**Oracle® Utilities Work and Asset Management**

Resource User Guide

Release 1.9.0.3

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Oracle® Utilities Work and Asset Management Resource User Guide for Release 1.9.0.3

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# Contents

# Chapter 1

## Overview

The Resource subsystem contains modules that represent the basic assets and organization of your organization including, equipment and parts, departments and accounts, employees and skills, and much more. The subsystem holds all this information in one place and passes that data to the rest of the system when needed, like a library of application information.

Since the information entered in the Resource subsystem is used by different parts of the system at different times, it is important to be as accurate and complete as possible when setting up the information and relationships described in the Resource subsystem. Entering and maintaining complete and correct resource information saves you time when working elsewhere in the application and allows the system to provide you complete working documents and accurate summary information. For example, assigning an account number to the wrong department and area can affect your organization's accounting. Such a mistake can be fixed, but the process can be tedious and time consuming.

# Chapter 2
## Department

A department represents the level of cost allocation. As costs are accrued in the maintenance of assets belonging to the department, those costs are recorded and totaled at various levels up to the department level. This process, known as cost roll-up, allows managers to monitor and evaluate costs at different levels throughout the organization.

## Department Records

Departments can have subordinate, or child, departments – an even several layers of subordinate departments (grandchildren) - that contribute to the cost roll-up process and enable you to group costs of departments. The record for the parent department must be established before the parent-child relationship can be defined in the child department record.

The upper section of the Department window contains the Department and Description fields. These fields are both required when inserting a new record, but only the Description field can be updated after the record is saved. The lower section displays a list of all child departments. You cannot update the information on this list.

Part of the cost roll-up functionality is the system's ability to maintain and check costs against budgets when they are being applied. Please refer to the topic on Budget Checking for more information.

**How to Create a Department Record**
1. **Open the Department module.**
   The Department module is located in the Resources subsystem.

2. **Click New.**
   The system will open a blank Department record.

3. **Enter a unique Department code.**
4. **Enter a Description.**
   Remember that only the first few words of the description will show on the Search Results panel.

5. **Click Save.**
   The system will check that the Department code is unique, then save the record.

**How to Create a Child-Parent Relationship Between Departments**
Once you have created the parent department record you can create a second department record and name it a child of the existing parent department.

1. **Create the Child Department record.**
2. **Place the cursor in the Parent Department field.**

3. **Select the Parent Department from the list of values.**
4. **Click Save.**

### How to Navigate from a Child to a Parent Department

1. **Open the Child Department record.**
2. **Click the arrow button next to the Parent Department field.**
   The information presented in the window will change to show the parent department record.

### How to Navigate from a Parent to a Child Department

1. **Open the Parent Department record.**
2. **Find the Child Department you want in the list in the lower part of the screen.**
3. **Click the arrow button next to the Child Department field.**
   The information presented in the window will change to show the Child Department record.

# Department Views

In addition to standard views, the module includes the following:

## Cost Summary

The Cost Summary view summarizes Budget and Actual Costs by Expense Category for the Department. Expenses accrue against their Accounts and at the end of each day the system processes expenses and applies them to the appropriate Account, Area, Department, and other records. The cost information is updated at the end of each day as a part of this process. This window is for review purposes only, you cannot change the information presented here. In order for an expense category to appear on the summary it must be associated to an Account that references the Department.

All budget amounts are supplied from and managed in the Period Costs view of the Account module.

When you select one of the Cost Summary options from the Views list, the system re-calculates the values and displays the appropriate information.

The display options are:

1. Parent Only

   Only the expense categories directly associated with the parent department will be summarized.

   A parent Department can be a child of another, higher-level Department. Selecting this view does not show information for that higher level. In order to see summarized costs for that level, you would have to Open the appropriate Department record.

2. Children Only

   Only the expense categories directly associated with the child departments will be summarized. This includes costs associated with children to the child departments as well.

3. Parent and Children

   All expense categories associated with the parent and all those associated with the child departments will be shown.

Cost Summary fields are the same as those that appear in the Account module.

# Period Costs

The Period Costs view displays Budget and Actual Cost information per Expense Category, by Period. Expenses accrue against their Accounts and at the end of each day the system processes expenses and applies them to the appropriate Account, Area, Department, and other records. The cost information is updated at the end of each day as a part of this process. The information in this window is imported from the Account module and can only be modified or updated there.

In order for an expense category to appear on the summary it must be associated to an Account that references the Department.

