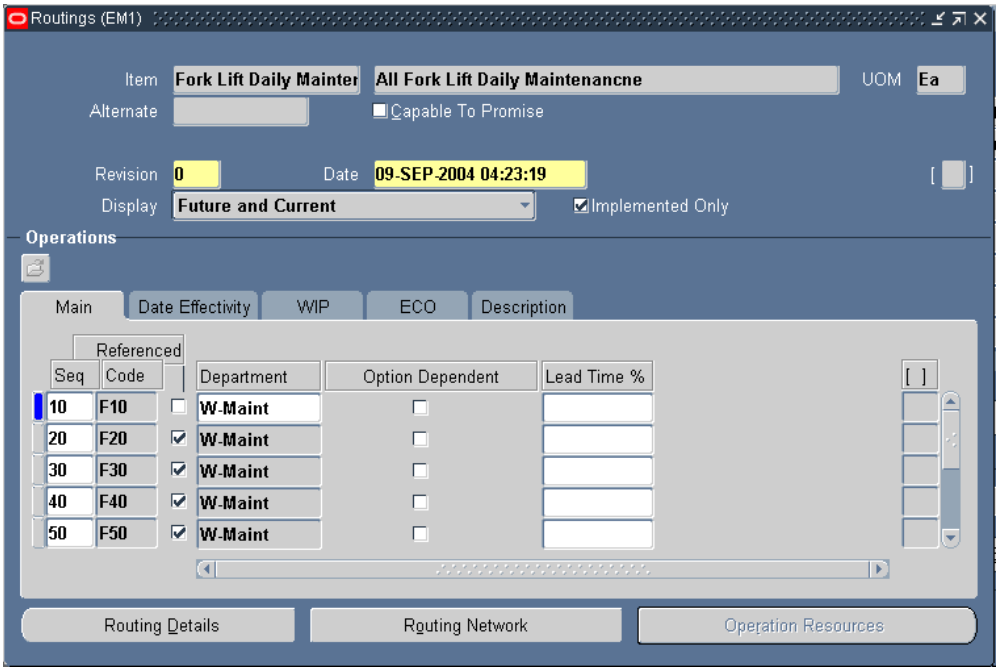
Activity Workbench



3. Within the Activity Workbench pane, select the Activity for which you wish to create the Routing.

4. Choose Routing.

Routings



5. Select an Activity from the Item list of values.

6. Within the Main tab, enter an operation Sequence, or let the system automatically generate it for you, according to your profile setup (See: Item and Operation Sequence, *Oracle Bills of Material User's Guide*).

7. To copy or reference standard operations into a routing, use the operation Code list of values. You can define a new standard operation by selecting Standard Operations from the Tools menu.

   If you use a standard operation code, the operation information for that code is copied into the current operation. You can then update that information as desired (See: Creating a Standard Operation, *Oracle Bills of Material User's Guide*).

8. Select a Department where the operation is performed.

9. Select the Referenced check box to indicate that any changes to standard operations are reflected in the routing. If the standard operation is selected, this check box is selected by default.

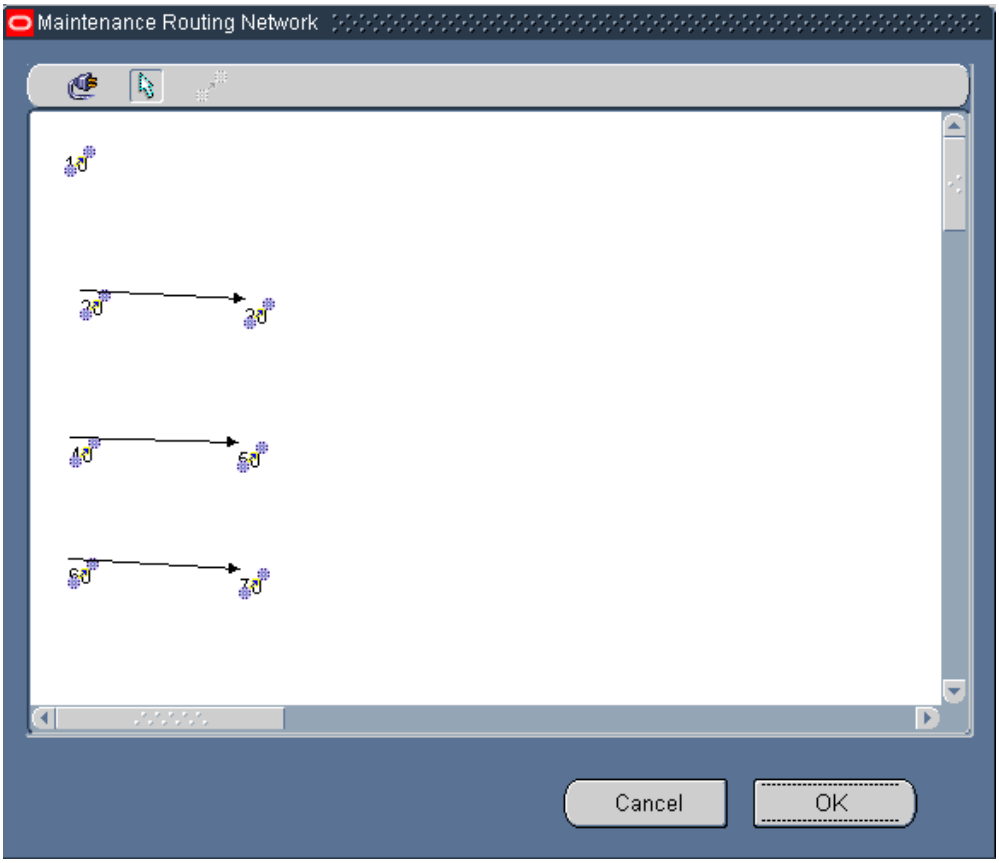
10. The Effective date defaults to the system date, but you can optionally change this (See: Effective Date Fields, *Oracle Bills of Material User's Guide*).

11. Optionally enter a Disabled date to indicate the current operation's expiration.

12. Select the Description tab. Enter a Description for the current operation.

13. Optionally choose Routing Network to view the operation dependencies for the current asset route.

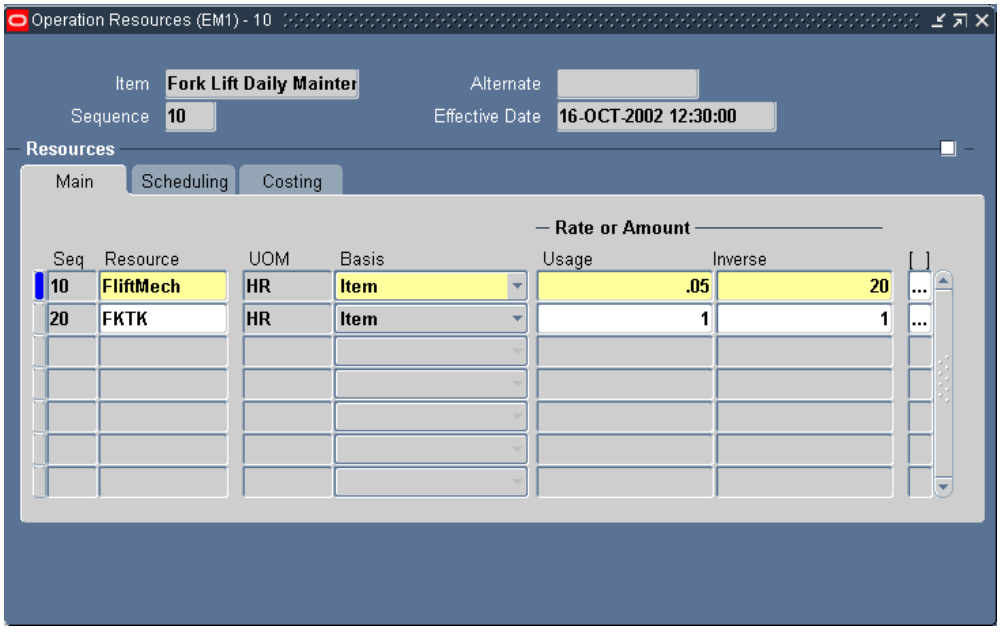
Maintenance Routing Network



You can schedule operations to execute in parallel, sequence, or through dependent steps. In the screen shot above, for example, Operations 20, 30, 40, and 50 are dependent on Operation 10, since there is a line connecting the operations. These operations also run in parallel to each other. The operation numbers identify the sequence that they are performed (See: Preparing Work Order Operations, *Oracle Enterprise Asset Management User's Guide*).

14. Optionally select an operation, then choose Operation Resources to view the resources associated with the current department attached to this operation (See: Defining Departments and Resources, *Oracle Enterprise Asset Management User's Guide*). Optionally you can modify the resources listed (See: Assigning Operation Resources, *Oracle Bills of Material User's Guide*).

Operation Resources



15. Save your work.

    For information on all remaining fields, See: Creating a Routing, *Oracle Bills of Material User's Guide*

    For information on defining Activities using the Activity Workbench, See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*.

Creating Activity Templates

You can streamline the creation of Activity associations using an Activity Association Template. For example, when you create an Asset Group, and then Asset Numbers within that group, you do not need to utilize the Association window to associate those Asset Numbers with an Activity. If you create an Activity Association Template, the Activity that you associate with the current Asset Number's Asset Group automatically determines the Activity that is associated with the current Asset Number.

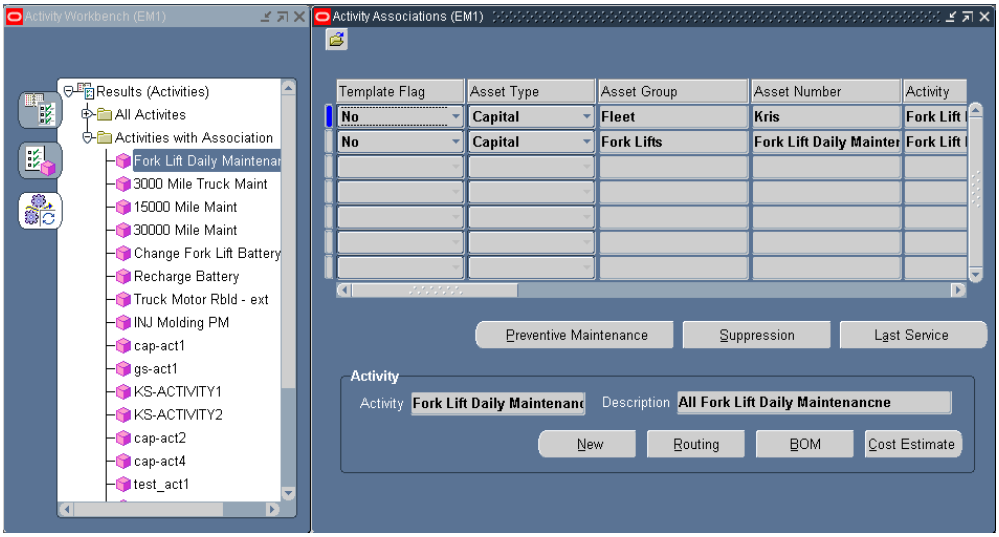
While creating an Asset Activity association within the Activity Workbench, you also have the option of creating an Activity Template at the same time.

To create an Activity Template:

1. Navigate to the Activity Workbench window.

2. Choose Launch.

Activity Associations



3. Select the Results (Activities) tab.

4. Optionally expand the All Activities folder to display all valid Activities, based on your chosen selection criteria, within the Activity Workbench window. You can select an Activity and view its related Activity information within the corresponding Activity Associations window, if an association exists. You can associate an Asset Number with the current, selected Activity using the corresponding Activity Associations window. You can select an Activity within the Activity Workbench pane, and then view its related information within the corresponding Activity Associations window. For a selected Activity, you can create a new Activity, create or update its associated Maintenance Routing, create or update the associated Maintenance BOM, and view cost estimations.

5. Optionally expand the Activities with Association folder to display all Activities that are associated with an Asset Number, based on your chosen selection criteria, within the Activity Workbench window. You can select an Activity within the Activity Workbench pane, and then view its related information within the corresponding Activity Associations window. For a selected Activity, you can create a new Activity, create or update its associated Maintenance Routing, create or update the associated Maintenance BOM, and view cost estimations.

6. Select Yes from the Template Flag list of values to indicate that this Activity and asset association is also an Activity Association Template. If you select No, an asset and Activity association is created.

7. For information on all remaining fields within the Activity Associations window, See: Associating Asset Numbers with Activities, *Oracle Enterprise Asset Management User's Guide*.

8. Save your work.

Related Topics

Defining Activities, *Oracle Enterprise Asset Management User's Guide*

Preventive Maintenance Setup, *Oracle Enterprise Asset Management User's Guide*

eAM Cost Estimation, *Oracle Enterprise Asset Management User's Guide*

Activity Association Templates, *Oracle Enterprise Asset Management User's Guide*

Rebuildable Item Setup

Rebuildable Item Setup tasks include:

- Defining Rebuildable Items, page 3-105
- Defining Rebuildable Serial Numbers, page 3-107
- Rebuildable Item/Activity Association, page 3-111
- Defining Rebuildable Bills of Material, page 3-114

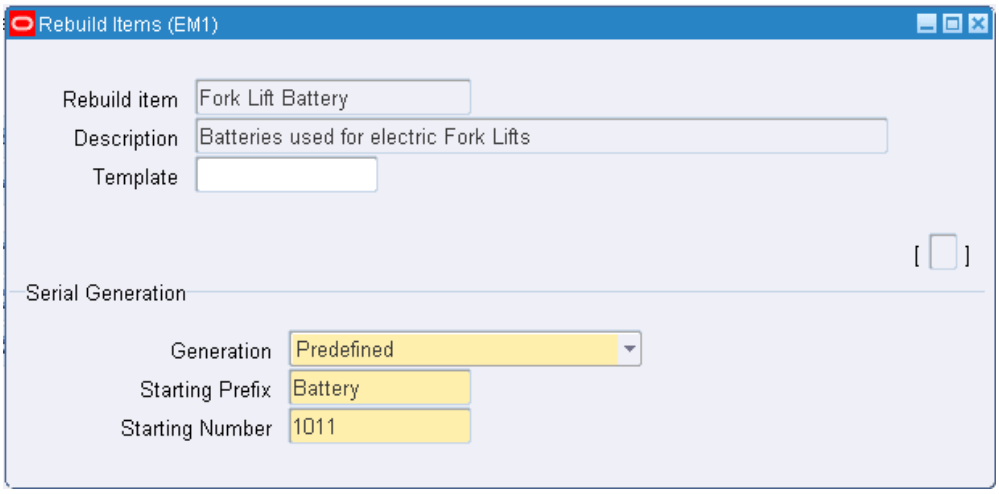
Defining Rebuildable Items

Items that are installed, removed, and refurbished are referred to as Rebuildable Items. Examples of Rebuildable Items include motors, control boxes, and computer boards. Rebuildable Items might need to be removed or refurbished while a parent Asset is maintained. Rebuildable Items are inventory items; you have the option to serialize them.

To set up rebuild items:

1. Navigate to the Rebuild Items window.

Rebuild Items



2. Enter the name of the Rebuild Item.

3. Enter a Description for this Rebuild Item, up to 240 characters.

4. Select the *@Rebuildable* Template to quickly apply attribute values, and to ensure that the appropriate attributes are applied.

   Note: You can create Rebuild Items using the template described above, or you can copy a Rebuild Item from an existing Rebuild Item (See: Defining Items, *Oracle Inventory User's Guide*).

5. In the Serial Generation region, select Predefined for the Generation value.

6. Define a Starting Prefix and Starting Number for this Rebuild Item. If Serial Generation is set at Item Level for the Organization, the system defaults the prefix, along with the starting number sequence, when a new Serialized Rebuild is created for this Rebuild Item.

7. Save your work.

To access failure analysis information:

You can access the Failure Set page to view failure tracking codes that are assigned to the current Rebuild Item.

1. From the Rebuild Items window, select Maintain Failure Set from the Tools menu. If the Rebuild Item does not have an associated Failure Set, this menu option is disabled. See: Defining Failure Codes and Sets, *Oracle Enterprise Asset Management*

User's Guide and Failure Analysis Overview, *Oracle Enterprise Asset Management User's Guide*.

2. Close the window.

To associate rebuildable items to multiple organizations:

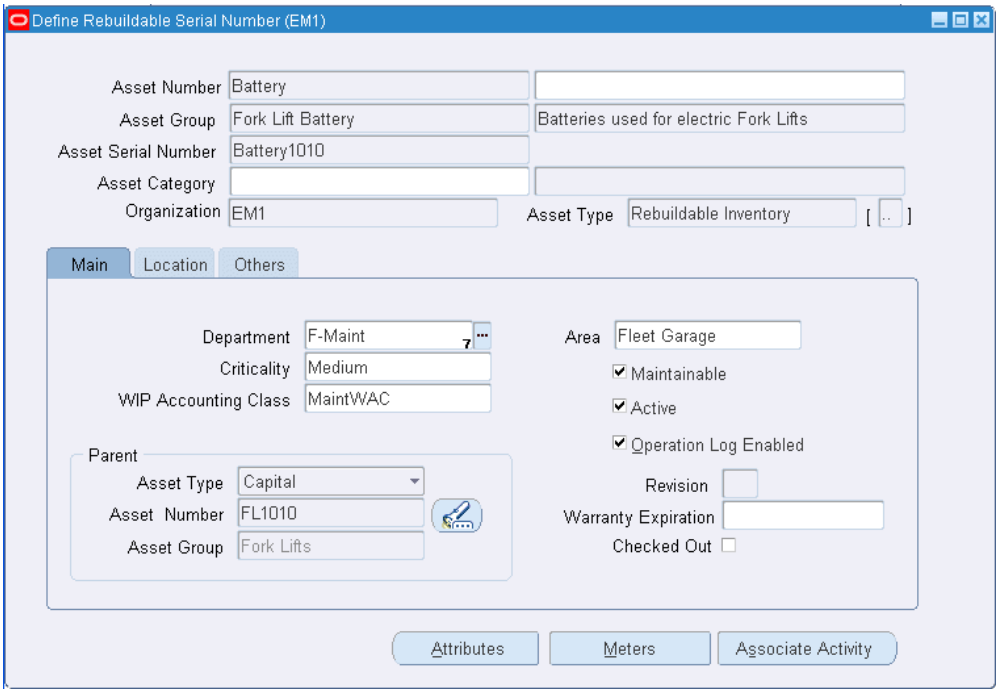
1. From the Rebuild Items window, select Item Details from the Tools menu.
2. Select the Organization Assignment tab.
3. Enter additional organizations in the available table.
4. After saving your work, you can associate this Rebuildable Item with an Activity (See: Rebuildable Item/Activity Association, *Oracle Enterprise Asset Management User's Guide*).

Defining Rebuildable Serial Numbers

To set up rebuildable serial numbers individually:

1. Navigate to the Define Rebuildable Serial Number window.

Define Rebuildable Serial Numbers



2. Enter an Asset Number (Rebuildable Serial Number) if you do not have them automatically generated. Accept or modify the default Asset Number, if you have automatic generation enabled (See: Defining eAM Parameters, *Oracle Enterprise Asset Management User's Guide*).

3. Select an Asset Group. This is the Asset Group (Rebuildable Item) you are associating with the Rebuildable Serial Number you are currently creating.

   Note: After an Asset Group (Rebuildable Item) is associated with a Rebuildable Serial Number and then saved, you cannot change it.

4. The Asset Serial Number (Rebuildable Serial Number) defaults to the Asset Number. You can optionally select the next serial number for the current organization.

   The Asset Serial Number might have a non-unique value across organizations, but the Asset Number must be globally unique, regardless of the defaulting value.

5. Optionally associate this Rebuildable Serial Number to an Asset Category. This is the Class and Subclass code, such as CRANE.OVERHEAD or BUILDING.FLOOR. See: Setting Up Category Codes and Sets, *Oracle Enterprise Asset Management User's Guide*.

6. Optionally enter a description for the Rebuildable Serial Number of up to 240 characters.

7. Within the Main tab, optionally select an owning Department for this Rebuildable Serial Number. This represents the crew responsible for the Rebuildable Serial Number. Notifications, regarding Work Requests, are sent to the Primary Approver of the Work Request's associated Asset Number's current owning department (See: Defining Department Approvers, *Oracle Enterprise Asset Management User's Guide* and Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*).

8. Optionally select a Criticality code to indicate the importance of the Asset Number to the organization. This field is for information purposes.

9. Optionally select a WIP Accounting Class to identify the Expense cost elements associated with the work performed, such as materials, labor, and resources.

10. Optionally enter the Area where this Asset Number resides. This is a user defined listing of logical areas of work. For example, North Plant, East Wing, or Area 1 (See: Setting Up Areas, *Oracle Enterprise Asset Management User's Guide*).

11. Indicate whether this asset is maintainable. If the Maintainable check box is selected, you can create work requests and work orders for this asset.

    For example, you can create an asset for cost-tracking purposes. We may want to see the cost for all top level assets in an asset hierarchy, but we do not want to maintain those assets. In this situation, do not select this check box.

    > **Note:** After work orders are created for this asset, you cannot clear this check box unless those work orders are at Complete, Canceled or Closed statuses.

12. Optionally select the Active check box to indicate that the asset is functioning, for example, maintenance Work Orders can be created for this asset. This check box change when you activate or deactivate an asset from the Tools menu.

13. Indicate whether Asset Operational Logging is enabled for this asset. If you select the Operation Log Enabled check box, you can view all current and past asset operational information, such as Check Out, Check In, associated Work Requests and Work Orders. You can remove or add a child asset, remove a parent asset, activate or deactivate the asset, transfer the asset to another location, and receive or issue the asset into/from Inventory. By default, logging is turned off for an asset. See: Asset Operational Logging, *Oracle Enterprise Asset Management User's Guide*.

14. You can optionally associate the current Rebuildable Serial Number with a parent capital asset or parent rebuildable.

1. Select an Asset Type. Valid values are Capital and Rebuildable Inventory.

2. If you selected a Capital Asset Type, optionally select a parent Asset Number. If you previously selected a Rebuildable Inventory Asset Type, optionally select a Rebuildable Serial Number from the Asset Number list of values.

3. If you selected a Capital Asset Type, optionally select a parent Asset Group. If you previously selected a Rebuildable Inventory Asset Type, optionally select a Rebuildable Item from the Asset Group list of values.

15. The Checked Out check box indicates whether the current asset is checked in or out. You can check out an asset to view asset details, enter collection plan data, enter meter information, and optionally create a Work Request, within Maintenance Super User. This check box is protected against update. See: Asset Operational Logging, *Oracle Enterprise Asset Management User's Guide*.

16. Within the Location tab, the Subinventory and Locator fields are view-only, displaying the subinventory location of this asset within Inventory and its Locator segments. If this asset if received into Inventory, these fields are populated.

17. Optionally select a Location Code to specify a physical location for this asset. The Address field simultaneously populates with the selected Location Code's associated Address. The previously defined Area is organization-specific and not associated to a physical location.

    Valid Location Codes are defined within Oracle Install Base.

18. The Address defaults as the populated Location Code's associated address. You can optionally select a different address. If the current asset is in stores, the address of the Location's organization appears (See: Stores, *Oracle Enterprise Asset Management User's Guide*).

19. Optionally select a Production Organization. The list of values displays the production inventory organizations maintained by the current asset's organization. See: Enabling Organizations for Enterprise Asset Management, *Oracle Enterprise Asset Management User's Guide*for information on designating eAM organizations to maintain equipment items for designated production organizations.

20. Select an Equipment Item. This is mandatory if you populated the Production Organization field. Items that were defined with an equipment template (See: Item Templates, *Oracle Inventory User's Guide*), or with the Equipment item attribute enabled (See: Physical Attributes, *Oracle Inventory User's Guide*), are available.

21. Enter an Equipment Serial Number. This is mandatory if you populated the Production Organization field. This is the specific name of the component within the Equipment Type, defined above.

22. Select the Others tab to optionally enter the Fixed Asset region information, if Oracle Fixed Assets is installed. This is Enterprise Asset Management's integration with Fixed Assets. Enter a Category, which is a grouping of fixed assets, defined within Oracle Fixed Assets. This category is tied to a set of books, and must be the same set of books that is assigned to the current Enterprise Asset Management organization. See: Setting Up Asset Categories, *Oracle Fixed Assets User's Guide*.

23. Optionally enter the Number if Oracle Fixed Assets is installed. This represents a fixed asset number that belongs to a fixed asset category, associated with the asset.

24. The Property Management fields, Location Name and Location Code, default from a Property Manager export process (Export Locations to Enterprise Asset Management), if Oracle Property Management is installed. These fields are disabled. These values cannot be changed.

25. Before the above information is passed from Property Manager into Enterprise Asset Management, asset groups (rebuildable items) need to first be established. See: Defining Rebuildable Items, *Oracle Enterprise Asset Management User's Guide*.

26. Optionally choose Location Details to view or update the Property Manager field information.

27. Save your work.

28. Optionally select Attributes to enter attribute values for the asset (See: Setting Up Attributes, *Oracle Enterprise Asset Management User's Guide*).

    Existing, enabled attribute groups appear (See: Setting Up Attributes, *Oracle Enterprise Asset Management User's Guide*). These attribute groups are optional. You do not need to enter values for all existing attribute groups. From this window, you cannot generate attribute groups.

29. Optionally choose Meters to associate the current rebuildable serial number to one or more meters.

30. Optionally choose Associate Activity to associate the current rebuildable serial number to an activity.

> **Note:** To establish this Rebuildable Serial Number in Inventory, you must execute any receipt transaction, such as a Miscellaneous Receipt or a Purchase Order Receipt.

Rebuildable Item/Activity Association

After you have defined rebuildable items and activities, you can associate activities to the rebuildable items. For example, you may have a Rebuild Engine Activity, and an Engine Rebuildable Item. After you create a rebuild work order for the engine, the

associated Rebuild Engine Activity attaches its associated maintenance BOM (material) and maintenance routing (resources) to the work order.

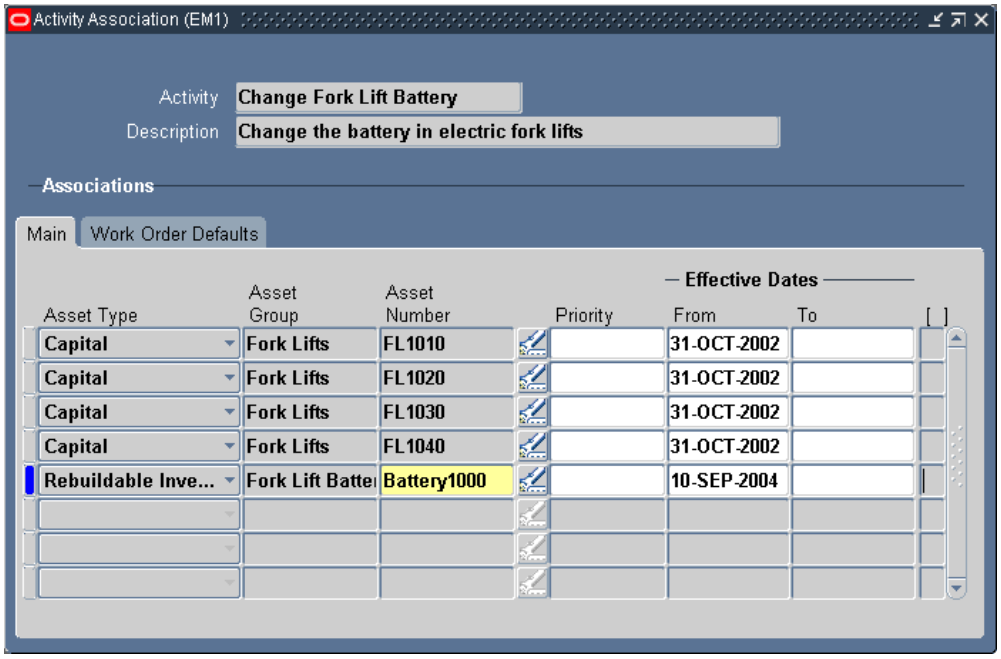
> **Note:** Activity association for Rebuildable Serial Numbers are streamlined by using Activity Association Templates. If an Activity Template is defined for a Rebuildable Item, the activity association automatically creates when a new serial number is created for that item, within the maintenance organization.

- Defining Rebuildable Items, page 3-105
- Defining Activities, page 3-53
- Rebuild Work Orders, *Oracle Enterprise Asset Management User's Guide*
- Defining Maintenance Routes, page 3-99
- Setting Up Maintenance Bills of Material, page 3-93

To associate Rebuildable Items with Activities:

1. Navigate to the Activity Association window.

Activity Association



2. Select an Activity.

3. Within the Main tab, select Rebuildable from the Item Type list of values.

4. Select a Rebuildable Item from the Asset Group list of values.

5. If the Rebuildable Item is serial number controlled (See: Defining Rebuildable Items, page 3-105), select a Rebuildable Serial Number from the Asset Number list of values.

6. Optionally select a Priority Code. This field is for information purposes.

7. Optionally enter Effective Dates. If the Effective From field is left blank, the system date defaults. If the Effective To field is left blank, it defaults as NULL.

8. Within the Activity tab, the Activity Cause defaults from the Activity definition (See: Defining Activities, page 3-53), specifying what situation caused this work to generate. For example, Breakdown, Vandalism, Normal Wear, or Settings. Optionally you can select an Activity Cause.

9. The Activity Type defaults from the Activity definition (See: Defining Activities, page 3-53). This code indicates the type of maintenance activity needed to perform for this Activity. It is used when defining a job or a standard job. It should remain generic, and should not describe the job in detail. For example, Inspection,

Overhaul, Lubrication, Repair, Servicing or Cleaning. Optionally select an Activity Type.

10. Optionally select the Tagging Required check box to indicate whether tag out procedures are required.

11. The Owning Department field is used when associating asset numbers to activities (See: Activity Association Templates, page 3-58).

12. Save your work.

Defining Rebuildable Bills of Material

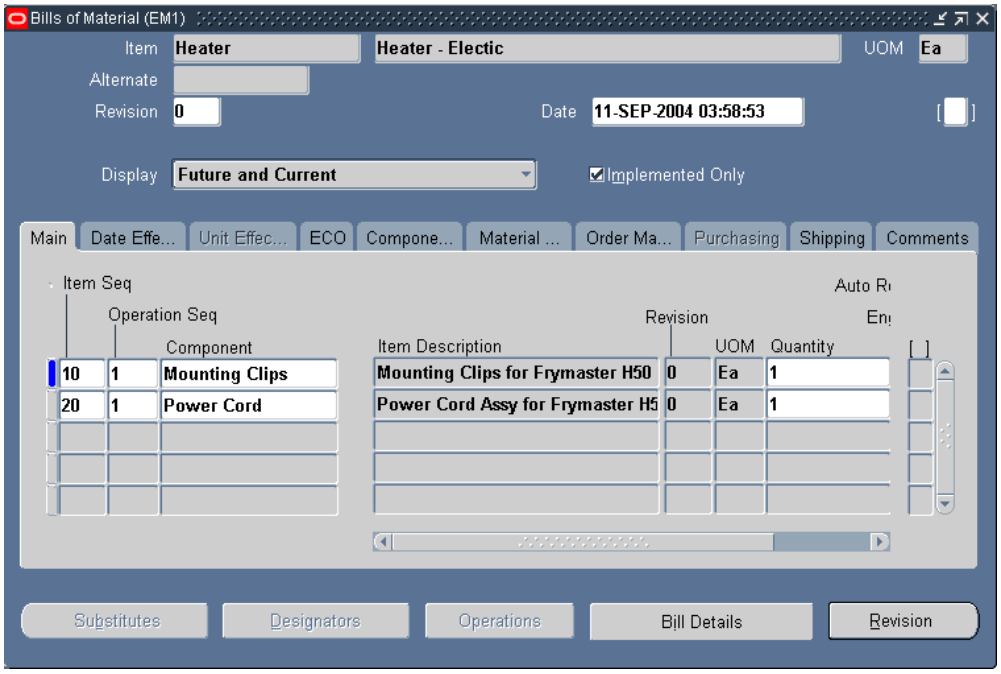
You can identify and select the required items that make up a Rebuildable Serial Number. A bill of material (BOM) is used to list all items and components that make up a particular asset or rebuildable, and is defined for each Rebuildable Item. The items defined on a Rebuildable BOM are standard inventory components and/or non-inventory, direct items (See: Defining Items, *Oracle Inventory User's Guide*).

> **Note:** If you are not using Project Manufacturing applications, Project Parameters are defined for your eAM enabled organization to successfully create Rebuildable Items. This is required because a Rebuildable BOM is of type Model/Unit Effective and this BOM type is currently allowed if PJM organization parameters are set up for the eAM enabled organization to which the Rebuildable Item has been assigned. To define Project Parameters, open the Project Parameters window using Project Manufacturing Super User responsibility and without entering any data in the window, save the record. If you plan to use Project Manufacturing, see: Project Manufacturing Integration Setup, page 3-190 for information on defining Project Parameters.

To set up a rebuildable BOM:

1. Navigate to the Bills of Material window.

Bills of Material



2. Select a Rebuildable Item from the Item list of values.
3. Within the Main tab, the Item Sequence and Operation Sequence values default.
4. Enter the inventory or non-inventory Component to make up the Rebuildable Serial Number.
5. Enter the Quantity of that component necessary for the Rebuildable Serial Number.
6. Save your work.

Related Topics

Defining Items, *Oracle Inventory User's Guide*

Associating Asset Numbers with Activities, page 3-96

Defining Subinventories, *Oracle Inventory User's Guide*

Defining Stock Locators, *Oracle Inventory User's Guide*

Creating a Bill of Material, *Oracle Bills of Material User's Guide*

Non-Stock Direct Item Setup

Non-Stock Direct Items can represent items that are not stocked in inventory, such as services that are purchased from a supplier. Non-Stock Direct Items are not stocked in inventory; they are defined in the Item Master as an inventory item, Purchased, Purchasable, and the Stockable check box cleared. See: Purchasing Attribute Group, *Oracle Inventory User's Guide*. These items are contrived as "one off", bought directly from a vendor for a specific Work Order and Operation. These items are delivered directly to the Shop Floor for maintenance Work Order execution.

You can add only coded items (i.e. Inventory Stockable and Non-Stockable-Direct items) to the Maintenance Bills of Material BOM. (See: Defining Direct Item Material Requirements, *Oracle Enterprise Asset Management User's Guide*).

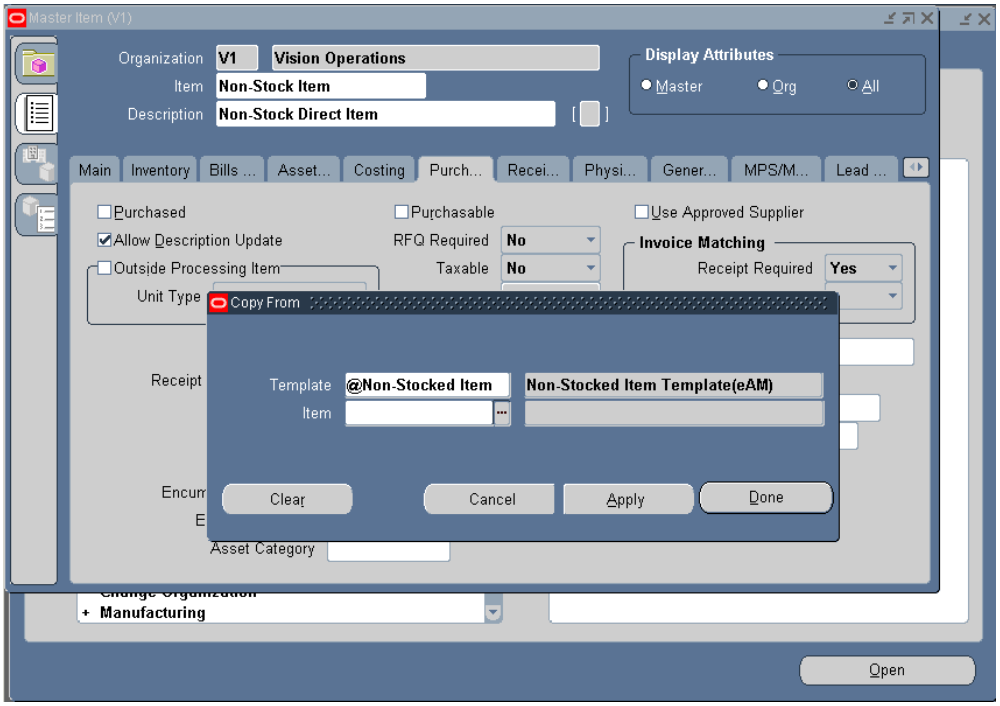
To set up Non-Stock Direct Items, access the Master Item window within Oracle Inventory, and apply the @Non Stocked Item template. See: Defining Items, *Oracle Inventory User's Guide*. Description Based Direct Items are not set up within Oracle Inventory.

If direct items exist on a Bill of Material, they default as material requirements when creating a Work Order for that asset; however, you can add additional direct item material requirements to an existing Work Order.

To set up a Non-Stock Direct Item:

1. Navigate to the Master Item window.

Master Item



2. Enter the non-stock direct Item name.
3. Enter a Description.
4. From the Tools menu, select Copy From.
5. Select the @Non-Stocked Item Template.
6. Choose Apply.
7. Choose Done.
8. Save your work. The Stockable check box is clear and the Purchased and Purchasable check boxes are selected.

Related Topics

Defining Rebuildable Bills of Material, page 3-114

Setting Up Maintenance Bills of Material, page 3-93

Setting Up Asset Bills of Material, page 3-77

Defining Items, *Oracle Inventory User's Guide*

Preventive Maintenance Setup

eAM can generate Work Orders automatically based on meter readings, runtime and/or calendar days. An example of meter-based preventive maintenance is your car's oil changes. Most car manufacturers recommend that you change your engine oil every 3,000 miles or six months, whichever comes first.

To set up the above scenario, you would first define your car's odometer as a meter. Next, you would associate that meter to an asset (your car), using the Asset Meter Association window. After you have associated the meter to the asset, you can associate the Maintenance Activity (oil change) that should occur, based on the meters you have defined. This is done via Preventive Maintenance Scheduling.

This section includes the following topics:

- Project and Task Setup, page 3-118
- Defining Meter Templates, page 3-118
- Defining Meters, page 3-121
- Defining Set Names, page 3-124
- Defining a Preventive Maintenance Template, page 3-126
- Entering Preventive Maintenance Schedule Definitions, page 3-134

Project and Task Setup

Work Orders can associate with a Project, Task or Seiban number, at the time of implementing PM suggestions to work orders. The Forecast Work Order window is customizable.

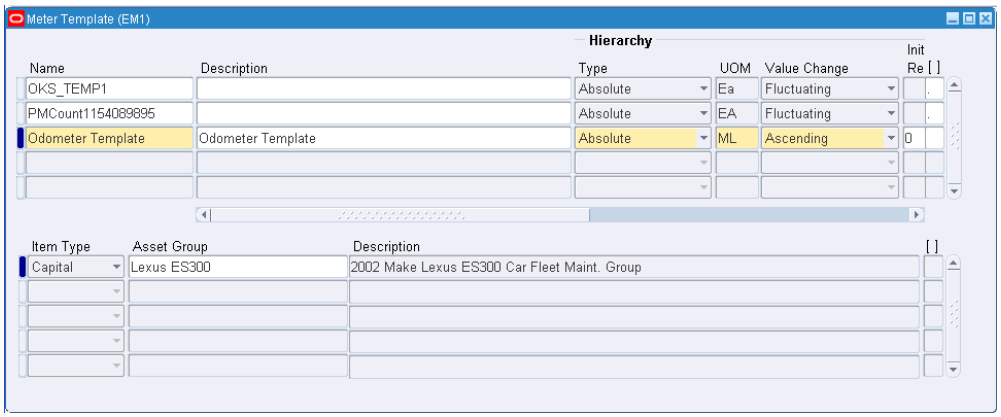
Defining Meter Templates

There are two ways to create meters. You can create them within the Meter window, or create them first using the Meter Template window, and then next instantiating them when defining an asset. If you create Meters using the Meter window (See: Defining Meters, page 3-121), associate that meter definition with individual Asset Numbers manually. If you utilize the Meter Template definition functionality, you can associate that Meter Template with Asset Groups. After the association is created, when an Asset Number (Asset Numbers or Serialized Rebuilds) is created within that Asset Group (Asset Group or Rebuildable Item), the system automatically creates a new instance of the meter, associated with the specific Asset Number. This enables you to streamline your meter setup. However, the meters are not created retroactively; it applies to Asset Numbers created after the Meter Template was created.

To define Meter Templates:

1. Navigate to the Meter Template window.

Meter Template



2. Enter a unique meter template Name.

3. Enter the template's Description.

4. Select the meter Type.

   When entering meter readings for the current meter, if the meter is an Absolute type, the Value field is enabled. If the meter is a Change type, the Change field is enabled.

5. Select a unit of measure (UOM). After the meter is created, this field is disabled.

6. Select whether the meter readings is Ascending, Descending, or Fluctuating. A fluctuating meter reading is one that can go up and down, for example, a temperature gauge. As production units pass through meters, meter readings increment. Another example of an ascending meter is a car odometer. Some liquid dispensers start full and record decreasing readings as material is used.

   > **Note:** If the meter is fluctuating, it is not used in Preventive Maintenance scheduling.

7. Optionally enter an Initial Reading. This is automatically used as the first meter reading entered, or each new instance of the meter that is created and associated with an Asset Number (or Serialized Rebuild) via the Meter Template.

8. If you select the Used in Scheduling check box, the meter is used in Preventive Maintenance Scheduling. If there are any scheduling rules associated with this meter, you cannot clear this check box. If this is a fluctuating meter, this check box is disabled. If the Used in Scheduling check box is selected, the Usage Rate (per day) and Number of Past Reading fields are mandatory.

9. Optionally select the Required check box to indicate whether readings for the meter are required during work order completion, regardless of whether a work order was generated from Preventive Maintenance or if it was created manually.

   You can select or clear this check mark at any time; it impacts only future meter readings. However, if the meter is a Primary Failure Meter for any current asset/meter association, you cannot clear the check box.

10. Enter a usage Rate (per day). This field works in conjunction with the Number of Past Readings field to provide daily meter usage estimates, based on historical readings. It supplies the system benchmark data that is used to set the occurrence of scheduled PMs. Rate per day is referred to in the absence of a sufficient value in the Number of Past Readings field.

    This field is mandatory if you have selected the Used in Scheduling check box.

11. Enter a value for the Number of Past Readings. This value designates how many readings prior the scheduler should go to for calculating the usage rate. If there is an insufficient number of readings (for example four, instead of the required five), the system continues the calculation based on the usage Rate per day.

    This field is mandatory if you have selected the Used in Scheduling check box.

    > **Note:** If you enter a value of 1, the system perpetually calculates at the usage Rate per day.

12. Select the meter template effective dates. If left blank, the meter is effective all of the time. You can disable a meter effective on a specific date by selecting a To date.

13. Save your work.

To associate Meter Templates with Asset Groups:

If you utilize the Meter Template definition functionality (See: Defining Meter Templates, page 3-118), you can associate that Meter Template with Asset Groups, within the same Meter Template window. After you create the association, when a new Asset Number (Asset Numbers or Rebuildable Serial Numbers) is created within that Asset Group (Asset Group or Rebuildable Item) a new instance of the corresponding meter is automatically created. This enables you to streamline your Meter setup.

1. Select an Item Type. Valid values are Capital or Rebuildable.

2. Select an Asset Group. If you previously selected Capital, Asset Groups are available for selection. If you previously selected Rebuildable, Rebuildable Items are available for selection.

3. Save your work. After saving, every Asset Number defined as part of the current Asset Group automatically associates with the Meter Template; you do not need to create this association manually.

Defining Meters

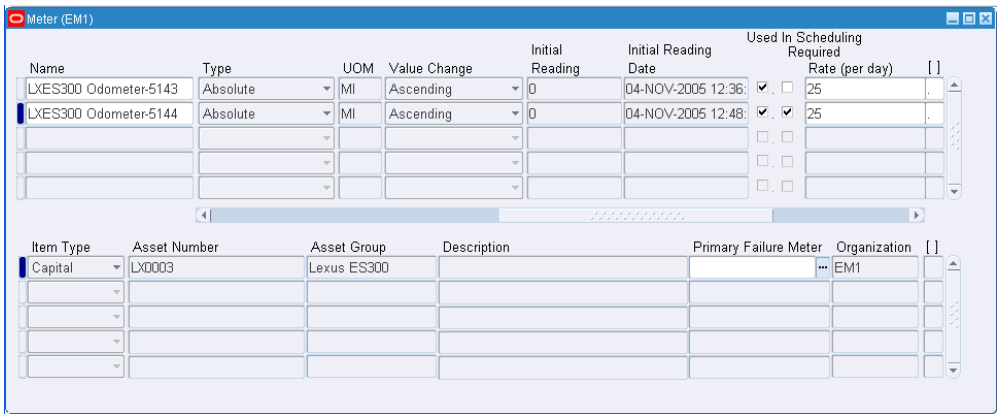
Alternatively, you can create Meters using the Meter window. Manually associate the meter definition with individual Asset Numbers. If you utilize the Meter Template definition functionality, you can associate that Meter Template with Asset Groups (See: Defining Meter Templates, page 3-118).

Defining Meters

To define a meter within the Meter window:

1. Navigate to the Meter window.

Meter



2. Enter a unique meter Name.

3. Enter a Description for this meter.

4. Optionally select a Source Meter from the list of values. As the Source Meter's readings are updated, the associated target meter (current meter) is updated automatically. Companies can associate a Source Meter to an Asset Number/Meter association. The Source Meter reading subsequently feeds corresponding meters that are associated with assets within the Meter Hierarchy.

   For example, some companies must track units, using a Meter, to a parent asset

(truck). These units should then trickle down to all children components of that parent asset (transmission, tires, belts). Each child component has different Meters to track the units and history on the individual components. If the transmission is replaced, the Rebuild Replacement process enables you to remove the replaced transmission from the meter hierarchy and add the new transmission to the hierarchy. From that point, meter readings logged to the truck should also update the transmission's child meter with those units. Any time a reading is logged to the truck, it will update the transmission child Meter with those units.

5. Select the meter Type.

   When entering meter readings for the current meter, if the meter is an Absolute type, the Value field is enabled. If the meter is a Change type, the Change field is enabled. A Change type meter is used to measure incremental changes in meter readings. The incremental amount is added to the current meter reading. After meter readings are entered for a Change Meter, you cannot change the type to Absolute.

6. Select a unit of measure (UOM), associated with this meter. After the meter is created, this field is disabled.

7. Select whether the meter readings are Ascending, Descending, or Fluctuating. A fluctuating meter reading is one that can go up and down, for example, a temperature gauge. As production units pass through meters, meter readings increment. Another example of an ascending meter is a car odometer. Some liquid dispensers start full and record decreasing readings as material is used.

   > **Note:** Fluctuating meters are not used in Preventive Maintenance scheduling.

   After the meter is created, this field is disabled.

8. Enter an Initial Reading. This is automatically used as the first meter reading entered, or each new instance of the meter that is created and associated to a Asset Number via the Meter Template.

9. If you select the Used in Scheduling check box, the meter is used in Preventive Maintenance Scheduling. If there are any scheduling rules associated with this meter, you cannot clear this check box. If this is a fluctuating meter, this check box is disabled. If the Used in Scheduling check box is selected, the Usage Rate (per day) and Use Past Reading fields become mandatory.

10. Optionally select the Required check box to indicate whether readings for the meter are required during work order completion, regardless of whether a work order was generated from Preventive Maintenance or if it was created manually.

    You can select or clear this check mark at any time; it impacts only future meter

readings. However, if the meter is a Primary Failure Meter for any current asset/meter association, you cannot clear the check box.

11. Enter a usage Rate (per day). This field works in conjunction with the Number of Past Readings field to provide daily meter usage estimates, based on historical readings. It supplies the system benchmark data that is used to set the occurrence of scheduled PMs. Rate per day is referred to in the absence of a sufficient value in the Number of Past Readings field.

    This field is mandatory if you have selected the Used in Scheduling check box.

12. Enter a value for the Number of Past Readings. This value designates how many readings prior the scheduler should go to for calculating the usage rate. If there is an insufficient number of readings (for example four, instead of the required five), the system continues the calculation based on the usage Rate per day entered.

    This field is mandatory if you have selected the Used in Scheduling check box.

    > **Note:** If you enter a value of 1, the system perpetually calculates at the usage Rate per day.

13. Select the meter Effective Dates. If left blank, the meter is effective all of the time, after it is created. If you select a future date, the meter is disabled until that date. You can disable a meter effective on a specific date by selecting a To date.

14. Save your work.

To associate meters with capital assets and/or serialized rebuilds:

Meter Association creates the relationship between the meter definition and the capital Asset Number and/or Serialized Rebuild.

1. Select an Item Type of Capital, if you are going to associate the current meter with an Asset Number. Select Rebuildable if you are associating the current meter with a Serialized Rebuild.

2. Select an Asset Number (or Serialized Rebuild). The Asset Group (or Rebuildable Item) defaults.

3. Optionally select a Primary Failure Meter to indicate the default meter that is used for failure analysis. This meter's readings are used to calculate meter-based MTBF and MTTR. See: Failure Analysis Overview, *Oracle Enterprise Asset Management User's Guide*.

    You can select a Primary Failure Meter for any meter with the Required check mark selected. Only one meter can be selected at a time, for an asset.

4. Save your work.

Defining Set Names

A PM schedule for an Activity and an Asset Number or Asset Group must uniquely belong to a Set Name. Multiple PM Schedules for the same Asset Number or Asset Group and Activity combination are created across Sets. However, out of those PM Schedules, one can be identified as the Default and used for generating Work Orders. Other PM Schedules in other Sets can be used for simulation purposes. Every Set Name has an end date. Every PM schedule that belongs to the Set Name must have its effective-to date before the end date of the PM Schedule's Set Name. Before assigning a Set Name to a PM schedule, you need to define Set Names within the Set Name Definition window. If you do not want to create Set Names, you can assign PM schedules to set, MAIN; it already exists.

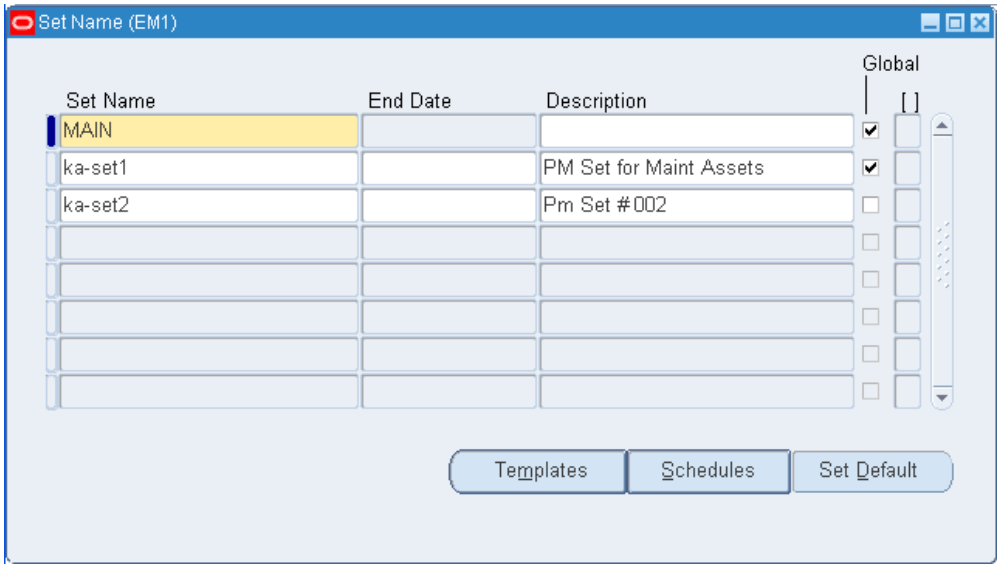
PM schedules might contain assets that transferred from one organization to another. The asset's destination organization can update and use the PM schedules that are assigned to a global PM set. However, you can only view, within the destination organization, PM schedules that are assigned to the asset's originating organization's local PM sets.

Defining Set Names

To define Set Names:

1. Navigate to the Set Name window.

Set Name



2. Enter the Set Name.

3. Optionally enter an End Date. Every PM schedule that belongs to the Set Name must have its effective-to date before the End Date of the PM Schedule's Set Name. If you leave this field blank, the current Set Name does not expire.

4. Optionally enter a Description for this Set Name.

5. Optionally select the Global check box to indicate that the set is visible globally. If this check box is clear, the set is confined to the current organization.

   Note: You can change this setting from Global to local, if the set is not used in an PM schedules of another organization's assets.

6. Optionally choose Templates to add, change, delete, or view Preventive Maintenance Schedule Templates, associated with the current Set Name (See: Preventive Maintenance Schedule Templates).

7. Optionally choose Schedules to create PM Schedule Definitions, associated with the current Set Name (See: Defining a Preventive Maintenance Template, *Oracle Enterprise Asset Management User's Guide*).

8. Optionally choose Set Default to identify all schedules within this set as Default. PM Schedules identified as Default automatically generates Work Orders, by the PM Scheduler process. PM schedules that are not identified as Default can generate Work Order suggestions, by the PM Scheduler process. The generated suggestions

cannot be converted into Work Orders. You can create an unlimited number of Set Names within this window.

9. Save your work.

Defining a Preventive Maintenance Template

An Activity and Asset Number combination can be associated with Runtime, Day Interval Rules, or a list of dates, defining when an Activity should be scheduled for an Asset, Serialized and Non-Serialized Rebuildables, or an Asset Route. Day Interval rules and List of Dates rules are supported for Non-Serialized Rebuildables and Asset Routes. The Preventive Maintenance (PM) Scheduler process creates suggested Work Order dates based on these rules. A planner can then view these forecasted Work Orders, and generate them as necessary.

There are two ways to create PM schedule definitions for Rebuildable Serial Numbers and Assets. You can create them individually within the Preventive Maintenance Schedules window (See: Entering Preventive Maintenance Schedule Definitions, *Oracle Enterprise Asset Management User's Guide*), or streamline the process of creating them using a PM Template. A PM Template is a schedule, defined for an Asset Group (Asset Group or Rebuildable Item)/Activity association. If you utilize the PM Template functionality, a new PM Schedule is automatically created for a newly created Asset Number (asset or rebuildable) for the Asset Group. All PM Template attributes are copied over to the PM Schedule for the Instance. You can optionally modify the values of the PM Instances created.

Before a PM Template is created, the following prerequisites must exist:

- Meter Template Definition (See: Defining Meter Templates, *Oracle Enterprise Asset Management User's Guide*)

  A Meter Template definition is required if the PM Template is based on Runtime Rule

- Activity Definition (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*)

- Meter Template Association (See: Associating Meter Templates with Asset Groups, *Oracle Enterprise Asset Management User's Guide*)

  A Meter Template Association is required if the PM Template is based on Runtime Rules.

- Activity Association Template (See: Activity Association Templates, *Oracle Enterprise Asset Management User's Guide*)

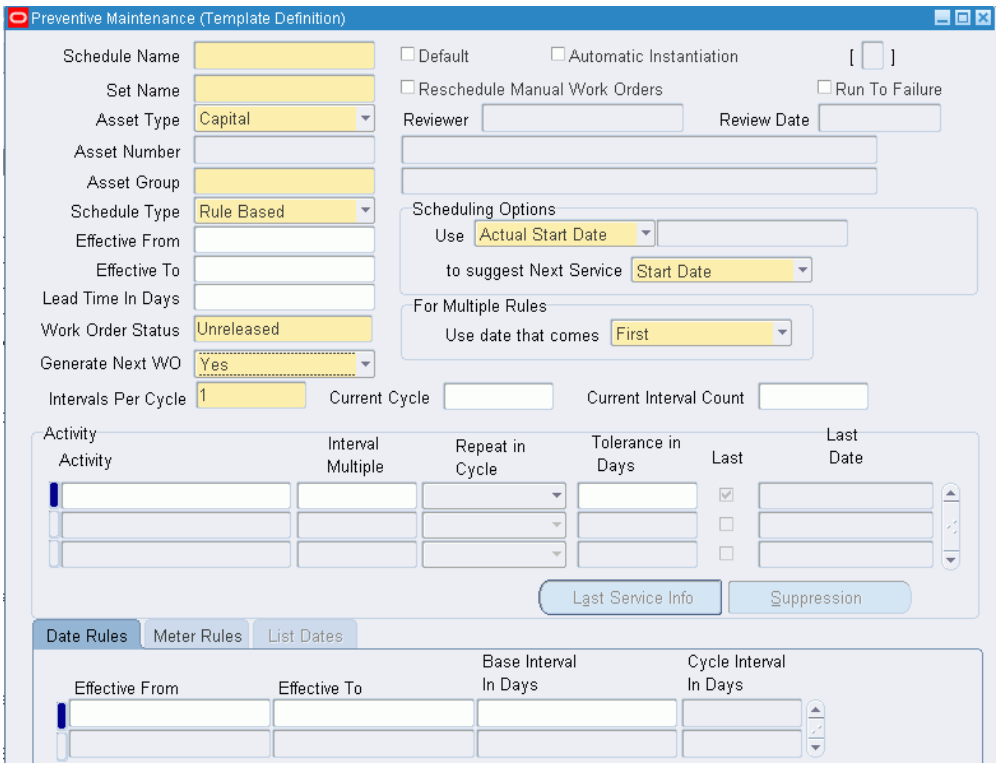
To create a PM Template:

1. Navigate to the Find Preventive Maintenance Schedules window. This window enables you to enter information to narrow your search for query mode.

   Select Yes in the Generate Next WO field if you want the PM Scheduler to be able to create the next work order only if the previous work order has been completed for this work order completion date.

   To define a new PM Template, select the **New** button.

Preventive Maintenance (Template Definition)



2. Enter a PM Template name in the Schedule Name field.

3. Enter a Set Name. A PM schedule for an Activity and Asset Group must uniquely belong to a Set Name (See: Defining Set Names, *Oracle Enterprise Asset Management User's Guide*). Every Set Name has an end date. Every PM schedule that belongs to the Set Name must have its Effective To date before the end date of the PM Set Name. Before assigning a Set Name to a PM schedule, define Set Names within the Set Name Definition window. If you do not want to create Set Names, you can assign PM schedules to set, MAIN; it already exists.

PM schedules might contain assets that transferred from one organization to another. The asset's destination organization can update and use the PM schedules that are assigned to a global PM set. However, you can only view, within the destination organization, PM schedules that are assigned to the asset's originating organization's local PM sets. You can copy these PM schedules to a global, local set or to your organization's local set.

4. Select an Asset Type. Valid values are Capital and Rebuildable Inventory. If Capital is selected, the Asset Group fields refer to the Asset Group. If you select Rebuildable Inventory, the Asset Group fields refer to the Rebuildable Item.

5. Select an Asset Group.

6. Select a Schedule Type. Valid values are Rule Based and List Dates. If you select Rule Based, the Day Interval Rules and Runtime Rules tabs are enabled to enter information. If you select List Dates, you can define information within the List Dates tab.

7. The Effective dates default from the current Activity association, if they exist. Optionally select or update the Effective From and Effective To dates.

8. Optionally enter a Lead Time In Days.

   Lead time in a Preventive Maintenance Schedule is different than lead time associated with Work Order creation. The Preventive Maintenance process suggests Work Orders to be created or scheduled, starting from the last service day of the Asset to the cutoff day you specified while running the process. If a Lead Time In Days is specified, the Preventive Maintenance process predicts work for those extra days beyond the cutoff date. This provides the maintenance department advanced visibility for maintenance work that is typically predicted in the next planning process. The maintenance department can prepare for such work in the current planning period.

9. Optionally select a Work Order Status that best fits your business process. When Preventive Maintenance Work Orders are generated, (See: Generating Work Orders, *Oracle Enterprise Asset Management User's Guide*) they are created with this specified status. You can optionally update this status within the Maintenance Workbench (See: Using the Maintenance Workbench, *Oracle Enterprise Asset Management User's Guide*).

10. Optionally select Yes in the Generate Next WO field if you want to enable the scheduler to create the next work order only if the previous work order has been completed for the work order completion date.

11. Optionally select the Default check box to indicate that the current PM schedule definition generates Work Orders. If this check box is not selected, Work Order suggestions will not generate. You can have only one Default PM for an Asset

Item/Activity combination.

12. Optionally select the Automatic Instantiation check box. If this check box is selected, a new instance of the current PM schedule template is created for each new Asset (Asset Number or Rebuildable Serial Number).

13. Optionally select the Reschedule Manual Work Orders check box. If this check box is selected, non-firm, unreleased manual work orders are considered during PM scheduling.

14. If the Run To Failure check box is selected, the Preventive Maintenance Scheduler does not automatically schedule Asset Numbers within this Asset Group and Activity association, although you can create manual Work Orders. This is relevant for Asset Numbers that cost more to maintain than the Asset Number itself. You might also check this box for forecasting and budgeting reasons. For example, your asset is a conveyor belt. It is common in maintenance environments to let this asset wear out completely before replacing it. You estimated that the life of this asset is 18 months, and have set up a schedule for a replacement Work Order every 18 months. In reality, you found that the belts have ended up wearing out every 12 months, affecting your cost budget.

    You may select this check box and clear it later. For example, you might associate an Asset Number to an Activity, but maybe you cannot currently maintain or schedule this Asset Number. You may have future plans to maintain this Asset Number.

    If this check box is selected, PMs created as a copy of this PM Template generate Work Orders for the corresponding asset in the Maintenance Workbench (See: Using the Maintenance Workbench, *Oracle Enterprise Asset Management User's Guide*).

15. In the Scheduling Options region, indicate how the PM Scheduler process calculates Work Order dates. The *Use* field works in conjunction with the *to suggest Next Service* field. The date field indicates the Last Service date

    - *Actual Start Date to Start Date*: The PM Scheduler process uses the Last Service Actual Start Date, and calculates scheduled start dates. This is a forward scheduling method.

    - *Actual Start Date to End Date*: The PM Scheduler process uses the Last Service Actual Start Date, and calculates the scheduled end dates. This is a backward scheduling method.

    - *Actual End Date to Start Date*: The PM Scheduler process uses the Last Service Actual End Date, and calculates the scheduled start dates. This is a forward scheduling method.

    - *Actual End Date to End Date*: The PM Scheduler process uses the Last Service

Actual End Date, and schedules the scheduled end dates. This is a backward scheduling method.

- *Scheduled Start Date to Start Date*: The PM Scheduler process uses the Last Service Scheduled Start Date, and calculates scheduled start dates. This is a forward scheduling method.

- *Scheduled Start Date to End Date*: The PM Scheduler process uses the Last Service Scheduled Start Date, and calculates the scheduled end dates. This is a backward scheduling method.

- *Scheduled End Date to Start Date*: The PM Scheduler process uses the Last Service Scheduled End Date, and calculates the scheduled start dates. This is a forward scheduling method.

- *Scheduled End Date to End Date*: The PM Scheduler process uses the Last Service Scheduled End Date, and schedules the scheduled end dates. This is a backward scheduling method.

- *Base Date*: You must enter a date as the basis for the PM calculation. As your intervals change, you might want to update the Base Date so that your PM work orders are generated at your choice intervals. It is recommended that you change the Base Date to the Last Service Date if your scheduling interval changes, to ensure that the new scheduling is impacted only from that point and forward. Actual and scheduled work order dates are not considered when you use the Base Date or Base Meter options.

- *Base Meter*: You must enter a Meter, as well as the initial interval. The PM engine uses that initial reading as the anchor for its calculation. Actual and scheduled work order dates are not considered when you use the Base Date or Base Meter options.

16. In the Multiple Rules region, indicate how the predicted due dates are determined for multiple rules.

    - *First*: The due date is set to the first due date of all rules.

    - *Last*: The due date is set to the last due date of all rules.

    For example, below is a Runtime Rule that includes two meters, Meter1 and Meter2.

Schedule Based On Example

Interval	Effective From	Effective To	Meter
100	0	10,000	Meter1
50	0	2,500	Meter2

If you specify First Due Date in the Scheduling Based On region of the PM Template, between the two meters, the first meter that hits the due reading triggers the service. In this case, if Meter1's reading reaches the interval of 100 first, the service happens before Meter2's reading reaches its interval of 50. Conversely, you can choose Last Due Date in the Scheduling Based On region. In this case, even if Meter1 reaches its due reading, the service is not scheduled until Meter2 has also reached its due reading.

This region is disabled if the current PM schedule definition's Scheduling Type field is populated with List Dates.

17. In the Activity region, select one or multiple activities. Activities associated with asset groups are eligible for defining a Schedule Template.

    A Maintenance Planner can create a single PM schedule for multiple activities on an Asset Template. You can list multiple activities to perform on an asset that share a common base interval of either a date, meter, or both. Each maintenance activity on the schedule generates work orders, based on a multiple of the base interval occurring. The group of maintenance activities on one PM schedule represents a cycle of activities. **Base Interval** refers to the minimum of a space of time (such as 90 days), or meter reading (such as 7,500 miles) between when PM activities included in one PM schedule should be performed. It can be considered a common denominator among the multiple activities included in one PM Schedule that share a common base interval. A **cycle** is a complete round of maintenance activities performed on an asset that share a common base interval of a meter or time period, or both, or a multiple of the shared intervals.

    After the cycle of activities completes, the cycle restarts. For example, you can define a PM schedule for two activities that have a common Base Interval of 7,500 miles. The first activity is an oil change, and is scheduled every 7,500 miles. The second activity, a tune-up, is scheduled for every fourth interval or 30,000 miles. The work order for the oil change generates on each occurrence of the 7,500 mile interval and the work order for the tune-up generates on the fourth interval occurrence.

    When an asset transfers to another organization, the schedule that is associated with the local PM Set is viewable within the new organization. For example, the PM Set Name, Local, is created in organization, EM1. A PM schedule is defined in EM1

for Asset Number, #1554877, and is associated with Local (Set Name). Asset Number #1554877 is transferred to another eAM-enabled organization, EM2. A planner in this new organization (EM2) can view the PM schedule that is associated with the Local PM set. However, it is view-only; it cannot be updated. The associated Activity appears in blue, to indicate that the activity definition has not yet been assigned to EM2. In this scenario, to use the PM schedule, the planner must either assign the schedule's Activity to the current organization, EM2, or update the schedule's PM Set Name from Local to a global set or a local PM set that was defined in EM2.

> **Note:** You can define an unlimited number of activities, however, it is recommended that you keep it simple.

18. Optionally indicate the Interval Multiple of the Base Interval. This field works with the Repeat in Cycle field to determine how many intervals for an activity to repeat.

19. Optionally select the Repeat in Cycle value to determine if the activity interval repeats in the cycle. If you select *Yes*, the Interval Multiple field determines how many times the activity interval repeats. If you select *No*, the activity is scheduled once for each cycle.

20. Optionally enter a Tolerance In Days to indicate a minimum interval in days that suggested Work Orders' dates are spaced from each other.

21. Within the Date Rules tab, optionally enter Effective From and To dates to specify the rule's expiration.

22. Enter a Base Interval In Days. For example, if you enter the number three, a Work Order suggestion is created every three days.

    You can optionally create variable Date Rules. For example, you would like Work Order suggestions created every three days in January, and every four days in February. The window below illustrates this example:

23. Within the Meter Rules tab, optionally select a Meter Name to indicate that Preventive Maintenance scheduling is based on a Meter Rule. If you have previously set up a Date Rule, you can base the scheduling on a Runtime Rule, as well. Meter Templates associated with this Asset Group (See: Associating Meter Templates with Asset Groups, *Oracle Enterprise Asset Management User's Guide*), and with the Used in Scheduling check box selected in the meter template definition, are available.

    For example, trucks of a specific Make and Model need to be scheduled for an oil change every 30 days, or every 1000 miles.

Date Rule

Field	Value
Last Service Start/End Date	December 26, 2001
Interval In Days	30

Meter Rule

Field	Value
Last Service Reading	3000
Interval	1000
Latest Meter Reading	3100 (found within meter reading history)
Latest Meter Reading Date	January 1, 2002 (this can be found via meter reading history)
Usage Rate	25 miles per day (calculated, based on Linear Regression's Least Square formula. In a least-squares model, the best-fitting line for the observed data is calculated by minimizing the sum of the squares of the vertical deviations from each data point to the line. For example, if a point lies on the fitted line exactly, then its vertical deviation is zero.)

If the Meter Rule is taken into account, the next due date is February 6, 2002 (January 1 2002 + [(3000 + 1000 - 3100)/25 = January 1, 2002] +36 days), and every 40 days after that. This is calculated as the interval (1000 miles) divided by the usage rate (25 miles per day).

The PM Scheduler process compares the above suggested dates from the runtime interval rule, to those of the date rule: Base Date of December 26, 2001 + every 30 days.

The Work Orders ultimately created by the PM Scheduler process are those of the earliest or latest dates, depending on how the Schedule Based On region is populated. If you selected First Due, the earliest suggestion is used for Work Order

creation. The opposite is also true.

24. The Interval and UOM fields work together. For example, for every 2000 miles, this Asset Number needs an oil change.

    The UOM defaults from the Meter Template definition of the current Meter Template.

    You can optionally create multiple Runtime Rules. For example, from zero to 10,000 miles, you would like your asset serviced every 3,000 miles. From 10,000 to 50,000 miles, you would like your asset serviced every 2,000 miles.

25. Optionally enter the Last Service Reading in the Last Service Information window. This field is also automatically updated with the meter reading information recorded at Work Order completion (See: Work Order Completion, *Oracle Enterprise Asset Management User's Guide*).

    > **Note:** The Preventive Maintenance Scheduler (See: Generating Work Orders, *Oracle Enterprise Asset Management User's Guide*) automatically calculates the meter usage rate, based on historical data, which is then used to predict the next meter due date. Refer to the example below.

26. If you populated List Dates within the Schedule Type field, select the List Dates tab to define the specific due dates that Work Orders should transpire.

    For example, you want asset, Car1, serviced on May 1 and November 1 every year for the next three years. In this case, you would create a List Dates type schedule definition, and list all the due dates within this tab. The PM Scheduler process creates suggested Work Order dates on those specified dates.

27. Save your work.

Entering Preventive Maintenance Schedule Definitions

Schedule definitions are implemented to create scheduled Work Orders, based on Day Interval Rules, and/or Runtime Rules. Schedules can also be based on a list of specific dates by using List Date rules. List Date rule based PM schedules cannot have Runtime or Day interval rules. Runtime or Day Interval Rule based PM schedules cannot have List Date rules. You can create a Preventive Maintenance Schedule Definition on an Asset Group (Non-serialized Rebuildable)/Activity combination, Asset Number/Activity combination, or an Asset Route/Activity combination.

If a meter is entered in a runtime interval rule, the following prerequisites must exist before creating a Preventive Maintenance Schedule:

- Meter Definition (See: Defining Meters, *Oracle Enterprise Asset Management User's Guide*)

A Meter definition is required if the PM schedule is based on Runtime Rules.

- Activity Definition (See: Defining Activities, *Oracle Enterprise Asset Management User's Guide*)
- Meter/Asset Association (See: Associating Meters with Asset Numbers, *Oracle Enterprise Asset Management User's Guide*)

  A Meter/Asset Association is required if the PM schedule is based on Runtime Rules.

- Asset Group (Non-Serialized Rebuildable) or Asset Number/Activity Association (See: Associating Asset Numbers with Activities, *Oracle Enterprise Asset Management User's Guide*)

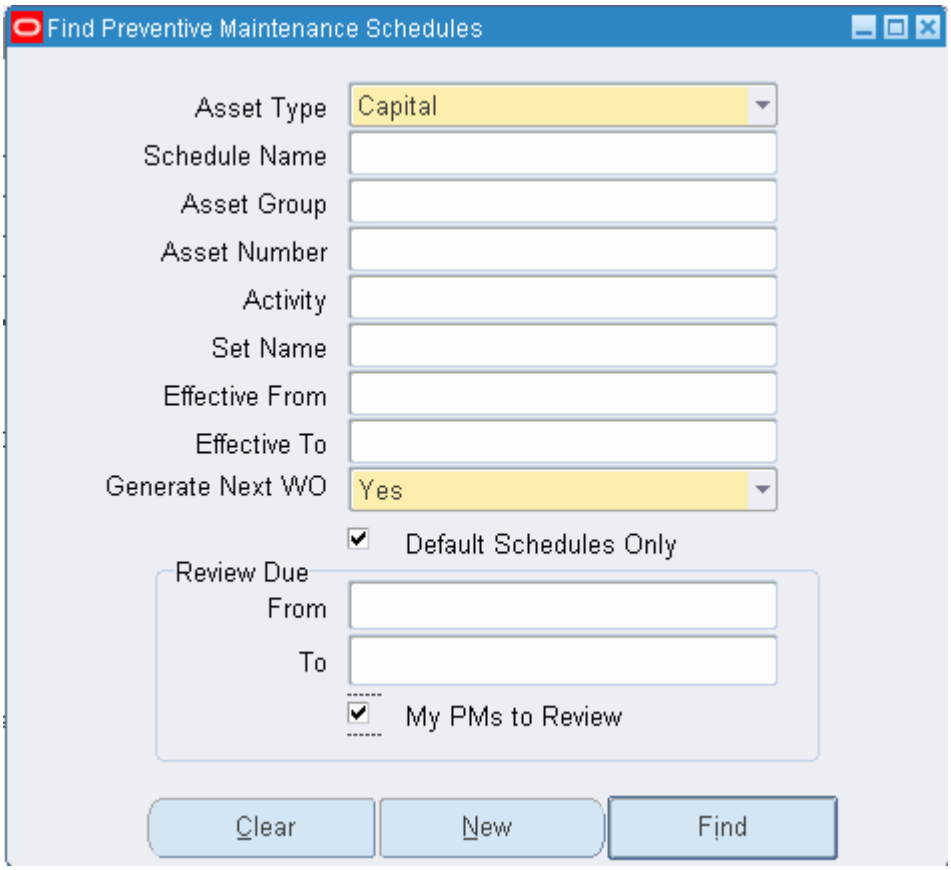
Defining Preventive Maintenance (PM) Schedules

To define a Preventive Maintenance schedule for an asset number:

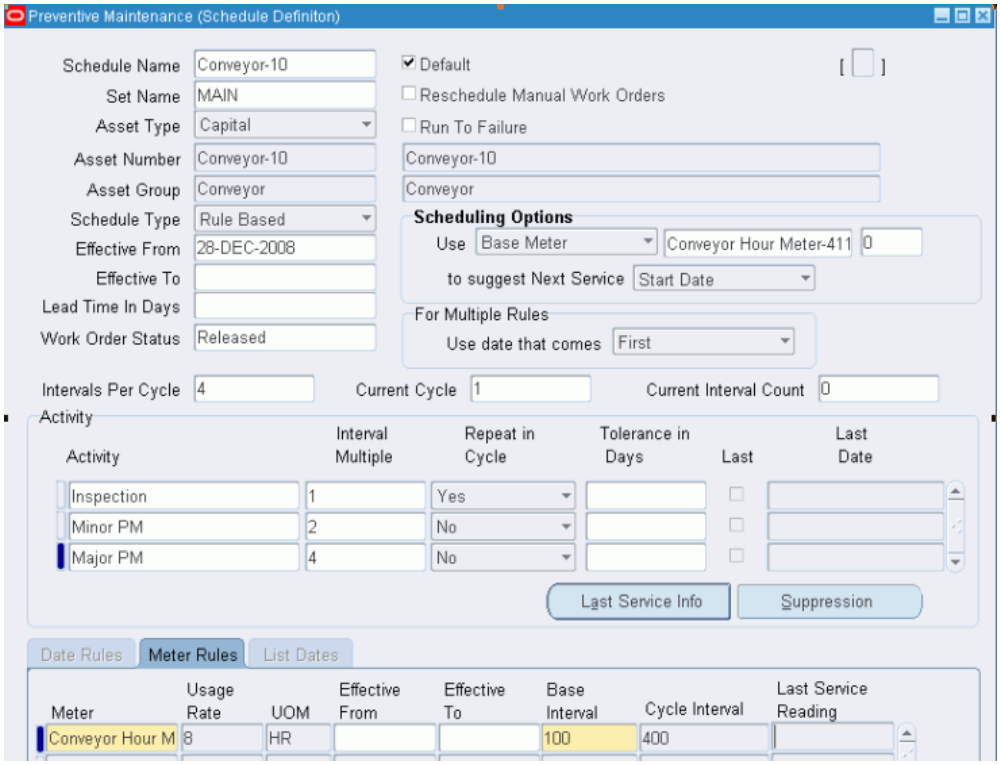
1. Navigate to the Find Preventive Maintenance Schedules window. This window enables you to enter information to narrow your search for query mode.

   Select Yes in the Generate Next WO field if you want the PM Scheduler to be able to create the next work order only if the previous work order has been completed for this work order completion date.

   To define a new schedule, click the **New** button.


Find Preventive Maintenance Schedules
Asset Type
Capital
Schedule Name
Asset Group
Asset Number
Activity
Set Name
Effective From
Effective To
Generate Next WO
Yes
Default Schedules Only
Review Due
From
To
My PMs to Review
Clear
New
Find

Preventive Maintenance (Schedule Definition)



2. Enter a Schedule Name.

   Important: If your PM schedule requires more than one activity and if the activities use different cycles, we recommend that you create separate PM schedules.

3. Enter a Set Name. A PM schedule for an Activity and an Asset Number or Asset Group must uniquely belong to a Set Name (See: Defining Set Names, *Oracle Enterprise Asset Management User's Guide*). Every Set Name has an end date. Every PM schedule that belongs to the Set Name must have its Effective To date before the end date of the PM Set Name. Before assigning a Set Name to a PM schedule, define Set Names within the Set Name Definition window. If you do not want to create Set Names, you can assign PM schedules to set, MAIN; it already exists.

   PM schedules might contain assets that transferred from one organization to another. The asset's destination organization can update and use the PM schedules that are assigned to a global PM set. However, you can only view, within the destination organization, PM schedules that are assigned to the asset's originating organization's local PM sets. You can copy these PM schedules to a global, local set or to your organization's local set.

4. Select an Asset Type. Valid values are Capital and Rebuildable Inventory. If Capital is selected, the Asset Number and Asset Group fields refer to the Asset Number and Asset Group, respectively. If Rebuildable Inventory is selected, the Asset Number and Asset Group fields refer to the Rebuildable Serial Number and Rebuildable Item, respectively. If a Non-Serialized Rebuildable Item is entered in the Asset Group field, the Asset Number field is not required.

5. Select an Asset Number. Assets that are maintainable and associated with Activities are available. The Asset Group field populates with the Asset Group associated with the current Asset Number. If you wish to define a PM Schedule for a Non-serialized Rebuildable, enter the Asset Group; the Asset Number field does not apply.

   For assets that transferred from one organization to another, PM schedules that are defined for assets within their originating organizations are also visible within their destination organizations.

6. Select a Schedule Type. Valid values are Rule Based and List Dates. If you select Rule Based, the Day Interval Rules and Runtime Rules tabs are enabled to enter information. If you select List Dates, you can define information within the List Dates tab.

7. The Effective dates default from the current Asset Activity association, if they exist. Optionally select or update the Effective From and Effective To dates.

8. Optionally enter a Lead Time In Days.

   Lead time in a Preventive Maintenance Schedule is different than lead time associated with Work Order creation. Lead time within a Preventive Maintenance Schedule covers the time between the end date of the first execution of the Preventive Maintenance Schedule process, and the start date (system date) of the second execution of the Preventive Maintenance Schedule process. For example, a department executes the Preventive Maintenance Scheduler process every two months; the end date of each Preventive Maintenance Scheduler process is the end of every other month. However, due to circumstance, the meter data is not ready until the middle of the month. Therefore, the Preventive Maintenance Scheduler process starts in the middle of the month, instead of at the beginning, creating a lapse between the first and second Preventive Maintenance Scheduler executions. Lead time is used to cover this lapse.

9. Optionally select Yes in the Generate Next WO field if you want to enable the scheduler to create the next work order only if the previous work order has been completed for the work order completion date.

10. Optionally select a Work Order Status that best fits your business process. When Preventive Maintenance Work Orders are generated, (See: Generating Work Orders, *Oracle Enterprise Asset Management User's Guide*) they are created with this specified status. You can optionally specify a different status for each PM schedule.

You can also update this status, using the Maintenance Workbench (See: Using the Maintenance Workbench, *Oracle Enterprise Asset Management User's Guide*).

11. Optionally select the Default checkbox to indicate that the current PM schedule definition generates Work Orders. If this checkbox is not selected, Work Order suggestions will not generate. You can have only one Default PM for an Asset Item/Activity combination.

12. Optionally select the Reschedule Manual Work Orders checkbox. If this checkbox is selected, non-firm, unreleased manual Work Orders are considered during PM scheduling.

13. If the Run To Failure checkbox is selected, the Preventive Maintenance Scheduler does not automatically schedule this Asset Number and Activity association, although you can create manual Work Orders. This is relevant for Asset Numbers that cost more to maintain than the Asset Number itself. You might also check this box for forecasting and budgeting reasons. For example, your asset is a conveyor belt. It is common in maintenance environments to let this asset wear out completely before replacing it. You estimated that the life of this asset is 18 months, and have set up a schedule for a replacement Work Order every 18 months. In reality, you found that the belts have worn out every 12 months, affecting your cost budget.

    You can select this checkbox and clear it later. For example, you might associate a non-maintainable asset to an activity, but maybe you cannot currently maintain or schedule this asset. You might have future plans to maintain this Asset Number.

    If this check box is selected, the work orders for this asset do not appear in the Maintenance Workbench at the time of PM Scheduling (See: Using the Maintenance Workbench, *Oracle Enterprise Asset Management User's Guide*).

14. For new PM schedule definitions, the default value for the Reviewer is based on the user login information, and the Review Date field defaults to the current system date.

    If you are updating a PM schedule definition, the Reviewer field indicates the last reviewer of the PM Schedule, and the Review Date field indicates the date on which the last review occurred. When updating the schedule definition, the Reviewed Date can be changed.

15. In the Scheduling Options region, indicate how the PM Scheduler process calculates work order dates.

    The *Use* field works in conjunction with the *to suggest Next Service* field. The date field indicates the Last Service date.

    - *Actual Start to Start Date*: The PM Scheduler process uses the Last Service Actual Start Date, and calculates scheduled start dates. This is a forward scheduling method.

- *Actual Start Date to End Date*: The PM Scheduler process uses the Last Service Actual Start Date, and calculates the scheduled end dates. This is a backward scheduling method.

- *Actual End Date to Start Date*: The PM Scheduler process uses the Last Service Actual End Date, and calculates the scheduled start dates. This is a forward scheduling method.

- *Actual End Date to End Date*: The PM Scheduler process uses the Last Service Actual End Date, and schedules the scheduled end dates. This is a backward scheduling method.

- *Scheduled Start Date to Start Date*: The PM Scheduler process uses the Last Service Scheduled Start Date, and calculates scheduled start dates. This is a forward scheduling method.

- *Scheduled Start Date to End Date*: The PM Scheduler process uses the Last Service Scheduled Start Date, and calculates the scheduled end dates. This is a backward scheduling method.

- *Scheduled End Date to Start Date*: The PM Scheduler process uses the Last Service Scheduled End Date, and calculates the scheduled start dates. This is a forward scheduling method.

- *Scheduled End Date to End Date*: The PM Scheduler process uses the Last Service Scheduled End Date, and schedules the scheduled end dates. This is a backward scheduling method.

- *Base Date*: You must enter a date as the basis for the PM calculation. As your intervals change, you might want to update the Base Date so that your PM work orders are generated at your choice intervals. It is recommended that you change the Base Date to the Last Service Date if your scheduling interval changes, to ensure that the new scheduling is impacted only from that point and forward. Actual and scheduled work order dates are not considered when you use the Base Date or Base Meter options.

- *Base Meter*: You must enter a Meter, as well as the initial interval. The PM engine uses that initial reading as the anchor for its calculation. Actual and scheduled work order dates are not considered when you use the Base Date or Base Meter options.

16. In the For Multiple Rules region, indicate how the predicted due dates are determined for multiple rules.

    - *First*: The due date is set to the first due date of all rules.

    - *Last*: The due date is set to the last due date of all rules.

For example, below is a Runtime Rule that includes two meters, Meter1 and Meter2.

Schedule Based On Example

Interval	Effective From	Effective To	Meter
100	0	10,000	Meter1
50	0	2,500	Meter2

If you specify First in the Multiple Rules region of the PM schedule definition, between the two meters, the first meter that hits the due reading triggers the service. In this case, if Meter1's reading reaches the interval of 100 first, the service happens before Meter2's reading reaches its interval of 50. Conversely, you can choose Last in the Multiple Rules region. In this case, even if Meter1 reaches its due reading, the service is not scheduled until Meter2 has also reached its due reading.

This region is disabled if the current PM schedule definition's Scheduling Type field is populated with List Dates.

17. Optionally enter a value for the **Intervals Per Cycle** field. This field represents the number of base intervals that comprise the complete cycle. For example, 12 monthly intervals would comprise a 1-year cycle, and four 7,500 miles base intervals would comprise a 30,000-mile cycle.

    The system automatically updates these fields:

    - **Current Cycle**: The current execution cycle of a Preventive Maintenance cycle for an asset. This field is automatically updated by the system when preventive maintenance work orders generated out of a given schedule are completed.

    - **Current Interval Cycle**: The current execution interval within a current running cycle. This field is automatically updated by the system when preventive maintenance work orders generated out of a given schedule are completed. It is advisable not to change the current cycle and current interval count after initial definition, unless really required to do so. These fields can be disabled for edit by users through function based menu exclusions.

18. Within the Activity region, select one or multiple Activities. Activities associated with Asset Numbers or Non-serialized Rebuilds are eligible for scheduling.

    A Maintenance Planner can create a single PM schedule for multiple activities on an Asset. You can list multiple activities to perform on an asset that share a common base interval of either a date, meter, or both. Each maintenance activity on the schedule generates work orders, based on a multiple of the base interval occurring. The group of maintenance activities on one PM schedule represents a cycle of

activities. After the cycle of activities completes, the cycle restarts. For example, you can define a PM schedule for two activities that have a common Base Interval of 7,500 miles. The first activity is an oil change, and is scheduled every 7,500 miles. The second activity, a tune-up, is scheduled for every fourth interval or 30,000 miles. The work order for the oil change generates on each occurrence of the 7,500 mile interval and the work order for the tune-up generates on the fourth interval occurrence.

When an asset transfers to another organization, the schedule that is associated with the local PM Set is viewable within the new organization. For example, the PM Set Name, Local, is created in organization, EM1. A PM schedule is defined in EM1 for Asset Number, #1554877, and is associated with Local (Set Name). Asset Number #1554877 is transferred to another eAM-enabled organization, EM2. A planner in this new organization (EM2) can view the PM schedule that is associated with the Local PM set. However, it is view-only; it cannot be updated. The associated Activity appears in blue, to indicate that the activity definition has not yet been assigned to EM2. In this scenario, to use the PM schedule, the planner must either assign the schedule's Activity to the current organization, EM2, or update the schedule's PM Set Name from Local to a global set or a local PM set that was defined in EM2.

> **Note:** You can define an unlimited number of activities, however, it is recommended that you keep it simple.

19. Optionally indicate the Interval Multiple of the Base Interval. This field works with the Repeat in Cycle field to determine how many intervals for an activity to repeat.

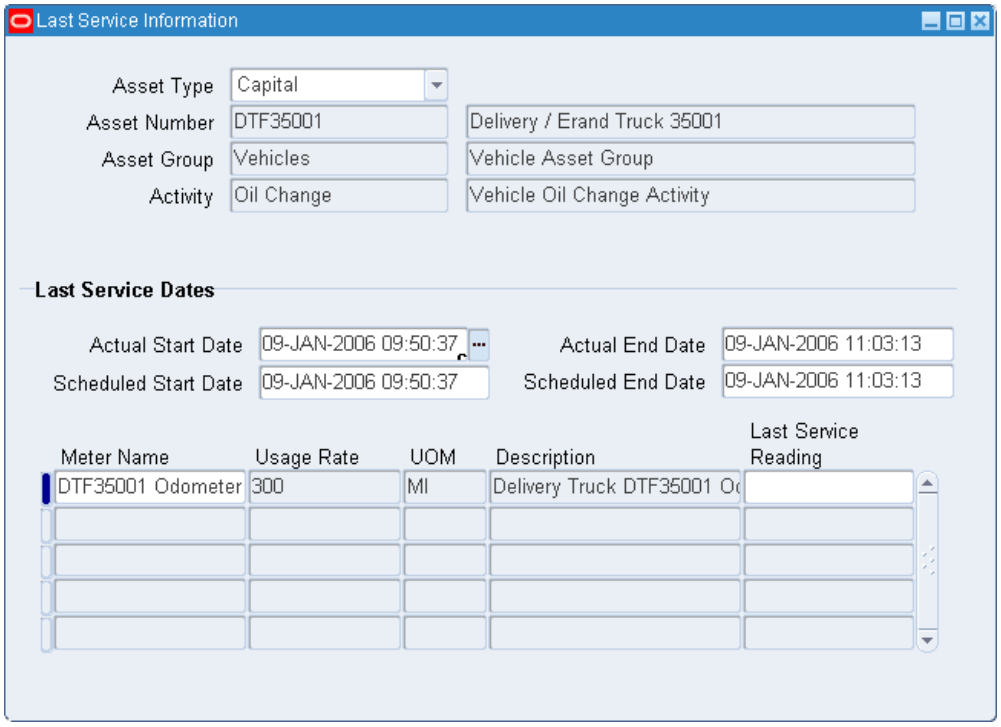
20. Optionally select the Repeat in Cycle value to determine if the activity interval repeats in the cycle. If you select *Yes*, the Interval Multiple field determines how many times the activity interval repeats. If you select *No*, the Activity is scheduled once for each cycle.

21. Optionally enter a Tolerance In Days to indicate a minimum interval in days that suggested Work Orders' dates are spaced from each other.

22. Optionally choose Last Service Info to enter the last service information for the current Asset Number/Activity association. Enter Last Service start and end dates. These dates are used by the Preventive Maintenance Scheduler as a starting point for calculating the next due date for a suggested Work Order. After the Preventive Maintenance Scheduler suggests a Work Order, and that Work Order is completed, this date resets to the completion date. Last service information is always regarding the Asset Number/Activity association, and independent of the association's PM schedule definition.

    The Last Service Reading cannot be greater than the last meter (if the meter is ascending), or less than the last meter reading (if the meter is descending).

Last Service Information

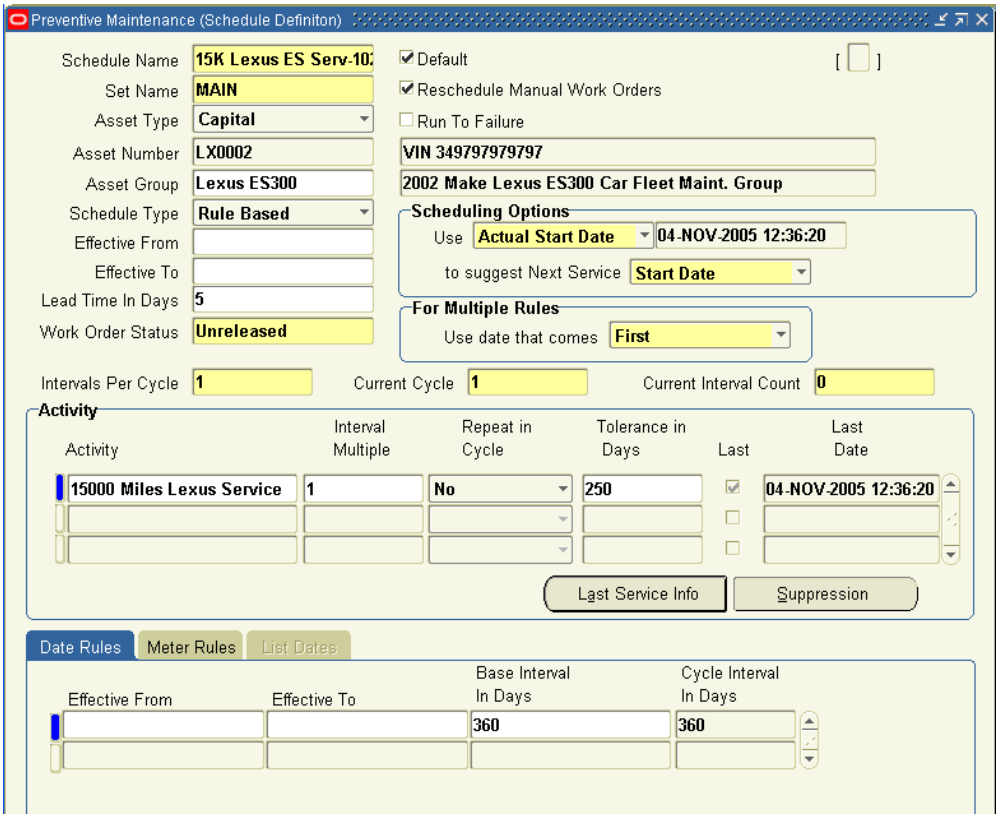


23. Within the Date Rules tab, optionally enter Effective From and To dates to specify the rule's expiration. This tab is enabled if Rule Based is populated in the Schedule Type field.

24. Enter a Base Interval In Days. For example, if you enter the number three, a Work Order suggestion is created every three days.

    You can optionally create variable Date Rules. For example, you would like Work Order suggestions created every three days in January, and every four days in February.

Date Rules Example



25. Optionally within the Meter Rules tab, select a Meter Name to indicate that Preventive Maintenance scheduling is based on a Meter Rule. If you have previously set up a Date Rule, you can base the scheduling on a Meter Rule, as well. Meters associated with this Asset Number (See: Associating Meters with Asset Numbers, *Oracle Enterprise Asset Management User's Guide*), and with the Used in Scheduling checkbox selected in the meter definition, are available.

    For example, a Truck 01 Asset Number is scheduled for an oil change every 30 days, or every 1000 miles.

Date Rule

Field	Value
Last Service Date	December 26, 2001
Interval In Days	30

Meter Rule

Field	Value
Last Service Reading	3000
Interval	1000
Last Service Reading Date	January 1, 2002 (this can be found via meter reading history)
Usage Rate	25 miles per day (calculated as the total of the meter readings value changes, divided by the total of the meter reading date intervals)

If the Meter Rule is taken into account, the next due date is February 10, 2002 (January 1 2002 + 40 days), and every 40 days after that. This is calculated as the interval (1000 miles) divided by the usage rate (25 miles per day).

The PM Scheduler process compares the above suggested dates from the meter rule, to those of the date rule: Base Date of December 26, 2001 + every 30 days.

The Work Orders ultimately created by the PM Scheduler process are those of the shortest interval and earliest dates: December 26, 2002 + every 30 days.

> **Note:** Meter Rules are not applicable for Non-Serialized Rebuildables.

26. The Interval and UOM fields work together. For example, for every 2000 miles, this Asset Number needs an oil change.

    The UOM defaults from the meter definition of the current meter.

    You can optionally create multiple Meter Rules. For example, from zero to 10,000 miles, you would like your asset serviced every 3,000 miles. From 10,000 to 50,000 miles, you would like your asset serviced every 2,000 miles.

27. You cannot enter the Last Service Reading. This field is automatically updated with the meter reading information recorded at Work Order completion (See: Work Order Completion, *Oracle Enterprise Asset Management User's Guide*).

    > **Note:** The Preventive Maintenance Scheduler (See: Generating Work Orders, *Oracle Enterprise Asset Management User's Guide*)

automatically calculates the meter usage rate, based on historical data, which is then used to predict the next meter due date. Refer to the example below.

28. If you populated List Dates within the Schedule Type field, select the List Dates tab to define the specific due dates that Work Orders should transpire.

    For example, you want asset, Car1, serviced on May 1 and November 1 every year for the next three years. In this case, you would create a List Dates type schedule definition, and list all the due dates within this tab. The PM Scheduler process creates suggested Work Order dates on those specified dates.

29. Save your work.

Multiple Activity PM Schedule Definition - Fixed Meter Example:

Parameters for Conveyor PM Schedule

- Inspection every 100 hours of operation
- Minor PM for every 200 hours of operation
- Major PM for every 400 hours of operation
- Scheduling Option: Base Meter

The following are the steps you will perform:

1. Enter the meter name and define the scheduling starting point to the right of the meter.

   The system will define default values for the following:

   - Intervals per Cycle
   - Current Cycle
   - Current Interval Count

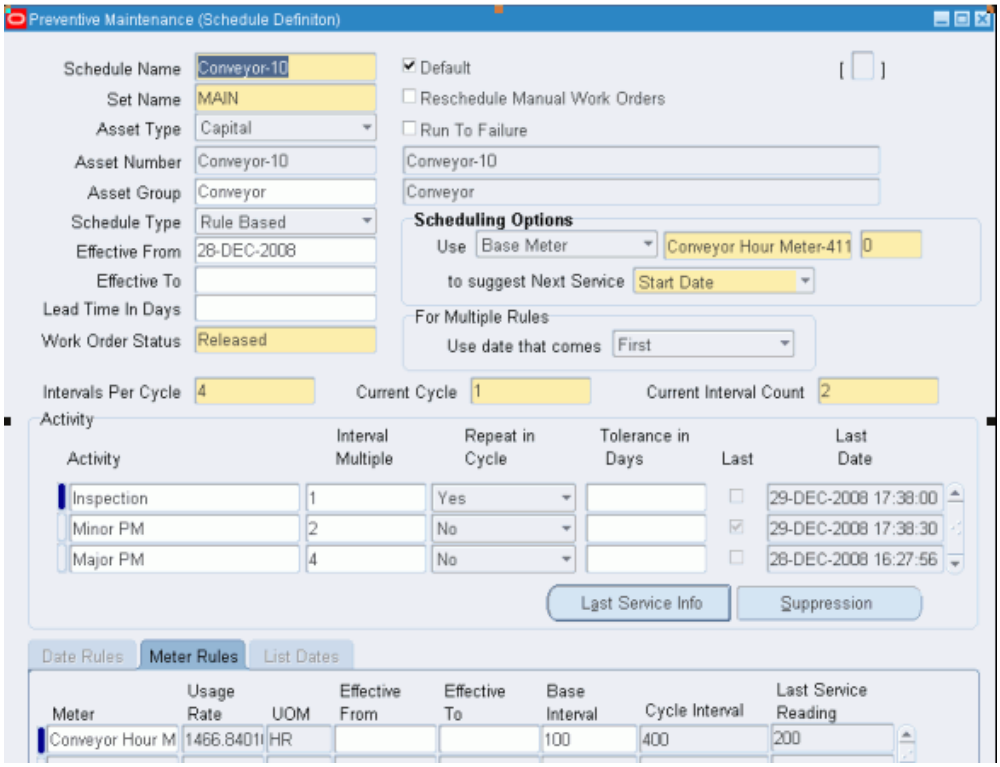
2. Enter the required activities, taking the following into consideration:

   - The Activity "Inspection" is scheduled after 100 hours of operation: (Interval Multiple (1) x Base Interval (100)).
   - The Activity "Minor PM" is scheduled after 200 hours of operation.
   - The Activity "Major PM" is scheduled after 400 hours of operation.

- Repeat in Cycle determines if an activity can occur multiple times during a cycle, in this example the Inspection can occur multiple times within the cycle, the Minor PM will not be planned at the 400 hour interval.

3. Enter the meter name with a base interval of 100.

4. Save your work.



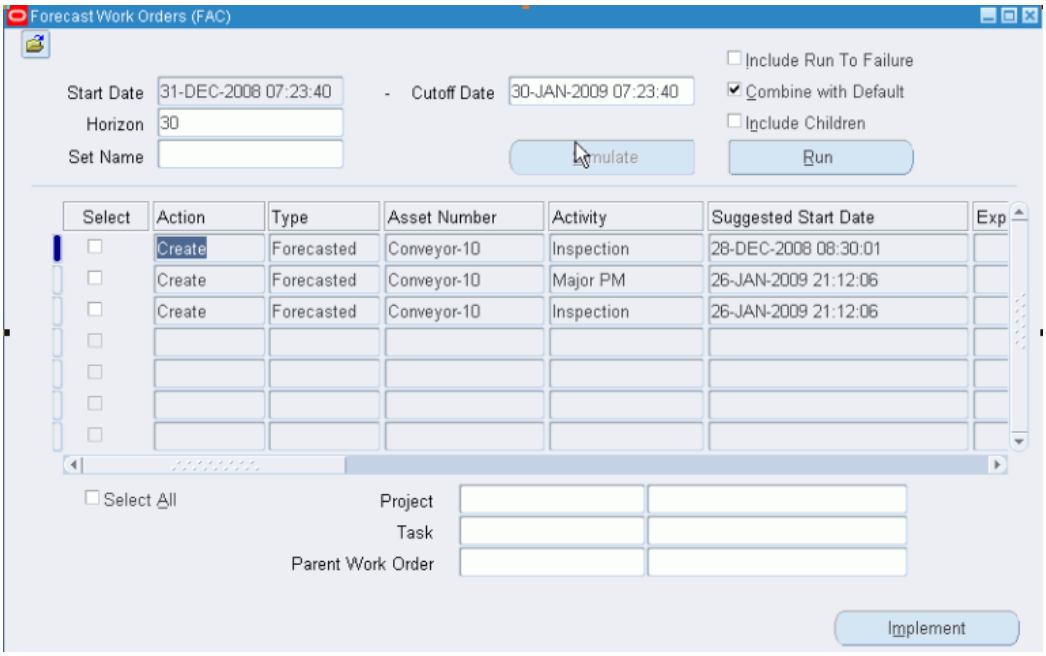
Analysis of Example

The program will update Current Cycle and Current Interval Count when PM work orders are completed. For example at 210 hours of operation, two Inspection work orders and one Minor PM work order have been generated and completed. The Current Interval Count has been updated to (2). The Current Interval Count provides a count within the Current Cycle, the Current Interval Count is updated to (1) with the start of each new cycle.

The Current Cycle provides a count of the number of times a PM Set (Inspection, Minor PM and Major PM) has been completed. In this example, the Current Cycle remains (1), the Current Cycle will be updated to (2) with the completion of the PM Set and the start of a new cycle.

When forecasting work orders for the next 30 days, note that the activity "Minor PM" is not included in the forecast but the Activity "Inspection" is included, the "Repeat in Cycle" controls if an activity will occur within a Cycle. For the activity "Inspection" the

Repeat in Cycle is "Yes", for the activity "Minor PM" the Repeat in Cycle is "No", the " Minor PM" will be generated once per cycle.



To define a Preventive Maintenance schedule for an asset route:

Preventive Maintenance Schedules can be defined based on Asset Routes. See: Setting Up Asset Routes.

1. Navigate to the Preventive Maintenance Schedules window.
2. Select Asset from the Item Type list of values.
3. Select an Asset Route from the Asset Number list of values.
4. See: Preventive Maintenance Scheduling, *Oracle Enterprise Asset Management User's Guide*, for instructions on the remaining fields.

> **Note:** You can define Date Rules and List Dates for Asset Routes. You cannot define Meter Rules.

To create a suppression activity:

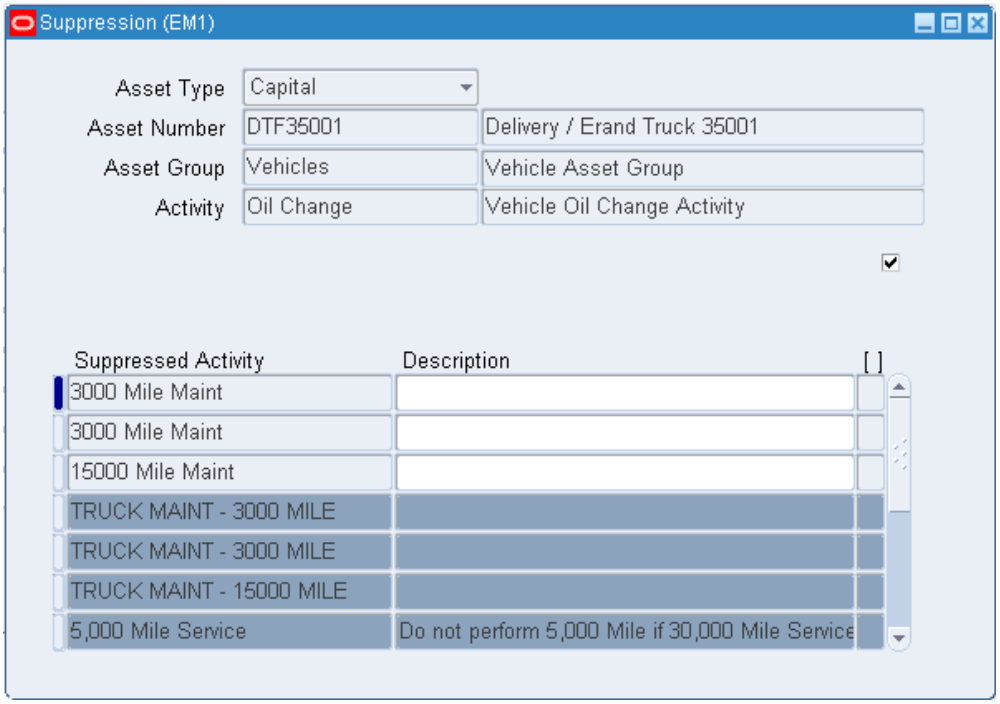
You can suppress other Activities with the current Activity in the scheduling definition. You can enter suppression activities for an Asset Number/Activity combination.

For example, there are two activities associated with a Truck 01 asset: Oil Change (to be performed every five months), and Major Service (to be performed every 12 months). A major service on a Truck 01 includes an Oil Change. Therefore, a suppression definition

needs to be defined; the Activity, Major Service, suppresses the child activity, Oil Change.

1. From the Preventive Maintenance Schedules window, choose Suppression.

Suppression



2. Choose a Suppressed Activity. Activities associated with the Asset Numbers are available.

   Note: One Activity association can suppress multiple Activity associations. One Activity association can be suppressed by one Activity association.

3. Optionally enter a Description for this suppression.

4. Save your work.

   Note: Suppression is applicable to an Activity association and can also be defined from the Activity Workbench and Suppression window.