All budget amounts are supplied from and managed in the Period Costs view of the Account module.

When you select one of the Period Cost options from the Views list, the system calculates the numbers for the appropriate department(s) and displays that information.

The display options are:

1.  Parent Only

    Only the Expense Categories directly associated with the parent Department will be summarized.

    A parent Department can be a child of another, higher-level Department. Selecting this view does not show information for that higher level. In order to see summarized costs for that level, you would have to Open the appropriate Department record.

2.  Children Only

    Only the Expense Categories directly associated with the child Departments will be summarized. This includes costs associated with children to the child Departments as well.

3.  Parent and Children

    All Expense Categories associated with the parent and all those associated with the child Departments will be shown.

Period Cost fields are the same as those that appear in the Account module.

# Chapter 3

# Area

Areas are subdivisions within departments and each Area record is associated with a single department, making all department/area combinations unique.

It is also at this level that account numbers are defined in the cost roll-up structure. A department/area may have one, many, or no account numbers associated with it. This is achieved by referencing a department and area directly on the Account record (in the Account module). For further information on accounts and their relationship to departments and areas, please refer to the section on the Account module.

Part of the cost roll-up functionality is the system's ability to maintain and check costs against budgets when they are being applied. Please refer to the topic on Budget Checking for more information.

## Area Records

An Area record consists of a unique department and area combination, and the area description.



**Area record**

When you create an Area record, the system checks that the entered department value exists in the Department module (a list of values is attached) and that the entered department/area combination is unique.

When updating existing information, only the area description may be modified on the Area header.

*Note:* Since an Area record may have Process, Asset, and/or Accounting records associated with it, direct access to those modules is provided via the Actions list.

Area cost information is updated at the end of each day by batch processing. Budget information is supplied from the Period Costs view of the associated Account record.

**How to Create an Area Record**
1.   **Open the Search Options or Search Results panel, or to an existing Area record.**
2.   **Click New.**
3.   **Enter the Department the Area will belong to.**
4.   **Enter the Area.**
5.   **Enter the Description.**
6.   **Click Save.**

# Area Views

In addition to standard views, the module includes the following:

## Period Costs

The Period Costs view displays Budget and Actual Cost information per Expense Category, by Period. Expenses accrue against their Accounts and at the end of each day the system processes expenses and applies them to the appropriate Account, Area, Department, and other records. The cost information is updated at the end of each day as a part of this process. The information in this window is imported from the Account module and can only be modified or updated there.

In order for an expense category to appear on the summary it must be associated to an Account that references the Area.

All budget amounts are supplied from and managed in the Period Costs view of the Account module.

When you select one of the Period Cost options from the Views list, the system calculates the numbers for the appropriate Area and displays that information.

Period Cost fields are the same as those that appear in the Account module.

## Cost Summary

Each night the system applies the day's costs, assigning them to the appropriate Account, Areas, Departments and other records. That information is organized by period and displayed in the Period Costs view.

The Cost Summary by Expense Category view summarizes budget and actual costs per expense category for the area. You cannot change the information presented in this window.

In order for an expense category to appear on the summary it must be associated with the area. Expense categories are associated with account numbers, which are in turn associated with departments and areas. The expenses accrue against their accounts and at the end of each day the system processes expenses and assigns them to the appropriate Account, Area and Department and other records. The cost information is updated at the end of each day as a part of this process. The budget information is supplied from the Period Costs view of the associated Account record.

*Note:* If you have the appropriate responsibilities, the period cost and cost summary views also display actual amounts from your organization's external financial system.

All budget amounts are supplied from and managed in the Period Costs view of the Account module.

# Area Actions

The Actions list for the Area module provides direct access to the Process, Asset, and Account modules.

*Note:* When accessing other modules, if more than one record is associated with the Area record, the module's Search Results panel opens. If only one record exists in that module for the Area, that record displays in the module header window. If no detail records are associated with the Area, the module Search Options window opens where you can choose to create a new record and associate it to the Area.

# Chapter 4

# Account

The Account module serves as the Chart of Accounts for the system. As you refer to an Account Number elsewhere in the application, the system checks the number against the Account records in this module. These accounts may serve as the basis for your organization's cost reporting and analysis as your daily work causes you to incur charges.

## Account Records

The system also uses these Account numbers to apply costs to other modules when costs are incurred against them. Part of this cost roll-up functionality is the system's ability to maintain and check costs against budgets when they are being applied. Budget amounts are entered in the Account module Period Costs view. Please refer to the topic on Budget Checking for more information.