Related Topics

Entering Meter Readings, *Oracle Enterprise Asset Management User's Guide*

Generating Work Orders, *Oracle Enterprise Asset Management User's Guide*

eAM Planning and Scheduling

Oracle Enterprise Asset Management utilizes work orders to create demand for asset maintenance. Operations within work orders are completed using the work orders' associated material and resource requirements (See: Overview eAM Work Management, *Oracle Enterprise Asset Management User's Guide*). Cost savings and work management efficiencies can be achieved by generating predictive work activities, and then using a planning process to balance the work load for resource management.

The process is as follows:

First, a Master Demand Schedule is created. This Master Demand Schedule is then attached to Material Requirements Planning (MRP) options. MRP is launched, creating planned work order suggestions. You can use the Planner Workbench to implement the suggestions into purchase requisitions or manufacturing orders. Using the Purchasing AutoCreate feature, purchase orders are created from the requisitions. After the purchase orders are received into inventory, you can issue material into a maintenance work order.

This section includes the following topics:

- eAM Planning, page 3-150
- eAM Scheduling, page 3-151

eAM Planning

Oracle eAM utilizes Material Requirements Planning (MRP) to calculate net material requirements from gross material requirements, by evaluating:

- The master schedule
- Bills of material
- Scheduled receipts
- On-hand inventory balances
- Lead times
- order modifiers

Material Requirements Planning then plans material replenishment by creating a set of

recommendations to release or reschedule orders for material, based on net material requirements. MRP assumes infinite capacity is available to meet the material requirements plan.

The following illustration depicts how eAM uses Material Requirements Planning. First, a Master Demand Schedule (MDS) is created. This schedule is then attached to MRP Plan Options. Next, the MRP is launched, creating suggestions for purchasing requisitions. Finally, these suggestions are implemented. They are purchased, and then received into inventory. After the material is in inventory, it can be issued to a maintenance work order.

eAM Material Requirements Planning

This section includes the following topics:

- Defining a Master Demand Schedule Name, page 3-152
- Defining a Material Requirements Plan Name, page 3-153
- Defining Plan Options, page 3-154

eAM Scheduling

Oracle Enterprise Asset Management (eAM) utilizes the Oracle Manufacturing Scheduling application to schedule work orders and operations. The scheduling process calculates work order and operations scheduled duration and dates, based on the forward or backward scheduling goal (See: Routine Work Orders, *Oracle Enterprise Asset Management User's Guide*), and Work in Process parameters. The concurrent program is triggered after a work order is released (See: eAM Work Order Statuses, *Oracle Enterprise Asset Management User's Guide*). The work order is automatically moved to a Pending Scheduling status, until the concurrent program finishes scheduling. At that time, the work order is moved back to a Released status.

The Scheduler Workbench enables a planner to graphically view and reschedule single work orders and operations. It provides you with a visual display of work orders. You can interactively reschedule work orders, operations, and resources.

Important: You have the eAM Scheduler (infinite scheduler) available to you; this scheduler is not constraint-based.

Note: Oracle eAM uses the Infinite Scheduler for automatic scheduling.

The Infinite Scheduler considers only the calendar and shift setups for scheduling. It does not consider shift exceptions or take the resource loads and availability into consideration. The Resource Availability form is a view to display information on the availability and considers exceptions so that you can perform manual scheduling accordingly.

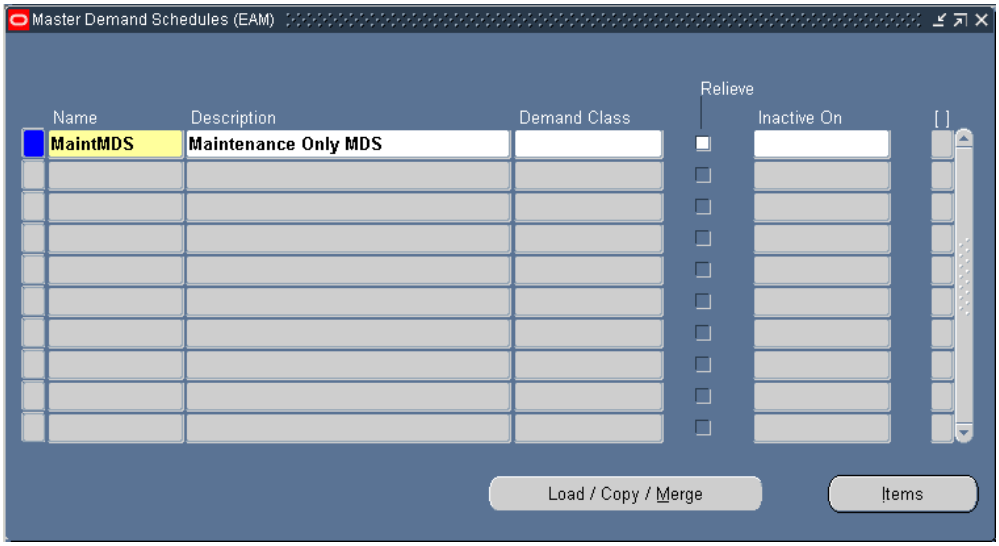
Defining a Master Demand Schedule Name

Before you define a master schedule manually or load a schedule from another source, you must first define a master demand schedule name. You can also set several options for each name.

To define a Master Demand Schedule name:

1. Navigate to the MDS Names window.

Master Demand Schedules



2. Enter a Name and Description for the schedule.

3. Save your work.

Related Topics

Defining a Schedule Name, *Oracle Master Demand Scheduling/MRP and Oracle Supply Chain Planning User's Guide*

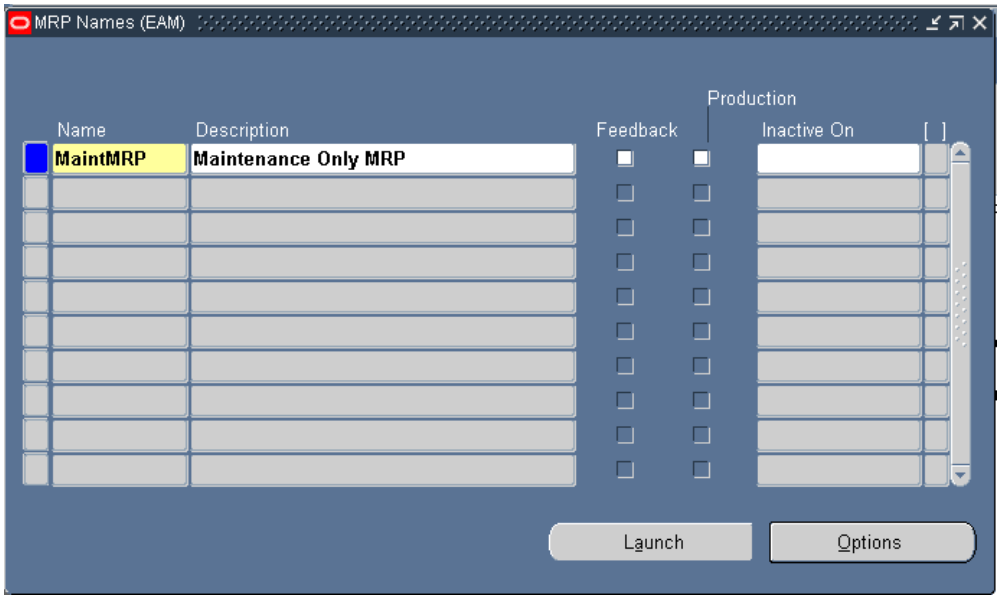
Defining a Material Requirements Plan Name

Master Demand Schedule names trigger the material requirements planning process. A master demand schedule name must be created to perform material requirement planning for maintenance Work Orders.

To define a MRP name:

1. Navigate to the MRP Names window.

MRP Names



2. Enter an alphanumeric Name to identify a unique material requirements.

3. Optionally enter a Description of the MRP name.

4. Optionally select the Feedback check box to monitor the quantity of the planned order that has been implemented as maintenance Work Orders, purchase orders, or purchase requisitions. This provides the planner visibility of the plan's status at any point in time.

5. Optionally select the Production check box to enable a plan to automatically release planned orders. See: Auto-release Planned Orders, *Oracle Master Demand Scheduling/MRP and Oracle Supply Chain Planning User's Guide*.

6. Optionally enter an Inactive On date on which to disable the plan.

   As of this date, you can no longer update the plan, nor use the plan name in the

planning process. You can still view information and run reports for disabled names.

7. Save your work.

Related Topics

Overview of Planning Logic, *Oracle Master Demand Scheduling/MRP and Oracle Supply Chain Planning User's Guide*

Defining MRP Names, *Oracle Master Demand Scheduling/MRP and Oracle Supply Chain Planning User's Guide*

Defining Plan Options

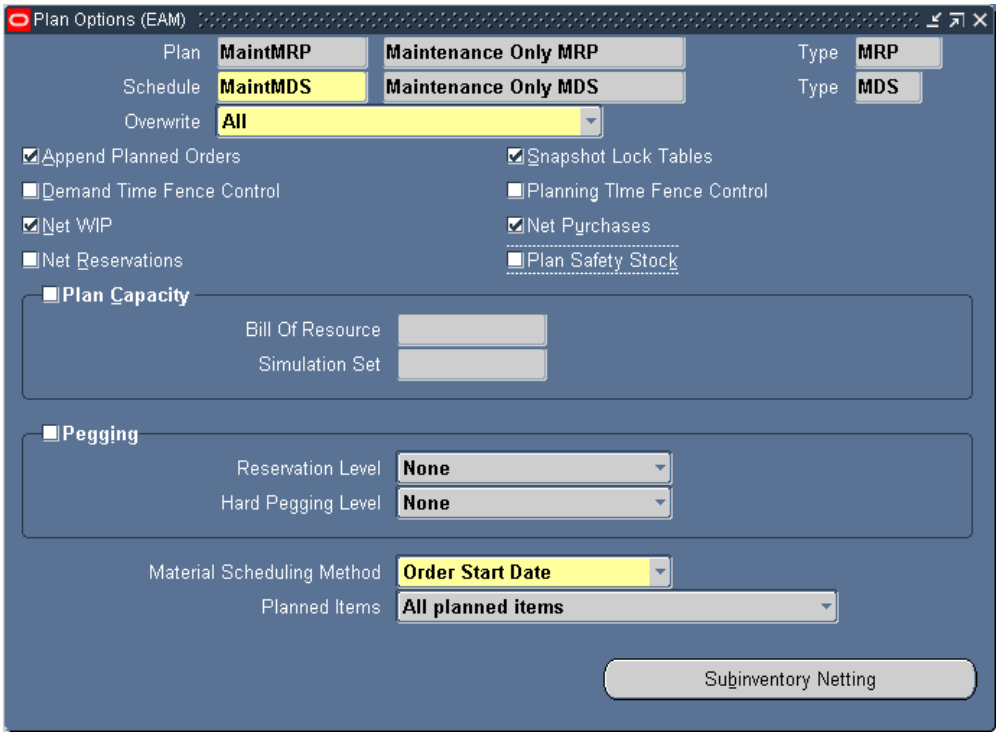
You can enter plan options for any plan. If you are launching the planning process for this plan name for the first time, the plan options you defined in the setup parameters are displayed. Otherwise, the plan options you chose, for the last launch of the planning process, are displayed.

Supply Chain Planning users can also launch a DRP and supply chain MRP and master production schedule (MPS) plan (See also: Reviewing or Adding Plan Options, *Oracle Master Demand Scheduling/MRP and Oracle Supply Chain Planning User's Guide*).

To enter plan options:

1. Navigate to the Plan Options window.

Plan Options



2. Select a material requirements Plan.

3. Select a master demand Schedule.

4. Select MRP from the Type list of values.

5. Select an Overwrite option:

   All: For a master production schedule (MPS) plan, overwrite all entries and regenerate new MPS entries based on the source master demand schedule. For an MRP, overwrite all MRP firm planned orders for MRP items. This option is displayed when you generate a plan for the first time.

   Outside planning time fence: For a master production schedule (MPS) plan, overwrite all MPS entries outside the planning time fence. For an MRP, overwrite all planned orders and firm planned orders outside the planning time fence.

   None: Do not overwrite any firm planned order for MPS or MRP plans.

6. Select the Append Planned Orders check box to append new planned orders. See: Reviewing or Adding Plan Options, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide* for information regarding situations that cause new planned orders to append.

7. Select the Net WIP check box to indicate that the planning process considers standard discrete jobs, non-standard discrete jobs, or repetitive schedules when planning items during the last plan execution.

8. Select Net Reservations to indicate that the planning process considers stock designated for a specific Work Order when planning the items during the last execution of the plan.

9. Select Net Purchases to indicate that the planning process considers approved purchase requisitions when planning the items during the last execution of the plan.

10. Select Plan Capacity to indicate whether the planning process calculates safety stock for each item during the last plan execution.

    - Specify the Bill of Resource (for MPS plans) and, Optionally a Simulation Set. See: Capacity Modifications and Simulation, *Oracle Capacity User's Guide* and Overview of Bills of Resources, *Oracle Capacity User's Guide*.

11. Select Pegging to calculate graphical pegging information. See: Overview of Graphical Pegging, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*. The planning process then traces supply information for an item to its corresponding end demand details, which you then can view in a graphical display.

    - If you are working in a project environment, set a Reservation Level and, Optionally a Hard Pegging Level. See: Reviewing or Adding Project MRP Plan Options, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*.

12. Select a Material Scheduling Method.

    Operation Start Date: Schedule material to arrive in Inventory for availability on the start date of a specific operation.

    Order Start Date: Schedule material to arrive in Inventory for availability on maintenance Work Order start date.

13. Specify which Planned Items you want included.

    All planned items: Include all planned items in the planning process. You would choose this option to be certain that all items are planned, including those you add to a Work Order or schedule, that are not components on any bill of material. Use this option to avoid missing items you want to plan. For items you do not want to plan, define them with an MRP planning method of Not Planned when defining an item in Inventory.

    Demand schedule items only

    Supply schedule items only

Demand and supply schedule items

14. Save your work.

Related Topics

Launching the Planning Process, *Oracle Enterprise Asset Management User's Guide*

Viewing Suggested Demand, *Oracle Enterprise Asset Management User's Guide*

Reviewing or Adding Supply Chain Plan Options, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*

Quality Integration Setup

A maintenance work order goes through various steps in its lifecycle (See: eAM Work Order Statuses, *Oracle Enterprise Asset Management User's Guide*). One of the steps in the lifecycle is Completion. When completing a maintenance work order, if the Asset Number has associated, mandatory quality collection plans, you need to enter quality results for the work order. A list of quality collection plans associated with the completion transaction appears during the completion process.

While creating a collection plan, you have the option of adding collection triggers to the plan. Triggers are restrictions that you define for a collection plan. For example, work orders for assets that belong to the TRUCK Asset Group require the entry of quality results for the collection plan. Data collection is initiated if all collection trigger conditions are satisfied.

Quality Setup tasks for Enterprise Asset Management include the following:

- Creating Collection Elements, page 3-157
- Creating eAM Quality Collection Plans, page 3-161
- Creating eAM Quality Collection Plans for a Supplier, page 3-165

Creating Collection Elements

Collection elements are the basic building blocks of collection plans, the data structures that you use to collect Quality results. Before you can collect quality data, you must first create a collection plan. Begin by creating collection elements, which define the characteristics of the product or process that you want to monitor, record, and analyze. See: Overview of Collection Elements, *Oracle Quality User's Guide*.

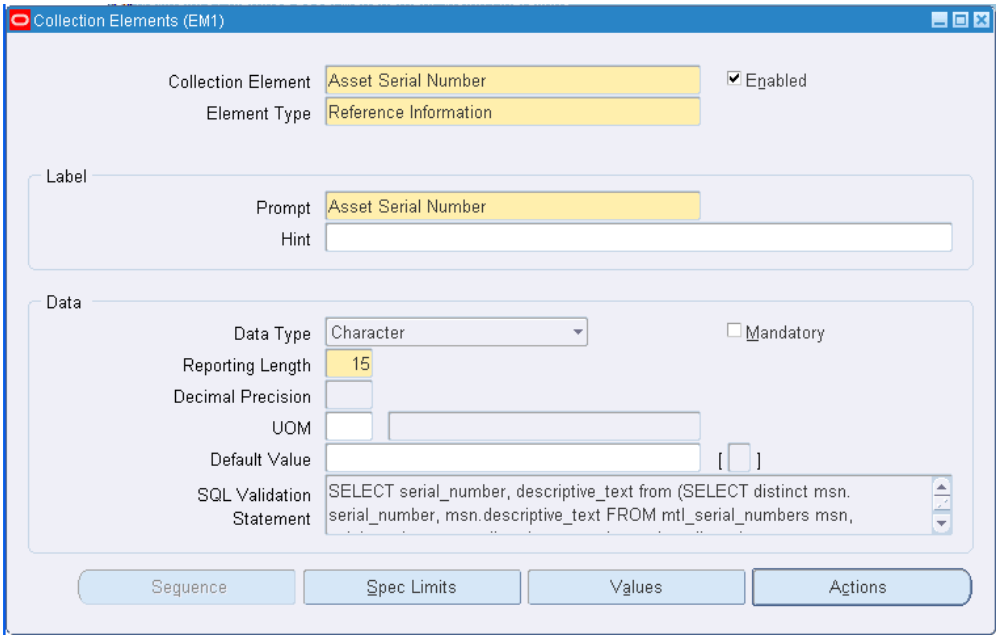
When you define collection elements, you are creating data fields that you can use in collection plans to collect quality results. After you create a collection element, it is available as a selection on a list of values that you can choose from when you set up collection plans. You can create an unlimited number of user-defined collection

elements, or you can use any of Quality's predefined collection elements (See: Predefined Collection Elements, *Oracle Quality User's Guide*) in your collection plans; for example, Asset Num, Asset Serial Number (Asset Serial Number was known as Asset Number in previous releases), Asset Group, Activity, and Work Order. You can also create collection elements by copying them from one collection plan to another.

To define collection elements:

1. Navigate to the Collection Elements window.

Collection Elements



Note: The steps listed below describe how to define Collection Elements one-at-a-time in the Collection Elements window. You can also define several collection elements simultaneously using the Collection Elements Summary window. See: Combination Blocks, *Oracle Applications User's Guide*.

Note: The following Collection Elements are included with Oracle Enterprise Asset Management; you do not need to define them: Asset Group, Asset Num, Asset Serial Number (the asset's Inventory Serial Number), Activity, Maintenance Work Order, Maintenance Operation Sequence.

2. Select the Collection Element name.

The collection element can contain alphanumeric characters, spaces, underscores, and single quotation marks. You cannot use words that are reserved for column names, such as NAME, OCCURRENCE, and ORGANIZATION_ID. See: Reserved Words, *Oracle Quality User's Guide*.

3. Select the Enabled checkbox to enable the collection element. You can add enabled collection elements to collection plans.

4. Select its collection Element Type. See: Collection Element Types, *Oracle Quality User's Guide*.

5. Enter text for the data entry Prompt.

   The prompt is the label for the collection element field displayed in the Results region of the Enter Quality Results window. Prompts also become the column headings on reports and online inquiries. The default prompt is the name of the collection element, but you can overwrite it.

6. Optionally enter a Hint.

   Hints are additional text that appears in the message line, as you enter quality results, to guide you during data entry. See: Message Line, *Oracle Applications User's Guide*.

7. Select the collection element's Data Type.

   You can select any data type, however, you cannot change it after you define the collection element. The available data types are Character, Number, Date, Comment, and Sequence.

   > **Important:** Oracle eAM Self-Service Applications do not support the use of sequence data type collection elements.

8. Optionally select the Mandatory check box to indicate that a value must always be entered for this collection element, when entering quality results. A mandatory collection element can be redefined as non-mandatory when added to a collection plan.

9. Enter the Reporting Length.

   The reporting length specifies how much space is allocated for this collection element's quality results values on reports, inquiries, and in the Enter Quality Results window.

   > **Note:** The reporting length does not determine the amount of space used to store quality results values in the quality data repository. Results values can be up to 150 characters in length.

10. If the Data Type is Number, enter the Decimal Precision.

    If you define specification limits for this collection element, entering the decimal precision (refers to the number of places after the decimal point) here controls the decimal precision of the specification limit values that you can define.

11. Optionally select a UOM. See: Overview of Units of Measure, *Oracle Inventory User's Guide*. Units of measure can be entered for any collection element, regardless of data type.

12. Optionally enter a Default Value for the collection element.

    When you set a default value for the collection element (generally, the most commonly used value for the collection element), it is automatically entered when you enter quality results. You can overwrite this value. See: Default Value Assignment Rules, *Oracle Quality User's Guide*.

13. Optionally enter the SQL Validation Statement.

    This statement is used for validation when you enter quality data. You can base a collection element's data validation on any table in the Oracle database. To do this, you can define a SQL validation statement that Quality uses for validation when you collect quality data. This SQL statement must be a SELECT statement in which you select two columns. For example, if you have entered machine numbers in the database table, you can cross-validate machine numbers entered as you collect quality results against the numbers. See: *SQL*Plus User's Guide and Reference*.

    For example, to validate machine numbers from a table called 'machine_numbers' stored in the database, enter the following SQL validation statement:

```
SELECT machine_number, machine_description

FROM machine_numbers

WHERE NVL(disable_date, SYSDATE+1) > SYSDATE

AND organization_id=:parameter.org_id

ORDER BY custom_machine_number
```

> **Note:** To constrain the SQL Statement to the current organization, you can use the variable, ':parameter.org_id' for the current organization id. To constrain the SQL Statement to the current user's id, you can use the variable, ':parameter.user_id' for the current user's id.

    If you define both a SQL validation statement and a list of collection element values, the list of values is used for validation; the SQL validation statement is ignored.

Related Topics

Overview of Collection Elements, *Oracle Quality User's Guide*

Collection Element Types, *Oracle Quality User's Guide*

Predefined Collection Elements, *Oracle Quality User's Guide*

Collection Element Values, *Oracle Quality User's Guide*

Defining Collection Element Actions, *Oracle Quality User's Guide*

Defining Collection Element Alert Actions, *Oracle Quality User's Guide*

Viewing Collection Elements, *Oracle Quality User's Guide*

Creating eAM Quality Collection Plans

You create collection plans to identify the data that you want to collect, and what actions you want to take based on the quality results that you collect. You can use collection plans to model your test or inspection plans, and you can create an unlimited number of plans to support your enterprise-wide quality data collection and analysis needs. Collection plans are invoked manually for direct results entry, or automatically as you complete a Work Order.

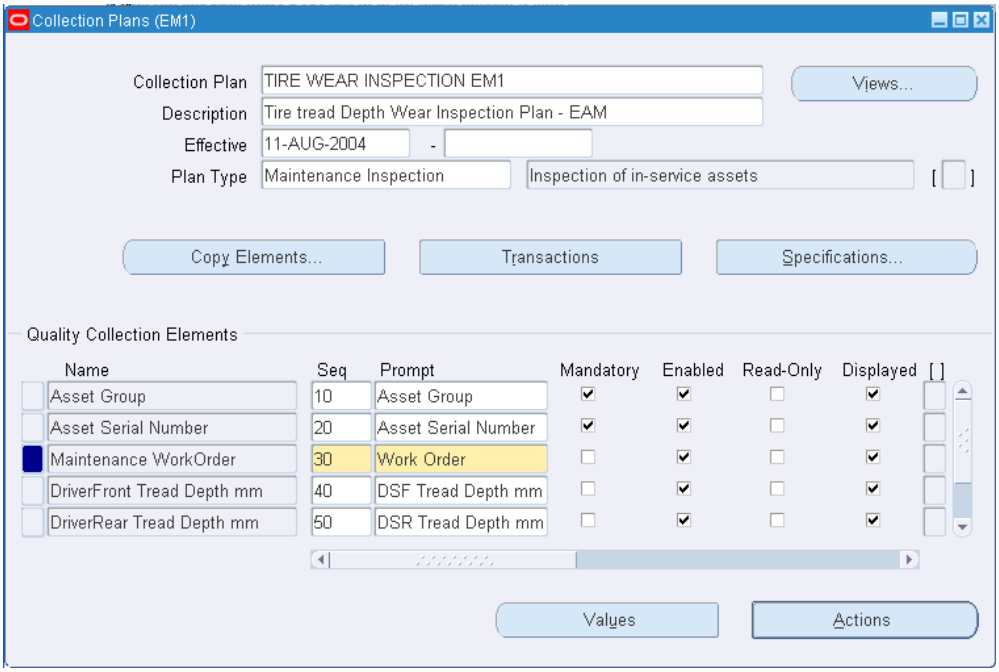
To collect quality data, you must set up a data collection structure called a collection plan. Collection plans are composed of collection elements, their values and specifications, and any actions that you want to initiate in response to quality results. There are some considerations that you must make before you set up collection plans. You first must create collection element types, then the individual collection elements that comprise the plan.

You can attach illustrative or explanatory files to collection plans, in the form of text, images, word processing documents, spreadsheets, or video. Attachments are used to document instructions and corrective action procedures. They are viewed by operations personnel during quality data collection. See: Attachments for Collection Plans, Specifications, and Result Lines, *Oracle Quality User's Guide* and Viewing Attachments Associated with Quality Results, *Oracle Quality User's Guide*.

To review a collection plan:

1. Navigate to the Collection Plans window.

Collection Plans

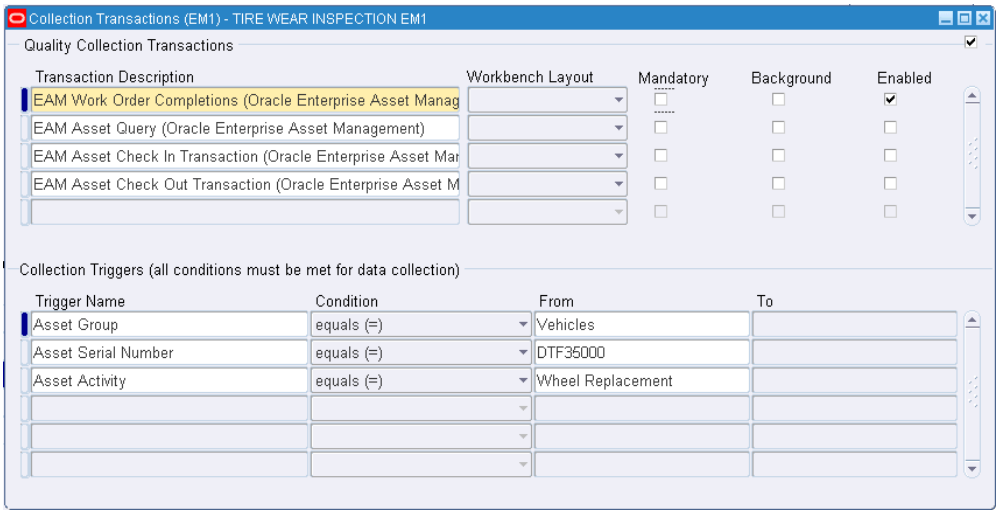


Note: To assist you as you create collection plans, you can select the Summary/Detail option from the View Menu, and run a query to view existing collection plans in summary format. See: Combination Blocks, *Oracle Applications User's Guide*.

2. Select a valid Collection Plan. To create a new collection plan, See: Creating Collection Plans, *Oracle Quality User's Guide*.

3. Choose Transactions. You can create collection plans that are specifically used to collect quality data during transactions performed in other applications (See: Collection Plans for Transactions, *Oracle Quality User's Guide*).

Collection Transactions



4. Select EAM Work Order Completion or Asset Query from the Transaction Description list of values.

   - EAM Asset Query: Enables quality results collection for an asset, independent from any transaction on the asset.

   - EAM Operation Completions: Enables quality results collection for a Work Order's operation pertaining to operation completion or during operation completion (See: Operation Completion, *Oracle Enterprise Asset Management User's Guide*).

   - EAM Work Order Completions: Enables quality results collection for a Work Order pertaining to Work Order completion or during Work Order completion (See: Work Order Completion, *Oracle Enterprise Asset Management User's Guide*).

   - EAM Asset Check In Transaction: Enables you to record quality information, describing the condition of the asset, during a Check In procedure (See: Asset Tracking, *Oracle Enterprise Asset Management User's Guide*).

   - EAM Asset Check Out Transaction: Enables you to record quality information, describing the condition of the asset, during a Check Out procedure (See: Asset Tracking, *Oracle Enterprise Asset Management User's Guide*.

5. Optionally indicate whether this collection plan requires the entry of quality results at Work Order completion. If you select the Mandatory check box, you must save at least one quality data record before saving the Work Order completion transaction.

Note: eAM supports Quality collection during operation completion transactions, as well as Standalone Asset Query. Valid Transaction Description values are EAM Operation Completions and EAM Asset Query, respectively.

6. Optionally select the Background check box.

   If you select this check box, you can collect quality results for context reference elements (See: Reference Information Collection Element Type, *Oracle Quality User's Guide*).

   Note: The following Collection Elements are included with Oracle Enterprise Asset Management; you do not need to define them: Asset Group, Asset Number, Activity, Maintenance Work Order, Maintenance Operation Sequence.

   Without invoking the Enter Quality Results window, background data collection is initiated when you save the work order completion transaction.

   The system then finds, selects, and initiates the appropriate collection plan or plans.

   If collection triggers are defined for background data collection, data collection is initiated if all collection trigger conditions are satisfied (you define triggers for transactional data collection in the Collection Transactions window).

   Several collection plans can collect data in the background during the same transaction.

   When this is the case, the results for context elements on all of these collection plans are automatically saved when the parent transaction is saved.

7. Select the Enabled check box.

8. Optionally select a Trigger Name.

   Valid trigger values are Activity, Asset Group, Asset Number, Asset Serial Number, and Maintenance Work Order. Triggers are restrictions that you define for this collection plan. In the above example, Work Orders for the JP1 asset require the entry of quality results for the collection plan.

   Note: If a trigger is not defined, then all work orders will require quality collection results; the collection plan is applicable to all assets.

9. If you selected a Trigger Name, select a Condition.

10. Select a From value.

For example, if you selected Asset Group as the Trigger Name, Asset Groups are available. Optionally you can enter a To value to create a range condition. For example, if the trigger is Work Order, you might enter a range of Work Order numbers.

11. Save your work.

Related Topics

Adding Collection Plan Attachments, *Oracle Enterprise Asset Management User's Guide*

Triggering a Work Request, *Oracle Enterprise Asset Management User's Guide*

Collection Plans for Transactions, *Oracle Quality User's Guide*

Overview of Collection Plans, *Oracle Quality User's Guide*

Overview of Quality Self-Service, *Oracle Quality User's Guide*

Collection Plan Types, *Oracle Quality User's Guide*

Collection Plan and Import Results Database Views, *Oracle Quality User's Guide*

Collection Elements in Collection Plans, *Oracle Quality User's Guide*

Defining Collection Plan Element Values, *Oracle Quality User's Guide*

Associating Specification Types with Collection Plans, *Oracle Quality User's Guide*

Defining Collection Plan Element Actions, *Oracle Quality User's Guide*

Updating and Deleting Collection Plans, *Oracle Quality User's Guide*

Viewing Collection Plans, *Oracle Quality User's Guide*

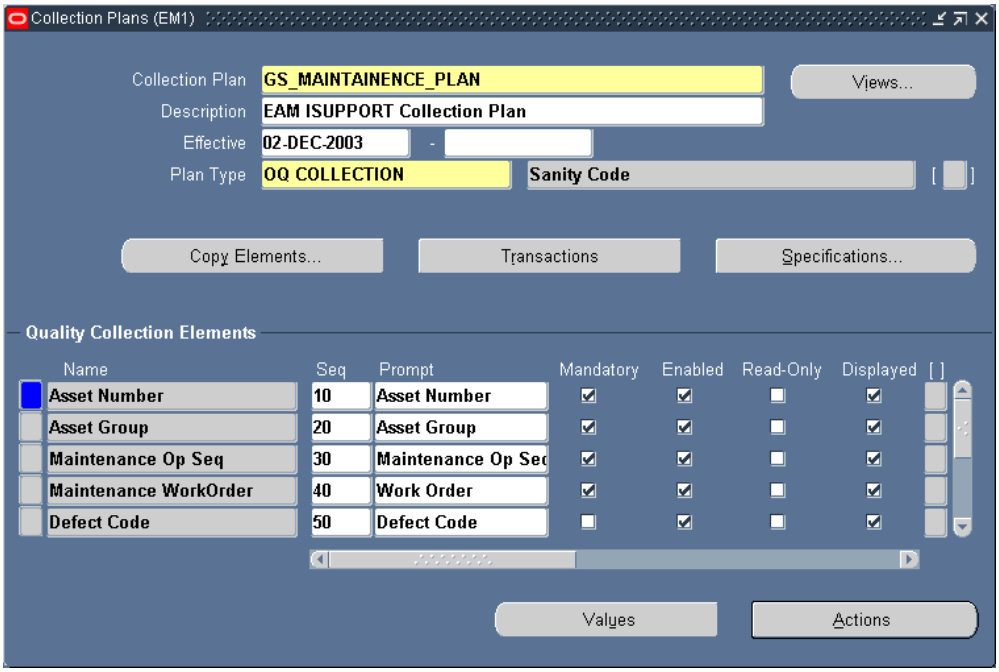
Creating eAM Quality Collection Plans for a Supplier

eAM enables you to create Quality collection plans that are optionally mandatory for a supplier to enter crucial Quality data, via iSupplier Portal, before the supplier can complete an Outside Service Processing operation.

To create and eAM quality collection plan for a supplier:

1. Navigate to the Collection Plans window.

Collection Plans

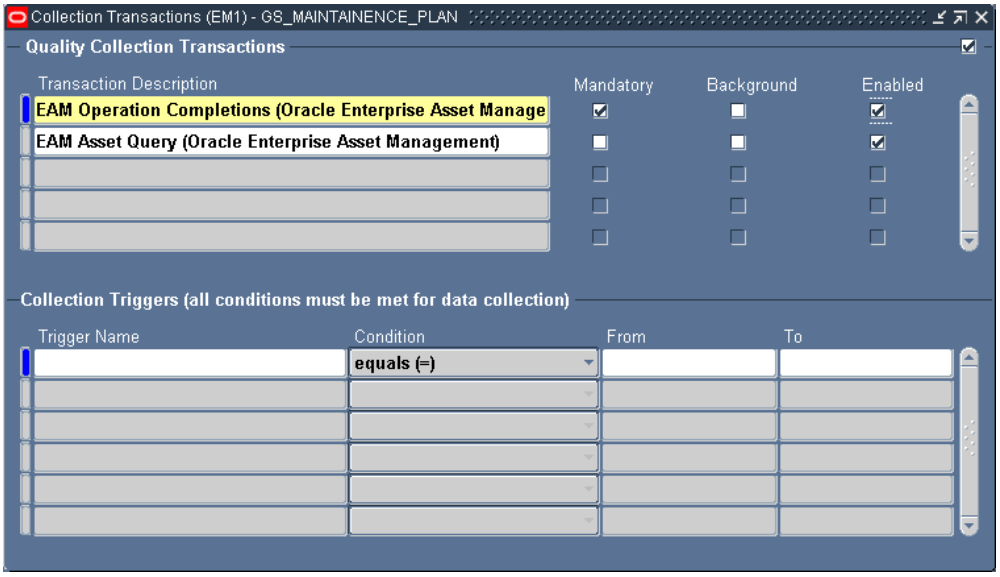


Note: To assist you as you create collection plans, you can select the Summary/Detail option from the View Menu, and run a query to view existing collection plans in summary format. See: Combination Blocks, *Oracle Applications User's Guide*.

2. Select a valid Collection Plan. To create a new collection plan, See: Creating Collection Plans, *Oracle Quality User's Guide*.

3. Choose Transactions. You can create collection plans that are specifically used to collect quality data during transactions performed in other applications (See: Collection Plans for Transactions, *Oracle Quality User's Guide*).

Collection Transactions



4. Select EAM Operation Completions from the Transaction Description list of values.

5. Optionally select the Mandatory check box to indicate that this collection plan requires the entry of quality results at Operation completion. If this check box is selected, the supplier must enter quality data before completing the Outside Services operation.

6. Save your work.

Related Topics

Creating eAM Quality Collection Plans, page 3-161

Adding Collection Plan Attachments, *Oracle Enterprise Asset Management User's Guide*

Triggering a Work Request, *Oracle Enterprise Asset Management User's Guide*

Overview of Collection Plans, *Oracle Quality User's Guide*

Overview of Quality Self-Service, *Oracle Quality User's Guide*

Collection Plan Types, *Oracle Quality User's Guide*

Collection Plan and Import Results Database Views, *Oracle Quality User's Guide*

Collection Elements in Collection Plans, *Oracle Quality User's Guide*

Defining Collection Plan Element Values, *Oracle Quality User's Guide*

Associating Specification Types with Collection Plans, *Oracle Quality User's Guide*

Defining Collection Plan Element Actions, *Oracle Quality User's Guide*

Updating and Deleting Collection Plans, *Oracle Quality User's Guide*

Viewing Collection Plans, *Oracle Quality User's Guide*

Outside Processing Integration Setup

Contractor services are defined as work services provided by an organization or person who is not an employee of your company. Contractors are paid for their work based on an agreed upon contract or agreement. For example, a contractor service is a painting service. It is also important to associate the purchasing transactions, such as the requisition and purchase order, to the Work Order. In order for this to execute, you must complete the appropriate steps in Purchasing and Enterprise Asset Management.

Outside Service Processing provides the functionality to create items that are contractor services, such as landscaping, include these items on a Work Order, and execute the related purchasing transactions as the Work Order is released. By creating a contract service as an Outside Service Processing item, the purchasing requisition is created when the Work Order is Released. The additional purchasing transaction, including the creation of the purchase order, the approval, and invoicing process, are then managed by Purchasing. This optional process ensures that the actual charges are applied to the Work Order. The supplier accesses the purchase order and maintenance Work Order via iSupplier Portal. Within iSupplier Portal, the supplier can view all open and closed outside service operations and their associated maintenance Work Orders. The supplier can enter mandatory collection plan results, before completing the outside operation (See: Oracle iSupplier Portal, *Oracle iSupplier Portal User's Guide*).

The other option is to enable Standard Rate. This applies predetermined standard rates, for contractor services, to the Work Order.

Outside Processing Setup tasks for Enterprise Asset Management include the following:

- Setting Up Outside Service Processing, page 3-168
- Setting Up Direct Items, page 3-176

Setting Up Outside Service Processing

Purchasing recognizes items, while eAM recognizes resources. As a result, you must link the contractor service item to a resource, for the purchase order to link to the Work Order. This is associated via the Resources window. Additionally, the resource must associate with a department. The department must specify the location where the services are to deliver. This must be a valid location for the organization.

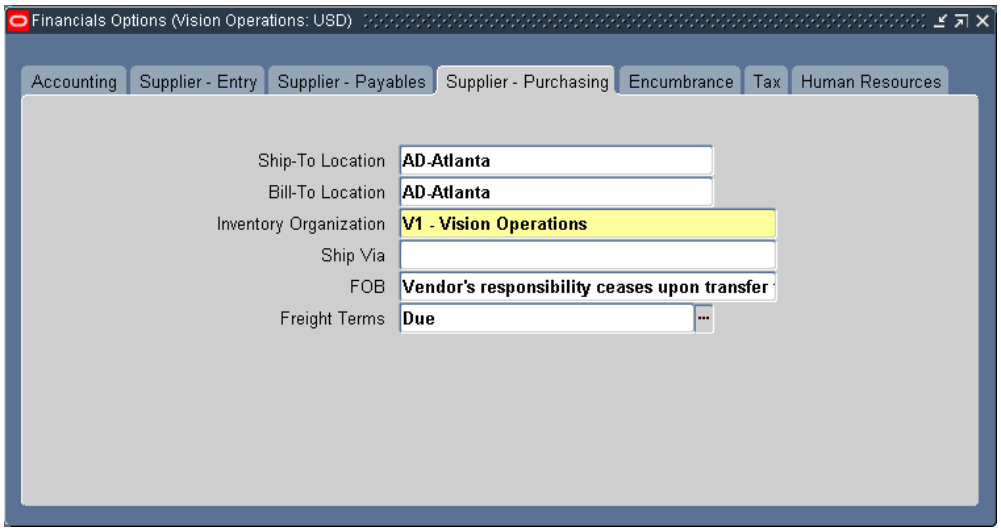
For each contractor service resource, you can determine whether the rate charged to the Work Order is a standard rate or the actual amount, based on the purchase order price. This is set up within the Resources window, and may vary for each resource.

To set up purchasing information:

1. Navigate to the Financials Options window.

2. Select the Supplier-Purchasing tab.

Financials Options



3. The options you define in this region, except for Inventory organization, are used as default values for the Purchasing region of the Suppliers window (See: Suppliers, *Oracle Payables User's Guide*). The supplier values default to new supplier sites for the supplier, which default to new purchasing documents for the supplier site.

4. Select Ship-To and Bill-To Locations. These are the names of the ship-to/bill-to location for the system default values. If the name you want is not available, use the Location window to select a new location (See: Setting Up Locations, *Using Oracle HRMS - The Fundamentals*).

5. Select an Inventory Organization. You can associate each of your purchasing operating units with one inventory item master organization. Your eAM Organization (See: Enabling Organizations for Enterprise Asset Management, page 3-7) should point to this item master. When you associate your purchasing operating unit with an inventory organization, items you define in this organization become available in Purchasing. You can choose an inventory organization that uses the same set of books as your Purchasing operating unit. Do not change the inventory organization after you have already assigned on to Purchasing.

6. Optionally select a Ship Via code. This is the freight carrier you use with suppliers. If the type of freight carrier you want is not available, use the Freight Carriers window to define a new shipping method. The value you enter here is the value in

the Description field of the Freight Carriers window in Purchasing.

7. Select a FOB. If the type of FOB you want is not available, use the Oracle Purchasing Lookups window to define a new FOB.

8. Select a Freight Terms code. The fright terms for a supplier identify whether you or your supplier pays for freight charges on goods you receive. You can define new freight terms in the Oracle Purchasing Lookups window.

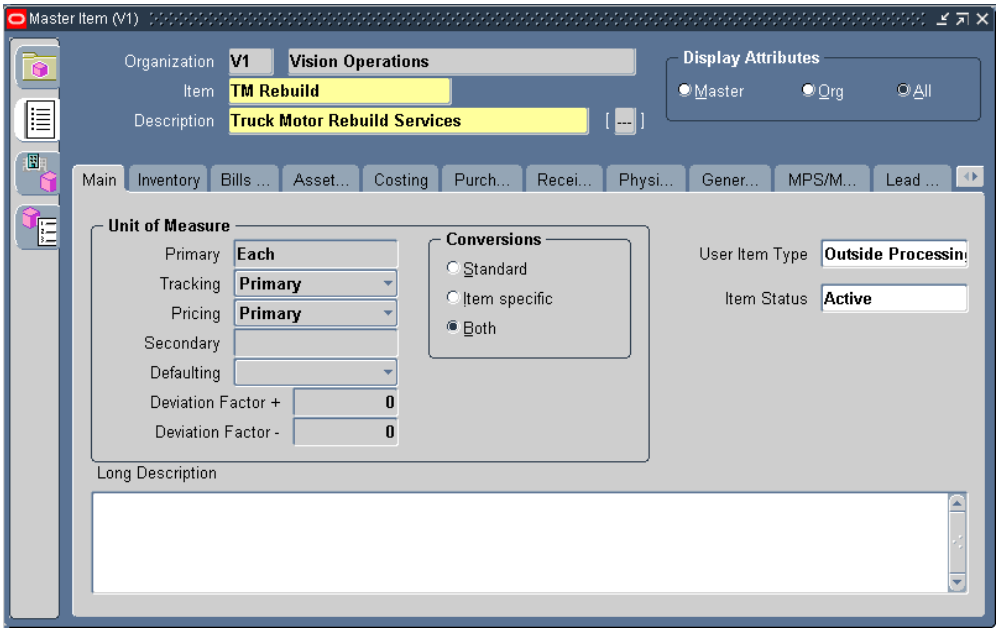
9. Save your work.

To set up outside services as items:

Create an item for each outside service, such as landscaping services.

1. Navigate to the Master Item window.

Master Item



2. Enter the item Name for the contractor service. For example, Landscape Service.

3. Select Copy From within the Tools menu.

4. Select @Outside Processing Item from the Template list of values.

5. Choose Apply.

6. Choose Done.

7. Within the Purchasing tab, ensure that the Outside Processing Item check box is selected.

8. Select the Resource Unit Type.

   Resource: Costs are based on the resource standard rate.

9. Select a Default Buyer.

10. Enter a List Price for this contractor service.

11. Select Each for the Unit of Issue. This is the unit of measure you use to issue the item from inventory.

12. Within the Receiving tab, select Direct from the Receipt Routing list of values.

13. Save your work.

14. Select the Organization Assignment tab on the left side of the window, then assign this item to the eAM organization.

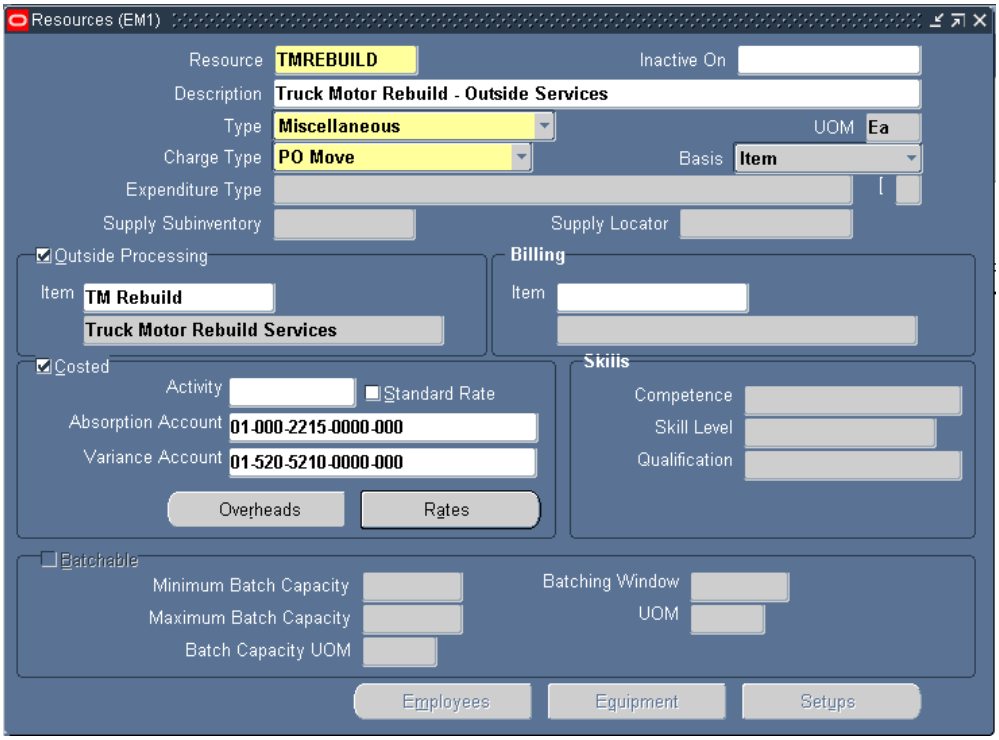
15. Save your work.

To link outside service items to resources:

You must define outside resources and link them to outside items in order to automatically generate purchase requisitions for outside services. When you assign outside resources to a department, you also specify a usage rate or amount that determines the quantity you are requisitioning and/or charging to Work Orders.

1. Navigate to the Resources window.

Resources



2. Select a unit of measure (UOM). This value is the default unit of measure for all transactions, for the current resource.

3. Verify that the Enabled check box is enabled for outside processing.

4. Enter the outside services Item that was entered in Inventory and associate it with the eAM resource.

5. Select the Costed check box to include this outside resource in your Work Order cost. When you define a resource with a charge type of PO Receipt, Cost Management automatically defaults Outside Processing as the cost element.

6. Enter an Absorption Account. You must define an absorption account for each outside resource. The absorption account defaults from the organization's receiving account, which is debited when an outside processing item is received and is subsequently credited when the item is delivered to eAM. The debit goes to the outside processing account associated with the accounting class of the Work Order when the item is delivered to eAM.

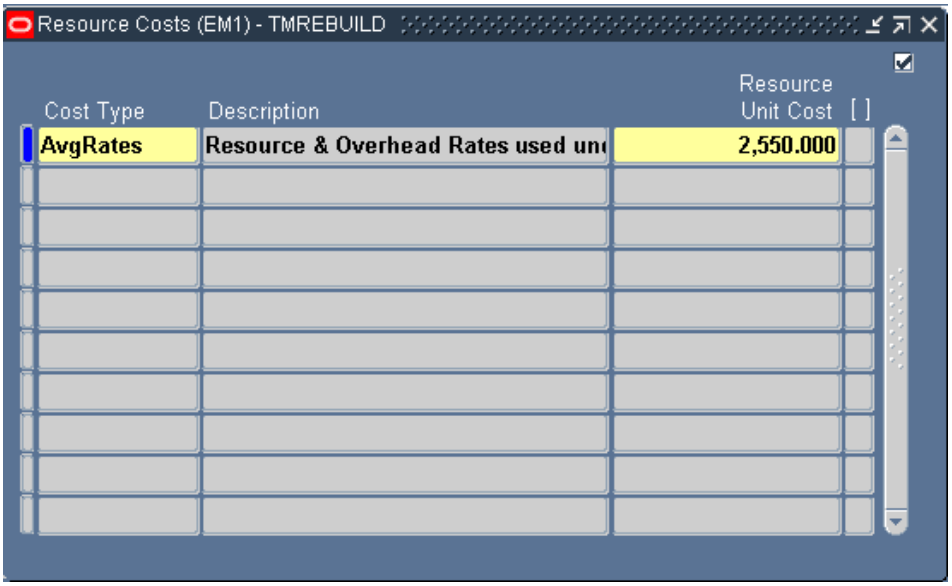
7. Optionally enter a Variance Account. You must define a purchase price variance account for each outside resource you define. This account defaults from the organization's purchase price variance account.

If you select the Standard Rate check box while performing the next step, the Variance Account is mandatory.

8. Optionally select the Standard Rate check box to charge the standard, non-purchase order amount to the Work Order. Clear the Standard Rate check box to charge the Work Order with the actual purchase order amount.

    1. If you selected the Standard Rate check box, choose Rates to enter your standard rates.

Resource Costs



    2. Enter a Cost Type of Value. This is dependent on the costing method defined for your eAM organization.

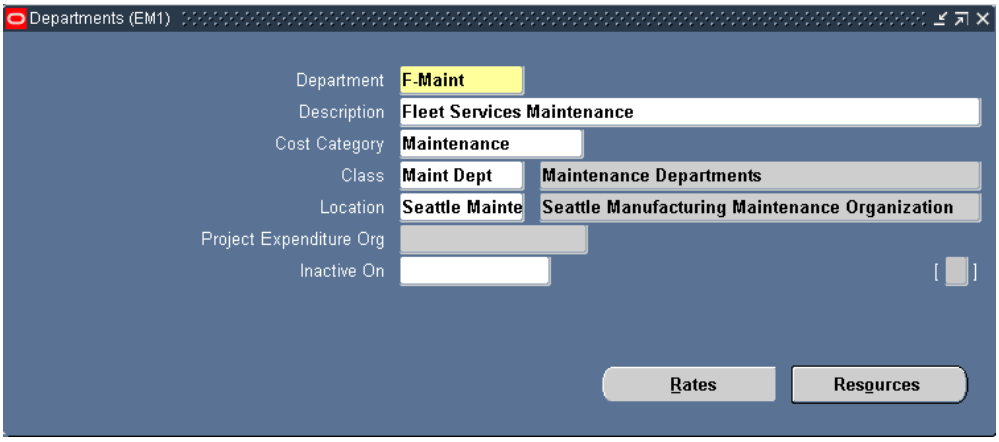
    3. Enter a Resource Unit Cost.

    4. Save your work and close the window.

To link the outside service resource to a department:

1. Navigate to the Departments window.

Departments



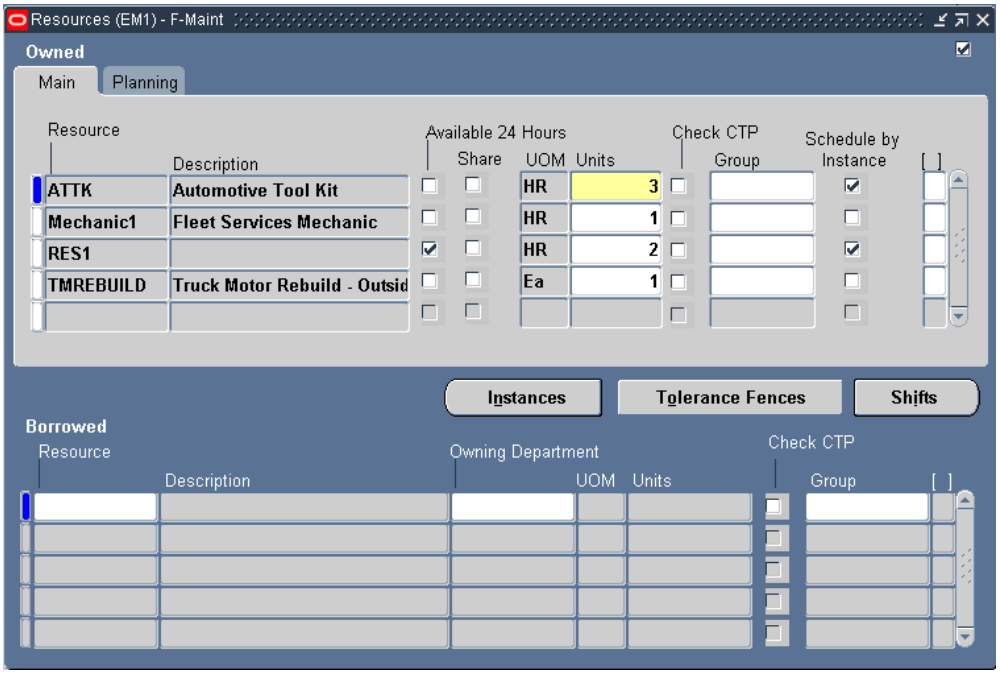
2. Select the Department to associate with the outside service resource.

3. Select a Cost Category for this department. If this is left blank, then the costs related to this department are charged, based on the eAM parameter settings (See: Defining eAM Parameters, page 3-11).

4. Select a valid Location. This is mandatory.

5. Choose Resources.

Resources



6. Select the outside service Resource.

7. Optionally indicate whether this resource is Available 24 Hours a day. You cannot assign shifts to a resource that is available 24 hours a day.

8. Optionally indicate whether this department can share this resource and capacity with other departments.

9. Enter the number of capacity Units (resource units) available for this department.

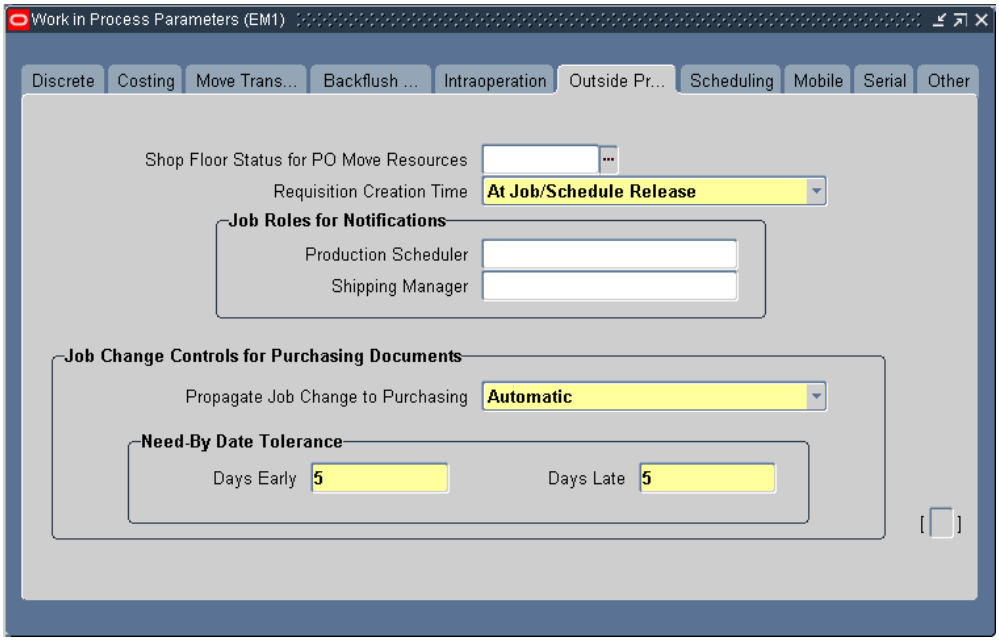
10. Save your work.

    For information on all remaining fields, See: Defining a Resource, *Oracle Bills of Material User's Guide*.

To define WIP parameters:

1. Navigate to the Work in Process Parameters window.

Work in Process Parameters



2. Select the Outside Processing tab.

3. Select a value for Requisition Creation Time.

   At Job/Schedule Release - This enables automatic creation of a purchase order requisition, for contractor services, when the Work Order is Released.

   Manual - Choose Manual to manually create requisitions. With this selection, requisitions are not automatically created.

   At Operation - Oracle recommends that you do not select At Operation. Within eAM, At Operation is equivalent to selecting Manual.

4. Save your work.

Related Topics

Supplier - Purchasing Financials Options, *Oracle Payables User's Guide*

Setting Up Direct Items

You can add Direct Items to a maintenance Bill of Material (BOM) (See: Setting Up Maintenance Bills of Material, page 3-93). When the Maintenance BOM is associated with a work order, you can add more Direct Items to its material requirements list before it is released (See: Defining Inventory Material Requirements, *Oracle Enterprise*

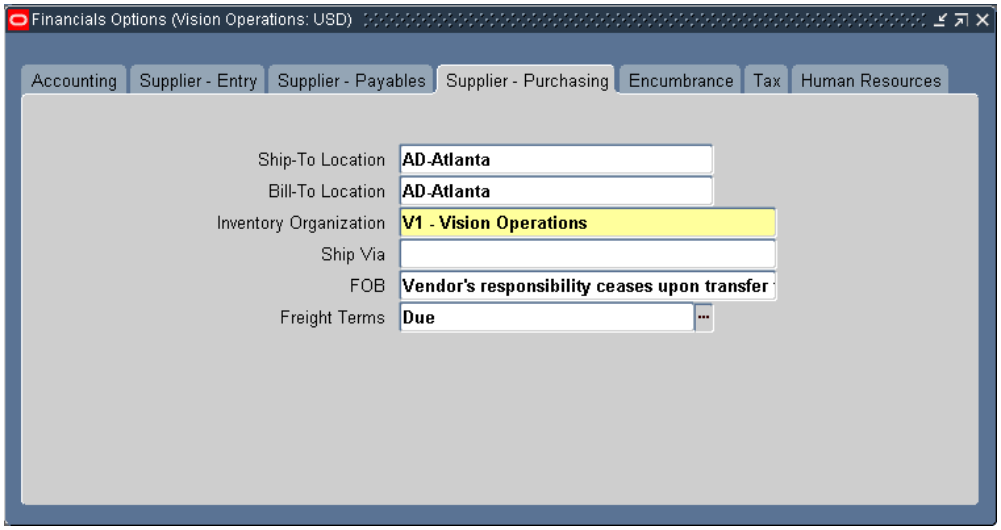
Asset Management User's Guide). The system automatically creates Requisition/Purchase Orders (if the Auto Request Material check box is selected within the Maintenance BOM), for the associated Direct Items, when the work order is released for execution. The supplier can view the maintenance work order detail information within Work Order Details page, via iSupplier Portal.

To set up purchasing information:

1. Navigate to the Financials Options window.

2. Select the Supplier-Purchasing tab.

Financials Options



The options you define in this region, except for Inventory organization, are used as default values for the Purchasing region of the Suppliers window (See: Suppliers, *Oracle Payables User's Guide*). The supplier values default to new supplier sites for the supplier, which default to new purchasing documents for the supplier site.

3. Select Ship-To and Bill-To Locations. These are the names of the ship-to/bill-to location for the system default values. If the name you want is not available, use the Location window to select a new location (See: Setting Up Locations, *Using Oracle HRMS - The Fundamentals*).

4. Select an Inventory Organization. You can associate each of your purchasing operating units with one inventory item master organization. Your eAM Organization (See: Enabling Organizations for Enterprise Asset Management, page 3-7) should point to this item master. When you associate your purchasing operating unit with an inventory organization, items you define in this organization become available in Purchasing. You can choose an inventory organization that uses the same set of books as your Purchasing operating unit. Do not change the

inventory organization after you have already assigned on to Purchasing.

5. Optionally select a Ship Via code. This is the freight carrier you use with suppliers. If the type of freight carrier you want is not available, use the Freight Carriers window to define a new shipping method. The value you enter here is the value in the Description field of the Freight Carriers window in Purchasing.

6. Select a FOB. If the type of FOB you want is not available, use the Oracle Purchasing Lookups window to define a new FOB.

7. Select a Freight Terms code. The fright terms for a supplier identify whether you or your supplier pays for freight charges on goods you receive. You can define new freight terms in the Oracle Purchasing Lookups window.

8. Save your work.

Related Topics

Non-Stock Direct Item Setup, page 3-116

Setting Up Asset Bills of Material, page 3-77

Setting Up Maintenance Bills of Material, page 3-93

Defining Rebuildable Bills of Material, page 3-114

Supplier - Purchasing Financials Options, *Oracle Payables User's Guide*

iSupplier Portal User's Guide

Cost Management Integration Setup

Costs are generated as maintenance work is executed and completed. These costs roll up through the Parent/Child hierarchies defined within Enterprise Asset Management, and can roll up to any level within an asset hierarchy. Labor, Material, and Equipment charges can further classify into several maintenance cost categories.

All work is captured and retained by Enterprise Asset Management. You can reference work that has been completed to review operations, resources, and costs. This information can help you understand the scope of work and the process by which it is completed.

This section includes the following topics:

- eAM Costing Methods and Mappings, page 3-179
- Setting Up Cost Categories, page 3-180
- Setting Up Purchase Order Category Associations for Direct Items, page 3-182

- Setting Up eAM Cost Management, page 3-183
- Setting Up Zero Cost Rebuild Item Issue, page 3-185

eAM Costing Methods and Mappings

eAM supports four perpetual costing methods: standard, average, FIFO, and LIFO. As a foundation, eAM uses the following five basic cost elements provided by Cost Management (See: Cost Elements, *Oracle Cost Management User's Guide*):

- Material
- Material Overhead
- Resource
- Resource Overhead
- Outside Processing

Asset management requires different cost classifications. eAM provides these cost classifications, while maintaining the integrity of the basic costing rules. The five cost elements above are translated into cost elements that are familiar to maintenance managers.

eAM classifies work done on maintenance Work Orders into cost categories. By default, eAM has defined three cost categories: Contract, Operations, and Maintenance.

You can define additional cost categories, if needed. Each cost category is further classified into three cost elements: Equipment, Labor, and Material.

- *Material* - Costs from material transactions.
- *Labor* - Costs from labor resource transactions.
- *Equipment* - Costs from equipment resource transactions.

Material charges are classified as Material cost elements. Resource charge of type person is classified as a Labor cost element. Resource charge of type machine is classified as Equipment cost element. All other resource types are classified by the default cost element in the eAM Parameters (See: Defining eAM Parameters, page 3-11).

For each department, a maintenance cost classification is identified to reflect the above breakdown. The cost category for the Material cost element is the cost category of the department assigned to the routing of the operation. For the Labor cost element, it is the cost category of the resource's owning department. For the Equipment cost element, it is the cost category of the asset's owning department.

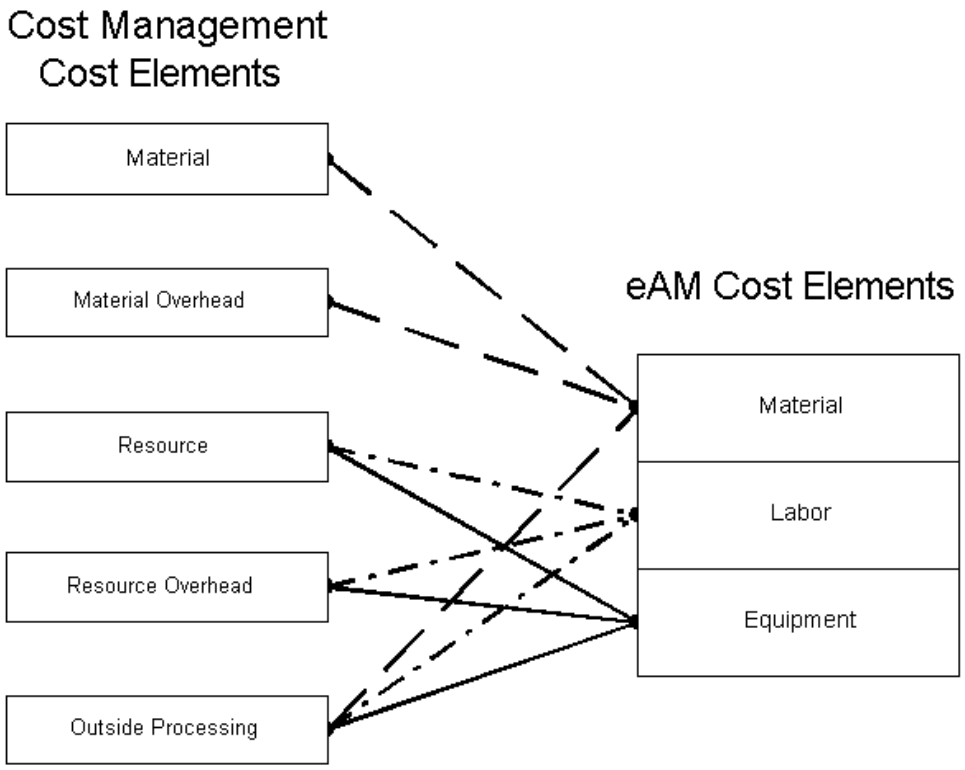
eAM Mappings

The three cost elements (Material, Labor, and Equipment) are mapped to the five basic

cost elements (Material, Material Overhead, Resource, Resource Overhead, and Outside Processing) provided by Cost Management.

The following diagram illustrates that the eAM Material cost classifications are mapped to Material, Material Overhead, and Outside Processing. Labor and Equipment cost classifications are mapped to Resource, Resource Overhead, and Outside Processing.

Cost Element Mappings



Setting Up Cost Categories

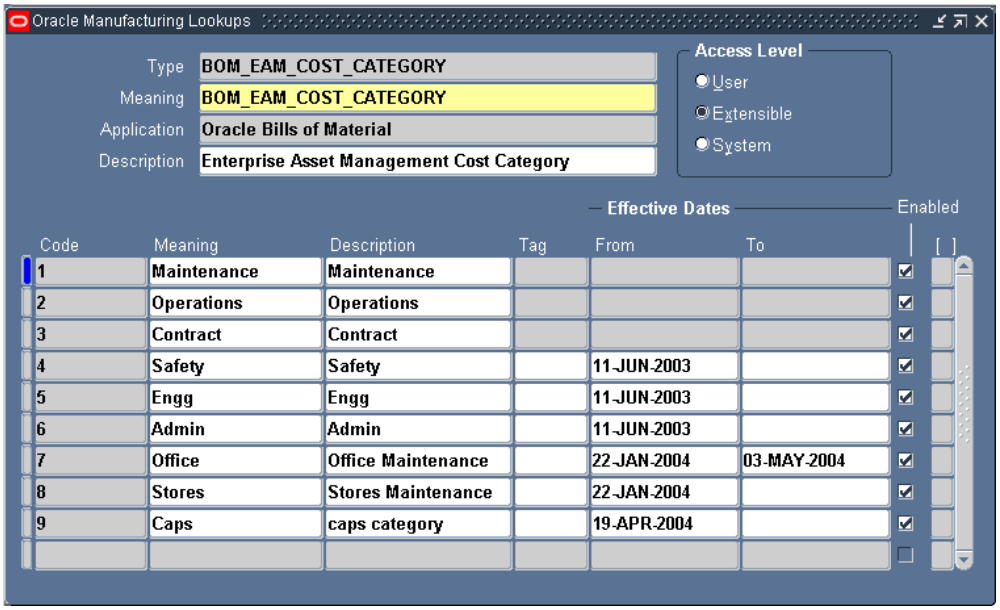
Cost Category codes are used as the default for departments that do not have a cost category defined. Department costs are then posted to the appropriate cost elements. Valid values are Maintenance, Operations, Contract, and any other values that you might have added within this extensible lookup table. See: Overview of eAM Cost Management, *Oracle Enterprise Asset Management User's Guide*.

By default, eAM has defined three cost categories: Contract, Operations, and Maintenance. However, you can define additional cost categories, if needed. After you have added the cost categories, they are available in the Cost Category list of values, within the Enterprise Asset Management Parameters window (See: Defining eAM Parameters, page 3-11).

To define additional cost categories:

1. Navigate to the Oracle Manufacturing Lookups window.

Cost Category Lookups



2. Select BOM_EAM_COST_CATEGORY from the Type list of values.

3. Enter a numeric value in the Code field. Oracle recommends that you enter values in increments of 10, enabling you to easily add codes later.

   Warning: Do not use alpha codes. Entering alpha codes causes database errors in the application.

4. Enter the Meaning of the code, for example, High.

5. Enter a Description for the code.

6. Optionally enter a Tag to categorize lookup values. This field is informational.

7. The Effective From Date defaults as the system date, but you can update this. Optionally enter a Effective To Date to indicate an expiration of the code.

8. Select the Enabled check box to enable this code for Enterprise Asset Management.

9. Save your work.

Setting Up Purchase Order Category Associations for Direct Items

You can specify whether direct items are material, labor, or equipment charges on a work order, based on the user-specified Purchasing Category on the requisition or purchasing line. Purchasing Categories are associated with a maintenance cost element and its respective valuation account. If an association is not set up, direct items are charged as material on the work order.

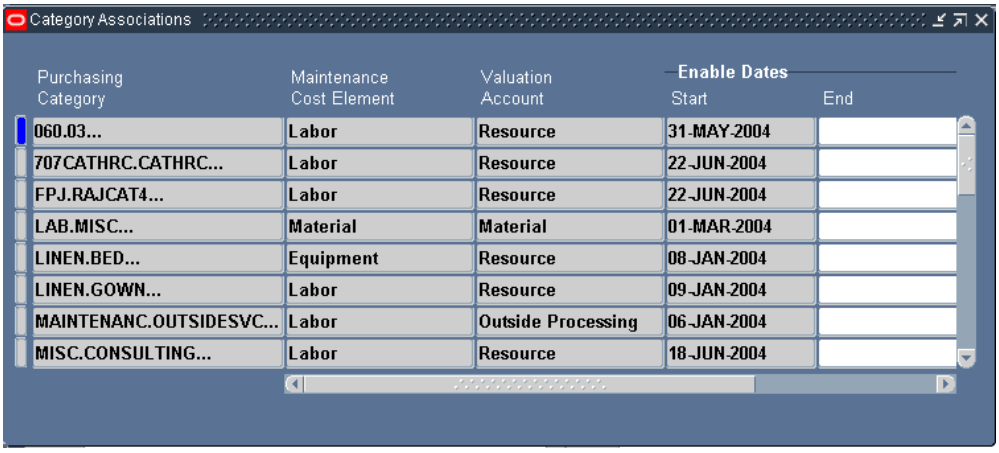
Direct Items may be Non-Stock or Description-based. Non-Stock Direct Items are defined within Oracle Inventory (See: Non-Stock Direct Item Setup, *Oracle Enterprise Asset Management User's Guide*), and the Purchasing Category for this type of Direct Item defaults from the Purchasing Category Set's Item Assignments.

For projects, you can assign direct items to a Direct Item Expenditure Type, other than the one assigned at the organization level. This is performed, based on the Direct Item Expenditure Type associated with the Purchasing Categories used on the requisition or purchasing line.

To set up associations for purchasing categories used for direct items:

1. Navigate to the Find Category Associations window.
2. Choose New.

Category Associations



3. Select a Purchasing Category. See: Defining Category Sets, *Oracle Inventory User's Guide*.
4. Select a Maintenance Cost Element.
5. Select a Valuation Account. If the Maintenance Cost Element is Material, you can choose the Material Valuation Account. If the Maintenance Cost Element is Labor or

Equipment, you can select either of the Resource or Outside Processing Valuation Accounts.

6. Select a Start Date.

7. Optionally select an End Date. A Purchasing Category may have one existing association at a time. If you want to assign a different association for a category, select an End Date.

8. Select a Direct Item Expenditure Type if your organization uses Oracle Projects. This is a required step.

9. Save your work.

Related Topics

Defining Items, *Oracle Inventory User's Guide*

Defining Categories, *Oracle Inventory User's Guide*

Defining Category Sets, *Oracle Inventory User's Guide*

Setting Up eAM Cost Management

You can reference work that has been completed to review operations, resources, and costs. This information can help you understand the scope of work and the process by which it is completed. To capture costs for all work within eAM, some key setups must be in place:

1. Define a default cost element.

2. Define a default cost category.

Follow these steps to define these key setups.

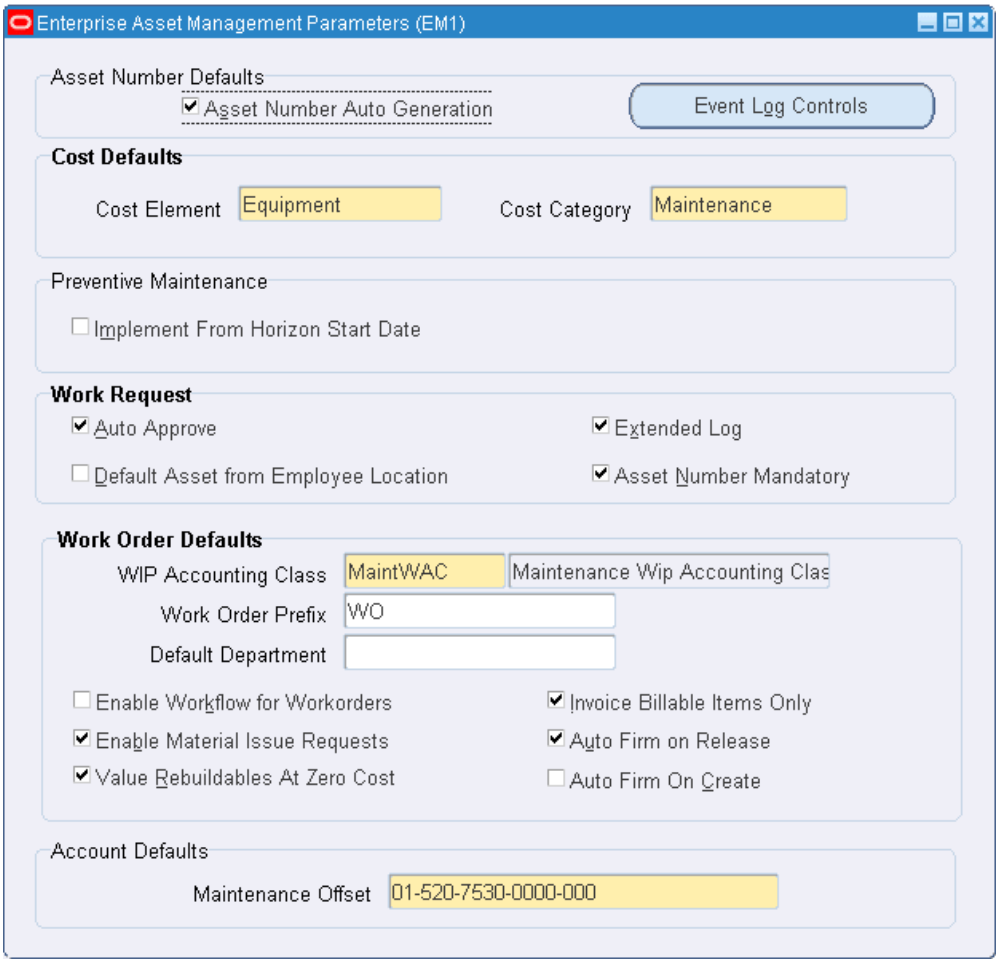
1. Define a default cost element (Material, Labor, or Equipment) when setting up the eAM Parameters. See: Defining eAM Parameters, page 3-11. This is used when no predefined mapping exists to the cost elements in eAM. For example, department overheads are not linked to a particular eAM cost element for cost analysis. Therefore, the default cost element carries the cost for analysis. Also, outside processing types of Currency, Amount, and Miscellaneous are not linked to a particular eAM cost element. When one of these types is used in outside processing, the costs are allocated to the default cost element (See: eAM Costing Methods and Mappings, page 3-179).

2. Define a default cost category when setting up the eAM Parameters. This defaulted cost category is used if there is no cost category defined for the departments.

To define a default cost element and cost category:

1. Navigate to the Enterprise Asset Management Parameters window.

Enterprise Asset Management Parameters



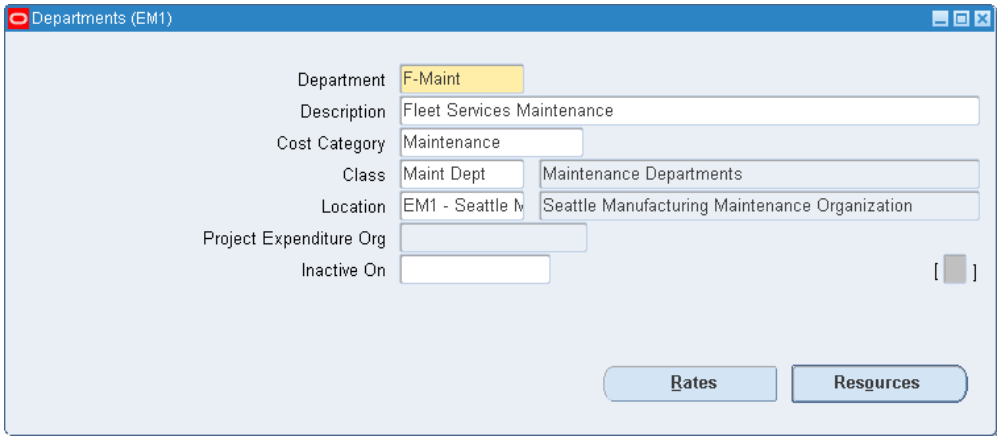
2. In the Cost Defaults region, select an eAM Cost Element to indicate how to capture cost overheads, and any miscellaneous resource costs. Valid values are Equipment, Labor, and Material.

3. Select a Cost Category to use as the default for departments that do not have a cost category defined. Department costs are then posted to the appropriate cost classification.

To define a cost category by department:

1. Navigate to the Departments window.

Departments



2. Select a Cost Category.

> **Note:** It is not required to provide a cost category for a department (crew). However, if you do not provide a cost category for a department (crew), costs for that crew are allocated to the defaulted cost category specified in the eAM parameters (See: Defining eAM Parameters, page 3-11). Each time costs for that element are charged to a Work Order, this default cost category is used for reporting and analysis.

Related Topics

Defining eAM Parameters, page 3-11

Defining Departments and Resources, page 3-17

eAM Cost Estimation, *Oracle Enterprise Asset Management User's Guide*

Viewing Cost Information, *Oracle Enterprise Asset Management User's Guide*

Transferring Invoice Variances, *Oracle Enterprise Asset Management User's Guide*

Setting Up Zero Cost Rebuild Item Issue

eAM Work Order costing supports both WIP Component Issues and the return of rebuildables from/to expense subinventories at their current or zero cost. You can issue rebuildable components from the Expense Subinventory to the maintenance Work Order at zero cost and/or return rebuildable components to the Expense Subinventory at zero cost.

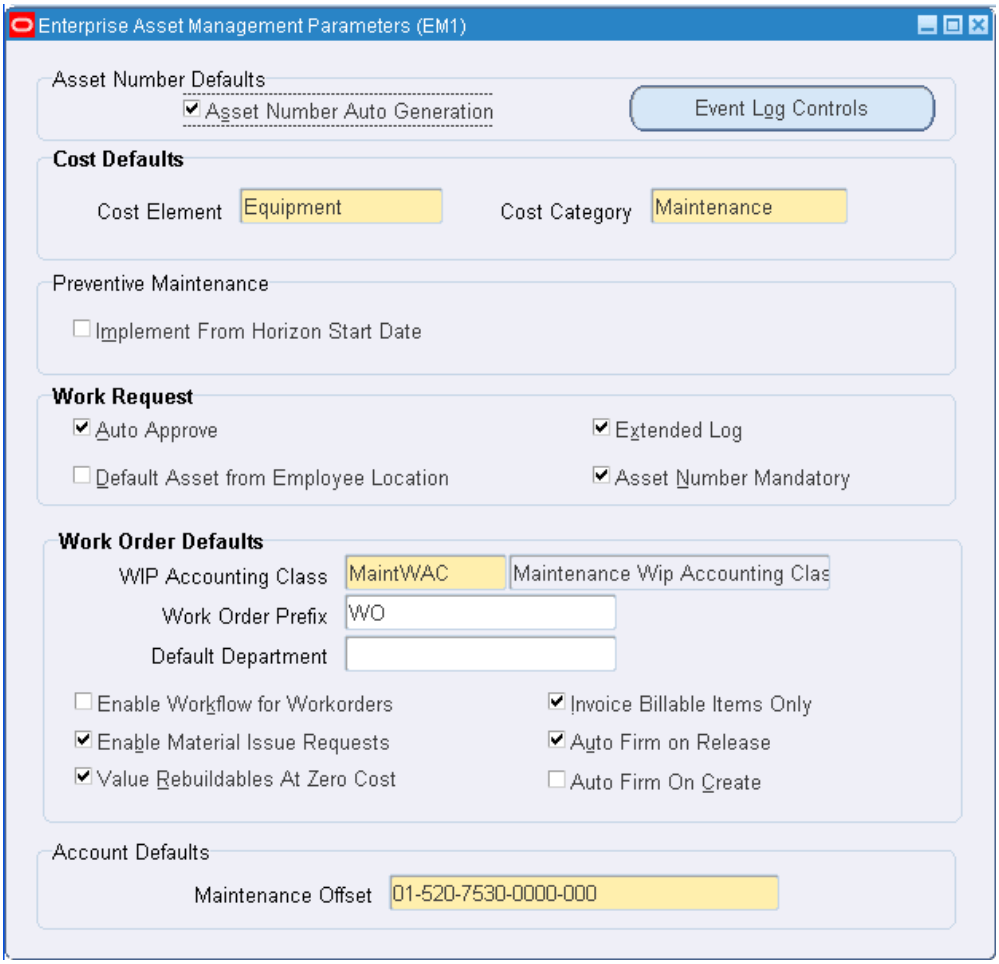
Enterprise Asset Management parameters determine organization level defaults for

individual transactions. Set up Work Order default information to establish how rebuildables are valued in the current organization.

To set up zero cost rebuild item issue:

1. Navigate to the Enterprise Asset Management Parameters window.

Enterprise Asset Management Parameters



2. Within the Work Order Defaults region, select the Value Rebuildables at Zero Cost to indicate that rebuildable components charge at zero cost.

3. Save your work.

Related Topics

Defining eAM Parameters, page 3-11

Process and Discrete Manufacturing Integration Setup

Enterprise Asset Management integrates with Process and Discrete Manufacturing, enabling your maintenance environment to identify Enterprise Asset Management asset relationships with production equipment. This feature associates an asset or many assets to the production equipment located in a discrete or process manufacturing organization. After establishing, you can view the resource usage (maintenance work orders, batches, or FPOs) emanating from production, associated with a maintainable asset. In discrete manufacturing organizations, you can view maintenance equipment downtime requirements and their affect on capacity during production planning and scheduling.

This section includes the following topics:

- Organization Setup, page 3-187
- Associating Assets with Production Equipment, page 3-188

Organization Setup

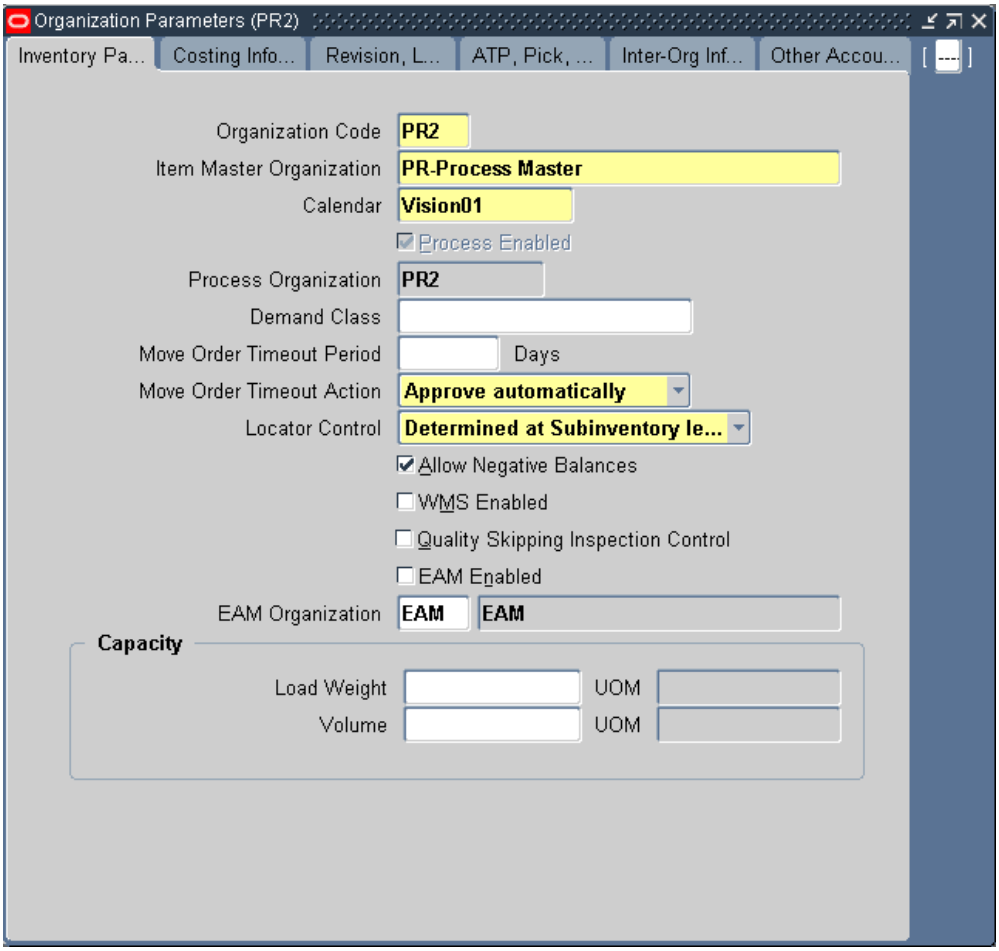
In order for eAM to integrate with process or discrete manufacturing, determine which process or discrete manufacturing organization is associated with your eAM organization.

Process Manufacturing organizations are never the same as eAM organizations; they are mutually exclusive. Although it is possible, Oracle does not recommend commingling eAM and discrete manufacturing organizations. They should have separate organization codes.

To associate a process or discrete manufacturing organization with an eAM organization:

1. Navigate to the Organization Parameters window, and select a valid process enabled or discrete manufacturing organization from the Organization Code list of values.

Organization Parameters



2. Enter an EAM Organization to associate with the current Organization Code. This eAM organization is now linked to the organization code you selected above.

Related Topics

Organization Setup, page 3-5

Creating an Organization, *Oracle Human Resources User's Guide*

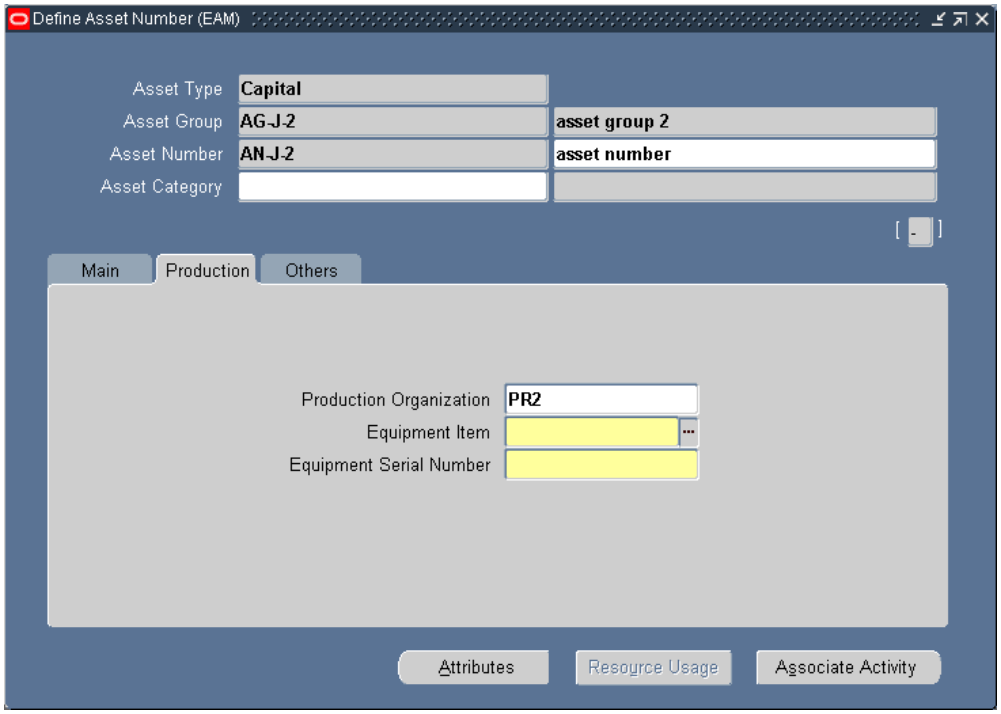
Associating Assets with Production Equipment

You can link an asset to production equipment defined within a process or discrete organization, as well as asset equipment defined within an eAM organization. This relationship is defined while defining or updating assets within eAM.

To associate an asset with production equipment:

1. Navigate to the Define Asset Number window.

Define Asset Number



2. Select an Asset Number that you want to link to production equipment.

3. In the Production tab, select a valid Production Organization.

   The list of values displays those process and discrete organizations that have the current eAM organization selected as their maintenance organization (See: Organization Setup, page 3-187).

4. Select an Equipment Item. This is mandatory if you populated the Production Organization field. Items that were defined with an equipment template (See: Item Templates, *Oracle Inventory User's Guide*), or with the Equipment item attribute enabled (See: Physical Attributes, *Oracle Inventory User's Guide*), are available.

5. Enter an Equipment Serial Number. This is mandatory if you populated the Production Organization field. This is the specific name of the component within the Equipment Type, defined above.

Related Topics

Defining Asset Numbers, page 3-65

Viewing Resource Usage, *Oracle Enterprise Asset Management User's Guide*

Encumbrance Accounting

Enterprise Asset Management enables you to use encumbrance accounting for purchase requisitions and purchase orders associated with work orders with a destination type of shop floor.

Prerequisites

You must perform the following setup tasks before you can use encumbrance accounting:

1. Ensure that your eAM organization is associated with an operating unit that allows encumbrance accounting.
2. Select the **Reverse Encumbrance** option on the Organization Parameters - Costing Information tab.
3. Include a budget account in the maintenance WIP accounting class for encumbrance accounting.

Related Topics

See Encumbrance Accounting, *Oracle Enterprise Asset Management User's Guide*

Project Manufacturing Integration Setup

Enterprise Asset Management supports a variety of ways to define work breakdown structures. The methods include, using third party project management systems (with on-line integration), project templates, Seiban number wizard, copy, and manual entry. Work breakdown structures are commonly needed for program management. To support financial project management an reporting, the combination of Oracle Projects and Oracle Project Manufacturing enables budgeting, project costing and tracking, project billing, project revenue recognition, project cash forecasting, and project cost collection, including multi-currency and tax regulations.

To support project supply chain management and execution, Project Manufacturing provides functionality for project sales management, project advanced supply chain planning, project procurement, project execution, and project quality management.

The following diagram illustrates the eAM Project Manufacturing process. First, a

maintenance Work Order is linked to a project or task. If a requisition or purchase order is created for that Work Order, the commitments for the Work Order's associated project or task are updated. The Project Cost Collector process (See: Project Cost Collector, *Oracle Cost Management User's Guide*) then passes the costs to the Work Order's associated project WIP accounting class accounts, rather than the WIP accounting class associated with the eAM asset or eAM organization.

Resources and Material charge against a Work Order. The Work Order is associated with a Project. The charges are transferred to the Project expenditures via the Cost Collector process.

eAM Project Manufacturing

This section includes the following topics:

- Project Definition, page 3-191

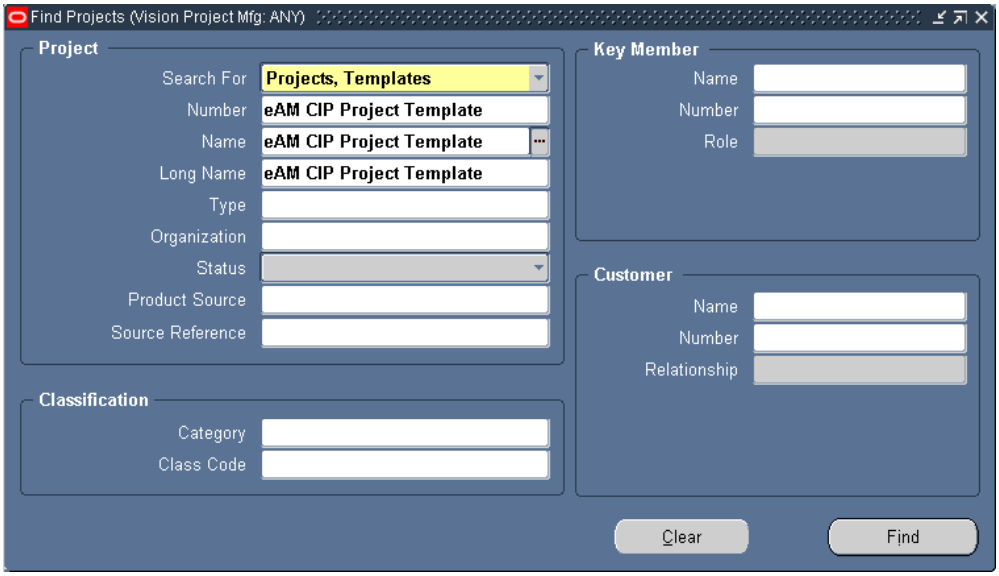
Project Definition

You can inquire on an existing, or copy a new project from a template or existing project. To create a new project, See: Project Definition (Assigning Project Parameters), *Oracle Project Manufacturing User's Guide*. Associate this project number with a planning group, a cost group, and a default WIP accounting class.

To inquire on an existing project:

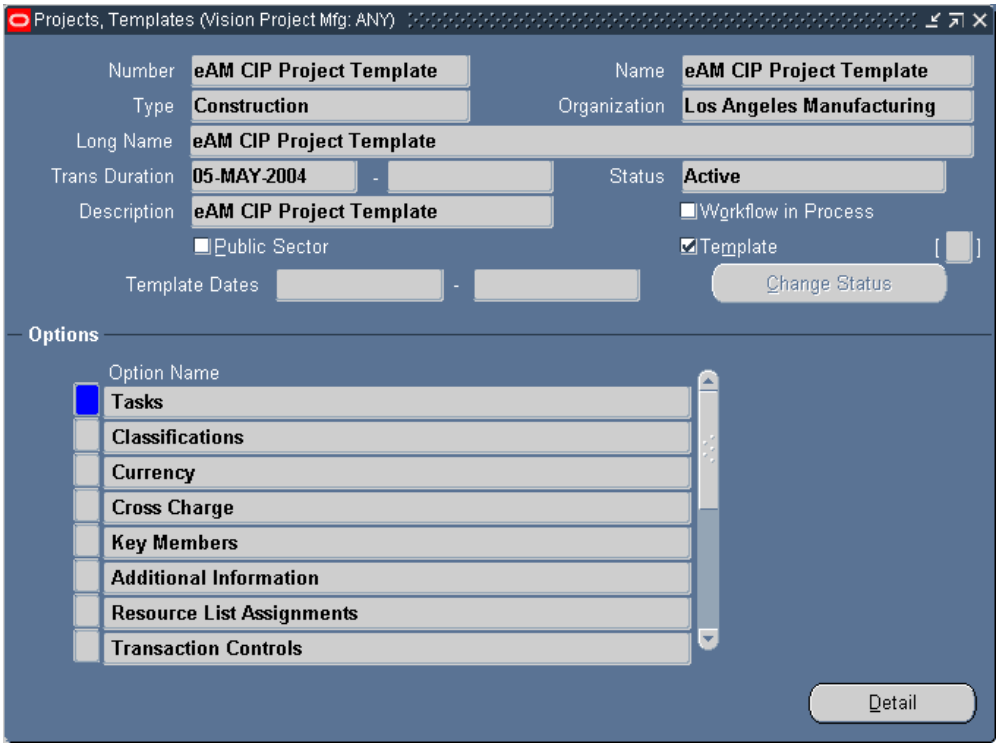
1. Navigate to the Find Projects window.

Find Projects



2. Select a project Number.
3. Choose Find.
4. Choose Open.

Projects, Templates

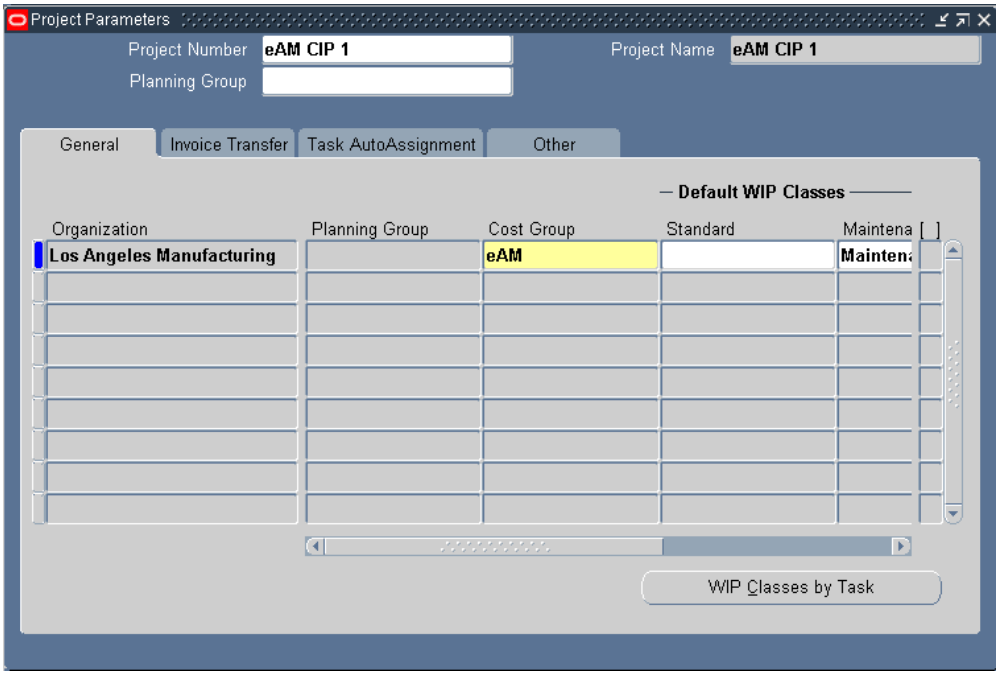


5. Optionally you can view detailed task information by choosing Detail (See: Viewing Project Details, *Oracle Project Manufacturing User's Guide*).

To assign project parameters:

1. Navigate to the Project Parameters window.

Project Parameters



2. Select a valid Project Number.

3. Optionally select a Planning Group.

4. Select a Cost Group.

   If the current organization has selected Average as its primary costing method in the Organization Parameters window, the Cost Group field is required. The list of values includes the Common Cost Group and the user defined cost groups. The list of user defined cost groups includes those cost groups with valid accounts and with Project selected in the Cost Group window (See: Project Cost Groups, *Oracle Cost Management User's Guide*). You must assign the project to its own Cost Group to keep weighted average costing at the project level.

   Associate a Maintenance type WIP Accounting Class to this Cost Group. See: Project Cost Groups, *Oracle Cost Management User's Guide*.

5. Optionally assign a Maintenance WIP Accounting Class to the current project. You can select any Maintenance type WIP Accounting Class that is associated with the selected Cost Group.

6. Optionally select the name of the Planning Group with which you want to associate your project.

   If you plan material requirements by a group of projects, rather than by each

individual project, you need to define a planning group and to assign all the projects to this planning group. If you plan material requirements by a single project, you do not need to associate the project with any planning group (See: Defining Planning Group Lookups, *Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide*).

7. Select the Other tab.

8. Select Maintenance from the Direct Item Expenditure Type list of values. This expenditure type enables the Cost Collector process to pass costs for direct items to project maintenance work orders.

   This is a required step.

9. Save your work.

Related Topics

Associating a Work Order with a Project, *Oracle Enterprise Asset Management User's Guide*

Creating Purchase Orders from Requisitions, *Oracle Enterprise Asset Management User's Guide*

Updating the Commitments for a Project, *Oracle Enterprise Asset Management User's Guide*

Viewing Commitments, *Oracle Enterprise Asset Management User's Guide*

Project Definition, *Oracle Project Manufacturing User's Guide*

Assigning Project Parameters, *Oracle Project Manufacturing User's Guide*

Project Cost Groups, *Oracle Cost Management User's Guide*

Defining Project Cost Groups, *Oracle Cost Management User's Guide*

WIP Accounting Classes, *Oracle Work in Process User's Guide*

Project Manufacturing Parameters, *Oracle Project Manufacturing User's Guide*

Property Manager Integration Setup

The eAM and Property Manager integration enables eAM assets to correspond with locations defined in Property Manager. The information transferred from Property Manager are the three-level land or building hierarchies, and the associated Location Codes within Property Manager. eAM also provides user-defined Area codes, enabling you to logically sort assets by where they are physically located. However, Area codes in eAM do not equal locations in Property Manager. See: Setting Up Areas, *Oracle Enterjprise Asset Management User's Guide*.

This section includes the following topics:

- Setting Up eAM Prerequisites, *Oracle Enterjprise Asset Management User's Guide*
- Executing the Export Process, page 3-196
- Executing the Asset Number Interface, page 3-198

Setting Up eAM Prerequisites

The following must be defined within eAM before the Export Locations to Enterprise Asset Management concurrent request process can export locations into eAM:

- Asset Group (See: Defining Asset Groups, page 3-50)
- Organization (See: Organization Setup, page 3-5)
- Owning Department (See: Defining Departments and Resources, page 3-17)

Executing the Export Process

Locations from Property Manager are always exported as a hierarchy. The first time that you execute the process, the starting node of the hierarchy is specified as the top level of building or land hierarchies. Thereafter, any level within the building or land hierarchy is specified.

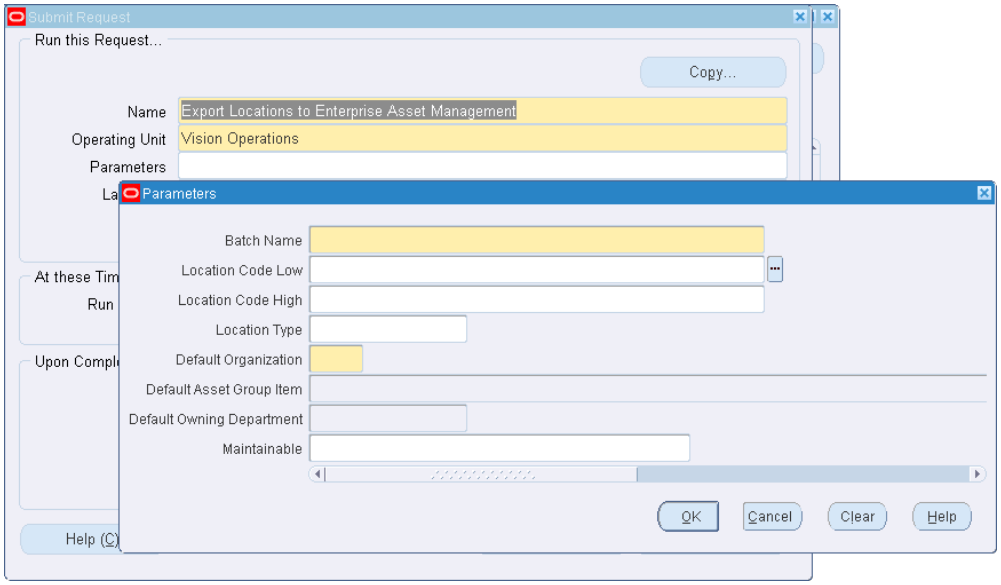
After the process has executed, any changes within Property Manager's building or land hierarchies are automatically changed within eAM's corresponding asset hierarchies.

The Export Locations to Enterprise Asset Management process executes from the Property Manager responsibility. This process can execute in both create and update modes.

To execute the Export Locations to Enterprise Asset Management process:

1. Navigate to the Submit Request window.

Submit Request



2. Select Export Locations to Enterprise Asset Management.

3. Enter the following parameters:

   - *Batch Name:* The Batch Name identifies each export process by name.

   - *Location Code Low:* This code, defined in Property Manager, is the starting node of the building or land hierarchies. This code reflects the Enterprise Asset Management Asset, and is normally entered into one Enterprise Asset Management Asset Group per transfer.

   - *Location Code High:* This code, defined in Property Manager, is the ending node of the building or land hierarchies. This code reflects the Enterprise Asset Management Asset, and is entered into one eAM Asset Group per transfer.

   - *Default Organization:* Select the eAM enabled organization. This code is defined within eAM. See: Organization Setup, page 3-5.

   - *Default Asset Group Item:* Select the Asset Group (defined within eAM). The eAM assets are created in this Asset Group. See: Defining Asset Groups, page 3-50.

   - *Owning Default Owning Department:* This is the designated maintenance department to associate with the exported asset/location within eAM.

   - *Maintainable:* Select whether the asset/location is maintainable within eAM.