Caution: In order for employees to be able to charge time against an account in the Timekeeping module of the Maintenance subsystem, the account must have a Reference ID number.

Each account number is structured from the segments defined on the Account record.



Account record

The system can be set to limit the possible budget overrun for accounts throughout the application by monitoring budget balances, tracking where costs are applied to certain accounts, and providing users with warnings when costs are being approved that may result in budget overruns. Please refer to Budget Checking for more information in the Operational Accounting chapter for more information.

## Account Field Descriptions

The following fields are included:

**Account Number -** When you save the record, the system assembles the account number from the account segments entered in the second section of the screen. This field can not be modified directly.

**Account Segments -** The second section of the window contains the Account Segment fields. Your organization can establish how account segments function by using the Account Structure module of the Administration subsystem. Your organization can determine how many segments will be used (up to 10), which will be required, how long each segment will be, how each will be labeled, which will have an associated list of values and how the lists will interact, etc. When you enter values into these fields, you are telling the system how to build the final account number.

**Status -** The status field indicates whether or not costs can be charged to the account. Possible statuses are:

> **Active** - Charges can only be applied to accounts in Active status.
>
> **Inactive** - Used for accounts that are on the books, but that should not be accruing charges. Inactive accounts can be reactivated.
>
> **Closed** - Charges cannot be made against Closed accounts.
>
> An example of these three statuses could be a set of accounts for a project and its subprojects. During the planning of the project, you could set up the accounts and put them in Inactive status. When the project is activated you would also activate the accounts so that charges could be made. Finally, when the project was finished and all charges calculated and passed to the general ledger, the account status could be changed to Closed.

**Reference ID -** A Reference ID is a value that allows you to associate the account number with a unique ID which you can use elsewhere in the system. Reference ID is mandatory if the account number is intended for use in the Timekeeping module. In this case, the account MUST have a Reference ID. The system uses the Reference ID to retrieve the account number automatically. This is useful because in most cases, the reference ID is much shorter and easier to remember than the whole account number. The Reference ID code must be unique to the account.

**Work Request Route -** You can enter a default approver route in this field. If the DEFAULT APPROVER FROM ACCOUNT value in the Work Request Processing Business Rule is set to ON, the system will use the approval route entered in this field when a new Work Request record is created and no approval route is entered. This saves anyone who is creating a work request from having to know the appropriate title for the approver. The approval route can always be overwritten on the Work Request record if necessary.

The Work Request Route field is controlled by a list of values that the system builds using the Approval Limits module of the Administration subsystem.

**Department and Area -** Enter a department and area in the appropriate fields if the account is to be associated with only one department and area. The same department and area may have more than one account number associated with it, however, the same account number may refer to only one department and area. An Account record does not have to reference a department/area if not applicable for that account number. Both are controlled by lists of values that the system builds from the Department and Area modules in the Resource subsystem.

**Description -** The Description field represents a very short (60 letters and spaces) description of the account.

**Budget Type -** The Budget Type field indicates how budget values will be calculated for this account number. Select Annual to use costs incurred within the current calendar year to calculate the budget and committed costs for the account. Select Lifetime to use all costs every incurred against the account to calculate the budget and committed costs for the account.

**How to Add an Account Number**

1. **Open the Account module in the Resource subsystem.**
2. **Click New.**
3. **For each account segment field, select the segment from the list of values.**
4. **Enter a short Description.**
5. **Enter any other information your organization requires.**
6. **Click Save.**

# Account Views

In addition to any standard views, the module includes the following:

## Period Costs

The Period Costs view displays budget and actual cost information per expense category, by period. The information in this window comes from the associated Account records and can only be updated be going to the associated Account record.



**Period Costs view**

This view displays budget and actual cost information per expense category, by period.

Each night the system rolls up the day's costs, assigning them to the appropriate Account, Areas, Departments and other records. That information is organized by period and displayed in the appropriate Period Costs view for each of these modules.

The Account Period Costs view serves three functions:

1. Enter budget information that will be displayed in Period Costs views and Cost Summary views throughout the system.

2. Compare budgeted versus actual costs by period and expense category.

3. Associate expense categories to the account.

The system creates new line items in the Period Costs view when activity elsewhere in the system causes costs for the expense code/account combination to appear for the first time in the period. For example, premium time may not be budgeted, but a crew is forced to work overtime. When they log the overtime in the Timekeeping module, the system will automatically insert a premium time line item for that month.