4. Choose OK.

5. Choose Submit.

Related Topics

Property Manager Integration, *Oracle Enterprise Asset Management User's Guide*

Submitting a Request, *Oracle Applications User's Guide*

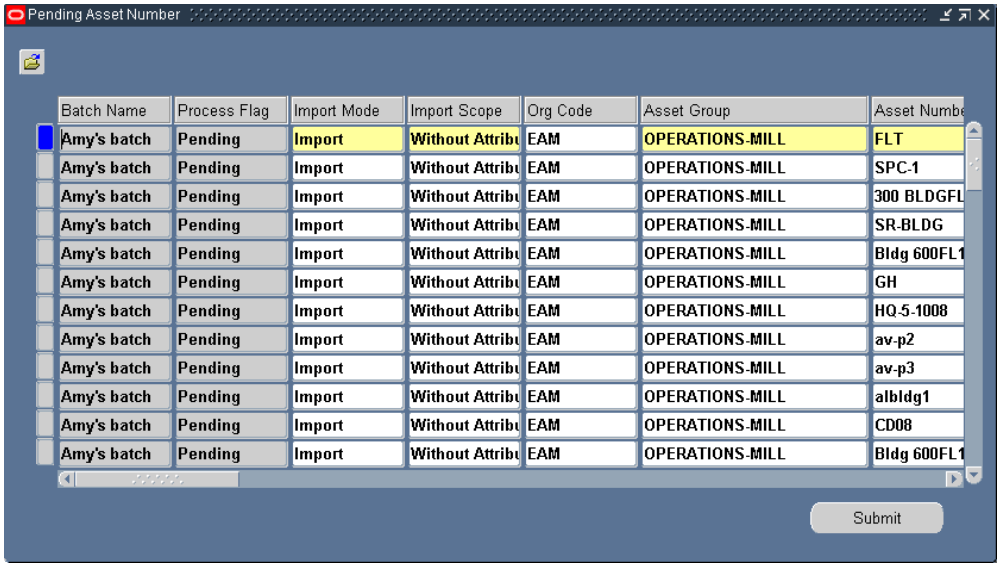
Executing the Asset Number Interface

Locations are set up in Property and are exported to Enterprise Asset Management (eAM) with a two-step process. This allows you the opportunity to modify data before it is exported to eAM. First, push the location records from Property Management to eAM (See: Executing the Export Process). After submission of the concurrent process, the Property Management Location information are entered into the EAM Asset Interface table and are accessed via the Pending Asset Number window within eAM. You can update all relevant information, including Asset Group, Asset Number, Owning Department, and WIP Accounting Class, for this information, before submitting the interface process.

To view pending asset numbers:

1. Navigate to the Pending Asset Number window.

Pending Asset Number



2. Update the information, as necessary.

3. Choose Submit to update your changes.

Related Topics

Executing the Export Process, page 3-196

Service Integration Setup

Use service requests to report and request maintenance service for unplanned maintenance demand on internal assets and rebuildable items. service requests that are classified as type Maintenance are used to identify requests for eAM maintenance. For example, when an employee notices that a printer is broken, the employee can create a service request, even though a technician is scheduled to regularly check the printer monthly. You can create both service and work requests for capital assets and rebuildables, simultaneously, within one eAM organization.

If a valid asset or rebuildable serial number is entered on the service request, the owning department for the serial number defaults. (See: Defining Asset Numbers, page 3-65), and the service request is visible within the eAM Maintenance Workbench. The Owning Department can then approve the service request and create a work order, or reject the service request and notify the service request owner to cancel it. However, customers or employees who report problems are often not aware of the asset or rebuildable's serial number requiring maintenance. In this situation, a default department is used as the Owning Department. You may customize an eAM Workflow

process to identify appropriate default owning departments and department approvers. Within Oracle Service, an agent can create a request for maintenance, provide a problem summary, and provide any additional information, such as an incident address or notes.

A planner creates a work order and then releases it to execute. The planner can choose to create one or multiple work orders for a single service request. When a work order is complete, the service request owner updates the service request status to Closed.

A support agent can view all work order information for each work order created for a service request. You can create eAM work orders for Service and/or Work Requests, or associate requests to existing work orders.

You can customize a workflow process that creates notifications to eAM personnel that indicate service requests requiring work and approval.

> **Note:** Oracle Service must be installed to utilize service request functionality.

This section includes the following topics:

- Creating Maintenance Service Request Types, *Oracle Enterprise Asset Management User's Guide*
- Enabling Service Requests for Assets and Rebuildables, *Oracle Enterprise Asset Management User's Guide*
- Enabling eAM Specific Fields, page 3-202

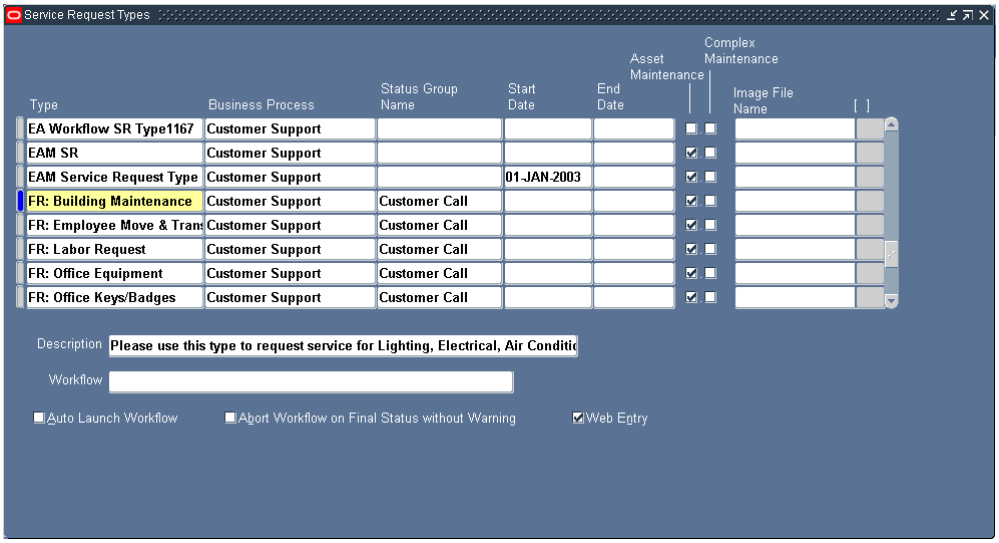
Creating Maintenance Service Request Types

Within Oracle Service, create at least one Maintenance Service Request Type. You can define multiple Service Request Types, if necessary.

To create a Maintenance service request type:

1. Navigate to the Service Request Type window.

Service Request Types



2. Enter the name of the Service Request Type.

3. Select Customer Support, from the Business Process list of values.

4. Optionally select effective dates for this request type.

5. Select the Asset Maintenance check box to indicate that this Service Request Type is of type Maintenance (viewable in eAM). Maintenance Type Service Requests are viewable in eAM.

6. Save your work.

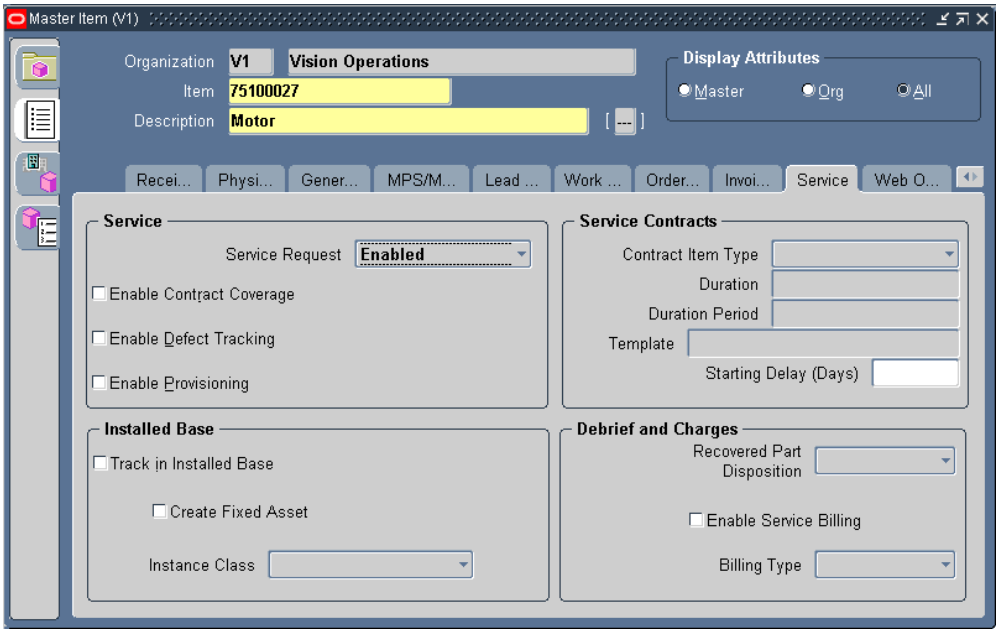
Enabling Service Requests for Assets and Rebuildables

To set up Service Request functionality for Asset and Rebuildable Serial Numbers, enable Asset Groups and Rebuildable Items for Service Requests, respectively.

To enable Service Requests for asset groups and rebuildable items:

1. Navigate to the Master Item window.

Master Item



2. Select an Asset Group or Rebuildable Item.
3. Select the Service tab.
4. Select Enabled, from the Service Request list of values.
5. Save your work.

Enabling eAM Specific Fields

The Service Request window enables a customer support agent to view pertinent information for an entered Service Request, such as associated Work Orders and their statuses. It is necessary to have this important information visible at all times, within the Service Request window. You can customize which fields and records appear (See: Customizing the Presentation of Data in a Folder, *Oracle Applications User's Guide*).

Utilize Oracle's folders functionality to ensure that key eAM-specific fields are visible for maintenance Service Requests. By default, eAM specific fields are hidden. This folders feature provides you a user-defined display of retrieved information, such as:

- Columns displayed
- Width of columns displayed
- Sequence of columns

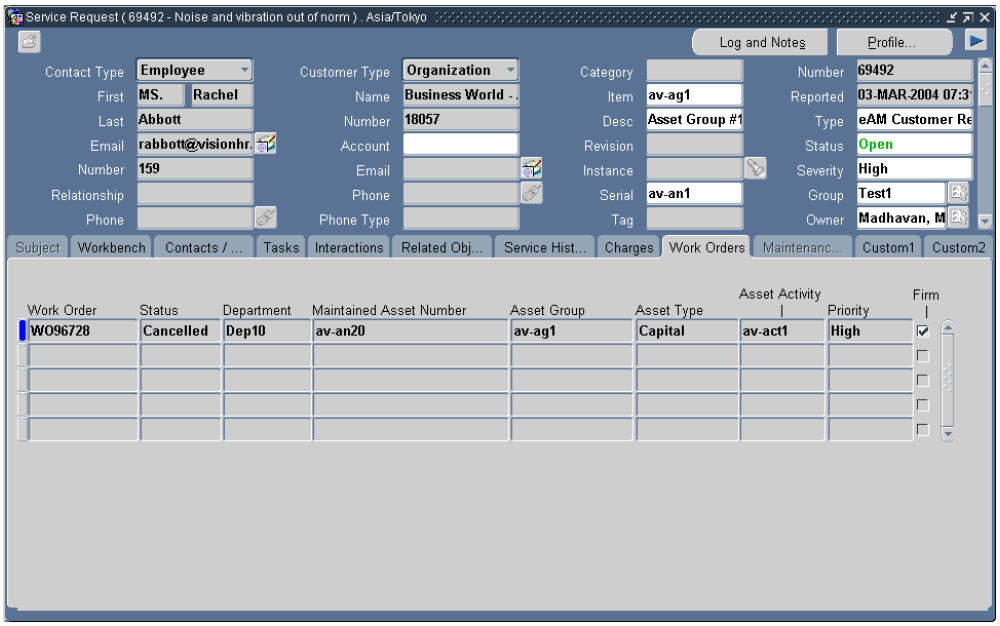
- Prompts associated with columns
- Sequence of records

You can prevent users from creating or modifying folders with profile option, FLEXVIEW: ALLOW_CUSTOMIZATION.

To display eAM-specific fields in the Service Request window:

1. Navigate to the Service Request window.

Service Request



2. From the Folder menu, select an existing, or create a new, Folder definition.
3. Save your work.

Related Topics

Customizing the Presentation of Data in a Folder, *Oracle Applications User's Guide*

Oracle Applications 12 Workflow

Oracle Time and Labor Integration Setup

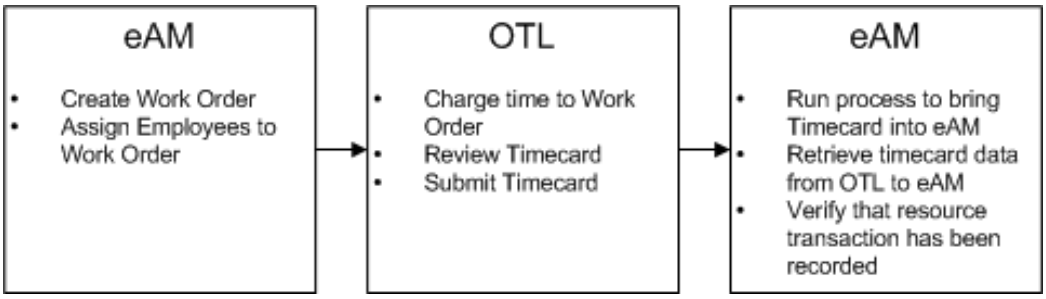
Oracle Time and Labor (OTL) is the repository in which time is entered by employees working in a particular organization. Employees working on Oracle Enterprise Asset Management (eAM) work orders enter their time using OTL Self-Service. Information

collected is stored in OTL Time Store, and is composed of a series of business rules and processes. eAM extracts information from the Time Store and charges eAM work orders for the time spent by employees that work on them.

There are multiple steps within the integration flow. First, timecard information is entered for a specific Work Order, within Oracle Time Store (a piece of Oracle Time and Labor). That information is then extracted from Oracle Time Store to Oracle Enterprise Asset Management. This extraction dynamically creates a resource transaction within Oracle Enterprise Asset Management. Finally, the Cost Manager process is executed. This process charges the resource transaction. After this process executes, you can view the actual costs for the period that you charged, within the Work Order.

The process is as follows:

OTL Process Flow



This section contains the following topics:

- Setting Up Overview, page 3-204

Setting Up Overview

There are two required setup procedures for this integration. The first is to establish employees needing to use this functionality as Persons within Oracle Human Resources (See: *Oracle Human Resources User's Guide*). After established, those Persons are assigned to respective Users, within Enterprise Asset Management. The second setup procedure consists of creating Preference Values, and then linking those values to eligibility criteria.

This section contains the following topics:

- Defining Persons as Users, page 3-204
- Creating Eligibility Criteria, page 3-205

Defining Persons as Users

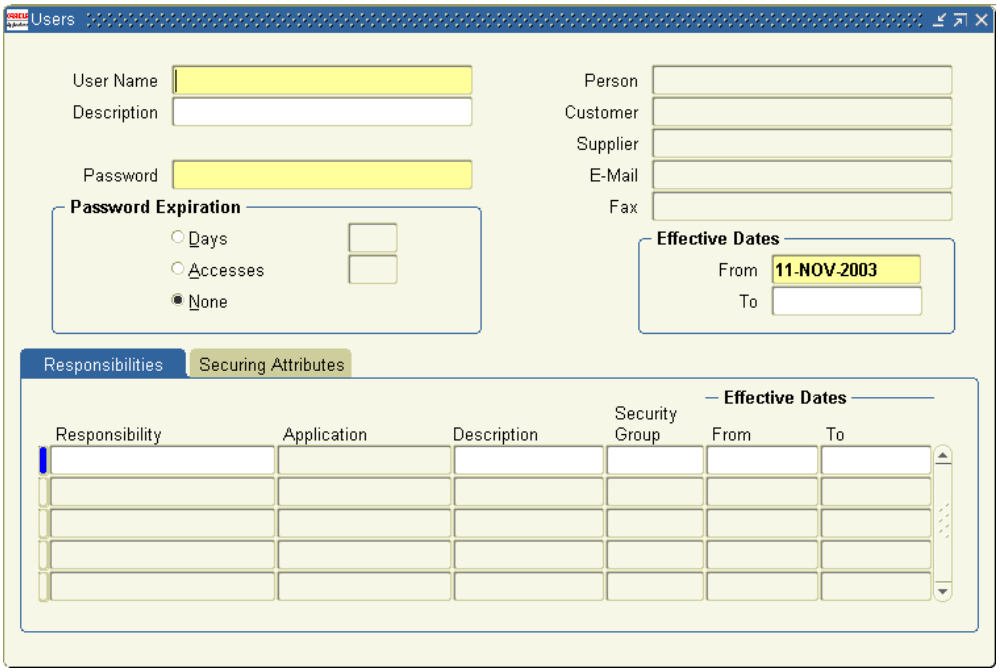
Establish employees needing to use this functionality as Persons within Oracle Human Resources (See: *Oracle Human Resources User's Guide*). After established, those Persons

must be assigned to respective Users, within Oracle Enterprise Asset Management (eAM).

To define Persons as Users within eAM:

1. Navigate to the Users window.

Users



2. Enter a User Name.

3. Select the Person that was created in Oracle Human Resources.

4. Enter a Password.

5. Within the Responsibilities tab, select the appropriate Responsibilities to assign to this User. The responsibilities, US OTL Administrator and Self Service Time and Expenses, are seeded but the Administrator needs to manually assign them to the Person/User.

6. Save your work. Repeat steps one through five for all appropriate Persons.

Creating Eligibility Criteria

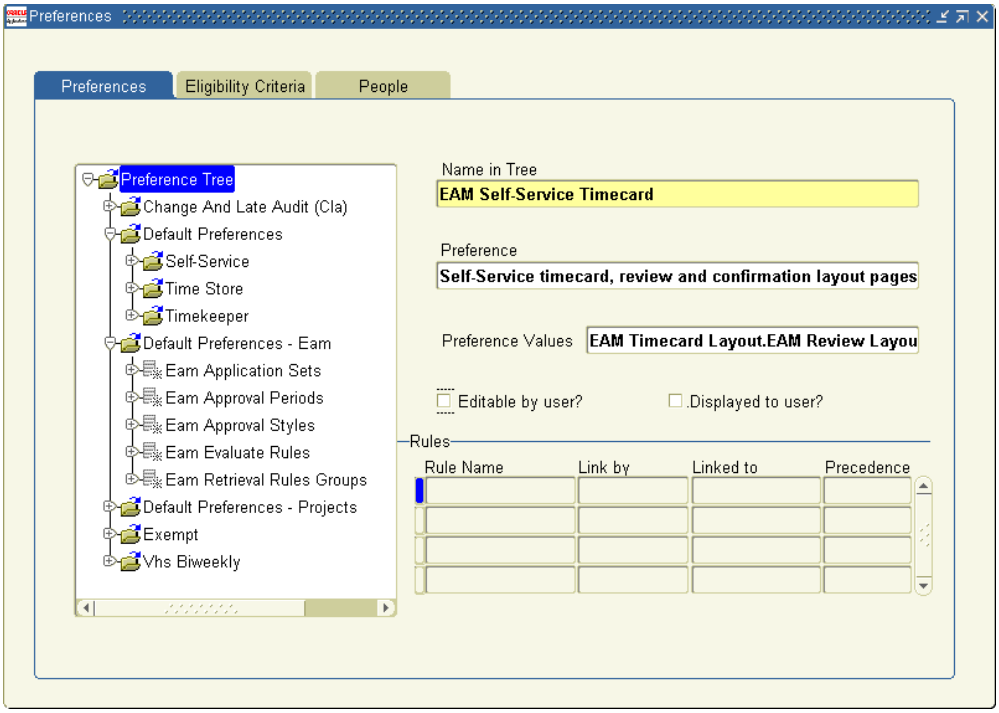
You need to create Preference Values, and then link those values to eligibility criteria.

Note: Preferences are seeded, but the preferences must be assigned to the user.

To create eligibility criteria:

1. Navigate to the Preferences window.

Preferences



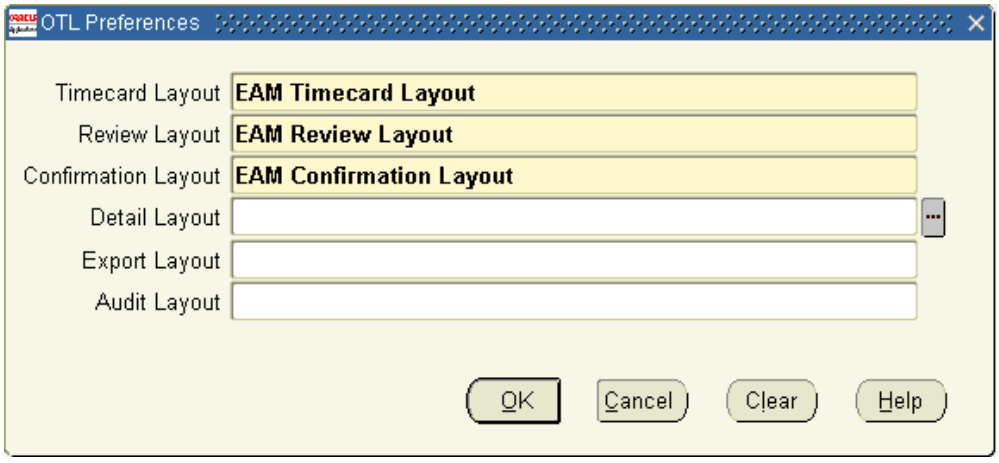
2. Select the Preference Tree node, then choose New.

3. Enter the name of your tree.

4. Select the *Self-Service timecard, review and confirmation layout pages* Preference.

5. Within the OTL Preferences window, select EAM Timecard Layout from the Timecard Layout list of values.

OTL Preferences



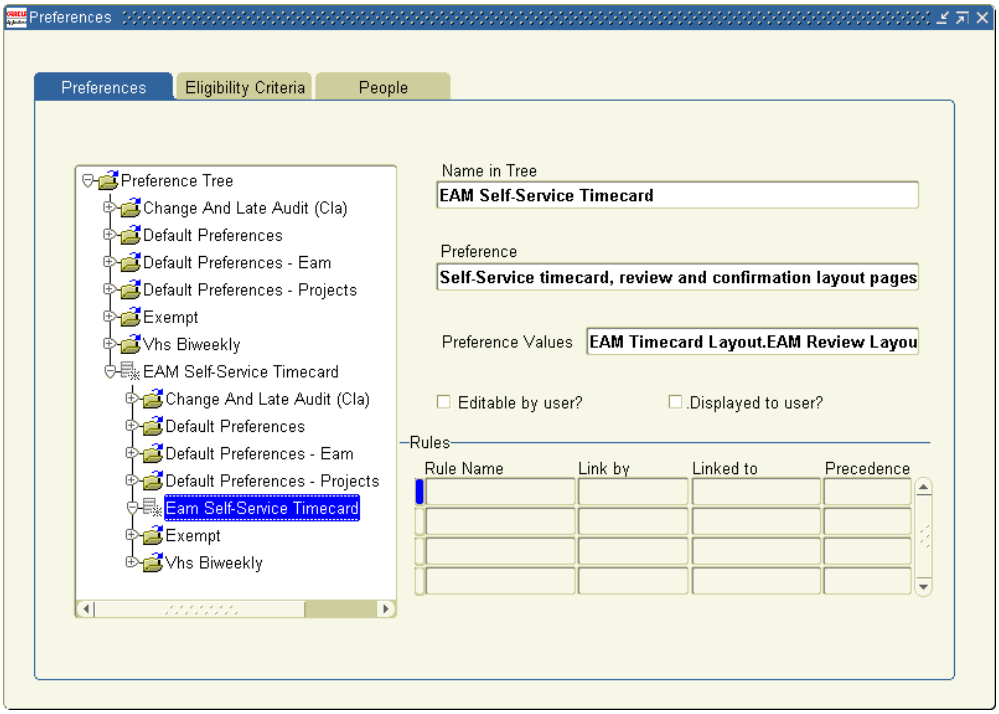
6. Select EAM Review Layout from the Review Layout list of values.

7. Select EAM Confirmation Layout from the Confirmation Layout list of values.

8. Choose OK.

9. Save your work. After saved, you have created a new node on the Preference Tree. Expand this new node, and select Eam Self-Service Timecard.

Preferences



10. To create eligibility criteria for timecard entry, select the Eligibility Criteria tab.

11. Enter the Name of the rule. You can have one rule for everyone, or multiple rules to create different eligibility criteria for different groups.

12. Select EAM Self-Service Timecard from the Name of Branch list of values. This value was previously defined during steps one through nine.

13. Select Person, Organization, or All People from the Link by list of values. If you are creating one rule for all users, select All People.

14. Enter a Precedence value. Valid values are all positive numbers. If you have multiple rules, the rule with the highest precedence is displayed first, and so on. For example, an employee can view the time card with a rule precedence value of 95, versus the timecard with a rule precedence value of 94.

15. Save your work.

Related Topics

Time and Expenses, *Oracle Enterprise Asset Management User's Guide*

Work Order Billing Setup

While maintaining an asset or servicing a customer request, you can bill a third party customer for the work that they performed. The cost of the work performed is based on the material and resource requirements (bill of material) of the work order, or the cost of the activity associated with the work order.

This section includes the following topics:

- Setting Up Parameters, page 3-209
- Setting Up Item Costs and Prices, page 3-209
- Service Attribute Setup, page 3-215
- Setting Up Billable Material, page 3-216
- Setting Up a Billable Resource, page 3-217
- Setting Up a Billable Activity, page 3-219

Setting Up Item Costs and Prices

The Billing Basis is either Cost Plus or Price List. The Billing Basis affects your item setup procedures. If you want the flexibility of using both billing basis types for an item, you need to set up both costs and prices for that item. An item is an Activity, Material, or Resource.

This section includes the following topics:

- Setting up Costs for the Cost Plus Billing Basis, page 3-210
- Setting up Prices for the Price List Billing Basis, page 3-213

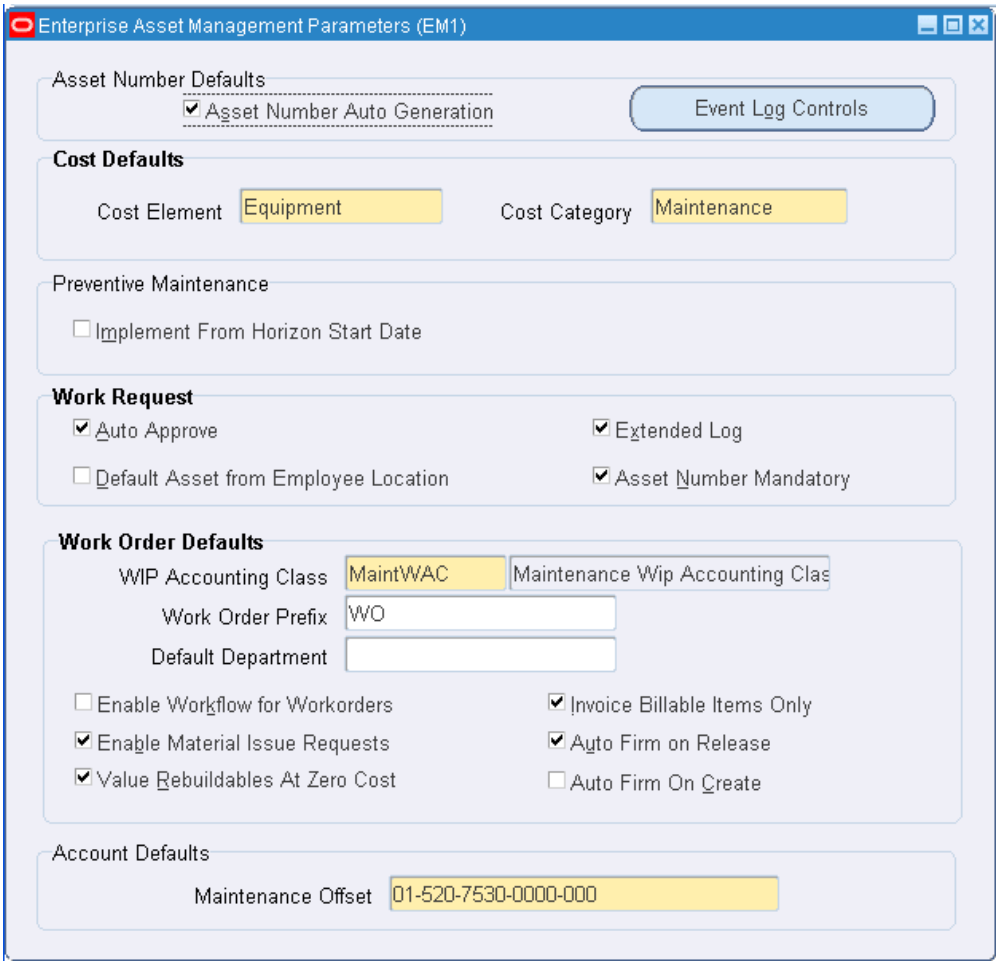
Setting Up Parameters

You can optionally create the ability to change the billable material on a Work Order at the time a bill is created.

To enable the change of billable material functionality:

1. Navigate to the Enterprise Asset Management Parameters window.

Enterprise Asset Management Parameters



2. Optionally select the Invoice Billable Items Only check box. If selected, you can change the billable material at the time the bill is created.

   If selected, this check box indicates that you want to invoice only billable items. Billable items are those that have a populated value within the Billing Type field, within the Service Tab, of the Master Item window. Billing Type is relevant only if you have this check box selected. Also, selecting this check box means that you can choose a different item to bill. See: Service Attribute Setup, *Oracle Enterprise Asset Management Implementation Guide*.

3. Save your work.

Setting up Costs for the Cost Plus Billing Basis

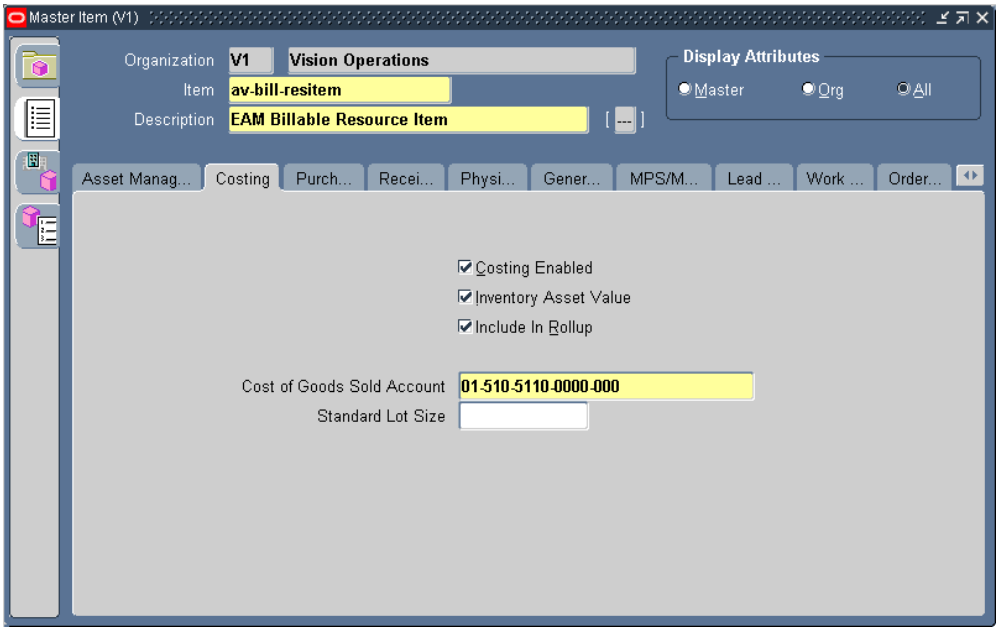
The cost plus method utilizes costs associated with an item. The item should have a cost

defined for it. First, you need to ensure that the appropriate item attributes are set up correctly for the item.

To set up an item's attributes:

1. Navigate to the Master Item window.

Master Item



2. Optionally select the Costing Enabled check box to report, value, and account for any item costs. You need to select this check box if you are using the cost plus billing method.

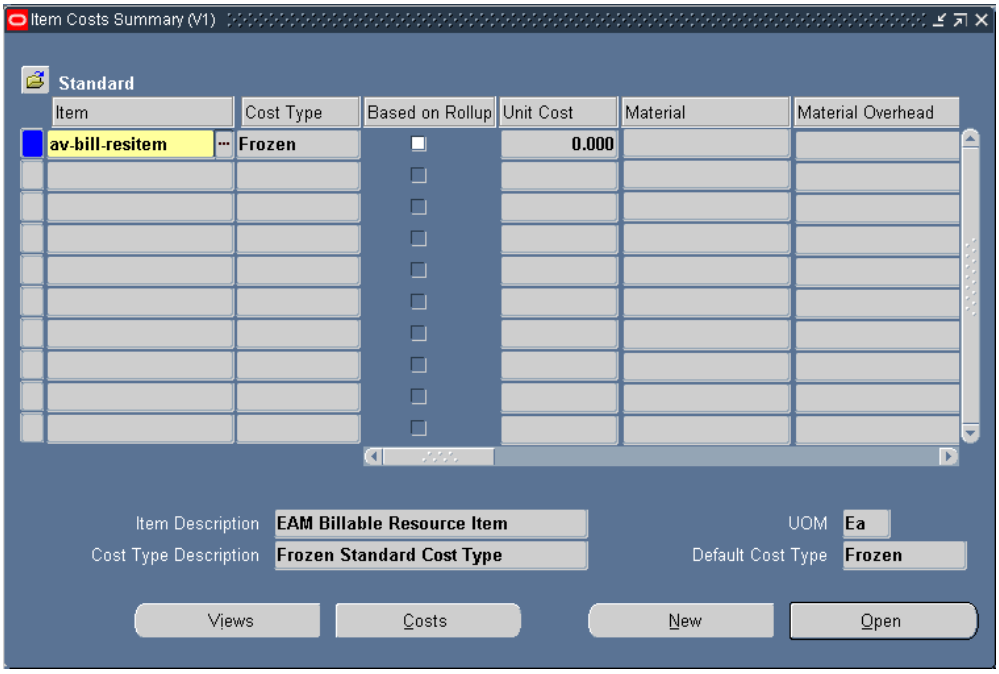
3. Optionally select the Inventory Asset Value check box. You need to select this check box if you are using the cost plus billing method.

4. Save your work.

To set up costs for an item:

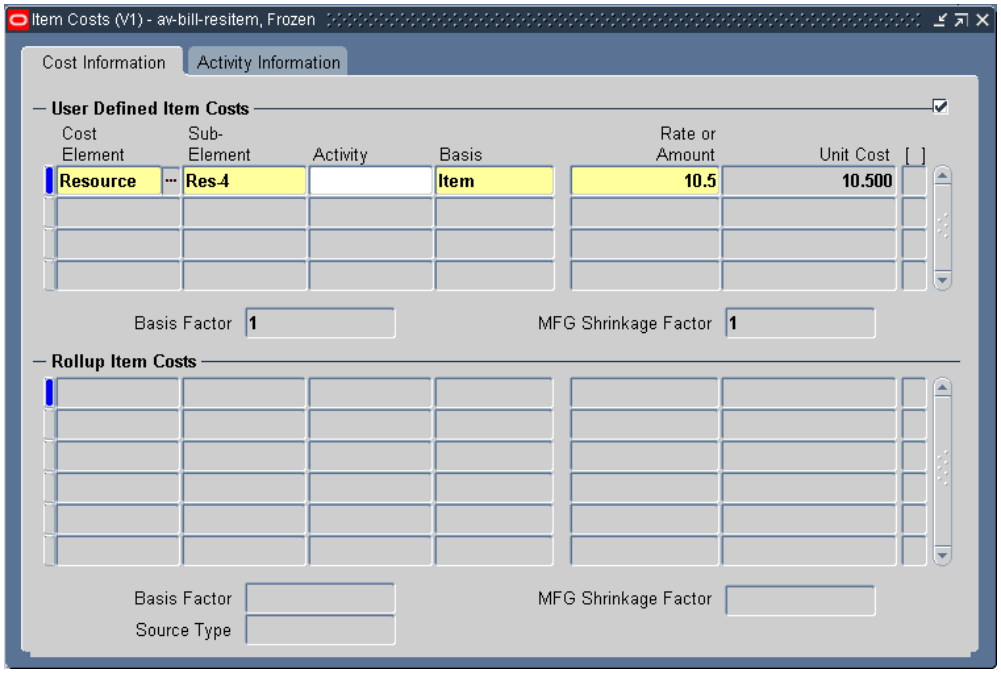
1. Navigate to the Item Costs Summary window.

Item Costs Summary



2. Choose Costs.

Item Costs



3. Enter cost information for your item.

4. Save your work.

Related Topics

Costing Attribute Group, *Oracle Inventory User's Guide*

Defining Item Costs, *Oracle Cost Management User's Guide*

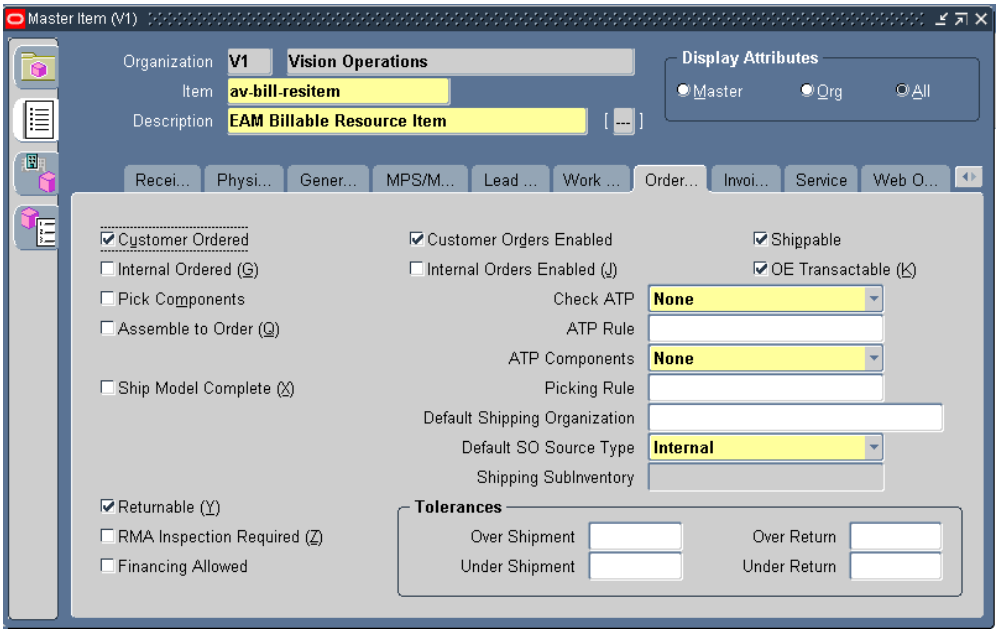
Setting up Prices for the Price List Billing Basis

The price list method uses a specified price list. The specified item should have at least one entry in the price list. First, you need to ensure that the appropriate item attributes are set up correctly for the item.

To set up an item's attributes:

1. Navigate to the Master Item window.

Master Item



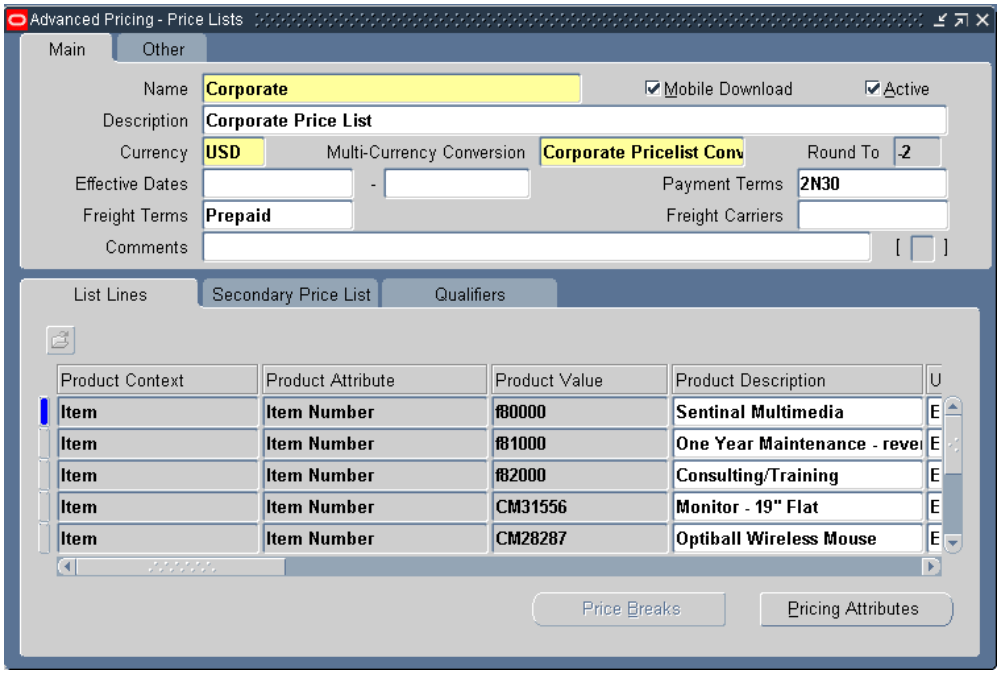
2. Optionally select the Customer Ordered check box in order to create a price within the price list. You need to select this check box if you are using the price list billing method.

3. Save your work.

To set up prices for an item:

1. Navigate to the Advanced Pricing - Price Lists window.

Advanced Pricing - Price Lists



2. Enter price information for your item.

   The same item can repeat multiple times in the price list, with varying values for Start Date, End Date, and Precedence. For example, it is invalid to have overlapping date ranges, if the Precedence is the same.

3. Save your work.

Related Topics

Order Entry Attribute Group, *Oracle Inventory User's Guide*

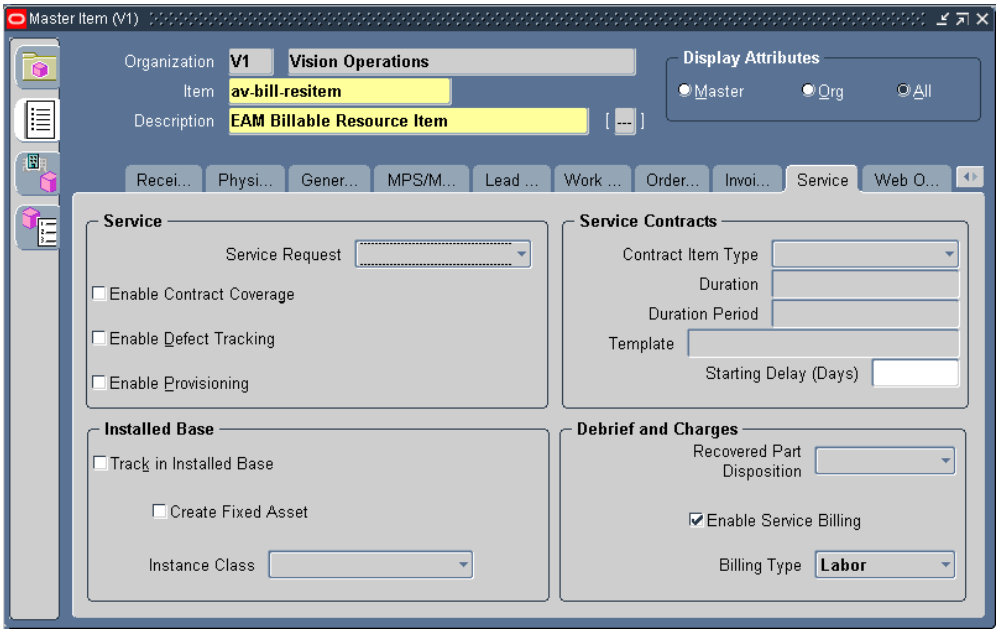
Service Attribute Setup

Set the Billing Type for each item that you want billable. The Billing Type field within the Master Item window must be populated if you have selected the Invoice Billable Items Only check box, within the Enterprise Asset Management Parameters window. See: Setting Up Parameters, page 3-209.

To set up the Billing Type attribute:

1. Navigate to the Master Item window.

Master Item



2. Select the Service tab.

3. Optionally select a Billing Type of Expense, Labor, or Material. This field must be populated if you have selected the Invoice Billable Items Only check box, within the Enterprise Asset Management Parameters window. See: Setting Up Parameters, page 3-209.

4. Save your work.

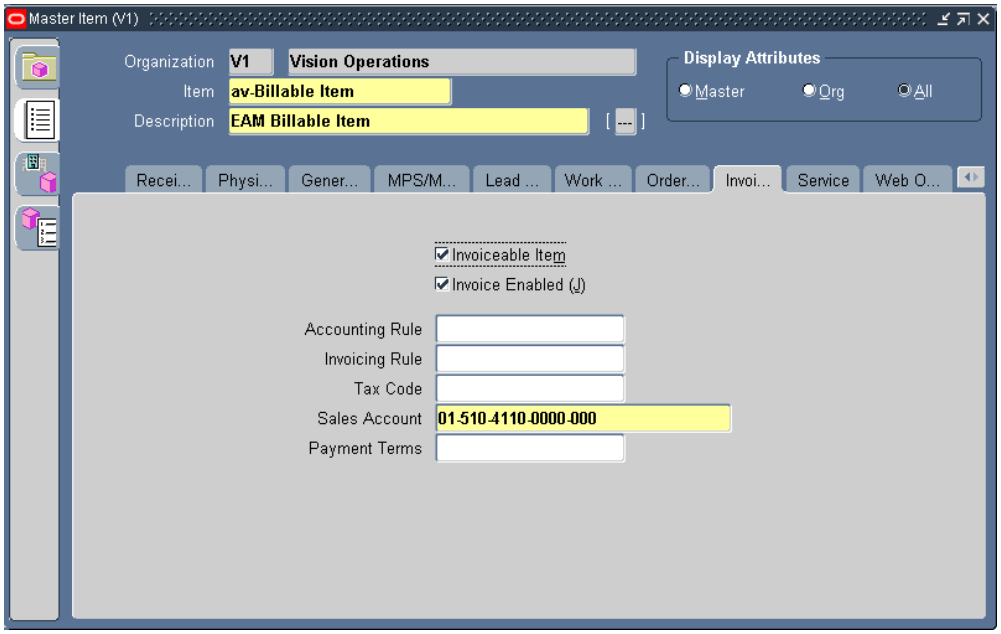
Setting Up Billable Material

To create billable material, first set specific attributes within the Master Item window. Next, assign the resource item to your organization. Decide whether you are pricing this item using the Cost Plus or Price List method, or both, and perform the additional setup for those methods (See: Setting Up Item Costs and Prices, page 3-209). Finally, define costs and prices for your item.

To set up billable material:

1. Navigate to the Master Item window.

Master Item



2. Select the Invoicing tab.

3. Optionally select the Invoiceable Item check box to indicate that the current material item can invoice. You can select this attribute at the Master Organization level.

4. Optionally select the Invoice Enabled check box to indicate that invoices are enabled for the current material item.

   Note: For the current material item, you need to ensure the Billing Type is populated with Material, within the Service tab. See: Service Attribute Setup, page 3-215.

5. Assign the current item to your organization.

6. Save your work.

Setting Up a Billable Resource

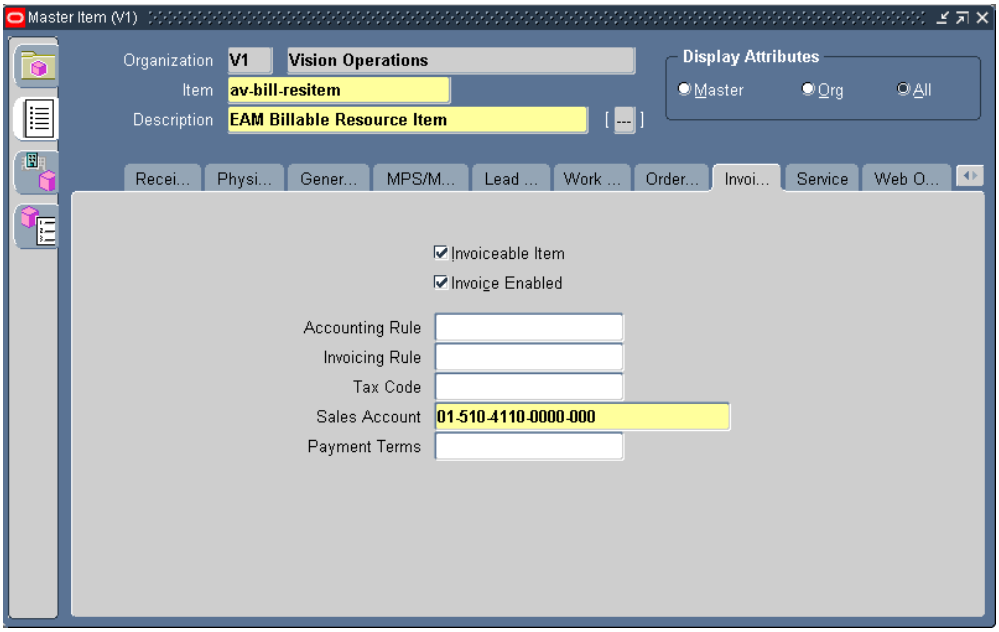
To create a billable resource, you need to first create a resource item by setting specific attributes within the Master Item window. Next, you need to assign the resource item to your organization. Decide whether you are pricing this item using the Cost Plus or Price List method, or both, and perform the additional setup for those methods (See: Setting

Up Item Costs and Prices, page 3-209). Next, you need to define a resource and associate the resource item to the resource. Finally, assign the resource to a department.

To set up a billable resource:

1. Navigate to the Master Item window.

Master Item



2. Select the Invoicing tab.

3. Optionally select the Invoiceable Item check box to indicate that the current resource item can invoice. You can select this attribute at the Master Organization level.

4. Optionally select the Invoice Enabled check box to indicate that invoices are enabled for the current resource item.

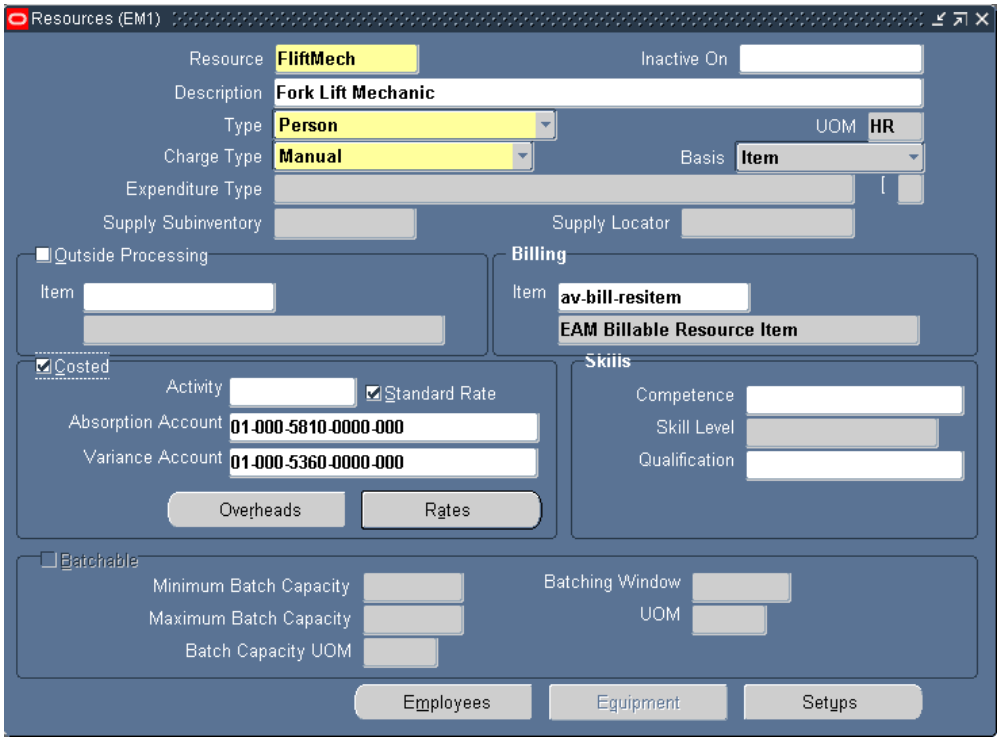
   Note: For the current resource item, you need to ensure the Billing Type is populated with Labor, within the Service tab. See: Service Attribute Setup, page 3-215.

5. Assign the current item to your organization.

6. Save your work and close the window.

7. Navigate to the Resources window.

Resources



8. Enter the name of the Resource within the Resource field.

9. Within the Billing region, select the resource item you created within the Master Item window to ensure that the resource is available for billing.

   Note: Rates defined in the Resources window are not used for billing. For billing rates for the resource item, See: Setting Up Item Costs and Prices, *Oracle Enterprise Asset Management User's Guide*.

10. Save your work.

11. Assign the current resource to a department. See: Defining Departments and Resources, page 3-17.

12. Save your work.

Setting Up a Billable Activity

To create a billable activity, first set specific attributes within the Master Item window. Next, decide whether you are pricing this item using the Cost Plus or Price List method,

or both, and perform the additional setup for those methods (See: Setting Up Item Costs and Prices, page 3-209). Finally, associate the activity to the asset group/asset number that is used to create the work order.

To set up a billable activity:

1. Navigate to the Master Item window.
2. Select the Invoicing tab.
3. Optionally select the Invoiceable Item check box to indicate that the current activity item can invoice. You can select this attribute at the Master Organization level.
4. Optionally select the Invoice Enabled check box to indicate that invoices are enabled for the current activity item.
5. Assign the current item to your organization.
6. Save your work.

Related Topics

Initiating Billing, *Oracle Enterprise Asset Management User's Guide*

4

eAM Profile Options

This chapter covers the following topics:

- Profile Option Summary
- Profile Option Details
- Profile Options in Other Applications
- Profile Option Details

Profile Option Summary

The table below indicates if you can view or update the profile option and which System Administrator levels the profile options can be updated: Site, Application, Responsibility, and User. Use the Personal Profile Options window to view or set your profile options at the user level. View the *Oracle Applications System Administrator's Guide* for a list of profile options common to all Oracle applications.

A Required profile option requires a value. An Optional profile option provides a default value; provide a value only if you want to change this value.

Profile Option Summary

Profile Option	User	System Admin: USER	System Admin: RESP	System Admin: APP	System Admin: SITE	Required ?	Default
EAM: Asset Description	View Update	View Update	View Update	View Update	View Update	N	No

Profile Option	User	System Admin: USER	System Admin: RESP	System Admin: APP	System Admin: SITE	Required ?	Default
EAM: Debug PM Scheduling	View Update	View Update	View Update	View Update	View Update	N	Yes
EAM: PM Debug File (including complete file path)	View Update	View Update	View Update	View Update	View Update	N	<Path determined during Rapid Install Setups>/eampmeng.log
EAM: Activity API Debug File Directory	View Update	View Update	View Update	View Update	View Update	N	-
EAM: Activity API Debug File Name	View Update	View Update	View Update	View Update	View Update	N	EAM_ABO_debug.log
EAM: Activity API Debug Option	View Update	View Update	View Update	View Update	View Update	N	No
EAM: Debug Profile Option	View Update	View Update	View Update	View Update	View Update	N	-

Profile Option	User	System Admin: USER	System Admin: RESP	System Admin: APP	System Admin: SITE	Required ?	Default
EAM: Object Instantiation API Log File Directory	View Update	View Update	View Update	View Update	View Update	N	-
EAM: FA Book Type Code	-	-	-	-	Yes	N	Blank
EAM: Map Viewer name	No	No	No	No	Yes	N	Blank
EAM: Google Map Registration key	No	No	No	No	Yes	N	Blank
EAM: Google Map Client ID	No	No	No	No	Yes	N	Blank
EAM: Object Instantiation API Log File Name	View Update	View Update	View Update	View Update	View Update	N	EAM_MOI.log
EAM: Object Instantiation API Log Option	View Update	View Update	View Update	View Update	View Update	N	No

Profile Option	User	System Admin: USER	System Admin: RESP	System Admin: APP	System Admin: SITE	Required ?	Default
EAM: Maintenance Supervisor	View Update	View Update	View Update	View Update	View Update	N	No
EAM: Maintenance Work Request Options	View	View	View Update	View	View	N	-

Profile Option Details

eAM's profile options are listed below:

EAM: Activity API Debug File Directory

The Activity API is called in eAM when a new Activity is created from either a Work Order or Activity. This profile option indicates the debug file directory that the debug log will reside, if debugging is enabled for the Activity API. For example, If the profile option, EAM: Activity API Debug Option, is set to Yes, the log of the activity process is saved in the directory determined by the path designated in the current profile option. This profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: Activity API Debug File Name

The Activity API is called in eAM when a new Activity is created from either a Work Order or Activity. This profile option indicates the debug file name that resides in the debug file directory, if debugging is enabled for the Activity API. For example, If the profile option, EAM: Activity API Debug Option, is set to Yes, the log of the activity process is saved in the directory determined by the path designated by the EAM: Activity API Debug File Directory profile option. The name of the file that includes the activity process log is determined by the current profile option. This profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: Activity API Debug Option

The Activity API is called in eAM when a new Activity is created from either a Work

Order or Activity. This profile option indicates whether debugging is enabled for the Activity API. This profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: Asset Description

Use this profile option to determine whether you want the asset hierarchy view to display the asset's description, and the length of its description. By default, the description does not appear.

EAM: Debug PM Scheduling

This profile option indicates whether debug mode is enabled for Preventive Maintenance Scheduling processes. The profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels. The debug mode enables a tracing feature and causes additional messages to be printed to a log file. The default value is Yes. The internal name of the profile option is EAM_DEBUG_PM_SCHED. Available values are as follows:

- Yes - System is operating in debug mode
- No - System is operating in normal mode
- Blank (no value) - Equivalent to No

EAM: Debug Profile Option

This profile option is used by multiple eAM processes. If this profile is enabled, the log of these processes is collected. These processes include the following:

- Asset Number Import Program - the log is visible in the Concurrent Program log
- Asset Downtime Process - the log is visible in the Concurrent Program log
- Asset Genealogy Import Process - the log is visible in the Concurrent Program log
- Work Order Business Object API

This profile option is visible and updateable at the User level; it is visible and updateable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: Include Non-Nettable Quantity

If this profile is set to NO, Material Requirements within the Material Requirements, Operations, Work Orders, and the Maintenance Workbench windows display on-hand quantity as the quantity available in Nettable Subinventories. If this profile is set to YES, Material Requirements within these windows display the on-hand quantity as the

quantity available in all Subinventories (Nettable and Non-nettable). Within the Maintenance Super User responsibility's Work Orders tab, the Material Requirements page displays he on-hand quantity as the quantity available in Nettable Subinventories if this profile is set to NO. The Material Requirements page displays on-hand quantity as the quantity available in all Subinventories (Nettable and Non-nettable), if the profile is set to YES.

EAM: Maintenance Supervisor

Set this profile option to indicate if the self service Maintenance Supervisor Workbench is enabled.

- *Yes:* The Maintenance Supervisor Workbench is enabled.
- *No:* The Maintenance Supervisor Workbench is not enabled.

EAM: Maintenance Work Request Options

This profile options controls the view and update of a Work Request. It determines whether you can see only your own work requests or also others' work requests.

EAM: Object Instantiation API Log File Directory

The Object Instantiation API is called when a new asset number is created via the Asset Number window or if the Instantiate button is chosen within the Rebuildable Serial Number window. This profile option indicates the debug file directory that the debug log will reside, if debugging is enabled for the Object Instantiation API. For example, If the profile option, EAM: Object Instantiation API Log Option, is set to Yes, the log of the activity process is saved in the directory determined by the path designated in the current profile option. This profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: Object Instantiation API Log File Name

The Object Instantiation API is called when a new asset number is created via the Asset Number window or if the Instantiate button is chosen within the Rebuildable Serial Number window. This profile option indicates the debug file name that resides in the debug file directory, if debugging is enabled for the Object Instantiation API. For example, If the profile option, EAM: Object Instantiation API Log Option, is set to Yes, the log of the activity process is saved in the directory determined by the path designated by the EAM: Object Instantiation API Log File Directory profile option. The name of the file that includes the activity process log is determined by the current profile option. This profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: Object Instantiation API Log Option

The Object Instantiation API is called when a new asset number is created via the Asset Number window or if the Instantiate button is chosen within the Rebuildable Serial Number window. This profile option indicates whether debugging is enabled for the Activity API. This profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels.

EAM: PM Debug File (including complete file path)

This profile option indicates the directory location where debug files will be created if debug mode is enabled. The profile option is visible and changeable at the User level; it is visible and changeable at System Administrator's User, Responsibility, Application, and Site levels. The internal name of the profile option is EAM_DEBUG_FILE. The default value is a file path inserted by the auto-configuration utility, executed during the installation of the application, and appended by the file name, viz.eampmeng.log.

Profile Options in Other Applications

Profiles that help the eAM integration with other Oracle Applications are listed below. If you are implementing other Oracle Applications, you will need to set up additional profile options as appropriate. Please refer to the applications' respective user's guides or implementation manuals for more details.

Profile Options Summary in Other Applications

Profile Option	User	System Admin: USER	System Admin: RESP	System Admin: APP	System Admin: SITE	Required?	Default
INV: Default Primary Unit of Measure	View Update	View Update	View Update	View Update	View Update	Y	-
INV: Item Default Status	View Update	View Update	View Update	View Update	View Update	Y	-

Profile Option	User	System Admin: USER	System Admin: RESP	System Admin: APP	System Admin: SITE	Required?	Default
PO: Enable Direct Delivery To Shop Floor	View Update	View Update	View Update	View Update	View Update	N	-

Profile Option Details

Relevant Profile Options in other applications are listed below:

INV: Default Primary Unit of Measure

You can specify any user-defined or seeded value for this profile.

INV: Item Default Status

You can specify any user-defined or seeded value for this profile.

PO: Enable Direct Delivery To Shop Floor

This profile option is a prerequisite for an eAM User to create Purchase Requisitions for Direct Items via Oracle Purchasing and iProcurement. This profile option must be set to Yes if you need to create Purchase Requisitions using Oracle Purchasing and iProcurement applications.

Related Topics

Personal Profile Values Window, *Oracle Applications User's Guide*

Overview of Setting User Profiles, *Oracle Applications System Administrator's Guide*

Common User Profile Options, *Oracle Applications User's Guide*

5

eAM Open Interfaces and APIs

This chapter covers the following topics:

- eAM Open Interfaces and APIs
- eAM Item Open Interface
- eAM Asset Number Open Interface
- eAM Asset Genealogy Open Interface
- eAM Meter Reading Open Interface
- Asset Number API
- Asset Attribute Values API
- Asset Attribute Groups API
- Asset Routes API
- Asset Areas API
- Department Approvers API
- EAM Parameters API
- EAM Meters API
- EAM Meter Association API
- Meter Reading API
- EAM PM Schedules API (includes PM Rules as children records)
- Activity Creation API
- EAM Activity Association API
- EAM Activity Suppression API
- EAM Set Name API
- Import Geocode API
- Maintenance Object Instantiation API

- Work Order Business Object API
- Process Maintenance Work Order API
- Work Request API

eAM Open Interfaces and APIs

Oracle Enterprise Asset Management provides several open interfaces and APIs, enabling you to link with non-Oracle applications, applications you build, and applications on other computers.

This section includes the following topics:

- eAM Item Open Interface, page 5-3
- eAM Asset Number Open Interface, page 5-9
- eAM Asset Genealogy Open Interface, page 5-18
- eAM Meter Reading Open Interface, page 5-21
- Asset Number API, page 5-24
- Asset Attribute Values API, page 5-31
- Asset Attribute Groups API, page 5-38
- Asset Routes API, page 5-41
- Asset Areas API, page 5-47
- Department Approvers API, page 5-50
- EAM Parameters API, page 5-52
- EAM Meters API, page 5-58
- EAM Meter Association API, page 5-64
- Meter Reading API, page 5-66
- EAM PM Schedules API (includes PM Rules as children records), page 5-70
- Activity Creation API, page 5-78
- EAM Activity Association API, page 5-94
- EAM Activity Suppression API, page 5-102

- EAM Set Name API, page 5-106
- Maintenance Object Instantiation API, page 5-117
- Work Order Business Object API, page 5-118
- Process Maintenance Work Order API, page 5-145
- Work Request API, page 5-153

eAM Item Open Interface

The eAM Item Open Interface enables you to import Asset Groups, Activities, and Rebuildable Items into the eAM application, using a batch process. Create them as new items or update existing items (Asset Groups, Activities, or Rebuildable Items). The Item Open Interface validates your data, ensuring that your imported items contain the same item detail as items you enter manually within the Master Item window.

You can import item category assignments. You can item category assignments simultaneously with an importing items process, or as a separate task.

When importing items through the Item Open Interface, new items are created in your item master organization, existing items are updated, or existing items are assigned to additional organizations. You can specify values for all item attributes, or you can specify just a few attributes and let the remainder default or remain null. The Item Open Interface enables import revision details, including past and future revisions and effectivity dates. Validation of imported items is performed using the same rules as the item definition windows to ensure valid items. See: Overview of Engineering Prototype Environment, *Oracle Engineering User's Guide* and Defining Items, *Oracle Inventory User's Guide*.

The Item Open Interface reads data from three tables for importing items and item details. Use the MTL_SYSTEM_ITEMS_INTERFACE table for new item numbers and all item attributes. This is the main item interface table and may be the only table you choose to use. When importing revision details for new items, use the MTL_ITEM_REVISIONS_INTERFACE table. This table is used for revision information and is not required. When importing item category assignments, use the MTL_ITEM_CATEGORIES_INTERFACE table to store data about item assignments to category sets and categories to import into the Oracle Inventory MTL_ITEM_CATEGORIES table. A fourth table, MTL_INTERFACE_ERRORS, is used for error tracking of all items that the Item Interface fails.

Before using the Item Open Interface, write and execute a custom program that extracts item information from your source system and inserts the records into the MTL_SYSTEM_ITEMS_INTERFACE and (if revision detail is included) MTL_ITEMS_REVISIONS_INTERFACE, and MTL_ITEM_CATEGORIES_INTERFACE tables. After loading item, revision, and item category assignment records into these interface tables, execute the Item Open Interface to import the data. The Item Open

Interface assigns defaults, validates included data, and then imports the new items.

> **Note:** Import items into a master organization before importing items into additional organizations. Specify only your master organization on a first pass execution. After this completes, you can execute the Item Open Interface again, this time specifying an additional or all organizations.

Setting up the item open interface:

1. Create Indexes for Performance. Create the following indexes to improve the Item Open Interface performance.

   First, determine which segments are enabled for the System Items flexfield.

   Next, for example, if you have a two-segment flexfield, with SEGMENT8 and SEGMENT12 enabled:

   ```
   SQL> create unique index MTL_SYSTEM_ITEMS_B_UC1 on
   MTL_SYSTEM_ITEMS_B (ORGANIZATION_ID, SEGMENT8, SEGMENT12);SQL>
   create unique index MTL_SYSTEM_ITEMS_INTERFACE_UC1 on
   mtl_system_items_interface (organization_id, segment8, segment12);
   ```

   If you plan to populate the ITEM_NUMBER column in mtl_system_items_interface instead of the item segment columns, do not create the MTL_SYSTEM_ITEMS_INTERFACE_UC1 unique index. Instead, create MTL_SYSTEM_ITEMS_INTERFACE_NC1 non-unique index on the same columns.

   Create the following indexes for optimum performance:

   MTL_SYSTEM_ITEMS_B

   - Non-Unique Index on organization_id, segment*n*
   - You need at least one indexed, mandatory segment.

   MTL_SYSTEM_ITEMS_INTERFACE

   - Non Unique Index on inventory_item_id, organization_id
   - Non Unique Index on Item _number
   - Unique Index on Transaction_id

     > **Note:** Recreate this Index as Non Unique, if you are populating organization_code instead of organization_id; it includes the previously enabled segment(s) for the System Item Key Flexfield. Use the created default index if you are using segment1.

MTL_ITEM_REVISIONS_INTERFACE

- Non Unique Index on set_process_id
- Non Unique Index on Transaction_id
- Non Unique Index on Organization_id, Inventory_item_id, Revision

MTL_ITEM_CATEGORIES_INTERFACE

- Non Unique Index on inventory_item_id, category_id
- Non Unique Index on set_process_id

> **Tip:** Populate _id fields whenever possible. Populating inventory_item_id instead of segment (n) for Update Mode improves performance. Populating organization_id, instead of organization_code for both Create and Update modes, reduces processing time.

2. Start the Concurrent Manager.

   Because the Item Open Interface process is launched and managed via the concurrent manager, ensure that the concurrent manager is executing before importing any items.

3. Set Profile Option Defaults.

   Some columns use profile options as default values. Set these profiles, if you want them to default. See: Inventory Profile Options, *Oracle Inventory User's Guide* and Overview of Inventory Setup, *Oracle Inventory User's Guide*.

Execution Steps:

1. Populate the interface tables.

   The item interface table MTL_SYSTEM_ITEMS_INTERFACE contains *every* column in the Oracle Inventory item master table, MTL_SYSTEM_ITEMS. The columns in the item interface correspond directly to those in the item master table. Except for ITEM_NUMBER or SEGMENT*n* columns, ORGANIZATION_CODE or ORGANIZATION_ID, DESCRIPTION, PROCESS_FLAG, and TRANSACTION_TYPE, all of these columns are optional, either because they have defaults that can derive, or because the corresponding attributes are optional and may be null.

   You may put in details about other interface tables not used by the Item Open Interface.

   Currently, the interface does not support the MTL_CROSS_REFERENCE_INTERFACE or

MTL_SECONDARY_LOCS_INTERFACE.

The MTL_ITEM_CATEGORIES_INTERFACE is used by the Item Open Interface for both internal processing of default category assignments, *and* to retrieve data populated by the user to be imported into the Oracle Inventory MTL_ITEM_CATEGORIES table.

Column Names (partial list of columns)	Instruction
PROCESS_FLAG	Enter 1 for pending data to be imported. After running the import process, the PROCESS_FLAG of the corresponding rows will be set to different values, indicating the results of the import (1 = Pending, 2 = Assign complete, 3 = Assign/validation failed, 4 = Validation succeeded; import failed, 5 = Import in process, 6 = Import succeeded)
TRANSACTION_TYPE	Enter CREATE to create a new item, or UPDATE to update existing items.
SET_PROCESS_ID	Enter an arbitrary number. Rows designated with the same value for SET_PROCESS_ID will process together.
ORGANIZATION_CODE	Enter the organization that the new item will import into.
SEGMENT1~20	Corresponds to the item name (for example, the name of the Asset Group, Asset Activity, or Rebuildable Item)
DESCRIPTION	Enter the description of the item.
EAM_ITEM_TYPE	Enter 1 for Asset Group, 2 for Asset Activity, or 3 for Rebuildable Item.
INVENTORY_ITEM_FLAG	Enter Y for eAM items.
MTL_TRANSACTIONS_ENABLED_FLAG	Enter N for eAM items.
EFFECTIVITY_CONTROL	Enter 2 for Unit Effectivity Control for eAM Asset Groups.

Column Names (partial list of columns)	Instruction
SERIAL_NUMBER_CONTROL_CODE	Enter 2 (Predefined) for Asset Groups; this should be NULL for Asset Activities.
AUTO_SERIAL_ALPHA_PREFIX	Serial Number Prefix
START_AUTO_SERIAL_NUMBER	Start Serial Number

Note: For information about columns not discussed, see Table and View Definitions, *Oracle Inventory Technical Reference Manual*.

2. Launch the Item Import process.

   1. Navigate to the Import Items window.

      Choose an organization, if you have not specified one already. Import items into the master organization before importing them to additional children organization.

   2. Enter parameters:

Parameter	Description
All Organizations	Select Yes to run the interface for all organization codes within the item interface table. Select No to run the interface for only interface rows within the current organization.

Parameter	Description
Validate Items	Select Yes to validate all items, and their information residing in the interface table, that have not yet been validated. If items are not validated, they will not be imported into eAM. Select No to not validate items within the interface table. Use this option if you have previously run the Item Open interface and responded Yes in the Validate Items parameter, and No in the Process Items parameter, and now need to process your items.
Process Items	Select Yes to import all qualifying items in the interface table into eAM. Select No to not import items into eAM. Use this option, along with Yes in the Delete Processed Rows parameter, to remove successfully processed rows from the interface table, without performing any other processing. You can also use this option, with Yes in the Validate Items parameter, to validate items without any processing.
Delete Processed Rows	Select Yes to delete successfully processed rows from the item interface tables. Select No to leave all rows in the item interface tables.
Process Set	Enter a set id number for the set of rows in the interface table to process. The interface process will process rows having that id in the SET_PROCESS_ID column. If you leave this parameter blank, all rows are picked up for processing, regardless of the SET_PROCESS_ID column value.

Parameter	Description
Create or Update Items	Select 1 to create new items. Select 2 to update existing items. You can create or update items via separate executions of the Import Items process.

3. Choose OK.

4. Choose Submit to launch the Import Asset Number process. You can view its progress by choosing View from the tool bar, and then selecting Requests.

Related Topics

Oracle Manufacturing APIs and Open Interfaces Manual, Release 11*i*

Defining Asset Groups, *Oracle Enterprise Asset Management User's Guide*

Defining Activities, *Oracle Enterprise Asset Management User's Guide*

Defining Rebuildable Items, *Oracle Enterprise Asset Management User's Guide*

eAM Asset Number Open Interface

The eAM Asset Number Open Interface enables you to import Asset Numbers into eAM, using a batch process. Optionally import Asset Number attributes. You can create new Asset Numbers and attributes, or update existing Asset Numbers and attributes.

You can also use Oracle Web Services to automatically create, update and search for asset numbers. These public interfaces enable you to more easily convert data from another instance or another system. These web services are annotated and available in the I-Repository along with other public Oracle APIs. (See: *Oracle Manufacturing APIs and Open Interfaces Manual* for more information on APIs.)

Execution Steps:

1. Populate the interface tables with the import information.

   The two item interface tables to populate are MTL_EAM_ASSET_NUM_INTERFACE (MEANI), and the MTL_EAM_ATTR_VAL_INTERFACE (MEAVI). The MTL_EAM_ASSET_NUM_INTERFACE table stores relevant Asset Number information. If the asset's attributes are also imported, that information is stored in the MTL_EAM_ATTR_VAL_INTERFACE.

Column Name (partial list of columns)	Instruction
BATCH_ID	Enter an arbitrary number. Rows designated with the same BATCH_ID will process together.
PROCESS_FLAG	Enter a P for pending. This value will change to S if the import is successful, or E if the row contains an error.
IMPORT_MODE	Enter 0 to create new rows (asset numbers), or 1 to update existing rows.
IMPORT_SCOPE	Enter 0 to import both Asset Numbers and Attributes, 1 to import Asset Numbers only, or 2 to import Attributes only.
INVENTORY_ITEM_ID	Enter the Asset Group to associate with the imported Asset Number(s).
SERIAL_NUMBER	Enter the name of the Asset Number.
ORGANIZATION_CODE	Enter the current organization.
OWNING_DEPARTMENT_CODE	Enter the Owning Department of the asset number(s).
ERROR_CODE	This column will update by the Import process if an error occurs.
ERROR_MESSAGE	This column will update by the Import process if an error occurs.
INTERFACE_HEADER_ID	This is used with the identically named column in the MEAVI table, to relate the Attributes associated with an Asset Number.

Column Name (partial list of columns)	Instruction
PROCESS_STATUS	Enter P (Pending). This value will change to S if the import is successful, or E if the row contains an error.
INTERFACE_HEADER_ID	Foreign key of the identically named column in the MEANI table to relate to the Asset Number an Attribute is associated with.
INTERFACE_LINE_ID	A unique key
END_USER_COLUMN_NAME	Corresponds with the Attribute Name
ATTRIBUTE_CATEGORY	Corresponds with the Attribute Group
LINE_TYPE	Enter 1 if the Attribute is of type VARCHAR2, 2 if it is of type NUMBER, or 3 if it is of type DATE.
ATTRIBUTE_VARCHAR2_VALUE	Value of the Attribute; used with LINE_TYPE = 1
ATTRIBUTE_NUMBER_VALUE	Value of the Attribute; used with LINE_TYPE = 2
ATTRIBUTE_DATE_VALUE	Value of the Attribute; used with LINE_TYPE = 3
ERROR_NUMBER	This column will update by the Import process if an error occurs.
ERROR_MESSAGE	This column will update by the Import process if an error occurs.

Note: For information about columns not discussed, see Table and View Definitions, *Oracle Enterprise Asset Management Technical Reference Manual.*

2. Launch the Asset Number Import process to import interface information into the MTL_SERIAL_NUMBERS production table.

1. Navigate to the Asset Number Import window.

   Choose an organization if you have not specified one already. Import Asset Numbers into the master organization before importing them into additional children organizations.

2. Enter parameters:

Parameter	Description
Batch ID	This is the same value that is populated in the BATCH_ID column within the MEANI table.
Purge Option	Select Yes to delete rows in the interface tables after they have successfully imported into the production tables. Select No to keep all rows in the interface tables after they have successfully imported into the production tables. Any failed rows with error messages will not delete.

3. Choose OK.

4. Choose Submit to launch the Asset Number Import process. You can view its progress by choosing View from the tool bar, and then selecting Requests.

Create and Update Asset Number API:

The MTL_EAM_ASSET_NUMBER_PUB public API is used to create and update Asset Numbers in the MTL_SERIAL_NUMBERS table, and is called from the Asset Number Open Interface process.

Column Name	Type	Required	Optional	Default
P_API_VERSION	Number	Yes	-	-
P_INIT_MSG_LIST	Varchar2	-	Yes	FND_API.G_FALSE

Column Name	Type	Required	Optional	Default
P_COMMIT	Varchar2	-	Yes	FND_API.G_FALSE
P_VALIDATION_LEVEL	Number	-	Yes	FND_API.G_VALID_LEVEL_FULL
P_INVENTORY_ITEM_ID	Number	-	-	-
P_SERIAL_NUMBER	Varchar2(30)	-	-	-
P_INITIALIZATION_DATE	Date	-	-	-
P_DESCRIPTIVE_TEXT	Varchar2(240)	-	-	-
P_CURRENT_ORGANIZATION_ID	Number	-	-	-
P_ATTRIBUTE CATEGORY	Varchar2(30)	-	-	-
P_ATTRIBUTE1 ~15	Varchar2(150)	-	-	-
P_GEN_OBJECT_ID	Number	-	-	-
P_CATEGORY_ID	Number	-	-	-
P_WIP_ACCOUNTING_CLASS_CODE	Varchar2(10)	-	-	-
P_MAINTAINABLE_FLAG	Varchar2(1)	-	-	-

Column Name	Type	Required	Optional	Default
P_OWNING_DEPARTMENT_ID	Number	-	-	-
P_DEPENDENT_ASSET_FLAG	Varchar2(1)	-	-	-
P_NETWORK_ASSET_FLAG	Varchar2(1)	-	-	-
P_FA_ASSET_ID	Number	-	-	-
P_PN_LOCATION_ID	Number	-	-	-
P_EAM_LOCATION_ID	Number	-	-	-
P_ASSET_STATUS_CODE	Varchar2(30)	-	-	-
P_ASSET_CRITICALITY_CODE	Varchar2(30)	-	-	-
P_LAST_UPDATE_DATE	Date	Yes	-	-
P_LAST_UPDATED_BY	Number	Yes	-	-
P_CREATION_DATE	Date	Yes	-	-
P_CREATED_BY	Number	Yes	-	-
P_LAST_UPDATE_LOGIN	Number	Yes	-	-
P_REQUEST_ID	Number	-	Yes	-
P_PROGRAM_APPLICATION_ID	Number	-	Yes	-

Column Name	Type	Required	Optional	Default
P_PROGRAM_ID	Number	-	Yes	-
P_PROGRAM_UPDATE_DATE	Date	-	Yes	-

Create and Update Extensible Asset Attribute Values API:

The MTL_EAM_ASSET_ATTR_VALUES_PUB public API is used to create and update asset extensible attribute values, and is called from the Asset Extensible Attributes Open Interface process. This interface process is used when the IMPORT_SCOPE column is set to 0 or 2 within the MTL_EAM_ASSET_NUM_INTERFACE table.

Column Name	Type	Required	Optional	Default
P_API_VERSION	Number	Yes	-	-
P_INIT_MSG_LIST	Varchar2	-	Yes	FND_API.G_FALSE
P_COMMIT	Varchar2	-	Yes	FND_API.G_FALSE
P_VALIDATION_LEVEL	Number	-	Yes	FND_API.G_VALID_LEVEL_FULL
P_ATTRIBUTE CATEGORY	Varchar2(30)	-	-	-
P_C_ATTRIBUTE1~20	Varchar2(150)	-	-	-
P_N_ATTRIBUTE1~10	Number	-	-	-
P_D_ATTRIBUTE1~10	Date	-	-	-

Column Name	Type	Required	Optional	Default
P_LAST_UPDATE_DATE	Date	Yes	-	-
P_LAST_UPDATED_BY	Number	Yes	-	-
P_CREATION_DATE	Date	Yes	-	-
P_CREATED_BY	Number	Yes	-	-
P_LAST_UPDATE_LOGIN	Number	Yes	-	-
P_REQUEST_ID	Number	-	Yes	-
P_PROGRAM_APPLICATION_ID	Number	-	Yes	-
P_PROGRAM_ID	Number	-	Yes	-
P_PROGRAM_UPDATE_DATE	Date	-	Yes	-

Create and Update Asset Genealogy and Hierarchy API:

The INV_GENEALOGY_PUB public API is used to create and update asset genealogy and hierarchy information in the MTL_OBJECT_GENEALOGY table, and is called from the Asset Number Open Interface process.

Column Name	Type	Required	Default
P_API_VERSION	Number	Yes	-
P_INIT_MSG_LIST	Varchar2	-	FND_API.G_FALSE
P_COMMIT	Varchar2	-	FND_API.G_FALSE

Column Name	Type	Required	Default
P_VALIDATION_LEVEL	Number	-	FND_API.G_VALID_LEVEL_FULL
P_OBJECT_TYPE	Number	Yes	-
P_PARENT_OBJECT_TYPE	Number	-	-
P_OBJECT_ID	Number	-	-
P_OBJECT_NUMBER	Varchar2	-	-
P_INVENTORY_ITEM_ID	Number	-	-
P_ORG_ID	Number	-	-
P_PARENT_OBJECT_ID	Number	-	-
P_PARENT_OBJECT_NUMBER	Varchar2	-	-
P_PARENT_INVENTORY_ITEM_ID	Number	-	-
P_PARENT_ORG_ID	Number	-	-
P_GENEALOGY_ORIGIN	Number	-	-
P_GENEALOGY_TYPE	Number	-	-
P_START_DATE_ACTIVE	Date	-	-
P_END_DATE_ACTIVE	Date	-	-
P_ORIGIN_TXN_ID	Number	-	-

Column Name	Type	Required	Default
P_UPDATE_TXN_ID	Number	-	-
P_LAST_UPDATE_DATE	Date	Yes	-
P_LAST_UPDATED_BY	Number	Yes	-
P_CREATION_DATE	Date	Yes	-
P_CREATED_BY	Number	Yes	-
P_LAST_UPDATE_LOGIN	Number	Yes	-
P_REQUEST_ID	Number	-	-
P_PROGRAM_APPLICATION_ID	Number	-	-
P_PROGRAM_ID	Number	-	-
P_PROGRAM_UPDATE_DATE	Date	-	-

Related Topics

Defining Asset Numbers, *Oracle Enterprise Asset Management User's Guide*

eAM Asset Genealogy Open Interface

The eAM Asset Genealogy Open Interface enables you to import asset genealogy (configuration history) into eAM, using a batch process. Create new parent/child relationships, or update existing relationships.

Execution Steps:

1. Populate the interface tables with the import information.

   The Asset Genealogy Import process reads information within the MTL_OBJECT_GENEALOGY_INTERFACE (MOGI) table, then imports that

information into the production tables.

Column Name (partial list of columns)	Instruction
BATCH_ID	Enter an arbitrary number. Rows designated with the same BATCH_ID will process together.
PROCESS_STATUS	Enter P (Pending). This value will change to S if the import is successful, or E if the row contains an error.
INTERFACE_HEADER_ID	Unique key
IMPORT_MODE	Enter 0 to create new rows (configuration histories), or 1 to update existing rows.
OBJECT_TYPE	Enter 2 for eAM.
PARENT_OBJECT_TYPE	Enter 2 for eAM.
GENEALOGY_ORIGIN	Enter 3 (Manual) for eAM.
GENEALOGY_TYPE	Enter 5 for eAM.
INVENTORY_ITEM_ID	Corresponds to Asset Group
SERIAL_NUMBER	Corresponds to Asset Number
PARENT_INVENTORY_ITEM_ID	Corresponds to Parent Asset Group
PARENT_SERIAL_NUMBER	Corresponds to Parent Asset Number
START_DATE_ACTIVE	Enter the Parent/Child relationship start date.
END_DATE_ACTIVE	Enter the Parent/Child relationship end date.
ERROR_CODE	This column will update by the Import process if an error occurs.

Column Name (partial list of columns)	Instruction
ERROR_MESSAGE	This column will update by the Import process if an error occurs.

Note: For information about columns not discussed, see Table and View Definitions, *Oracle Enterprise Asset Management Technical Reference Manual.*

2. Launch the Asset Genealogy Import process.
   1. Navigate to the Asset Genealogy Import window.

      Choose an organization if you have not specified one already. Import asset genealogies into the master organization before importing them into additional children organizations.

   2. Enter parameters:

Parameter	Description
Batch ID	This is the same value that is populated in the BATCH_ID column within the MOGI table.
Purge Option	Select Yes to delete rows in the interface tables after they have successfully imported into the production tables. Select No to keep all rows in the interface tables after they have successfully imported into the production tables. Any failed rows with error messages will not delete.

   3. Choose OK.

   4. Choose Submit to launch the Asset Genealogy Import process. View its progress by choosing View from the tool bar, and then selecting Requests.

eAM Meter Reading Open Interface

Import Meter Reading is an interface process used to import meter readings into eAM.

Execution Steps:

1. Populate the interface table with the import information.

   The Meter Reading Import process reads information within the EAM_METER_READINGS_INTERFACE table, then imports that information into the eAM production table.

Column Name (partial list of columns)	Instruction
GROUP_ID	Enter an arbitrary number. Rows designated with the same GROUP_ID will process together.
PROCESS_STATUS	Enter P (Pending). This value will change to S if the import is successful, or E if the row contains an error.
PROCESS_PHASE	Enter 2 for rows to be processed.
METER_ID	Unique key
METER_NAME	Enter the name of the meter to process. This is not mandatory if you entered a METER_ID.
RESET_FLAG	Enter Yes to reset the meter reading. If there is an already existing meter reading for the given meter that occurs after this reset reading, the processor will error. Enter No to not reset the meter reading.
LIFE_TO_DATE	Enter a value for LIFE_TO_DATE or a value in the READING_VALUE column. If both columns are populated, then the READING_VALUE value is used to enter a reading, and the LIFE_TO_DATE_READING value is calculated from this current reading.

Column Name (partial list of columns)	Instruction
ORGANIZATION_ID	If you enter an organization ID, the organization provided must be enabled for eAM.
ORGANIZATION_CODE	If you enter an organization code, the organization provided must be enabled for eAM.
READING_DATE	Date the reading is entered
READING_VALUE	Reading value at the reading date
WIP_ENTITY_ID	Enter the work order id that the reading is associated with. If the column is populated, then the ORGANIZATION_ID or ORGANIZATION_CODE columns are mandatory.
WORK_ORDER_NAME	Enter the work order name that the reading is associated with. If this column is populated, then the ORGANIZATION_ID or ORGANIZATION_CODE columns are mandatory.
DESCRIPTION	Description of meter reading
ERROR_CODE	This column will update by the Import process if an error occurs.
ERROR_MESSAGE	This column will update by the Import process if an error occurs.

Note: For information about columns not discussed, see Table and View Definitions, *Oracle Enterprise Asset Management Technical Reference Manual.*

2. Launch the Meter Reading Import process.
    1. Navigate to the Import Jobs and Schedules window.

        Choose an organization if you have not specified one already. Import Work Orders into the master organization before importing them into additional

children organizations.

2. Enter parameters:

Parameter	Description
Group ID	Corresponds to the GROUP_ID in the EAM_METER_READINGS_INTERFACE table. The import process will only process those meter readings that have a GROUP_ID in the interface table matching the value entered in this parameter.

3. Choose OK.

4. Choose Submit to launch the Meter Reading Import process. View its progress by choosing View from the tool bar, and then selecting Requests.

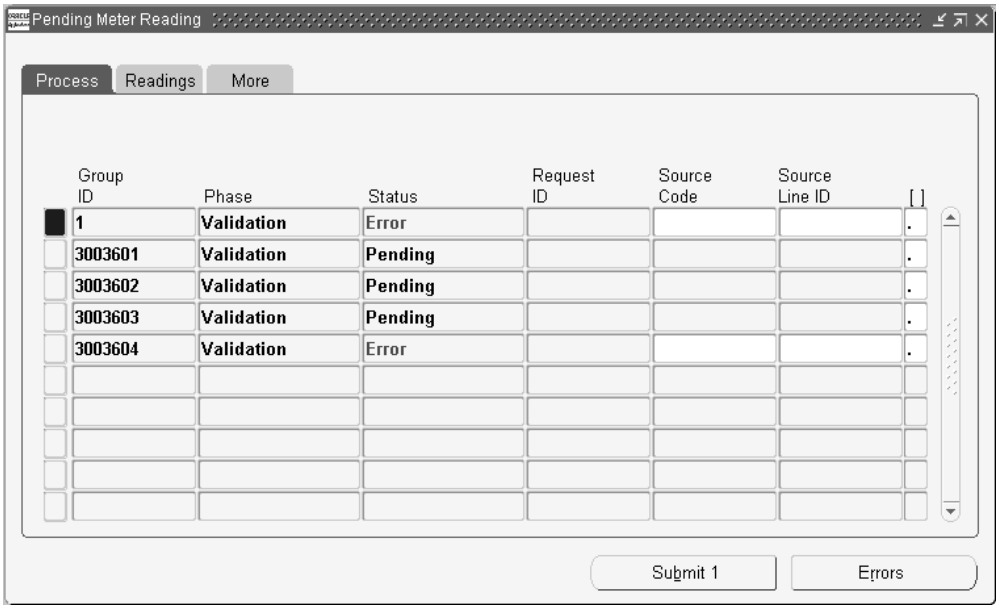
To view pending meter readings:

You can display the rows within the interface table that failed to import into eAM.

1. Navigate to the Find Meter Readings window to limit rows using search criteria, such as Group ID, Reading Date, or Organization code.

2. Choose Find. The rows that appear failed to import into eAM.

Pending Meter Reading



3. Optionally select the Process tab to display general information about the errored meter readings.

4. Optionally select the Readings tab to display meter reading information, such as meter name, reading date, and reading value.

5. Optionally select the More tab to display information about the meter reading, such as Organization, Work order, Description, and Created By.

6. Optionally select Errors to view additional detailed information regarding the type and cause of the failure.

7. Optionally choose Submit to import Work Orders, after correcting errors.

Related Topics

Entering Meter Readings, *Oracle Enterprise Asset Management User's Guide*

Asset Number API

Package Name:

EAM_AssetNumber_PUB

Procedure Name:

Insert_Asset_Number

The Insert_Asset_Number API is used to create Asset Numbers. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_inventory_item_id	NUMBER	Yes	-	Inventory Item ID
p_serial_number	VARCHAR2	Yes	-	Serial Number
p_current_status	NUMBER	-	3	Current Status 3 - activated 4 - deactivated
p_descriptive_text	VARCHAR2	-	NULL	Description

Parameter	Type	Required	Default	Description
p_current_organization_id	NUMBER	Yes	-	Current Organization ID
p_attribute_category	VARCHAR2	-	-	Descriptive Flexfield
p_attribute1	VARCHAR2	-	-	Descriptive Flexfield
p_attribute2	VARCHAR2	-	-	Descriptive Flexfield
p_attribute3	VARCHAR2	-	-	Descriptive Flexfield
p_attribute4	VARCHAR2	-	-	Descriptive Flexfield
p_attribute5	VARCHAR2	-	-	Descriptive Flexfield
p_attribute6	VARCHAR2	-	-	Descriptive Flexfield
p_attribute7	VARCHAR2	-	-	Descriptive Flexfield
p_attribute8	VARCHAR2	-	-	Descriptive Flexfield
p_attribute9	VARCHAR2	-	-	Descriptive Flexfield
p_attribute10	VARCHAR2	-	-	Descriptive Flexfield
p_attribute11	VARCHAR2	-	-	Descriptive Flexfield
p_attribute12	VARCHAR2	-	-	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute13	VARCHAR2	-	-	Descriptive Flexfield
p_attribute14	VARCHAR2	-	-	Descriptive Flexfield
p_attribute15	VARCHAR2	-	-	Descriptive Flexfield
p_wip_accounting_class_code	VARCHAR2	-	NULL	WIP Accounting Class Code
p_maintainable_flag	VARCHAR2	-	NULL	Maintainable Flag: Y, N, or Null
p_owning_department_id	NUMBER	Yes	-	Owning Department ID
p_network_asset_flag	VARCHAR2	-	NULL	Network Asset Flag: Y, N, or Null
p_fa_asset_id	NUMBER	-	NULL	Fixed Asset ID
p_pn_location_id	NUMBER	-	NULL	PN Location ID
p_eam_location_id	NUMBER	-	NULL	EAM Location ID
p_asset_criticality_code	VARCHAR2	-	NULL	Asset Criticality Code
p_category_id	NUMBER	-	NULL	Category ID
p_prod_organization_id	NUMBER	-	NULL	Production Organization ID
p_equipment_item_id	NUMBER	-	NULL	Equipment Item ID

Parameter	Type	Required	Default	Description
p_eqp_serial_number	VARCHAR2	-	NULL	Equipment Serial Number
p_instantiate_flag	BOOLEAN	-	FALSE	Instantiation Flag

Package Name:

EAM_AssetNumber_PUB

Procedure Name:

Update_Asset_Number

The EAM_AssetNumber_PUB.Update_Asset_Number API is used to update existing eAM Asset Numbers. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter

Parameter	Type	Required	Default	Description
p_inventory_item_id	NUMBER	Yes	-	Inventory Item ID
p_serial_number	VARCHAR2	Yes	-	Serial Number
p_current_status	NUMBER	-	3	Current Status 3 - activated 4 - deactivated
p_descriptive_text	VARCHAR2	-	NULL	Description
p_current_organization_id	NUMBER	Yes	-	Current Organization ID
p_attribute_category	VARCHAR2	-	-	Descriptive Flexfield
p_attribute1	VARCHAR2	-	-	Descriptive Flexfield
p_attribute2	VARCHAR2	-	-	Descriptive Flexfield
p_attribute3	VARCHAR2	-	-	Descriptive Flexfield
p_attribute4	VARCHAR2	-	-	Descriptive Flexfield
p_attribute5	VARCHAR2	-	-	Descriptive Flexfield
p_attribute6	VARCHAR2	-	-	Descriptive Flexfield
p_attribute7	VARCHAR2	-	-	Descriptive Flexfield
p_attribute8	VARCHAR2	-	-	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute9	VARCHAR2	-	-	Descriptive Flexfield
p_attribute10	VARCHAR2	-	-	Descriptive Flexfield
p_attribute11	VARCHAR2	-	-	Descriptive Flexfield
p_attribute12	VARCHAR2	-	-	Descriptive Flexfield
p_attribute13	VARCHAR2	-	-	Descriptive Flexfield
p_attribute14	VARCHAR2	-	-	Descriptive Flexfield
p_attribute15	VARCHAR2	-	-	Descriptive Flexfield
p_wip_accounting_class_code	VARCHAR2	-	NULL	WIP Accounting Class Code
p_maintainable_flag	VARCHAR2	-	NULL	Maintainable Flag: Y, N, or Null
p_owning_department_id	NUMBER	Yes	-	Owning Department ID
p_network_asset_flag	VARCHAR2	-	NULL	Network Asset Flag: Y, N, or Null
p_fa_asset_id	NUMBER	-	NULL	Fixed Asset ID
p_pn_location_id	NUMBER	-	NULL	PN Location ID
p_eam_location_id	NUMBER	-	NULL	EAM Location ID

Parameter	Type	Required	Default	Description
p_asset_criticality_code	VARCHAR2	-	NULL	Asset Criticality Code
p_category_id	NUMBER	-	NULL	Category ID
p_prod_organization_id	NUMBER	-	NULL	Production Organization ID
p_equipment_item_id	NUMBER	-	NULL	Equipment Item ID
p_eqp_serial_number	VARCHAR2	-	NULL	Equipment Serial Number

Asset Attribute Values API

Package Name:

EAM_ASSETATTR_VALUE_PUB

Procedure Name:

insert_assetattr_value

The EAM_ASSETATTR_VALUE_PUB.insert_assetattr_value API is used to create eAM Asset Attributes for existing Asset Numbers. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_association_id	NUMBER	Yes	-	Association ID
p_application_id	NUMBER	Yes	-	Application ID
p_descriptive_flexfield_name	VARCHAR2	Yes	-	Descriptive Flexfield Name
p_inventory_item_id	NUMBER	Yes	-	Inventory Item ID
p_serial_number	VARCHAR2	Yes	-	Serial Number
p_organization_id	NUMBER	Yes	-	Organization ID
p_attribute_category	VARCHAR2	Yes	-	Attribute Category
p_c_attribute1	VARCHAR2	Yes	-	Attribute
p_c_attribute2	VARCHAR2	Yes	-	Attribute
p_c_attribute3	VARCHAR2	Yes	-	Attribute
p_c_attribute4	VARCHAR2	Yes	-	Attribute

Parameter	Type	Required	Default	Description
p_c_attribute5	VARCHAR2	Yes	-	Attribute
p_c_attribute6	VARCHAR2	Yes	-	Attribute
p_c_attribute7	VARCHAR2	Yes	-	Attribute
p_c_attribute8	VARCHAR2	Yes	-	Attribute
p_c_attribute9	VARCHAR2	Yes	-	Attribute
p_c_attribute10	VARCHAR2	Yes	-	Attribute
p_c_attribute11	VARCHAR2	Yes	-	Attribute
p_c_attribute12	VARCHAR2	Yes	-	Attribute
p_c_attribute13	VARCHAR2	Yes	-	Attribute
p_c_attribute14	VARCHAR2	Yes	-	Attribute
p_c_attribute15	VARCHAR2	Yes	-	Attribute
p_c_attribute16	VARCHAR2	Yes	-	Attribute
p_c_attribute17	VARCHAR2	Yes	-	Attribute
p_c_attribute18	VARCHAR2	Yes	-	Attribute
p_c_attribute19	VARCHAR2	Yes	-	Attribute
p_c_attribute20	VARCHAR2	Yes	-	Attribute
p_d_attribute1	DATE	Yes	-	Attribute
p_d_attribute2	DATE	Yes	-	Attribute
p_d_attribute3	DATE	Yes	-	Attribute
p_d_attribute4	DATE	Yes	-	Attribute

Parameter	Type	Required	Default	Description
p_d_attribute5	DATE	Yes	-	Attribute
p_d_attribute6	DATE	Yes	-	Attribute
p_d_attribute7	DATE	Yes	-	Attribute
p_d_attribute8	DATE	Yes	-	Attribute
p_d_attribute9	DATE	Yes	-	Attribute
p_d_attribute10	DATE	Yes	-	Attribute
p_n_attribute1	NUMBER	Yes	-	Attribute
p_n_attribute2	NUMBER	Yes	-	Attribute
p_n_attribute3	NUMBER	Yes	-	Attribute
p_n_attribute4	NUMBER	Yes	-	Attribute
p_n_attribute5	NUMBER	Yes	-	Attribute
p_n_attribute6	NUMBER	Yes	-	Attribute
p_n_attribute7	NUMBER	Yes	-	Attribute
p_n_attribute8	NUMBER	Yes	-	Attribute
p_n_attribute9	NUMBER	Yes	-	Attribute
p_n_attribute10	NUMBER	Yes	-	Attribute
p_maintenance_object_type	VARCHAR2	Yes	-	Maintenance Object Type
p_maintenance_object_id	NUMBER	Yes	-	Maintenance Object ID
p_creation_organization_id	NUMBER	Yes	-	Creation Organization ID

Package Name:

EAM_ASSETATTR_VALUE_PUB

Procedure Name:

update_assetattr_value

The EAM_ASSETATTR_VALUE_PUB.update_assetattr_value API is used to update eAM Asset Attributes for existing Asset Numbers. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_association_id	NUMBER	Yes	-	Association ID
p_application_id	NUMBER	Yes	-	Application ID
p_descriptive_flexfield_name	VARCHAR2	Yes	-	Descriptive Flexfield Name

Parameter	Type	Required	Default	Description
p_inventory_item_id	NUMBER	Yes	-	Inventory Item ID
p_serial_number	VARCHAR2	Yes	-	Serial Number
p_organization_id	NUMBER	Yes	-	Organization ID
p_attribute_category	VARCHAR2	Yes	-	Attribute Category
p_c_attribute1	VARCHAR2	Yes	-	Attribute
p_c_attribute2	VARCHAR2	Yes	-	Attribute
p_c_attribute3	VARCHAR2	Yes	-	Attribute
p_c_attribute4	VARCHAR2	Yes	-	Attribute
p_c_attribute5	VARCHAR2	Yes	-	Attribute
p_c_attribute6	VARCHAR2	Yes	-	Attribute
p_c_attribute7	VARCHAR2	Yes	-	Attribute
p_c_attribute8	VARCHAR2	Yes	-	Attribute
p_c_attribute9	VARCHAR2	Yes	-	Attribute
p_c_attribute10	VARCHAR2	Yes	-	Attribute
p_c_attribute11	VARCHAR2	Yes	-	Attribute
p_c_attribute12	VARCHAR2	Yes	-	Attribute
p_c_attribute13	VARCHAR2	Yes	-	Attribute
p_c_attribute14	VARCHAR2	Yes	-	Attribute
p_c_attribute15	VARCHAR2	Yes	-	Attribute

Parameter	Type	Required	Default	Description
p_c_attribute16	VARCHAR2	Yes	-	Attribute
p_c_attribute17	VARCHAR2	Yes	-	Attribute
p_c_attribute18	VARCHAR2	Yes	-	Attribute
p_c_attribute19	VARCHAR2	Yes	-	Attribute
p_c_attribute20	VARCHAR2	Yes	-	Attribute
p_d_attribute1	DATE	Yes	-	Attribute
p_d_attribute2	DATE	Yes	-	Attribute
p_d_attribute3	DATE	Yes	-	Attribute
p_d_attribute4	DATE	Yes	-	Attribute
p_d_attribute5	DATE	Yes	-	Attribute
p_d_attribute6	DATE	Yes	-	Attribute
p_d_attribute7	DATE	Yes	-	Attribute
p_d_attribute8	DATE	Yes	-	Attribute
p_d_attribute9	DATE	Yes	-	Attribute
p_d_attribute10	DATE	Yes	-	Attribute
p_n_attribute1	NUMBER	Yes	-	Attribute
p_n_attribute2	NUMBER	Yes	-	Attribute
p_n_attribute3	NUMBER	Yes	-	Attribute
p_n_attribute4	NUMBER	Yes	-	Attribute
p_n_attribute5	NUMBER	Yes	-	Attribute

Parameter	Type	Required	Default	Description
p_n_attribute6	NUMBER	Yes	-	Attribute
p_n_attribute7	NUMBER	Yes	-	Attribute
p_n_attribute8	NUMBER	Yes	-	Attribute
p_n_attribute9	NUMBER	Yes	-	Attribute
p_n_attribute10	NUMBER	Yes	-	Attribute
p_maintenance_object_type	VARCHAR2	Yes	-	Maintenance Object Type
p_maintenance_object_id	NUMBER	Yes	-	Maintenance Object ID
p_creation_organization_id	NUMBER	Yes	-	Creation Organization ID

Asset Attribute Groups API

Package Name:

EAM_ASSETATTR_GRP_PUB

Procedure Name:

insert_assetattr_grp

The EAM_ASSETATTR_GRP_PUB.insert_assetattr_grp public API is used to associate existing eAM Asset Groups with existing Attribute Groups. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_application_id	NUMBER	Yes	-	Application ID
p_descriptive_flexfield_name	VARCHAR2	Yes	-	Descriptive Flexfield Name
p_desc_flex_context_code	VARCHAR2	Yes	-	Descriptive Flex Content Code
p_organization_id	NUMBER	Yes	-	Organization ID
p_inventory_item_id	NUMBER	Yes	-	Inventory Item ID
p_enabled_flag	VARCHAR2	Yes	-	Enabled Flag
p_creation_organization_id	NUMBER	Yes	-	Creation Organization ID
x_new_association_id	NUMBER	-	-	The newly created Association ID

Package Name:

EAM_ASSETATTR_GRP_PUB

Procedure Name:

update_assetattr_grp

The EAM_ASSETATTR_GRP_PUB.update_assetattr_grp public API is used to update existing Asset Attribute Group associations. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_association_id	NUMBER	Yes	-	Association ID of the updated record
p_application_id	NUMBER	Yes	-	Application ID
p_descriptive_flexfield_name	VARCHAR2	Yes	-	Descriptive Flexfield Name

Parameter	Type	Required	Default	Description
p_desc_flex_context_code	VARCHAR2	Yes	-	Descriptive Flex Content Code
p_organization_id	NUMBER	Yes	-	Organization ID
p_inventory_item_id	NUMBER	Yes	-	Inventory Item ID
p_enabled_flag	VARCHAR2	Yes	-	Enabled Flag
p_creation_organization_id	NUMBER	Yes	-	Creation Organization ID

Asset Routes API

Package Name:

EAM_ASSET_ROUTES_PUB

Procedure Name:

insert_asset_routes

The EAM_ASSET_ROUTES_PUB.insert_asset_routes public API is used to create new Asset Routes. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_organization_id_in	NUMBER	Yes	-	Organization ID
p_start_date_active_in	DATE	-	NULL	Start date active
p_end_date_active_in	DATE	-	NULL	End date active
p_attribute_category_in	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_network_item_id_in	NUMBER	Yes	-	Network Item ID
p_network_serial_number_in	VARCHAR2	Yes	-	Network Serial Number
p_inventory_item_id_in	NUMBER	Yes	-	Inventory Item ID
p_serial_number	VARCHAR2	Yes	-	Serial Number

Parameter	Type	Required	Default	Description
p_network_object_type_in	NUMBER	-	NULL	Network Object Type
p_network_object_id_in	NUMBER	-	NULL	Network Object ID
p_maintenance_object_type	NUMBER	-	NULL	Maintenance Object Type
p_maintenance_object_id	NUMBER	-	NULL	Maintenance Object ID

Package Name:

EAM_ASSET_ROUTES_PUB

Procedure Name:

update_asset_routes

The EAM_ASSET_ROUTES_PUB.update_asset_routes public API is used to update existing Asset Routes. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter

Parameter	Type	Required	Default	Description
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_organization_id_in	NUMBER	Yes	-	Organization ID
p_start_date_active_in	DATE	-	NULL	Start date active
p_end_date_active_in	DATE	-	NULL	End date active
p_attribute_category_in	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_network_item_id_in	NUMBER	Yes	-	Network Item ID
p_network_serial_number_in	VARCHAR2	Yes	-	Network Serial Number
p_inventory_item_id_in	NUMBER	Yes	-	Inventory Item ID
p_serial_number	VARCHAR2	Yes	-	Serial Number
p_network_object_type_in	NUMBER	-	NULL	Network Object Type
p_network_object_id_in	NUMBER	-	NULL	Network Object ID
p_maintenance_object_type	NUMBER	-	NULL	Maintenance Object Type

Parameter	Type	Required	Default	Description
p_maintenance_object_id	NUMBER	-	NULL	Maintenance Object ID

Asset Areas API

Package Name:

EAM_ASSET_AREAS_PUB

Procedure Name:

insert_asset_areas

The EAM_ASSET_AREAS_PUB.insert_asset_areas public API is used to create new Asset Areas. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter

Parameter	Type	Required	Default	Description
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_location_codes	VARCHAR2	Yes	-	Location Code
p_start_date	DATE	-	NULL	Start Effective Date
p_end_date	DATE	-	NULL	End Effective Date
p_organization_id	NUMBER	Yes	-	Organization ID
p_description	VARCHAR2	-	NULL	Description
p_creation_organization_id	NUMBER	Yes	-	Creation Organization ID

Package Name:

EAM_ASSET_AREAS_PUB

Procedure Name:

update_asset_areas

The EAM_ASSET_AREAS_PUB.update_asset_areas public API is used to update existing Asset Areas. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	-	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_location_codes	VARCHAR2	Yes	-	Location Code
p_start_date	DATE	-	NULL	Start Effective Date
p_end_date	DATE	-	NULL	End Effective Date
p_organization_id	NUMBER	Yes	-	Organization ID

Parameter	Type	Required	Default	Description
p_description	VARCHAR2	-	NULL	Description
p_creation_organization_id	NUMBER	Yes	-	Creation Organization ID

Department Approvers API

Package Name:

EAM_DEPT_APPROVERS_PUB

Procedure Name:

insert_dept_appr

The EAM_DEPT_APPROVERS_PUB.insert_dept_appr public API is used to create new department approvers. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_dept_id	NUMBER	Yes	-	Department ID
p_organization_id	NUMBER	Yes	-	Organization ID
p_resp_app_id	NUMBER	Yes	-	Application ID
p_responsibility_id	NUMBER	Yes	-	Responsibility ID
p_primary_approver_id	NUMBER	Yes	-	Primary Approver ID

Package Name:

EAM_DEPT_APPROVERS_PUB

Procedure Name:

update_dept_appr

The EAM_DEPT_APPROVERS_PUB.update_dept_appr public API is used to update existing department approvers. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_dept_id	NUMBER	Yes	-	Department ID
p_organization_id	NUMBER	Yes	-	Organization ID
p_resp_app_id	NUMBER	Yes	-	Application ID
p_responsibility_id	NUMBER	Yes	-	Responsibility ID
p_primary_approver_id	NUMBER	Yes	-	Primary Approver ID

EAM Parameters API

Package Name:

EAM_PARAMETERS_PUB

Procedure Name:

Insert_Parameters

The EAM_PARAMETERS_PUB.Insert_Parameters public API is used to create a new set of eAM Parameters for an existing eAM enabled organization. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_organization_id	NUMBER	Yes	-	Organization ID
p_work_request_auto_approve	VARCHAR2	-	'N'	Work Request Auto Approve
p-def_maint_cost_category	NUMBER	Yes	-	Maintenance Cost Category
p_def_eam_cost_element_id	NUMBER	Yes	-	eAM Cost Element ID
p_work_req_extended_log_flag	VARCHAR2	-	'Y'	Work Request Extended Log flag

Parameter	Type	Required	Default	Description
p_default_eam_class	VARCHAR2	Yes	-	WIP Accounting Class
p_easy_work_order_prefix	VARCHAR2	-	NULL	Easy Work Order prefix
p_work_order_prefix	VARCHAR2	-	NULL	Work Order prefix
p_serial_number_enabled	VARCHAR2	-	'Y'	Serial Number enabled
p_auto_firm_flag	VARCHAR2	-	'Y'	Auto Firm flag
p_maintenance_offset_account	NUMBER	-	NULL	Maintenance Offset Account
p_wip_eam_request_type	NUMBER	-	NULL	WIP eAM Request Type
p_material_issue_by_mo	VARCHAR2	-	'N'	Material Issue flag
p_default_department_id	NUMBER	-	NULL	Default Department ID
p_invoice_billable_items_only	VARCHAR2	-	'N'	Invoice Billable Items Only
p_override_bill_amount	VARCHAR2	-	NULL	Override Bill Amount
p_billing_basis	NUMBER	-	NULL	Billing Basis
p_billing_method	NUMBER	-	NULL	Billing Method
p_dynamic_billing_activity	VARCHAR2	-	NULL	Dynamic Billing Activity
p_default_asset_flag	VARCHAR2	-	NULL	Default Asset flag

Parameter	Type	Required	Default	Description
p_pm_ignore_missed_wo	VARCHAR2	-	'N'	flag indicating if PM scheduling should ignore missed Work Orders
p_issue_zero_cost_flag	VARCHAR2	-	'Y'	flag indicating if you are issuing rebuldables at zero or item cost
p_work_request_asset_num_reqd	VARCHAR2	-	'Y'	flag indicating if an Asset Number is mandatory at Work Request creation

Package Name:

EAM_PARAMETERS_PUB

Procedure Name:

Update_Parameters

The EAM_PARAMETERS_PUB.Update_Parameters public API is used to update an existing set of eAM Parameters. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_organization_id	NUMBER	Yes	-	Organization ID
p_work_request_auto_approve	VARCHAR2	-	'N'	Work Request Auto Approve
p-def_maint_cost_category	NUMBER	Yes	-	Maintenance Cost Category
p_def_eam_cost_element_id	NUMBER	Yes	-	eAM Cost Element ID
p_work_req_extended_log_flag	VARCHAR2	-	'Y'	Work Request Extended Log flag
p_default_eam_class	VARCHAR2	Yes	-	WIP Accounting Class
p_easy_work_order_prefix	VARCHAR2	-	NULL	Easy Work Order prefix
p_work_order_prefix	VARCHAR2	-	NULL	Work Order prefix

Parameter	Type	Required	Default	Description
p_serial_number_enabled	VARCHAR2	-	'Y'	Serial Number enabled
p_auto_firm_flag	VARCHAR2	-	'Y'	Auto Firm flag
p_maintenance_offset_account	NUMBER	-	NULL	Maintenance Offset Account
p_wip_eam_request_type	NUMBER	-	NULL	WIP eAM Request Type
p_material_issue_by_mo	VARCHAR2	-	'N'	Material Issue flag
p_default_department_id	NUMBER	-	NULL	Default Department ID
p_invoice_billable_items_only	VARCHAR2	-	'N'	Invoice Billable Items Only
p_override_bill_amount	VARCHAR2	-	NULL	Override Bill Amount
p_billing_basis	NUMBER	-	NULL	Billing Basis
p_billing_method	NUMBER	-	NULL	Billing Method
p_dynamic_billing_activity	VARCHAR2	-	NULL	Dynamic Billing Activity
p_default_asset_flag	VARCHAR2	-	NULL	Default Asset flag
p_pm_ignore_missed_wo	VARCHAR2	-	'N'	flag indicating if PM scheduling should ignore missed Work Orders

Parameter	Type	Required	Default	Description
p_issue_zero_cost_flag	VARCHAR2	-	'Y'	flag indicating if you are issuing rebuldables at zero or item cost
p_work_request_asset_num_reqd	VARCHAR2	-	'Y'	flag indicating if an Asset Number is mandatory at Work Request creation

EAM Meters API

Package Name:

EAM_METER_PUB

Procedure Name:

create_meter

The EAM_METER_PUB.create_meter public API is used to create new meters. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_meter_name	VARCHAR2	Yes	-	Meter Name
p_meter_uom	VARCHAR2	Yes	-	Unit of Measure
p_meter_type	NUMBER	-	1	Meter Type 1 = value meter 2 = change meter
p_value_change_dir	NUMBER	-	1	Value change direction 1 = ascending 2 = descending
p_used_in_scheduling	NUMBER	-	'N'	Used in Scheduling flag
p_user_defined_rate	NUMBER	-	NULL	User Defined Rate
p_use_past_reading	NUMBER	-	NULL	Use Past Reading
p_description	VARCHAR2	-	NULL	Meter Description
p_from_effective_date	DATE	-	NULL	From Effective Date

Parameter	Type	Required	Default	Description
p_to_effective_date	DATE	-	NULL	To Effective Date
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_templ_flag	VARCHAR2	-	NULL	Template flag
p_source_tmpl_id	NUMBER	-	NULL	Source Template ID
p_initial_reading	NUMBER	-	0	Initial Reading
p_initial_reading_date	DATE	-	SYSDATE	Initial Reading Date
x_new_meter_id	NUMBER	-	-	Newly created Meter's ID

Package Name:

EAM_METER_PUB

Procedure Name:

update_meter

The EAM_METER_PUB.update_meter public API is used to update existing meters. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_meter_name	VARCHAR2	Yes	-	Meter Name
p_meter_uom	VARCHAR2	Yes	-	Unit of Measure
p_meter_type	NUMBER	-	1	Meter Type 1 = value meter 2 = change meter
p_value_change_dir	NUMBER	-	1	Value change direction 1 = ascending 2 = descending
p_used_in_scheduling	NUMBER	-	'N'	Used in Scheduling flag
p_user_defined_rate	NUMBER	-	NULL	User Defined Rate
p_use_past_reading	NUMBER	-	NULL	Use Past Reading

Parameter	Type	Required	Default	Description
p_description	VARCHAR2	-	NULL	Meter Description
p_from_effective_date	DATE	-	NULL	From Effective Date
p_to_effective_date	DATE	-	NULL	To Effective Date
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_templ_flag	VARCHAR2	-	NULL	Template flag
p_source_tmpl_id	NUMBER	-	NULL	Source Template ID

EAM Meter Association API

Package Name:

EAM_MeterAssoc_PUB

Procedure Name:

Insert_AssetMeterAssoc

The EAM_MeterAssoc_PUB.Insert_AssetMeterAssoc public API is used to create new meter associations. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_meter_id	NUMBER	Yes	-	Meter ID
p_organization_id	NUMBER	Yes	-	Organization ID
p_asset_group_id	NUMBER	-	NULL	Inventory Item ID
p_asset_number	VARCHAR2	-	NULL	Serial Number
p_maintenance_object_type	NUMBER	-	NULL	Maintenance Object Type
p_maintenance_object_id	NUMBER	-	NULL	Maintenance Object ID

Note: Because all fields (other than WHO columns and attribute columns) within the eam_asset_meters table are part of the unique key, no update method is supplied.

Meter Reading API

Package Name:

EAM_MeterReading_PUB

Procedure Name:

create_meter_reading

The create_meter_reading API is used to create new meter readings and reset existing meter readings. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
p_meter_reading_rec	Eam_MeterReading_PUB.meter_reading_Rec_Type	Yes	-	The record includes details of the meter reading.

Parameter	Type	Required	Default	Description
p_value_before_reset	NUMBER	-	NULL	Value of the meter reading before reset. Required only when the reading is a reset.
x_meter_reading_id	NUMBER	-	-	The meter_reading_id of the newly created record.

Column Name	Type	Default
meter_id	NUMBER	NULL
meter_reading_id	NUMBER	NULL
current_reading	NUMBER	NULL
current_reading_date	DATE	NULL
reset_flag	VARCHAR2(1)	NULL
description	VARCHAR2(100)	NULL
wip_entity_id	NUMBER	NULL
attribute_category	VARCHAR2(30)	NULL
attribute1	VARCHAR2(150)	NULL
attribute2	VARCHAR2(150)	NULL
attribute3	VARCHAR2(150)	NULL
attribute4	VARCHAR2(150)	NULL

Column Name	Type	Default
attribute5	VARCHAR2(150)	NULL
attribute6	VARCHAR2(150)	NULL
attribute7	VARCHAR2(150)	NULL
attribute8	VARCHAR2(150)	NULL
attribute9	VARCHAR2(150)	NULL
attribute10	VARCHAR2(150)	NULL
attribute11	VARCHAR2(150)	NULL
attribute12	VARCHAR2(150)	NULL
attribute13	VARCHAR2(150)	NULL
attribute14	VARCHAR2(150)	NULL
attribute15	VARCHAR2(150)	NULL
source_line_id	NUMBER	NULL
source_code	VARCHAR2(30)	NULL
wo_entry_fake_flag	VARCHAR2(1)	NULL

Package Name:

EAM_MeterReading_PUB

Procedure Name:

disable_meter_reading

The disable_meter_reading API is used to disable existing meter readings. You need to supply either a meter reading ID or a meter reading date, to identify the specific reading. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
P_API_VERSION	NUMBER	Yes	-	Standard Oracle API parameter
P_INIT_MSG_LIST	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_COMMIT	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_VALIDATION_LEVEL	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
X_RETURN_STATUS	VARCHAR2	-	-	Standard Oracle API output parameter
X_MSG_COUNT	NUMBER	-	-	Standard Oracle API output parameter
X_MSG_DATA	VARCHAR2	-	-	Standard Oracle API output parameter
p_meter_reading_id	NUMBER	-	NULL	The meter_reading_id of the meter reading to be disabled.
p_meter_id	NUMBER	-	NULL	The meter_id of the meter.
p_meter_reading_date	DATE	-	NULL	Meter reading date
p_meter_name	VARCHAR2	-	NULL	Meter name

EAM PM Schedules API (includes PM Rules as children records)

Package Name:

EAM_PMDef_PUB

Procedure Name:

instantiate_PM_def

Given an Activity association instance's Activity association ID and a PM Template's pm_schedule_id, the EAM_PMDef_PUB.instantiate_PM_def public API is used to create a new PM definition from the template, where the new PM definition is associated with the given activity_association_id. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_pm_schedule_id	NUMBER	Yes	-	the PM Template's pm_schedule_id
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
p_activity_assoc_id	NUMBER	Yes	-	the Activity association instance's Activity association ID
x_new_pm_schedule_id	NUMBER	-	-	the newly created PM Schedule's pm_schedule_id

Package Name:

EAM_PMDef_PUB

Procedure Name:

instantiate_PM_Defs

The EAM_PMDef_PUB.instantiate_PM_Defs public API is used to instantiate a set of

PM definitions for all asset_association_ids within the activity_assoc_id_tbl table and create a PM Schedule definition from the template. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_activity_assoc_id_tbl	EAM_ObjectInstantiation_PUB.Association_Id_Tbl_Type	-	-	PL/SQL table type containing one or more association_Id_Tbl_Type rows

Package Name

EAM_PMDef_PUB

Procedure Name:

create_PM_Def

The EAM_PMDef_PUB.create_PM_Def public API is used to create new PM Schedules and child records, such as PM rules. The table below provides the specifications for this

API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_pm_schedule_rec	pm_scheduling_rec_type	Yes	-	PL/SQL table type containing one unique PM Schedule record
p_pm_day_interval_rules_tbl	pm_rule_tbl_type	Yes	-	PL/SQL table type containing zero or more PL/SQL record type pm_rule_rec_type rows, used for creating Day Interval type runtime rules

Parameter	Type	Required	Default	Description
p_pm_runtime_rules_tbl	pm_rule_tbl_type	Yes	-	PL/SQL table type containing zero or more PL/SQL record type pm_rule_rec_type rows, used for creating meter-based runtime rules
p_pm_list_date_rules_tbl	pm_rule_tbl_type	Yes	-	PL/SQL table type containing zero or more PL/SQL record type pm_rule_rec_type rows, used to create simple list date rules.
x_new_pm_schedule_id	NUMBER	-	-	pm_schedule_id of the newly created PM Schedule

Package Name:

EAM_PMDef_PUB

Procedure Name:

update_PM_Def

The EAM_PMDef_PUB.update_PM_Def public API is used to update existing PM Schedules and child records, such as PM rules. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_pm_schedule_rec	pm_scheduling_rec_type	-	NULL	PL/SQL table type containing one unique PM Schedule record. Unlike the create procedure, this may be NULL because this procedure can be used to modify PM Rules.
p_pm_day_interval_rules_tbl	pm_rule_tbl_type	Yes	-	PL/SQL table type containing zero or more PL/SQL record type pm_rule_rec_type rows, used for creating Day Interval type runtime rules

Parameter	Type	Required	Default	Description
p_pm_runtime_rules_tbl	pm_rule_tbl_type	Yes	-	PL/SQL table type containing zero or more PL/SQL record type pm_rule_rec_type rows, used for creating meter-based runtime rules
p_pm_list_date_rules_tbl	pm_rule_tbl_type	Yes	-	PL/SQL table type containing zero or more PL/SQL record type pm_rule_rec_type rows, used to create simple list date rules.

Package Name:

EAM_PMDef_PUB

Procedure Name:

PM_Scheduling_Rec_Type

The EAM_PMDef_PUB.PM_Scheduling_Rec_Type is a PL SQL record type used for inserting PM Schedule definitions into the eam_pm_schedulings table.

Column	Type
PM_SCHEDULE_ID	NUMBER
ACTIVITY_ASSOCIATION_ID	NUMBER
NON_SCHEDULED_FLAG	VARCHAR2(1)
FROM_EFFECTIVE_DATE	DATE

Column	Type
TO_EFFECTIVE_DATE	DATE
RESCHEDULING_POINT	NUMBER
LEAD_TIME	NUMBER
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
DAY_TOLERANCE	NUMBER

Column	Type
SOURCE_CODE	VARCHAR2(30)
SOURCE_LINE	VARCHAR2(30)
DEFAULT_IMPLEMENT	VARCHAR2(1)
WHICHEVER_FIRST	VARCHAR2(1)
INCLUDE_MANUAL	VARCHAR2(1)
SET_NAME_ID	NUMBER
SCHEDULING_METHOD_CODE	NUMBER
TYPE_CODE	NUMBER
NEXT_SERVICE_START_DATE	DATE
NEXT_SERVICE_END_DATE	DATE
SOURCE_TMPL_ID	NUMBER
AUTO_INSTANTIATION_FLAG	VARCHAR2(1)
NAME	VARCHAR (50)
TMPL_FLAG	VARCHAR2(1)

Package Name:

EAM_PMDef_PUB

Procedure Name:

pm_rule_rec_type

The EAM_PMDef_PUB.pm_rule_rec_type is a PL SQL record type used for inserting PM Schedule rules that are associated with a PM Schedule into the eam_pm_scheduling_rules table.

Column	Type
RULE_ID	NUMBER
PM_SCHEDULE_ID	NUMBER
RULE_TYPE	NUMBER
DAY_INTERVAL	NUMBER
METER_ID	NUMBER
RUNTIME_INTERVAL	NUMBER
LAST_SERVICE_READING	NUMBER
EFFECTIVE_READING_FROM	NUMBER
EFFECTIVE_READING_TO	NUMBER
EFFECTIVE_DATE_FROM	DATE
EFFECTIVE_DATE_TO	DATE
LIST_DATE	DATE
LIST_DATE_DESC	VARCHAR2(50)

Activity Creation API

Package Name:

EAM_ACTIVITY_PUB

Procedure Name:

CREATE_ACTIVITY

The Activity Creation API is used to create eAM Activities. You can specify the source Work Order that the API uses as a model for the new Activities. Optionally provide an Item Template to define the attributes of the Activity. You can specify various Activity properties, such as Activity Type, Cause, Shutdown Notification, and Source. Various copy options, controlling the copy of Operations, Material, Resources, and Activity

Association, are supported.

> **Note:** Items (Asset Groups, Activities, Rebuildables) are created using the Item Creation Business Object API (See: Item Creation Business Object API, *Oracle Manufacturing APIs and Open Interfaces Manual*). Asset BOMs and Asset Activities are created using the BOM Business Object API (See: BOM Business Object API, *Oracle Manufacturing APIs and Open Interfaces Manual*).

The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
P_API_VERSION	NUMBER	Yes	-	Standard Oracle API parameter
P_INIT_MSG_LIST	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_COMMIT	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_VALIDATION_LEVEL	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
X_RETURN_STATUS	VARCHAR2	-	-	Standard Oracle API output parameter
X_MSG_COUNT	NUMBER	-	-	Standard Oracle API output parameter
X_MSG_DATA	VARCHAR2	-	-	Standard Oracle API output parameter
P_ASSET_ACTIVITY	INV_ITEM_GRP.ITEM_REC_TYPE	Yes	-	Item Record to define the attributes of the Activity

Parameter	Type	Required	Default	Description
P_TEMPLATE_ID	NUMBER	-	NULL	Template Id (If Template Name is specified, Template Id will override Template Name)
P_TEMPLATE_NAME	VARCHAR2	-	NULL	Template Name
P_ACTIVITY_TYPE_CODE	VARCHAR2	-	NULL	Activity Type
P_ACTIVITY_CAUSE_CODE	VARCHAR2	-	NULL	Activity Cause
P_SHUTDOWN_TYPE_CODE	VARCHAR2	-	NULL	Shutdown Type
P_NOTIFICATION_REQ_FLAG	VARCHAR2	-	NULL	Notification Required Flag: Y (enabled), N (disabled)
_ACTIVITY_SOURCE_CODE	VARCHAR2	-	NULL	Activity Source
P_WORK_ORDER_REC	EAM_ACTIVITY_PUB.WORK_ORDER_REC_TYPE	Yes	-	Specifies the source Work Order the new Activity is to be created from
P_OPERATION_COPY_OPTION	NUMBER	-	2	Operation Copy Option: 1 (NONE), 2 (ALL)
P_MATERIAL_COPY_OPTION	NUMBER	-	2	Material Copy Option: 1 (NONE), 2 (ISSUED), 3 (ALL)

Parameter	Type	Required	Default	Description
P_RESOURCE_COPY_OPTION	NUMBER	-	2	Resource Copy Option: 1 (NONE), 2 (ISSUED), 3 (ALL)
P_ASSOCIATION_COPY_OPTION	NUMBER	-	2	Association Copy Option: 1 (NONE), 2 (CURRENT), 3 (ALL)
X_WORK_ORDER_REC	EAM_ACTIVITY_PUB.WORK_ORDER_REC_TYPE	-	-	Output. Validated Work Order record.
X_CURR_ITEM_REC	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Validated current item record.
X_CURR_ITEM_RETURN_STATUS	VARCHAR2	-	-	Output. Current item creation return status.
X_CURR_ITEM_ERROR_TBL	INV_ITEM_GRP.ERROR_TBL_TYPE	-	-	Output. Current item creation error table.
X_MASTER_ITEM_REC	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Validated master item record.
X_MASTER_ITEM_RETURN_STATUS	VARCHAR2	-	-	Output. Master item creation return status.
X_MASTER_ITEM_ERROR_TBL	INV_ITEM_GRP.ERROR_TBL_TYPE	-	-	Output. Master item creation error table.

Parameter	Type	Required	Default	Description
x_rtg_header_rec	BOM_Rtg_Pub.Rtg_Header_Rec_Type	-	-	Routing Business Object API output.
x_rtg_revision_tbl	BOM_Rtg_Pub.Rtg_Revision_Tbl_Type	-	-	Routing Business Object API output.
x_operation_tbl	BOM_Rtg_Pub.Operation_Tbl_Type	-	-	Routing Business Object API output.
x_op_resource_tbl	BOM_Rtg_Pub.Op_Resource_Tbl_Type	-	-	Routing Business Object API output.
x_sub_resource_tbl	BOM_Rtg_Pub.Sub_Resource_Tbl_Type	-	-	Routing Business Object API output.
x_op_network_tbl	BOM_Rtg_Pub.Op_Network_Tbl_Type	-	-	Routing Business Object API output.
x_rtg_return_status	VARCHAR2	-	-	Routing Business Object API output.
x_rtg_msg_count	NUMBER	-	-	Routing Business Object API output.
x_rtg_msg_list	Error_Handler.Error_Tbl_Type	-	-	Routing Business Object API output.
x_bom_header_rec	BOM_BO_PUB.BOM_Head_Rec_Type	-	-	BOM Business Object API output.
x_bom_revision_tbl	BOM_BO_PUB.BOM_Revision_Tbl_Type	-	-	BOM Business Object API output.

Parameter	Type	Required	Default	Description
x_bom_component_tbl	BOM_BO_PUB.BOM_Co_mps_Tbl_Type	-	-	BOM Business Object API output.
x_bom_return_status	VARCHAR2	-	-	BOM Business Object API output.
x_bom_msg_count	NUMBER	-	-	BOM Business Object API output.
x_bom_msg_list	Error_Handler.Error_Tbl_Type	-	-	BOM Business Object API output.
x_assoc_return_status	VARCHAR2	-	-	Copy Association API output.
x_assoc_msg_count	NUMBER	-	-	Copy Association API output.
x_assoc_msg_data	VARCHAR2	-	-	Copy Association API output.
x_act_num_association_tbl	EAM_Activity_PUB.Activity_Association_Tbl_Type	-	-	Copy Association API output.
x_activity_association_tbl	EAM_Activity_PUB.Activity_Association_Tbl_Type	-	-	Copy Association API output.

Package Name:

EAM_ACTIVITY_PUB

Procedure Name:

COPY_ACTIVITY

The Copy Activity API is used to create a new Activity from an existing Activity. While copying from the source Activity, you can copy the source Activity's BOM, Routing, and associations. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
P_API_VERSION	NUMBER	Yes	-	Standard Oracle API parameter
P_INIT_MSG_LIST	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_COMMIT	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_VALIDATION_LEVEL	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
X_RETURN_STATUS	VARCHAR2	-	-	Standard Oracle API output parameter
X_MSG_COUNT	NUMBER	-	-	Standard Oracle API output parameter
X_MSG_DATA	VARCHAR2	-	-	Standard Oracle API output parameter
P_ASSET_ACTIVITY	INV_ITEM_GRP.ITEM_REC_TYPE	Yes	-	Item Record to define the attributes of the Activity
P_TEMPLATE_ID	NUMBER	-	NULL	Template Id (If Template Name is specified, Template Id will override Template Name)

Parameter	Type	Required	Default	Description
P_TEMPLATE_NAME	VARCHAR2	-	NULL	Template Name
P_ACTIVITY_TYPE_CODE	VARCHAR2	-	NULL	Activity Type
P_ACTIVITY_CAUSE_CODE	VARCHAR2	-	NULL	Activity Cause
P_SHUTDOWN_TYPE_CODE	VARCHAR2	-	NULL	Shutdown Type
P_NOTIFICATION_REQ_FLAG	VARCHAR2	-	NULL	Notification Required Flag: Y (enabled), N (disabled)
_ACTIVITY_SOURCE_CODE	VARCHAR2	-	NULL	Activity Source
P_WORK_ORDER_REC	EAM_ACTIVITY_PUB.WORK_ORDER_REC_TYPE	Yes	-	Specifies the source Work Order the new Activity is to be created from
P_OPERATION_COPY_OPTION	NUMBER	-	2	Operation Copy Option: 1 (NONE), 2 (ALL)
P_MATERIAL_COPY_OPTION	NUMBER	-	2	Material Copy Option: 1 (NONE), 2 (ISSUED), 3 (ALL)
P_RESOURCE_COPY_OPTION	NUMBER	-	2	Resource Copy Option: 1 (NONE), 2 (ISSUED), 3 (ALL)

Parameter	Type	Required	Default	Description
P_ASSOCIATION_COPY_OPTION	NUMBER	-	2	Association Copy Option: 1 (NONE), 2 (CURRENT), 3 (ALL)
X_WORK_ORDER_REC	EAM_ACTIVITY_PUB.WORK_ORDER_REC_TYPE	-	-	Output. Validated Work Order record.
X_CURR_ITEM_REC	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Validated current item record.
X_CURR_ITEM_RETURN_STATUS	VARCHAR2	-	-	Output. Current item creation return status.
X_CURR_ITEM_ERROR_TBL	INV_ITEM_GRP.ERROR_TBL_TYPE	-	-	Output. Current item creation error table.
X_MASTER_ITEM_REC	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Validated master item record.
X_MASTER_ITEM_RETURN_STATUS	VARCHAR2	-	-	Output. Master item creation return status.
X_MASTER_ITEM_ERROR_TBL	INV_ITEM_GRP.ERROR_TBL_TYPE	-	-	Output. Master item creation error table.
x_rtg_header_rec	BOM_Rtg_Pub.Rtg_Header_Rec_Type	-	-	Routing Business Object API output.
x_rtg_revision_tbl	BOM_Rtg_Pub.Rtg_Revision_Tbl_Type	-	-	Routing Business Object API output.

Parameter	Type	Required	Default	Description
x_operation_tbl	BOM_Rtg_Pub.Operation_Tbl_Type	-	-	Routing Business Object API output.
x_op_resource_tbl	BOM_Rtg_Pub.Op_Resource_Tbl_Type	-	-	Routing Business Object API output.
x_sub_resource_tbl	BOM_Rtg_Pub.Sub_Resource_Tbl_Type	-	-	Routing Business Object API output.
x_op_network_tbl	BOM_Rtg_Pub.Op_Network_Tbl_Type	-	-	Routing Business Object API output.
x_rtg_return_status	VARCHAR2	-	-	Routing Business Object API output.
x_rtg_msg_count	NUMBER	-	-	Routing Business Object API output.
x_rtg_msg_list	Error_Handler.Error_Tbl_Type	-	-	Routing Business Object API output.
x_bom_header_rec	BOM_BO_PUB.BOM_Head_Rec_Type	-	-	BOM Business Object API output.
x_bom_revision_tbl	BOM_BO_PUB.BOM_Revision_Tbl_Type	-	-	BOM Business Object API output.
x_bom_component_tbl	BOM_BO_PUB.BOM_Co_mps_Tbl_Type	-	-	BOM Business Object API output.
x_bom_return_status	VARCHAR2	-	-	BOM Business Object API output.

Parameter	Type	Required	Default	Description
x_bom_msg_count	NUMBER	-	-	BOM Business Object API output.
x_bom_msg_list	Error_Handler.Error_Tbl_Type	-	-	BOM Business Object API output.
x_assoc_return_status	VARCHAR2	-	-	Copy Association API output.
x_assoc_msg_count	NUMBER	-	-	Copy Association API output.
x_assoc_msg_data	VARCHAR2	-	-	Copy Association API output.
x_act_num_association_tbl	EAM_Activity_PUB.Activity_Association_Tbl_Type	-	-	Copy Association API output.
x_activity_association_tbl	EAM_Activity_PUB.Activity_Association_Tbl_Type	-	-	Copy Association API output.

Package Name:

EAM_ACTIVITY_PUB

Procedure Name:

CREATE_ACTIVITY_WITH_TEMPLATE

The Copy Activity API is used to create a new Activity from an pre-defined template. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
P_API_VERSION	NUMBER	Yes	-	Standard Oracle API parameter
P_INIT_MSG_LIST	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_COMMIT	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_VALIDATION_LEVEL	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
X_RETURN_STATUS	VARCHAR2	-	-	Standard Oracle API output parameter
X_MSG_COUNT	NUMBER	-	-	Standard Oracle API output parameter
X_MSG_DATA	VARCHAR2	-	-	Standard Oracle API output parameter
P_ORGANIZATION_ID	NUMBER	-	-	Organization id
P_ORGANIZATION_CODE	NUMBER	-	-	Organization code
P_ASSET_ACTIVITY	VARCHAR2	-	NULL	Activity
P_SEGMENT1	VARCHAR2	-	NULL	Segment1
P_SEGMENT2	VARCHAR2	-	NULL	Segment2
P_SEGMENT3	VARCHAR2	-	NULL	Segment3
P_SEGMENT4	VARCHAR2	-	NULL	Segment4

Parameter	Type	Required	Default	Description
P_SEGMENT5	VARCHAR2	-	NULL	Segment5
P_SEGMENT6	VARCHAR2	-	NULL	Segment6
P_SEGMENT7	VARCHAR2	-	NULL	Segment7
P_SEGMENT8	VARCHAR2	-	NULL	Segment8
P_SEGMENT9	VARCHAR2	-	NULL	Segment9
P_SEGMENT10	VARCHAR2	-	NULL	Segment10
P_SEGMENT11	VARCHAR2	-	NULL	Segment11
P_SEGMENT12	VARCHAR2	-	NULL	Segment12
P_SEGMENT13	VARCHAR2	-	NULL	Segment13
P_SEGMENT14	VARCHAR2	-	NULL	Segment14
P_SEGMENT15	VARCHAR2	-	NULL	Segment15
P_SEGMENT16	VARCHAR2	-	NULL	Segment16
P_SEGMENT17	VARCHAR2	-	NULL	Segment17
P_SEGMENT18	VARCHAR2	-	NULL	Segment18
P_SEGMENT19	VARCHAR2	-	NULL	Segment19
P_SEGMENT20	VARCHAR2	-	NULL	Segment20
P_DESCRIPTION	VARCHAR2	-	-	Description
P_TEMPLATE_ID	NUMBER	-	NULL	Template id
P_TEMPLATE_NAME	VARCHAR2	-	NULL	Name of template

Parameter	Type	Required	Default	Description
P_ACTIVITY_TYPE_CODE	VARCHAR2	-	NULL	Activity code
P_ACTIVITY_CAUSE_CODE	VARCHAR2	-	NULL	Activity cause
P_SHUTDOWN_TYPE_CODE	VARCHAR2	-	NULL	Shutdown Type
P_NOTIFICATION_REQ_FLAG	VARCHAR2	-	NULL	Notification Required Flag (Y for enabled, N for disabled)
P_ACTIVITY_SOURCE_CODE	VARCHAR2	-	NULL	Activity Source
X_CURR_ITEM_REC	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Validated current item record.
X_CURR_ITEM_RETURN_STATUS	VARCHAR2	-	-	Output. Current item creation return status.
X_CURR_ITEM_ERROR_TBL	INV_ITEM_GRP.ITEM_ERROR_TBL_TYPE	-	-	Output. Current item creation error table.
X_MASTER_ITEM_REC	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Validated master item record.
X_MASTER_ITEM_RETURN_STATUS	VARCHAR2	-	-	Output. Master item creation return status.
X_MASTER_ITEM_ERROR_TBL	INV_ITEM_GRP.ITEM_REC_TYPE	-	-	Output. Master item creation error table.

Column Name	Type	Default
organization_id	NUMBER	NULL
organization_code	VARCHAR2(3)	NULL
wip_entity_id	NUMBER	NULL
wip_entity_name	VARCHAR2(240)	NULL

Column Name	Type	Default
organization_id	NUMBER	NULL
asset_activity_id	NUMBER	NULL
start_date_active	DATE	NULL
end_date_active	DATE	NULL
priority_code	VARCHAR2(30)	NULL
attribute_category	VARCHAR2(30)	NULL
attribute1	VARCHAR2(150)	NULL
attribute2	VARCHAR2(150)	NULL
attribute3	VARCHAR2(150)	NULL
attribute4	VARCHAR2(150)	NULL
attribute5	VARCHAR2(150)	NULL
attribute6	VARCHAR2(150)	NULL
attribute7	VARCHAR2(150)	NULL
attribute8	VARCHAR2(150)	NULL

Column Name	Type	Default
attribute9	VARCHAR2(150)	NULL
attribute10	VARCHAR2(150)	NULL
attribute11	VARCHAR2(150)	NULL
attribute12	VARCHAR2(150)	NULL
attribute13	VARCHAR2(150)	NULL
attribute14	VARCHAR2(150)	NULL
attribute15	VARCHAR2(150)	NULL
owning_department_id	NUMBER	NULL
activity_cause_code	VARCHAR2(30)	NULL
activity_type_code	VARCHAR2(30)	NULL
activity_source_code	VARCHAR2(30)	NULL
class_code	VARCHAR2(10)	NULL
maintenance_object_id	NUMBER	NULL
genealogy_id	NUMBER	NULL
inventory_item_id	NUMBER	NULL
serial_number	VARCHAR2(30)	NULL
activity_association_id	NUMBER	NULL
tagging_required_flag	VARCHAR2(1)	NULL
shutdown_type_code	VARCHAR2(30)	NULL
templ_flag	VARCHAR2(1)	NULL

Column Name	Type	Default
creation_organization_id	NUMBER	NULL
return_status	VARCHAR2(1)	NULL
error_mesg	VARCHAR2(240)	NULL

TYPE activity_association_tbl_type IS TABLE OF activity_association_rec_type

INDEX BY BINARY_INTEGER

Related Topics

BOM Business Object API, *Oracle Manufacturing APIs and Open Interfaces Manual*

Item Creation Business Object API, *Oracle Manufacturing APIs and Open Interfaces Manual*

EAM Activity Association API

Package Name:

EAM_ITEM_ACTIVITIES_PUB

Procedure Name:

Insert_item_activities

The EAM_ITEM_ACTIVITIES_PUB.Insert_item_activities public API is used to create new Activity associations. The table below provides the specifications for this API:

You can also use Oracle Web Services to automatically create, update and search for asset activity associations. These public interfaces enable you to more easily convert data from another instance or another system. These web services are annotated and available in the I-Repository along with other public Oracle APIs. (See: *Oracle Manufacturing APIs and Open Interfaces Manual* for more information on APIs.)

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_asset_activity_id	NUMBER	Yes	-	Asset Activity ID
p_inventory_item_id	NUMBER	-	NULL	Inventory Item ID
p_organization_id	NUMBER	Yes	-	Organization ID
p_owningdepartment_id	NUMBER	-	NULL	Owning Department ID
p_maintenance_object_id	NUMBER	-	NULL	Maintenance Object ID
p_creation_organization_id	NUMBER	-	NULL	Creation Organization ID
p_start_date_active	DATE	-	NULL	Start Date Active

Parameter	Type	Required	Default	Description
p_end_date_active	DATE	-	NULL	End Date Active
p_priority_code	VARCHAR2	-	NULL	Priority Code
p_activity_cause_code	VARCHAR2	-	NULL	Activity Cause code
p_activity_type_code	VARCHAR2	-	NULL	Activity Type code
p_shutdown_type_code	VARCHAR2	-	NULL	Shutdown Type code
p_maintenance_object_type	NUMBER	-	NULL	Maintenance Object Type
p_tmpl_flag	VARCHAR2	-	NULL	Template flag
p_class_code	VARCHAR2	-	NULL	Class code
p_activity_source_code	VARCHAR2	-	NULL	Activity Source code
p_serial_number	VARCHAR2	-	NULL	Serial Number
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_tagging_required_flag	VARCHAR2	-	NULL	Tagging Required flag
p_last_service_start_date	DATE	-	NULL	Last Service Start Date
p_last_service_end_date	DATE	-	NULL	Last Service End Date

Parameter	Type	Required	Default	Description
p_prev_service_start_date	DATE	-	NULL	Previous Service Start Date
p_prev_service_end_date	DATE	-	NULL	Previous Service End Date
p_source_tmpl_id	NUMBER	-	NULL	Source Template ID
p_pm_last_service_tbl	EAM_PM_LAST_SERVICE_PUB.pm_last_service_tbl	Yes	-	PM Last Service table

Package Name:

EAM_ITEM_ACTIVITIES_PUB

Procedure Name:

Update_item_activities

The EAM_ITEM_ACTIVITIES_PUB.Update_item_activities public API is used to update existing Activity associations. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_asset_activity_id	NUMBER	Yes	-	Asset Activity ID
p_inventory_item_id	NUMBER	-	NULL	Inventory Item ID
p_organization_id	NUMBER	Yes	-	Organization ID
p_owningdepartment_id	NUMBER	-	NULL	Owning Department ID
p_maintenance_object_id	NUMBER	-	NULL	Maintenance Object ID
p_creation_organization_id	NUMBER	-	NULL	Creation Organization ID
p_start_date_active	DATE	-	NULL	Start Date Active
p_end_date_active	DATE	-	NULL	End Date Active
p_priority_code	VARCHAR2	-	NULL	Priority Code
p_activity_cause_code	VARCHAR2	-	NULL	Activity Cause code

Parameter	Type	Required	Default	Description
p_activity_type_code	VARCHAR2	-	NULL	Activity Type code
p_shutdown_type_code	VARCHAR2	-	NULL	Shutdown Type code
p_maintenance_object_type	NUMBER	-	NULL	Maintenance Object Type
p_tmpl_flag	VARCHAR2	-	NULL	Template flag
p_class_code	VARCHAR2	-	NULL	Class code
p_activity_source_code	VARCHAR2	-	NULL	Activity Source code
p_serial_number	VARCHAR2	-	NULL	Serial Number
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_tagging_required_flag	VARCHAR2	-	NULL	Tagging Required flag
p_last_service_start_date	DATE	-	NULL	Last Service Start Date
p_last_service_end_date	DATE	-	NULL	Last Service End Date
p_prev_service_start_date	DATE	-	NULL	Previous Service Start Date
p_prev_service_end_date	DATE	-	NULL	Previous Service End Date
p_source_tmpl_id	NUMBER	-	NULL	Source Template ID

Parameter	Type	Required	Default	Description
p_pm_last_service_tbl	EAM_PM_LAST_SERVICE_PUB.pm_last_service_tbl	Yes	-	PM Last Service table

EAM Activity Suppression API

Package Name:

EAM_ActivitySupn_PUB

Procedure Name:

Insert_ActivitySupn

The EAM_ActivitySupn_PUB.Insert_ActivitySupn public API is used to create new Activity Suppressions. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_parent_association_id	NUMBER	Yes	-	Parent Association ID
p_child_association_id	NUMBER	Yes	-	Child Association ID
p_tmpl_flag	VARCHAR2	-	NULL	Template flag
p_description	VARCHAR2	-	NULL	Description
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield

Package Name:

EAM_ActivitySupn_PUB

Procedure Name:

Update_ActivitySupn

The EAM_ActivitySupn_PUB.Update_ActivitySupn public API is used to update existing Activity Suppressions. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_parent_association_id	NUMBER	Yes	-	Parent Association ID
p_child_association_id	NUMBER	Yes	-	Child Association ID
p_tmpl_flag	VARCHAR2	-	NULL	Template flag
p_description	VARCHAR2	-	NULL	Description
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield

EAM Set Name API

Package Name:

EAM_SetName_PUB

Procedure Name:

Insert_PMSetName

The EAM_SetName_PUB.Insert_PMSetName public API is used to create new Set Names. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_set_name	VARCHAR2	Yes	-	Set Name
p_description	VARCHAR2	-	NULL	Description
p_end_date	DATE	-	NULL	End Date
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
x_new_set_name	NUMBER	-	-	Newly create Set Name's ID
p_end_date_val_req	VARCHAR2	-	'true'	Flag indicating if the validation end date is in the future. This flag is 'true' by default, and is 'false' only when the API is called by the iSetup API.

Package Name:

EAM_SetName_PUB

Procedure Name:

Update_PMSetName

The EAM_SetName_PUB.Update_PMSetName public API is used to update existing Set Names. The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_set_name_id	NUMBER	Yes	-	Set Name of the record to update
p_set_name	VARCHAR2	Yes	-	Set Name
p_description	VARCHAR2	-	NULL	Description
p_end_date	DATE	-	NULL	End Date
p_attribute_category	VARCHAR2	-	NULL	Attribute Category
p_attribute1	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute2	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute3	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute4	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute5	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute6	VARCHAR2	-	NULL	Descriptive Flexfield

Parameter	Type	Required	Default	Description
p_attribute7	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute8	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute9	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute10	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute11	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute12	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute13	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute14	VARCHAR2	-	NULL	Descriptive Flexfield
p_attribute15	VARCHAR2	-	NULL	Descriptive Flexfield
p_end_date_val_req	VARCHAR2	-	'true'	Flag indicating if the validation end date is in the future. This flag is 'true' by default, and is 'false' only when the API is called by the iSetup API.

Import Geocode API

Package Name:

CSI_GIS_INSTANCE_LOC_PUB

Procedure Name:

IMPORT_INSTANCE_GEO_LOCATION

Procedure Details:

The procedure IMPORT_INSTANCE_GEO_LOCATION in public API CSI_GIS_INSTANCE_LOC_PUB is used to import geocode information from the interface table CSI_II_GEOLOC_INTERFACE to the base table CSI_II_GEOLOCATIONS. You can use script or data loading programs such as SQL Loader to push data into the table CSI_II_GEOLOC_INTERFACE, and call the procedure CSI_II_GEOLOC_INTERFACE to import the geocode data.

Column Name	Type	Parameter Type	Required	Optional	Default
p_api_version	NUMBER	IN	Yes	-	-
p_commit	VARCHAR2	IN	-	Yes	FND_API.G_TRUE
x_return_status	VARCHAR2	OUT	-	-	-
x_msg_count	NUMBER	OUT	-	-	-
x_msg_data	VARCHAR2	OUT	-	-	-

Table Details for interface table CSI_II_GEOLOC_INTERFACE:

Column Name	Column Description	Data Type	Size	Not Null
INSTANCE_NUMBER	Instance number/Asset Number to be imported	VARCHAR2	30	X
GEOCODE_FORMAT	Supports DMS, DM and DD format	VARCHAR2	3	X
INST_LATITUDE	Latitude Information	VARCHAR2	50	X
INST_LONGITUDE	Longitude Information	VARCHAR2	50	X
PROCESS_FLAG	'R','P' or 'E'	VARCHAR2	1	X
ERROR_MESSAGE	Error message if any during import	VARCHAR2	4000	X
PROCESS_DATE	Date when record was last processed	DATE	-	X

Validation Details for Latitude (INST_LATITUDE) and Longitude (INST_LONGITUDE) values

The valid values for the 3 formats (DMS, DM, DD) are illustrated as follows:

- **DMS:** <Degree Value>D<Minutes Value>M<Seconds Value>S<Direction<

  D-Degrees, M-Minutes, S-Seconds, Direction can be N, S, E, W as in North, South, East, West, respectively.

  For example, 25D36M49S N or 25d36m49s n

  - Spaces between any two elements will be ignored. For example, 25D 36M 49S N is also a valid value.
  - Minutes and seconds must be in the range of 0 to 59.
  - Degrees and Minutes cannot have decimal value.

  For example, 25.456 D36M49S N is an invalid value

All the three values for D, M, S must be present for DMS format

- **DM:**< Degree Value>D<Minutes Value >M>Direction<

  D-Degrees, M-Minutes Direction can be N, S, E, W as in North, South, East, West, respectively

  For example, 25D36.567M N or 25d36.567m n

  - Spaces between any two elements will be ignored. For example, 25D 36M N is also a valid value.
  - Minutes must be in the range of 0 to 59
  - Degrees cannot have decimal value.

  25.456 D36M49S N is an invalid value

  Both the values for D, M must be present for DM format

Validations common for both DMS and DM:

- Latitude must be in the range of –90 to + 90.
- Longitude must be in the range of –180 to +180.
- Latitude directions can be only N, S.
- Longitude directions can be only E, W.
- Latitude direction N cannot have a negative value.
- Longitude direction E cannot have a negative value.
- If no direction is given, it is decided by taking sign (positive or negative) into account.

  Positive values are considered to be N or E for latitude or longitude respectively. Negative values are considered S or W for latitude or longitude respectively.

- **DD:** DD value can be anything between –90 to +90 for latitude and –180 to +180 for longitude including decimal numbers, for example, 25.6677.

  Direction should not be entered for DD format.

  Direction for DD format will be inferred based on the sign of the value and whether it is latitude or longitude. Positive values are considered to be N or E for latitude or longitude respectively. Negative values are considered S or W for latitude or longitude respectively.

Example:

This example will show how to import bulk geocode data in a DMS format for an asset number, The Import Geocode API is used to reduce the manual tasks of entering geocodes for assets using the Mass Gecocode Entry form. This import process can be performed by inserting the geocode entries directly into the interface table, or by using INSERT statements or through the SQL Loader.

Inserting Bulk Data to the Interface Table Using INSERT Statements:

- Insert the geocode details into the CSI_II_GEOLOC_INTERFACE table using the following INSERT:

  ```
  INSERT into CSI_II_GEOLOC_INTERFACE values ('AN-008', 'DMS',
  '45D40M14S N', '69D40M14S W', 'R', NULL, NULL);
  COMMIT;
  ```

  This query will insert the geocode values for asset number AN-008.

- The geocode values given here are:
  - Latitude values: Degree: 45 Minutes: 40 Seconds: 14 Direction: N (North)
  - Longitude values: Degree: 69 Minutes: 40 Seconds: 14 Direction: W (West)

- The interface table should now have the aforementioned information stored in the table once the INSERT statement is executed. Similar INSERT statements can be used for each asset and instance with their relevant geocode entries.

Inserting Bulk Data to the Interface Table Using the SQL Loader:

Use the SQL Loader to insert geocode details into the CSI_II_GEOLOC_INTERFACE table using the following steps:

1. Open an Excel worksheet.
2. Enter the data to be imported into the interface table. For example:

KAK-ANI	DMS	40D59M12S N	79D59M12S W	R
39309	DMS	40D59M12S N	79D59M12S W	R
39310	DMS	40D59M12S N	79D59M12S W	R
39311	DMS	40D59M12S N	79D59M12S W	R
39312	DMS	40D59M12S N	79D59M12S W	R

39313	DMS	40D59M12S N	79D59M12S W	R

3. Save the entered data as a .csv file, for example, GIS.csv.

   Note the location of where the file was saved.

4. Open Notepad and create a control file, for example, "loader.ctl".

   Contents of this control file should be as the following:

   - `load data`
     `infile 'D:\GIS.csv'`

     infile command accepts the full path for the .csv file which includes all asset geocodes.

   - `into table CSI_II_GEOLOC_INTERFACE`

     into table accepts the interface table name that the data will be imported to.

   - `fields terminated by "," optionally enclosed by '"'`

     The column names of the CSI_II_GEOLOC_INTERFACE interface table should be mentioned in order.

     ```
     (INSTANCE_NUMBER,GEOCODE_FORMAT,INST_LATITUDE,INST_LONGITUDE,PROC
     ESS_FLAG)
     ```

5. The final loader.ctl file should contain only the following information:

   ```
   load data
   infile 'D:\GIS.csv'
   into table CSI_II_GEOLOC_INTERFACE
   fields terminated by "," optionally enclosed by '"'
   (INSTANCE_NUMBER,GEOCODE_FORMAT,INST_LATITUDE,INST_LONGITUDE,PROCESS
   _FLAG)
   ```

6. Open a Command prompt and change the directory to d: (by simply typing d:)

7. Execute the following command:

   ```
   sqlldr apps/<password>@<SID> control=loader.ctl
   ```

8. You will receive a message indicating, "Commit point reached - logical record count 6".

   The logical record count is 6 since there are 6 records in the csv file.

9. Connect to sqlplus and verify that the data has been inserted into the interface table.

   ```
   SELECT * FROM CSI_II_GEOLOC_INTERFACE;
   ```

Importing Bulk Data from the Interface Table to the Main Tables:

Run the following SQL block to import all details from the Interface table to the Main tables:

```
Declare l_return_status Varchar2(1);
l_msg_count Number;
l_msg_data Varchar2(4000);
Begin CSI_GIS_INSTANCE_LOC_PUB.IMPORT_INSTANCE_GEO_LOCATION
(p_api_version =>1.0,
p_commit=>FND_API.G_TRUE,
x_return_status => l_return_status,
x_msg_count => l_msg_count,
x_msg_data=>l_msg_data);
dbms_output.put_line('Process Status'||l_return_status);
dbms_output.put_line('Errored Records'||l_msg_count);
End;
```

The SQL Block should import the details from the Interface table to the Main tables. Ensure that the process_flag is 'P' which means 'Processed'.

Maintenance Object Instantiation API

Package Name:

EAM_OBJECTINSTANTIATION_PUB

Procedure Name:

INSTANTIATE_OBJECT

The Maintenance Object Instantiation API is first triggered after the creation of a Maintenance Object. It will then call the private packages for the Activity Instantiation (from the Maintenance Item/Activity Templates), and Preventive Maintenance and Meter Instantiations (from their templates). The table below provides the specifications for this API:

Parameter	Type	Required	Default	Description
P_API_VERSION	NUMBER	Yes	-	Standard Oracle API parameter
P_INIT_MSG_LIST	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
P_COMMIT	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

Parameter	Type	Required	Default	Description
P_VALIDATION_LEVEL	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
X_RETURN_STATUS	VARCHAR2	-	-	Standard Oracle API output parameter
X_MSG_COUNT	NUMBER	-	-	Standard Oracle API output parameter
X_MSG_DATA	VARCHAR2	-	-	Standard Oracle API output parameter
P_MAINTENANCE_OBJECT_ID	NUMBER	Yes	-	Standard Oracle API output parameter
P_MAINTENANCE_OBJECT_TYPE	NUMBER	Yes	-	Supports Type 1 (Serial Numbers)
P_COMMIT	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter

TYPE association_id_tbl_type IS TABLE OF number

INDEX BY BINARY_INTEGER

Work Order Business Object API

Package Name:

EAM_PROCESS_WO_PUB

Procedure Name:

Process_Master_Child_WO

The EAM_PROCESS_WO_PUB.Process_Master_Child_WO public API is used to create and update work orders, work order relationships, operations, operation networks, material, resources, and resource instances. The table below provides the specifications

of this API.

You can also use Oracle Web Services to automatically create, update and search for work orders. These public interfaces enable you to more easily convert data from another instance or another system. These web services are annotated and available in the I-Repository along with other public Oracle APIs. (See: *Oracle Manufacturing APIs and Open Interfaces Manual* for more information on APIs.)

Parameter	Type	Required	Default	Description
p_po_identifier	VARCHAR2	Yes	EAM	Standard Oracle API parameter
p_api_version_number	NUMBER	Yes	1.0	Standard Oracle API parameter
p_init_msg_list	BOOLEAN	Yes	FALSE	Standard Oracle API parameter
p_eam_wo_relations_tbl	EAM_PROCESS_WO_PUB.eam_wo_relations_tbl_type	Yes	-	PL SQL table containing one or more records that identify the relationship between Work Orders
p_eam_wo_tbl	EAM_PROCESS_WO_PUB.eam_wo_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Orders to process
p_eam_op_tbl	EAM_PROCESS_WO_PUB.eam_op_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order operations to process

Parameter	Type	Required	Default	Description
p_eam_op_network_tbl	EAM_PROCESS_WO_PUB.eam_op_network_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order operation networks to process
p_eam_res_tbl	EAM_PROCESS_WO_PUB.eam_res_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order resource requirements to process
p_eam_res_inst_tbl	EAM_PROCESS_WO_PUB.eam_res_inst_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order resource instances to process
p_eam_sub_res_tbl	EAM_PROCESS_WO_PUB.eam_sub_res_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order substitute resources to process
p_eam_mat_req_tbl	EAM_PROCESS_WO_PUB.eam_mat_req_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order material requirements to process

Parameter	Type	Required	Default	Description
p_eam_direct_items_tbl	EAM_PROCESS_WO_PUB.eam_direct_items_tbl_type	Yes	-	PL/SQL table containing one or more records that identify Work Order description-based direct items to process
x_eam_wo_tbl	EAM_PROCESS_WO_PUB.eam_wo_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Orders that were processed and their post-processing attributes
x_eam_wo_relations_tbl	EAM_PROCESS_WO_PUB.eam_wo_relations_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order relationships that were processed and their post-processing attributes
x_eam_op_tbl	EAM_PROCESS_WO_PUB.eam_op_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order operations that were processed and their post-processing attributes

Parameter	Type	Required	Default	Description
x_eam_op_network_tbl	EAM_PROCESS_WO_PUB.eam_op_network_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order operation networks that were processed and their post-processing attributes
x_eam_res_tbl	EAM_PROCESS_WO_PUB.eam_res_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order resource requirements that were processed and their post-processing attributes
x_eam_res_inst_tbl	EAM_PROCESS_WO_PUB.eam_res_inst_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order resource instances that were processed and their post-processing attributes

Parameter	Type	Required	Default	Description
x_eam_sub_res_tbl	EAM_PROCESS_WO_PUB.eam_sub_res_tbl	Yes	-	output PL/SQL table containing one or more records that identify Work Order substitute resources that were processed and their post-processing attributes
x_eam_mat_req_tbl	EAM_PROCESS_WO_PUB.eam_mat_req_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order material requirements that were processed and their post-processing attributes
x_eam_direct_items_tbl	EAM_PROCESS_WO_PUB.eam_direct_items_tbl_type	Yes	-	output PL/SQL table containing one or more records that identify Work Order description-based direct items that were processed and their post-processing attributes
x_return_status	VARCHAR2	Yes	-	Standard Oracle API output parameter

Parameter	Type	Required	Default	Description
x_msg_count	NUMBER	Yes	-	Standard Oracle API output parameter
p_commit	VARCHAR2	Yes	N	Standard Oracle API output parameter
p_debug	VARCHAR2	Yes	N	Standard Oracle API output parameter
p_output_dir	VARCHAR2	Yes	NULL	The output directory where the debug messages are written to, if the debug parameter is set to Yes. This directory should be accessible by the database.
p_debug_filename	VARCHAR2	Yes	EAM_WO_DEBUG.log	The output file name where the debug messages are written to, if the debug parameter is set to Yes. The directory should be accessible by the database.
p_debug_file_mode	VARCHAR2	Yes	w	The debug file should open in this mode, for example, in append or overwrite mode.

Following are the columns that must pass for p_eam_wo_relations_tbl record type:

Column	Type
BATCH_ID	NUMBER
WO_RELATIONSHIP_ID	NUMBER
PARENT_OBJECT_ID	NUMBER
PARENT OBJECT_TYPE_ID	NUMBER
PARENT_HEADER_ID	NUMBER
CHILD_OBJECT_ID	NUMBER
CHILD_OBJECT_TYPE_ID	NUMBER
CHILD_HEADER_ID	NUMBER
PARENT_RELATIONSHIP_TYPE	NUMBER
RELATIONSHIP_STATUS	NUMBER
TOP_LEVEL_OBJECT_ID	NUMBER
TOP_LEVEL_OBJECT_TYPE_ID	NUMBER
TOP_LEVEL_HEADER_ID	NUMBER
ADJUST_PARENT	VARCHAR2(1)
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER
ROW_ID	NUMBER

Following are the columns that must pass for p_eam_wo_tbl record type:

Column	Type
HEADER_ID	NUMBER

Column	Type
BATCH_ID	NUMBER
ROW_ID	NUMBER
WIP_ENTITY_NAME	VARCHAR2(240)
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER
DESCRIPTION	VARCHAR2(240)
ASSET_NUMBER	VARCHAR2(30)
ASSET_GROUP_ID	NUMBER
REBUILD_ITEM_ID	NUMBER
REBUILD_SERIAL_NUMBER	VARCHAR2(30)
MAINTENANCE_OBJECT_ID	NUMBER
MAINTENANCE_OBJECT_TYPE	NUMBER
MAINTENANCE_OBJECT_SOURCE	NUMBER
CLASS_CODE	VARCHAR2(10)
ASSET_ACTIVITY_ID	NUMBER
ACTIVITY_TYPE	VARCHAR2(30)
ACTIVITY_CAUSE	VARCHAR2(30)
ACTIVITY_SOURCE	VARCHAR2(30)
WORK_ORDER_TYPE	VARCHAR2(30)
STATUS_TYPE	NUMBER

Column	Type
JOB_QUANTITY	NUMBER
DATE_RELEASED	DATE
OWNING_DEPARTMENT	NUMBER
PRIORITY	NUMBER
REQUESTED_START_DATE	DATE
DUE_DATE	DATE
SHUTDOWN_TYPE	VARCHAR2(30)
FIRM_PLANNED_FLAG	NUMBER
NOTIFICATION_REQUIRED	VARCHAR2(1)
TAGOUT_REQUIRED	VARCHAR2(1)
PLAN_MAINTENANCE	VARCHAR2(1)
PROJECT_ID	NUMBER
TASK_ID	NUMBER
END_ITEM_UNIT_NUMBER	VARCHAR2(30)
SCHEDULE_GROUP_ID	NUMBER
BOM_REVISION_DATE	DATE
ROUTING_REVISION_DATE	DATE
ALTERNATE_ROUTING_DESIGNATOR	VARCHAR2(10)
ALTERNATE_BOM_DESIGNATOR	VARCHAR2(10)
ROUTING_REVISION	VARCHAR2(3)

Column	Type
BOM_REVISION	VARCHAR2(3)
PARENT_WIP_ENTITY_ID	NUMBER
MANUAL_REBUILD_FLAG	VARCHAR2(1)
PM_SCHEDULE_ID	NUMBER
WIP_SUPPLY_TYPE	NUMBER
MATERIAL_ACCOUNT	NUMBER
MATERIAL_OVERHEAD_ACCOUNT	NUMBER
RESOURCE_ACCOUNT	NUMBER
OUTSIDE_PROCESSING_ACCOUNT	NUMBER
MATERIAL_VARIANCE_ACCOUNT	NUMBER
RESOURCE_VARIANCE_ACCOUNT	NUMBER
OUTSIDE_PROC_VARIANCE_ACCOUNT	NUMBER
STD_COST_ADJUSTMENT_ACCOUNT	NUMBER
OVERHEAD_ACCOUNT	NUMBER
OVERHEAD_VARIANCE_ACCOUNT	NUMBER
SCHEDULED_START_DATE	DATE
SCHEDULED_COMPLETION_DATE	DATE
COMMON_BOM_SEQUENCE_ID	NUMBER
COMMON_ROUTING_SEQUENCE_ID	NUMBER
PO_CREATION_TIME	NUMBER

Column	Type
GEN_OBJECT_ID	NUMBER
MATERIAL_ISSUE_BY_MO	VARCHAR2(1)
USER_ID	NUMBER
RESPONSIBILITY_ID	NUMBER
SOURCE_LINE_ID	NUMBER
SOURCE_CODE	VARCHAR2(30)
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)

Column	Type
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
ISSUE_ZERO_COST_FLAG	VARCHAR2(1)
USER_ID	NUMBER
RESPONSIBILITY_ID	NUMBER
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
SOURCE_LINE_ID	NUMBER
SOURCE_CODE	VARCHAR2(30)
VALIDATE_STRUCTURE	VARCHAR2(1)
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_op_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER

Column	Type
OPERATION_SEQ_NUM	NUMBER
STANDARD_OPERATION_ID	NUMBER
DEPARTMENT_ID	NUMBER
OPERATION_SEQUENCE_ID	NUMBER
DESCRIPTION	VARCHAR2(240)
MINIMUM_TRANSFER_QUANTITY	NUMBER
COUNT_POINT_TYPE	NUMBER
BACKFLUSH_FLAG	NUMBER
SHUTDOWN_TYPE	VARCHAR2(30)
START_DATE	DATE
COMPLETION_DATE	DATE
LONG_DESCRIPTION	VARCHAR2(4000)
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)

Column	Type
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_op_network_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER

Column	Type
PRIOR_OPERATION	NUMBER
NEXT_OPERATION	NUMBER
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_mat_req_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER
OPERATION_SEQ_NUM	NUMBER
INVENTORY_ITEM_ID	NUMBER
QUANTITY_PER_ASSEMBLY	NUMBER
DEPARTMENT_ID	NUMBER
WIP_SUPPLY_TYPE	NUMBER
DATE_REQUIRED	DATE
REQUIRED_QUANTITY	NUMBER
REQUESTED_QUANTITY	NUMBER
RELEASED_QUANTITY	NUMBER
QUANTITY_ISSUED	NUMBER
SUPPLY_SUBINVENTORY	VARCHAR2(10)
SUPPLY_LOCATOR_ID	NUMBER
MRP_NET_FLAG	NUMBER
MPS_REQUIRED_QUANTITY	NUMBER
MPS_DATE_REQUIRED	DATE

Column	Type
COMPONENT_SEQUENCE_ID	NUMBER
COMMENTS	VARCHAR2(240)
AUTO_REQUEST_MATERIAL	VARCHAR2(1)
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
SUGGESTED_VENDOR_NAME	VARCHAR2(240)

Column	Type
VENDOR_ID	NUMBER
UNIT_PRICE	NUMBER
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
PROGRAM_UPDATE_DATE	DATE
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_res_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER
OPERATION_SEQ_NUM	NUMBER
RESOURCE_SEQ_NUM	NUMBER
RESOURCE_ID	NUMBER
UOM_CODE	VARCHAR2(3)
BASIS_TYPE	NUMBER

Column	Type
USAGE_RATE_OR_AMOUNT	NUMBER
ACTIVITY_ID	NUMBER
SCHEDULED_FLAG	NUMBER
ASSIGNED_UNITS	NUMBER
AUTOCHARGE_TYPE	NUMBER
STANDARD_RATE_FLAG	NUMBER
APPLIED_RESOURCE_UNITS	NUMBER
APPLIED_RESOURCE_VALUE	NUMBER
START_DATE	DATE
COMPLETION_DATE	DATE
SCHEDULE_SEQ_NUM	NUMBER
SUBSTITUTE_GROUP_NUM	NUMBER
REPLACEMENT_GROUP_NUM	NUMBER
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)

Column	Type
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
DEPARTMENT_ID	NUMBER
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
PROGRAM_UPDATE_DATE	DATE
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_res_inst_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER

Column	Type
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER
OPERATION_SEQ_NUM	NUMBER
RESOURCE_SEQ_NUM	NUMBER
INSTANCE_ID	NUMBER
SERIAL_NUMBER	VARCHAR2(30)
START_DATE	DATE
COMPLETION_DATE	DATE
TOP_LEVEL_BATCH_ID	NUMBER

Following are the columns that must pass for p_eam_sub_res_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER
OPERATION_SEQ_NUM	NUMBER
RESOURCE_SEQ_NUM	NUMBER
RESOURCE_ID	NUMBER

Column	Type
UOM_CODE	VARCHAR2(3)
BASIS_TYPE	NUMBER
USAGE_RATE_OR_AMOUNT	NUMBER
ACTIVITY_ID	NUMBER
SCHEDULED_FLAG	NUMBER
ASSIGNED_UNITS	NUMBER
AUTOCHARGE_TYPE	NUMBER
STANDARD_RATE_FLAG	NUMBER
APPLIED_RESOURCE_UNITS	NUMBER
APPLIED_RESOURCE_VALUE	NUMBER
START_DATE	DATE
COMPLETION_DATE	DATE
SCHEDULE_SEQ_NUM	NUMBER
SUBSTITUTE_GROUP_NUM	NUMBER
REPLACEMENT_GROUP_NUM	NUMBER
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)

Column	Type
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
DEPARTMENT_ID	NUMBER
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
PROGRAM_UPDATE_DATE	DATE
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_res_usage_tbl record type:

Column	Type
HEADER_ID	NUMBER
ROW_ID	NUMBER
BATCH_ID	NUMBER
WIP_ENTITY_ID	NUMBER
OPERATION_SEQ_NUM	NUMBER
RESOURCE_SEQ_NUM	NUMBER
ORGANIZATION_ID	NUMBER
START_DATE	DATE
COMPLETION_DATE	DATE
ASSIGNED_UNITS	NUMBER
INSTANCE_ID	NUMBER
SERIAL_NUMBER	VARCHAR2(30)
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
PROGRAM_UPDATE_DATE	DATE
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Following are the columns that must pass for p_eam_direct_items_tbl record type:

Column	Type
HEADER_ID	NUMBER
BATCH_ID	NUMBER
ROW_ID	NUMBER
DESCRIPTION	VARCHAR2(240)
PURCHASING_CATEGORY_ID	NUMBER
DIRECT_ITEM_SEQUENCE_ID	NUMBER
OPERATION_SEQ_NUM	NUMBER
DEPARTMENT_ID	NUMBER
WIP_ENTITY_ID	NUMBER
ORGANIZATION_ID	NUMBER
SUGGESTED_VENDOR_NAME	VARCHAR2(240)
SUGGESTED_VENDOR_ID	NUMBER
SUGGESTED_VENDOR_SITE	VARCHAR2(15)
SUGGESTED_VENDOR_SITE_ID	NUMBER
SUGGESTED_VENDOR_CONTACT	VARCHAR2(80)
SUGGESTED_VENDOR_CONTACT_ID	NUMBER
SUGGESTED_VENDOR_PHONE	VARCHAR2(20)
SUGGESTED_VENDOR_ITEM_NUM	VARCHAR2(25)
UNIT_PRICE	NUMBER
AUTO_REQUEST_MATERIAL	VARCHAR2(1)

Column	Type
REQUIRED_QUANTITY	NUMBER
REQUESTED_QUANTITY	NUMBER
UOM	VARCHAR2(3)
NEED_BY_DATE	DATE
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)

Column	Type
REQUEST_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
PROGRAM_UPDATE_DATE	DATE
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Process Maintenance Work Order API

Package Name:

EAM_PROCESS_WO_PUB

Procedure Name:

Process_WO

The EAM_PROCESS_WO_PUB.Process_WO public API is used to create or update a single maintenance work order. It can also be used to create, update, or delete the work order operations, operation networks, materials, direct items, resources, resource usage and resource instances. This procedure calls the required business processes such as scheduling the work order, material allocation, and requisition generation for direct items and for OSP items cost re-estimation of the work order.

The API requires that you enter only the minimum necessary business information that defines your maintenance work order. To schedule the work order, the operation, resource, resource usage and resource instance tables need to be passed. The API will perform the required defaulting for columns not filled in by users.

The user can optionally provide the activity BOM and the activity routing to use the explosion feature of the API when the maintenance work order is created. In case of errors, the API reports detailed and translatable error messages.

Parameter	Type	Required	Default	Description
p_bo_identifier	VARCHAR2	Yes	EAM	Standard Oracle API parameter
p_api_version_number	NUMBER	Yes	1.0	Standard Oracle API parameter
p_init_msg_list	BOOLEAN	Yes	False	Standard Oracle API parameter
p_commit	VARCHAR2	Yes	N	Standard Oracle API parameter
p_eam_wo_rec	EAM_PROCESS_WO_PUB.eam_wo_rec_type	Yes	-	PL SQL table containing one single work order header details
p_eam_op_tb	EAM_PROCESS_WO_PUB.eam_op_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order operations to process
p_eam_op_network_tbl	EAM_PROCESS_WO_PUB.eam_op_network_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order operation networks to process
p_eam_res_tbl	EAM_PROCESS_WO_PUB.eam_res_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order resource requirements to process

Parameter	Type	Required	Default	Description
p_eam_res_inst_tbl	EAM_PROCESS_WO_PUB.eam_res_inst_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order resource instances to process
p_eam_sub_res_tbl	EAM_PROCESS_WO_PUB.eam_sub_res_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order substitute resources to process
p_eam_res_usage_tbl	EAM_PROCESS_WO_PUB.eam_res_usage_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order resource usages to process
p_eam_mat_req_tbl	EAM_PROCESS_WO_PUB.eam_mat_req_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order material requirements to process
p_eam_direct_items_tbl	EAM_PROCESS_WO_PUB.eam_direct_items_tbl_type	No	-	PL/SQL table containing one or more records that identify the work order description-based direct items to process

Parameter	Type	Required	Default	Description
x_eam_wo_rec	EAM_PROCESS_WO_PUB.eam_wo_rec_type	No	-	Output PL/SQL record that identifies the work orders that were processed and their post-processing attributes
x_eam_op_tbl	EAM_PROCESS_WO_PUB.eam_op_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order operations that were processed and their post-processing attributes
x_eam_op_network_tbl	EAM_PROCESS_WO_PUB.eam_op_network_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order operation networks that were processed and their post-processing attributes

Parameter	Type	Required	Default	Description
x_eam_res_tbl	EAM_PROCESS_WO_PUB.eam_res_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order resource requirements that were processed and their post-processing attributes
x_eam_res_inst_tbl	EAM_PROCESS_WO_PUB.eam_res_inst_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order resource instances that were processed and their post-processing attributes
x_eam_sub_res_tbl	EAM_PROCESS_WO_PUB.eam_sub_res_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order substitute resources that were processed and their post-processing attributes

Parameter	Type	Required	Default	Description
x_eam_res_usage_tbl	EAM_PROCESS_WO_PUB.eam_res_usage_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order resource usages that were processed and their post-processing attributes
x_eam_mat_req_tbl	EAM_PROCESS_WO_PUB.eam_mat_req_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order material requirements that were processed and their post-processing attributes
x_eam_direct_items_tbl	EAM_PROCESS_WO_PUB.eam_direct_items_tbl_type	No	-	Output PL/SQL table containing one or more records that identify the work order description-based direct items that were processed and their post-processing attributes
x_return_statu	VARCHAR2	Yes	-	Standard Oracle API output parameter

Parameter	Type	Required	Default	Description
x_msg_count	NUMBER	Yes	-	Standard Oracle API output parameter
p_debug	VARCHAR2	Yes	N	Standard Oracle API output parameter
p_output_dir	VARCHAR2	Yes	Null	Output directory where the debug messages are written to, if the debug parameter is set to Yes. This directory should be accessible by the database.
p_debug_filename	VARCHAR2	Yes	EAM_WO_DEBUG.log	Output file name where the debug messages are written to, if the debug parameter is set to Yes. The directory should be accessible by the database.
p_debug_file_mode	VARCHAR2	Yes	w	Mode in which the debug file should open, for example, in append or overwrite mode

The following columns must pass for p_eam_res_usage_tbl:

Column	Type
HEADER_ID	NUMBER
BATCH_ID	NUMBER

Column	Type
ROW_ID	NUMBER
WIP_ENTITY_ID	NUMBER
OPERATION_SEQ_)NUM	NUMBER
RESOURCE_SEQ_NUM	NUMBER
ORGANIZATION_ID	NUMBER
START_DATE	DATE
COMPLETION_DATE	DATE
OLD_START_DATE	DATE
OLD_COMPLETION_DATE	DATE
ASSIGNED_UNITS	NUMBER
REQUEST_ID	NUMBER
PROGRAM_APPLICATION_ID	NUMBER
PROGRAM_ID	NUMBER
PROGRAM_UPDATE_DATE	DATE
INSTANCE_ID	NUMBER
SERIAL_NUMBER	VARCHAR2(30)
RETURN_STATUS	VARCHAR2(1)
TRANSACTION_TYPE	NUMBER

Work Request API

Package Name:

WIP_EAM_WORKREQUEST_PUB

Procedure Name:

Work_Request_Import

The WIP_EAM_WORKREQUEST_PUB.Work_Request_Import public API is used to create and update Work Requests. The table below provides the specifications of this API:

Parameter	Type	Required	Default	Description
p_api_version	NUMBER	Yes	-	Standard Oracle API parameter
p_init_msg_list	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_commit	VARCHAR2	-	FND_API.G_FALSE	Standard Oracle API parameter
p_validation_level	NUMBER		FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_return_status	VARCHAR2	-	-	Standard Oracle API output parameter
x_msg_count	NUMBER	-	FND_API.G_VALID_LEVEL_FULL	Standard Oracle API parameter
x_msg_data	VARCHAR2	-	-	Standard Oracle API output parameter
p_mode	VARCHAR2	Yes	-	Import mode is 'CREATE' or 'UPDATE'

Parameter	Type	Required	Default	Description
p_work_request_rec	WIP_EAM_WORKREQUESTS%ROWTYPE	Yes	-	Rowtype record from WIP_EAM_WORK_REQUESTS table
p_request_log	VARCHAR2	Yes	-	Work Request problem description that appends to the Work Request log, specified during 'CREATE' and 'UPDATE' **Note:** This API appends the work request Description field with logging information when importing and updating work requests processed in a batch.
p_user_id	NUMBER	Yes	-	user ID of person creating Work Request

Parameter	Type	Required	Default	Description
x_work_request_id	NUMBER	-	-	If import mode = 'CREATE', the Work Request ID for the newly created Work Request returns. If import mode = 'UPDATE', the Work Request ID of the Work Request being updated returns.

The following columns need to pass for p_work_request_rec:

Column	Type
WORK_REQUEST_ID	NUMBER
WORK_REQUEST_NUMBER	VARCHAR2(64)
ASSET_NUMBER	VARCHAR2(30)
ORGANIZATION ID	NUMBER
WORK_REQUEST_STATUS_ID	NUMBER
WORK_REQUEST_PRIORITY_ID	NUMBER
WORK_REQUEST_OWNING_DEPT	NUMBER
EXPECTED_RESOLUTION_DATE	DATE
ATTRIBUTE_CATEGORY	VARCHAR2(30)
ATTRIBUTE1	VARCHAR2(150)
ATTRIBUTE2	VARCHAR2(150)
ATTRIBUTE3	VARCHAR2(150)

Column	Type
ATTRIBUTE4	VARCHAR2(150)
ATTRIBUTE5	VARCHAR2(150)
ATTRIBUTE6	VARCHAR2(150)
ATTRIBUTE7	VARCHAR2(150)
ATTRIBUTE8	VARCHAR2(150)
ATTRIBUTE9	VARCHAR2(150)
ATTRIBUTE10	VARCHAR2(150)
ATTRIBUTE11	VARCHAR2(150)
ATTRIBUTE12	VARCHAR2(150)
ATTRIBUTE13	VARCHAR2(150)
ATTRIBUTE14	VARCHAR2(150)
ATTRIBUTE15	VARCHAR2(150)
WORK_REQUEST_TYPE_ID	NUMBER
WORK_REQUEST_CREATED_FOR	NUMBER
PHONE_NUMBER	VARCHAR2(4000)
E_MAIL	VARCHAR2(240)
CONTACT_PREFERENCE	NUMBER
NOTIFY_ORIGINATOR	NUMBER

6

eAM Descriptive Flexfields

This chapter covers the following topics:

- eAM Descriptive Flexfields

eAM Descriptive Flexfields

A flexfield is a field comprised of sub-fields, or segments. There are two types of flexfields: key flexfields and descriptive flexfields. A key flexfield appears on your form as a normal text field with an appropriate prompt. A descriptive flexfield appears on your form as a two-character-wide text field with square brackets [ ] as its prompt. When opened, both types of flexfields appear as a pop-up window that contains a separate field and prompt for each segment. Each segment has a name and a set of valid values. The values might also have value descriptions.

Descriptive flexfields provide customizable "expansion space" on your windows and pages. You can use descriptive flexfields to track additional information, important and unique to your business, that would not otherwise be captured by the window. Descriptive flexfields can be context sensitive, where the information your application stores depends on other values your users enter in other parts of the window.

A descriptive flexfield appears on a form as a single-character, unnamed field enclosed in brackets. Just like with a key flexfield, a pop-up window appears when you move your cursor into a customized descriptive flexfield. Like a key flexfield, the pop-up window has as many fields as your organization needs.

Each field or segment in a descriptive flexfield has a prompt, just like ordinary fields, and can have a set of valid values. Your organization can define dependencies among the segments or customize a descriptive flexfield to display context-sensitive segments, so that different segments or additional pop-up windows appear depending on the values you enter in other fields or segments.

The following is a list of eAM's Descriptive Flexfields:

Form: Define Asset Number

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
ASSET_NUMBERS.DESC_FLEX	Serial Numbers	Oracle Inventory
ASSET_NUMBERS.DESC_FLEX_MIR	Serial Numbers	Oracle Inventory
ATTRIBUTE_VALUES.DESC_FLEX	Asset Attributes	Oracle Inventory
EAM_ASSET_ACTIVITIES.DESC_FLEX	Asset Activity Association	Oracle Inventory
NETWORK_ASSET_ASSOC.DESC_FLEX	Asset Routes Association	Oracle Inventory

Form: Asset Route

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
ASSET_NUMBERS.DESC_FLEX	Serial Numbers	Oracle Inventory
ASSET_NUMBERS.DESC_FLEX_MIR	Serial Numbers	Oracle Inventory
ATTRIBUTE_VALUES.DESC_FLEX	Asset Attributes	Oracle Inventory
EAM_ASSET_ACTIVITIES.DESC_FLEX	Asset Activity Association	Oracle Inventory
NETWORK_ASSET_ASSOC.DESC_FLEX	Asset Routes Association	Oracle Inventory

Form: Define Rebuildable Serial Number

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
ASSET_NUMBERS.DESC_FLEX	Serial Numbers	Oracle Inventory

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
ASSET_NUMBERS.DESC_FLEX_MIR	Serial Numbers	Oracle Inventory
ATTRIBUTE_VALUES.DESC_FLEX	Asset Attributes	Oracle Inventory
EAM_ASSET_ACTIVITIES.DESC_FLEX	Asset Activity Association	Oracle Inventory
NETWORK_ASSET_ASSOC.DESC_FLEX	Asset Routes Association	Oracle Inventory

Form: Rebuildable Routings

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
B_OP_RES.DF	Operation Resources	Oracle Bills of Material
B_OP_RTGS.DF	Routing flex	Oracle Bills of Material
B_OP_RTGS.DF_MIRROR	Routing flex	Oracle Bills of Material
B_OP_SEQS.DF	Operation Information	Oracle Bills of Material
B_RTG_REVS.DF	Routing revisions	Oracle Inventory
B_SUB_OP_RES.DF	Sub Operation Resources	Oracle Bills of Material

Form: Work Order

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
EAM_WORKORDERS.DESC_FLEX_MIR	Discrete Job	Oracle Work in Process
OPERATIONS.DESC_FLEX	Operation Information	Oracle Bills of Material

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
REQUIREMENTS.DESC_FLEX	Component Information	Oracle Bills of Material
RESOURCES.DESC_FLEX	Operation Resources	Oracle Bills of Material

Form: Rebuild Work Order

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
EAM_WORKORDERS.DESC_FLEX_MIR	Discrete Job	Oracle Work in Process
OPERATIONS.DESC_FLEX	Operation Information	Oracle Bills of Material
REQUIREMENTS.DESC_FLEX	Component Information	Oracle Bills of Material
RESOURCES.DESC_FLEX	Operation Resources	Oracle Bills of Material

Form: Close Work Order

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
EAM_WORKORDERS.DESC_FLEX_MIR	Discrete Job	Oracle Work in Process
OPERATIONS.DESC_FLEX	Operation Information	Oracle Bills of Material
REQUIREMENTS.DESC_FLEX	Component Information	Oracle Bills of Material
RESOURCES.DESC_FLEX	Operation Resources	Oracle Bills of Material

Form: Operations

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
OPERATIONS.DESC_FLEX	Operation Information	Oracle Bills of Material
REQUIREMENTS.DESC_FLEX	Component Information	Oracle Bills of Material
RESOURCES.DESC_FLEX	Operation Resources	Oracle Bills of Material

Form: Material Requirement

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
REQUIREMENTS.DESC_FLEX	Component Information	Oracle Bills of Material

Form: Pending Resource Transactions

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
RESOURCE_TRANSACTIONS.DESC_FLEX WIP	Resource Transaction	Oracle Work in Process

Form: View Resource Transactions

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
W_TXNS_V.DESC_FLEX WIP	Resource Transaction	Oracle Work in Process

Form: Work Order Completion

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
WO_COMPLETION.DF	Work Order Completion Information	Oracle Enterprise Asset Management

Form: Rebuild Work Order Completion

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
REBUILD_COMPLETION.DESC_FLEX	Work Order Completion Information	Oracle Enterprise Asset Management

Form: Set Name Definition

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
SET_NAMES.DF	Preventive Maintenance Set Name	Oracle Enterprise Asset Management

Form: Suppression

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
SUPPRESSIONS.DF	Suppression Information	Oracle Enterprise Asset Management

Form: Meter Readings

Field	Descriptive Flexfield Name	Descriptive Flexfield Owner
METER_READING.DESCRIPTIVE_FLEX	Meter Reading Information	Oracle Enterprise Asset Management

Related Topics

Descriptive Flexfields, *Oracle Applications Flexfield Guide*

Benefits of Flexfields, *Oracle Applications Flexfield Guide*

Basic Flexfield Concepts, *Oracle Applications Flexfield Guide*

A

GIS Integration: Implementing the Custom Mapviewer

This appendix covers the following topics:

- Implementing the Custom Mapviewer
- GIS Integration - Implementing Custom Mapviewer

Implementing the Custom Mapviewer

This appendix covers the various setups and implementation steps required to integrate a Custom mapviewer for GIS integration. The information is applicable only for Oracle EBS Release 12.1.1 and above, for Enterprise Asset Management and Oracle Asset Tracking products.

GIS Integration - Implementing Custom Mapviewer

GIS Integration for Oracle EBS, EAM and OAT is available with Google Maps (Release 12.1.1) and with ESRI Maps (Release 12.1.3). However, the application provides an open architecture towards plugging in a custom web based HTML map viewer which can also be used for displaying assets and work orders (work order info will be available with 12.1.3 or higher versions only) on a map in the Asset Map page or Work Map page. The setup and implementation details required are documented in this appendix.

1. Setup Required to Render a Custom Map

To integrate the custom mapviewer, the following profile values must be set as indicated:

1. CSI: Mapviewer Name: This should be set to 'Custom

2. CSI: Customized Mapviewer Class: This value should contain the fully qualified name of the Java Class used to implement the customized mapviewer, for example,

'oracle.apps.csi.gis.custom.CustomisedMapviewer'.

The details of implementing this java class are discussed below.

2. Class Structure of the Customized Class

This section describes a typical implementation to customize any web-based HTML mapviewer. Please go through the comments marked in bold in the example to understand how the passed object and the base Class methods can be reused.

The customized mapviewer class should extend the MapContentPreparer class and implement the interface MapContentDesign. This should be done because the mandatory method renderMap should have an implementation in the custom class.

In 12.1.1, we passed information required for rendering asset information in EAM and instance information in OAT.

In 12.1.3, we added support, using which customer can render work order information on the map.

```
package oracle.apps.csi.custom;

//Lists the necessary imports required.

import java.util.ArrayList;

import java.util.Comparator;

import java.util.Iterator;

import oracle.apps.csi.gis.webui.MapDetails;

//WoMapDetails and OpDetails is available 12.1.3 onwards only

import oracle.apps.csi.gis.webui.WOMapDetails;

import oracle.apps.csi.gis.webui.OpDetails;

import oracle.apps.csi.gis.webui.MapContentDesign;

import oracle.apps.csi.gis.webui.MapContentPreparer;

import oracle.apps.fnd.framework.webui.OAPageContext;

//Mandatorily need to extend MapContentPreparer and MapContentDesign

public class CustomisedMapviewer extends MapContentPreparer implements
MapContentDesign

{

public CustomisedMapviewer()

{

}

public String renderMap(OAPageContext pageContext, ArrayList assetList)
```

{

/*Do configuration check and delegate call to your function to generate HTML content for the installed mapviewer here*

String htmlContent=renderInstalledMap(pageContext,assetList);

return htmlContent;

}

private String renderInstalledMap(OAPageContext pageContext, ArrayList assetOrWOList){

//For 12.1.3 add this additional piece of code to determine if flow is for Assets/Instance or Work //Order.The value returned if context is Asset/Instance is 'asset'.Else the value returned will be //'work'

String context=(String)pageContext.getSessionValueDirect("MapContext");

/*The below if block can be used since 12.1.3, in case customer wants to use both asset/instance as well as work order information. For 12.1.1 and 12.1.2 the assetOrWOList will only contain MapDetails object.*/

if(context.equals("asset")){

Comparator compMap=new MapDetails();

/*Use this to sort list in order of latitude,longitude if required .Typical use could be to merge popup details of assets if at same location.*/

Collections.sort(assetOrWOList,compMap);

/*The assetOrWOList contains MapDetails object in this case(for asset).This object contains information about the asset details.The below code snippet is just for illustration.Move this to a method or a separate class for code clarity *

Iterator it=assetOrWOList.iterator();

while(it.hasNext())/

//Get the object and use the getters to prepare your own details

MapDetails mapDetails=(MapDetails)it.next();

//Gets latitude in DD

mapDetails.getLatitude();

//Gets longitude in DD

mapDetails.getLongitude();

//Gets address

mapDetails.getAddress();

//Gets Instance Number(OAT) / Asset number(EAM)

mapDetails.getInstanceNumber();

//Gets Instance Description

mapDetails.getDescriptiveText();

//Gets Serial Number

mapDetails.getSerialNumber();

//Gets Item Name

mapDetails.getConcatenatedSegments();

//Gets Item Description

mapDetails.getItemDescription();

//Gets Owning Department(populated only for EAM)

mapDetails.getOwningDepartment();

//Gets internal instance id

mapDetails.getInstanceId();

//Gets Asset Area(populated only for EAM)

mapDetails.getAssetArea();

//Gets Asset Category(populated only for EAM)

mapDetails.getAssetCategory();

/*(i)Returns 'EAM' for EAM asset and application is used in EAM,

(ii)CSE' for instance which is not an EAM asset(Capital/Rebuildable only) and application is being used from OAT

(iii)'EAM-CSE' for instance which is also an EAM asset(Capital/Rebuildable only) and application is being used from OAT */

mapDetails.getAssetType();

//Gets Degree value for latitude

mapDetails.getDegreesLat();

//Gets Minutes value for latitude

mapDetails.getMinutesLat();

//Gets Seconds value for latitude

mapDetails.getSecondsLat();

//Gets Direction value for latitude (N,S)

mapDetails.getDirectionLat();

//Gets Degree value for longitude

mapDetails.getDegreesLng();

//Gets Minute value for longitude

```
mapDetails.getMinutesLng();
//Gets Seconds value for longitude
mapDetails.getSecondsLng();
//Gets Direction value for longitude(E,W)
mapDetails.getDirectionLng();
//Gets Organization Id (Only populated for EAM)
mapDetails.getOrgId();
}else{
Comparator compMap=new WOMapDetails();
/*Use this to sort list in order of latitude,longitude if required.
Typical use could be to merge popup details of assets if at same location.*/
Collections.sort(assetOrWOList,compMap);
/*The assetOrWOList contains WOMapDetails object in this case(for work).This
object contains information about the work order details.The below code snippet is
just for illustration.Move this to a method or a separate class for code clarity */
Iterator it=assetOrWOList.iterator();
while(it.hasNext())
{
//Get the object and use the getters to prepare your own details
WOMapDetails woMapDetails=(WOMapDetails)it.next();
//Gets the wipEntityId(Work Order internal id)
woMapDetails.getWipEntityId();
//Gets the Work Order name
woMapDeails.getWipEntityName();
//Gets latitude in DD format
woMapDetails.getLat();
//Gets longitude in DD format
woMapDetails.getLng();
//Gets asset number associated with the work order
woMapDetails.getInstanceNumber();
//Gets work order description
woMapDetails.getDescription();
//Gets serial number associated with work order
```

```
woMapDetails.getSerialNumber();
//Gets asset group associated with work order
woMapDetails.getConcatenatedSegments();
//Gets asset group internal id associated with work order
woMapDetails.getInventoryItemId();
//Gets asset group description associated with work order
woMapDetails.getItemDescription();
//Gets asset owning department
woMapDetails.getAssetOwningDepartment();
//Gets work order owning department
woMapDetails.getWoOwningDepartment();
//Gets user defined status for work order
woMapDetails.getUserDefinedStatus();
//Gets work order system status
woMapDetails.getSystemStatus();
//Gets the degree part of latitude in DMS format
woMapDetails.getDegreesLat();
//Gets the minute part of latitude in DMS format
woMapDetails.getMinutesLat();
//Gets the seconds part of latitude in DMS format
woMapDetails.getSecondsLat();
//Gets the direction part of latitude in DMS format
woMapDetails.getDirectionLat();
//Gets the degree part of longitude in DMS format
woMapDetails.getDegreesLng();
//Gets the minute part of longitude in DMS format
woMapDetails.getMinutesLng();
//Gets the seconds part of longitude in DMS format
woMapDetails.getSecondsLng();
//Gets the direction part of longitude in DMS format
woMapDetails.getDirectionLng();
//Gets the internal id associated with asset number of the work order
```

woMapDetails.getMaintenanceObjectId();

//Gets operation rows for the work order.The ArrayList returned by the below method contains oracle.apps.csi.gis.webui.OpDetails object.The OpDetails object contains the below info.The variables are self explanatory:

//String opSeq;

//String resourceSeq;

//String departmentCode;

//String departmentId;

//String resourceId;

//String resourceCode;

//String resourceInstanceId;

//String resourceInstanceName;

//oracle.jbo.Domain.Date fromDate;

//oracle.jbo.Domain.Date toDate;

woMapDetails.getOperations();

//Gets if work order is firm

woMapDetails.getFirmFlag();

//Gets the work order owning department internal id

woMapDetails.getWoOwningDepartmentId();

//Gets the maintenance object type of the associated asset number.

woMapDetails.getMaintenanceObjectType();

//Gets the scheduled start date of the work order

woMapDetails.getScheduledStartDate();

//Gets the scheduled end date of the work order

woMapDetails.getScheduledEndDate();

//Gets the PM Schedule Id of the work order

woMapDetails.getPmScheduleId();

//Gets the PM Schedule Name of the work order

woMapDetails.getPmScheduleName();

//Gets the duration of the work order

woMapDetails.getDuration();

}

/*Also the protected methods in MapContentPreparer could be reused. Customer can

also override them for their own use. Refer section 3 below.Use the info above and the protected methods to generate HTML content as required by the mapviewer and return it in a java.lang.String object.*/

return "<html><body><h1>some map content</h1></body></html>" ;

3. Protected Methods of Class MapContentPreparer

Method	Purpose
protected String loadAssetNumberDetailsLink(OAPageContext pageContext, MapDetails mapDetails)	Used to prepare link URL for Asset Number details for EAM. This could be reused in a customized mapviewer implementation.
protected String loadInstanceNumberDetailsLink(OAPageContext pageContext,MapDetails mapDetails)	Used to prepare link URL for Instance Number details for OAT. This could be reused in a customized mapviewer implementation.
protected String loadGraphicalDisplayPage(OAPageContext pageContext, MapDetails mapDetails)	Used to prepare link URL for Graphical Hierarchy for OAT and EAM. This could be reused in a customized mapviewer implementation.
protected String formatHtmlContent(String unFormattedString)	Used to replace quotes symbol with HTML escape sequence. This could be reused in a customized mapviewer implementation.
protected String loadCreateWorkRequest(OAPageContext pageContext,MapDetails mapDetailsEAM)	Used to prepare link URL for Create Work Request for EAM. This could be reused in a customized mapviewer implementation.
protected String loadCreateWorkRequest(OAPageContext pageContext,MapDetails mapDetailsEAM)	Used to prepare link URL for View Work Request for OAT and EAM. This could be reused in a customized mapviewer implementation.
protected String loadCreateWorkOrder(OAPageContext pageContext, MapDetails mapDetails)	Used to prepare link URL for Create Work Order for EAM. This could be reused in a customized mapviewer implementation.
protected String loadViewWorkOrder(OAPageContext pageContext, MapDetails mapDetails)	Used to prepare link URL for View Work Order for EAM and OAT. This could be reused in a customized mapviewer implementation.

The methods listed below were introduced in Release 12.1.3 and are not available in

prior releases:

Method	Purpose
protected String loadAssetNumberDetailsLink(OAPageContext pageContext,WOMapDetails woMapDetails)	Used to prepare link URL for Asset Number details for EAM. This could be reused in a customized mapviewer implementation.
protected String loadUpdateWOLink(OAPageContext pageContext,WOMapDetails woMapDetails)	Used to prepare link URL for Update Work Order for EAM. This could be reused in a customized mapviewer implementation.
protected String loadDebriefWOLink(OAPageContext pageContext,WOMapDetails woMapDetails)	Used to prepare link URL for Debrief Work Order for EAM. This could be reused in a customized mapviewer implementation.
protected String loadAssignEmpLink(OAPageContext pageContext,WOMapDetails woMapDetails)	Used to prepare link URL for Assign Employee Page for EAM. This could be reused in a customized mapviewer implementation.

B

Windows and Navigation Paths

This appendix covers the following topics:

- Windows and Navigation Paths
- Default Navigation Paths for Standard Application Windows

Windows and Navigation Paths

This appendix provides the default navigator paths for the windows used in the Oracle Enterprise Asset Management. The following table provides the default navigation paths. Brackets [ ] indicate a button.

Default Navigation Paths for Standard Application Windows

eAM-Related Windows and Navigation Paths

Window Name	Navigation Path
Activity and Asset Number/Rebuildable Association	Enterprise Asset Manager: Asset Activities > Asset Activity Association
Activity Workbench	Enterprise Asset Manager: Activities > Activity Workbench
Advanced Pricing (Price Lists)	Order Management: Pricing > Price Lists > Price List Setup
Area	Enterprise Asset Manager: Setup > Area
Asset Genealogy Import	Interfaces > Import Asset Genealogy

Window Name	Navigation Path
Asset Meter	Enterprise Asset Manager: Meters > Asset Meter Association
Asset Number Import	Interfaces > Import Asset Number
Asset Status	Enterprise Asset Manager: Assets > Asset Statuses
Bills of Material (Activity BOM)	Enterprise Asset Manager: Asset Activities > Maintenance BOM
Bills of Material (Asset BOM)	Enterprise Asset Manager: Assets > Asset BOM
Bills of Material (Rebuildable BOM)	Enterprise Asset Manager: Rebuildables > Rebuildable BOM
Categories	Enterprise Asset Manager: Setup > Category > Category Codes
Category Sets	Enterprise Asset Manager: Setup > Category > Category Sets
Close Rebuild Work Order	Enterprise Asset Manager: Work Orders > Close Rebuildable Work Orders
Close Work Order	Enterprise Asset Manager: Work Orders > Close Work Orders
Collection Elements	Quality Manager: Setup > Collection Elements
Collection Plans	Quality Manager: Setup > Collection Plans
Define Asset Number	Enterprise Asset Manager: Assets > Asset Numbers
Define Asset Route	Enterprise Asset Manager: Assets > Asset Route
Define Rebuildable Serial Number	Enterprise Asset Manager: Rebuildables > Rebuildable Serial Numbers

Window Name	Navigation Path
Departments	Enterprise Asset Manager: Setup > Routing > Departments
Department Approvers	Enterprise Asset Manager: Setup > Department Approvers
Descriptive Flexfield Segments	Enterprise Asset Manager: Setup > Flexfields > Descriptive > Segments Order Manager: Setup > Flexfields > Descriptive > Segments
EAM Asset Documents	Enterprise Asset Manager: Assets > Asset Numbers > Documents
EAM Work Order Documents	Enterprise Asset Manager: Work Orders > Documents
Electronic Records	ERES Administrator: Setup
Enter Meter Readings	Maintenance Super User: Assets tab > Mass Meter Readings sub-tab
Enter Quality Results	Enterprise Asset Manager: Quality > Results > Entry > Enter Quality Results
Enterprise Asset Management Parameters	Enterprise Asset Manager: Setup > Parameters
Failure History	Maintenance Super User: Failure Analysis tab > Failure History sub-tab
Failure Sets	Maintenance Super User: Failure Analysis tab > Failure Tracking Setup sub-tab
Financials Options	Purchasing Manager: Setup > Organizations > Financial Options
Find Asset Number	Enterprise Asset Manager: Assets > Asset Numbers > Asset Number field > [Find] icon
Find Category Associations	Enterprise Asset Manager: Setup > Category Associations

Window Name	Navigation Path
Find Meter Readings	Enterprise Asset Manager: Interfaces > Pending Meter Readings
Find Pending Work Orders	Enterprise Asset Manager: Interfaces > Pending Work Orders
Find Preventive Maintenance Schedules	Enterprise Asset Manager: Preventive Maintenance > Schedule Template Definition
Find Projects	Project Manufacturing Manager: Projects > Project Definition > Projects
Find Project Status	Project Manufacturing Manager: Project Status > Project Status Inquiry
Find Rebuild Work Orders	Enterprise Asset Manager: Work Orders > Rebuild Work Orders
Find Requests (PRC: Refresh Project Summary Amounts)	Project Manufacturing Manager: Other > Requests > Run OR View menu > Requests
Find Requisition Lines	Enterprise Asset Manager: Purchasing > AutoCreate
Find Resource Transactions	Enterprise Asset Manager: Work Order Transactions > View Resource Transactions
Find Work Orders	Enterprise Asset Manager: Work Orders > Work Orders Enterprise Asset Manager: Billing > Work Order Billing
Forecasts	Maintenance Super User: Forecasts tab
Generate Preventive Maintenance Work Orders	Enterprise Asset Manager: Preventive Maintenance > Generate Work Orders
Import Items	Enterprise Asset Manager: Interfaces > Import Items

Window Name	Navigation Path
Import Jobs and Schedules	Enterprise Asset Manager: Interfaces > Import Work Orders or Import Meter Readings
Interface Managers	Enterprise Asset Manager: Inventory > Setup > Transactions > Interface Managers
Item Costs Summary	Enterprise Asset Manager: Inventory > Items > Master Items > (M) Tools, Item Costs
Launch MRP	Enterprise Asset Manager: Material Planning > MRP > Launch
Load Production Equipment Maintenance Downtime	Enterprise Asset Manager: Work Order Planning > Production Equipment Downtime
Maintenance Workbench	Enterprise Asset Manager: Work Order Planning > Maintenance WorkBench
Maintenance Work Orders	Enterprise Asset Manager: Work Orders > Work Orders
Maintenance Work Order Value Summary	Enterprise Asset Manager: Work Orders > Work Orders > [Costs] > [Value Summary]
Mass Time Entry	Maintenance Super User: Work Orders tab > Mass Time Entry sub-tab
Master Demand Schedules	Enterprise Asset Manager: Material Planning > MDS > Names
Master Item	Inventory: Items > Master Items
Material Requirements **Note:** This menu function is available for those users with responsibilities and roles that include function, EAM_WO_DETAILS_MODE, with their associated menu. See: Implementing Function Security, *Oracle Applications System Administrator's Guide - Security*.	Enterprise Asset Manager: Work Order Details > Material Requirements

Window Name	Navigation Path
Meters	Enterprise Asset Manager: Meters > Meter Definition
Meter Reading	Enterprise Asset Manager: Meters > Meter Readings
Miscellaneous Documents	Enterprise Asset Manager: Setup > Miscellaneous Documents
MRP Names	Enterprise Asset Manager: Material Planning > MRP > Names
My Work Queue	Maintenance User Workbench: sign in
Operations **Note:** This menu function is available for those users with responsibilities and roles that include function, EAM_WO_DETAILS_MODE, with their associated menu. See: Implementing Function Security, *Oracle Applications System Administrator's Guide - Security*.	Enterprise Asset Manager: Work Order Details > Operations
Organization	Enterprise Asset Manager: Inventory > Setup > Organizations > Organizations > [New]
Organization Parameters	Enterprise Asset Manager: Inventory > Setup > Organizations > Parameters
Oracle Manufacturing Lookups	Enterprise Asset Manager: Setup > Lookups
Pending Asset Number	Enterprise Asset Manager: Interfaces > Pending Asset Numbers
Pending Meter Reading	Enterprise Asset Manager: Meters > Meter Readings > Pending Meter Reading
Personal Profile Values	Enterprise Asset Manager: Setup > Profiles > Personal

Window Name	Navigation Path
Plan Options	Enterprise Asset Manager: Material Planning > MRP > Options
Purchase Orders	Purchasing Manager: Purchase Orders > Purchase Orders
Preferences	Time and Labor Administration: Preferences
Preventive Maintenance Schedules	Enterprise Asset Manager: Preventive Maintenance > Schedule Definition
Project Parameters	Project Manufacturing Manager: Projects > Project Definition > Project Parameters
Rebuild Completion	Maintenance Super User or Maintenance User Workbench: Work Orders tab Enterprise Asset Manager: Work Order Planning > Maintenance Workbench
Rebuild Work Orders **Note:** This menu function is available for those users with responsibilities and roles that include function, EAM_WO_DETAILS_MODE, with their associated menu. See: Implementing Function Security, *Oracle Applications System Administrator's Guide - Security*.	Enterprise Asset Manager: Work Orders > Rebuildable Work Orders
Requisitions	Enterprise Asset Manager: Purchasing > Requisitions > Requisitions

Window Name	Navigation Path
Resource Requirements **Note:** This menu function is available for those users with responsibilities and roles that include function, EAM_WO_DETAILS_MODE, with their associated menu. See: Implementing Function Security, *Oracle Applications System Administrator's Guide - Security*.	Enterprise Asset Manager: Work Order Details > Resource Requirements
Resource Usage	Enterprise Asset Manager: Assets > Asset Numbers > Asset Numbers
Routings	Enterprise Asset Manager: Asset Activities > Maintenance Routings
Run AutoInvoice	Order Manager: Receivables > Interfaces > AutoInvoice
Select Work Order	Enterprise Asset Manager: Work Order Details > Operations, Material Requirements, or Resource Requirements
Service Request	Service: Service Requests > Find Service Requests
Service Request Types	Service: Setup > Service Requests > Request Types
Scheduler Workbench	Enterprise Asset Manager: Work Order Planning > Scheduler WorkBench
Set Name	Preventive Maintenance > Set Name Definition
Shop Floor Invoice Variance	Enterprise Asset Management Cost > Work Order Shop Floor Invoice Variance
Submit Request	Enterprise Asset Manager: Reports

Window Name	Navigation Path
Supply/Demand	Enterprise Asset Manager: Material Planning > MRP > Workbench > [Supply/Demand] > [Find]
Time	Self-Service Time and Expenses: Time Entry
Transaction Sources	Order Manager: Receivables > Setup > Transactions > Sources
Users	System Administrator: Security > User > Define
View Operations	Enterprise Asset Manager: Work Order Details > View Operations
View Material Requirements	Enterprise Asset Manager: Work Order Details > View Material Requirements
View Resource Requirements	Enterprise Asset Manager: Work Order Details > View Resource Requirements
View Resource Transactions	Enterprise Asset Manager: Work Order Transactions > View Resource Transactions > [Find]
View Work Order	Enterprise Asset Manager: Work Order Details > View Work Orders
Work In Process Parameters	WIP Manager: Setup > Parameters
Work Order Capitalization	Enterprise Asset Manager: Billing and Capitalization > Work Order Capitalization
Work Order Completion	Maintenance Super User or Maintenance User Workbench: Work Orders tab > Complete Work Order icon Enterprise Asset Manager: Work Order Planning > Maintenance Workbench

Window Name	Navigation Path
Work Order **Note:** This menu function is available for those users with responsibilities and roles that include function, EAM_WO_DETAILS_MODE, with their associated menu. See: Implementing Function Security, *Oracle Applications System Administrator's Guide - Security*.	Enterprise Asset Manager: Work Orders > Work Orders
Work Orders tab	Maintenance Super User or Maintenance Workbench role: Work Orders tab

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