Settings in the End of Period Processing Business Rule determine how the system processes costs and when.

Possible sources for period costs that are generated within the system include:

1. Storeroom Catalog records,

2. The Materials view of Work Order Task records and

3. The Timekeeping module.

If you have the appropriate function responsibility in your user profile, you can also use the Period Cost view to compare actual amounts from your organization's external financial system with the information maintained by Oracle Utilities Work and Asset Management.

## Period Costs Field Descriptions

All budget amounts are supplied from and managed in the Period Costs view of the Account module.

**Expense Code and Description -** Some Period Cost views are organized by expense category. This field represents the expense category that is being summarized. Expense categories and codes are defined in the Expense Codes business rule.

**Period -** This field shows the Accounting Period that the costs shown apply to. Accounting Periods are defined in the Accounting Periods module of the Administration subsystem.

**Budget Amount -** This shows the budget amount allotted for the associated Period.

**Committed Amount -** This column shows the accumulated costs that have been committed to for the year to the current date. These amounts represent costs such as issued Purchase Orders and approved Timesheets. The actual funds may not have actually been paid out yet.

**Budget Balance -** This column shows the dollar amount left on the budget for the Period in the Expense Category indicated. This value is calculated (not stored) as the difference between the Budget Amount and the Actual Amount.

**Actual Amount -** This column shows the actual costs for the Period. These amounts represent costs that have actually been invoiced and paid.

**External Actual Amount, Budget Balance and Actual Quantity -** If you have the appropriate function responsibility in your user profile, you can use these three columns to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

### How to Enter Budget Information
1. **Open the Account module in the Resource subsystem.**
2. **Use the Search Options screen to find the account that you want to establish a budget for.**
3. **Select Period Costs from the Views list.**
4. **Click New.**
   If costs have already been posted for the period that you want to enter the budget for, you are allowed to enter a budget amount for the existing period cost item.
5. **Select an Expense Code.**
   The system enters the description for the expense code.
6. **Select the accounting period that the budget applies to from the list of values in the Period fields.**
   Accounting periods are set in the Accounting Periods module of the Administration subsystem.
7. **Enter the budget amount.**
8. **Click Save.**
   Repeat steps 4 - 8 to enter budget amounts for the remaining accounting periods.

## Yearly Costs

This view displays budget and actual costs per expense period summarized by year for each account. The top portion of the screen summaries each year that costs have been applied in the

system. Highlight a specific year to show a more detailed breakdown of that year in the bottom portion of the screen.

This information is for review only and cannot be modified. All budget amounts are entered in the Period Costs view.

If you have the appropriate function responsibility in your user profile, you can also use this view to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

Field Descriptions are similar to those discussed for Period Costs.

## Exporting Costs

The Export Yearly Costs action is available for either summary or detail data depending on whether you click in the upper or lower section of the screen.

Export actions are available from both the Period Costs and Yearly Costs views. When selected, the system opens an Export Screen to File window where you can make selections of how you would like for the data to be presented.

You can choose whether you want the data to be exported in HTML, text, or Excel XLS format. If you click the radio button to select an HTML or text file, the export results appear in a browser window where you can save or print the data. If you select an XLS file, a File Download dialog box opens were you can select to view or save the file.

## Cost Summary

The Cost Summary view summarizes budget and actual costs by expense category for the account. Expenses accrue against their accounts and at the end of each day the system processes expenses and applies them to the appropriate Account, Area, Department, and other records. The cost information is updated at the end of each day as a part of this process. This window is for review purposes only, you cannot change the information presented here.

All budget amounts are supplied from and managed in the Period Costs view.

In order for an expense category to appear in the summary it must be associated to the account number in the Expense Codes view.

If you have the appropriate function responsibility in your user profile, you can also use the Cost Summary view to compare actual amounts from your organization's external financial system with the information maintained by Oracle Utilities Work and Asset Management.

## Cost Summary Field Descriptions

**Expense Category -** This field represents the expense category that is being summarized. Expense categories are associated to accounts in the Expense Codes view of the Account module.

For Department and Area records, the expense category must be associated to an account number that references the department or area in order for it to appear on the summary.

**MTD Budget -** The MTD (Month to Date) Budget field shows the accumulated budget(s) for the Accounting Period. Accounting Periods are defined in the Accounting Periods module of the Administration subsystem.

**MTD Budget Balance -** This column shows the dollar amount left for the month (to the current date) on the budget in the expense category indicated. This value is calculated (not stored) as the difference between the MTD Budget amount and the MTD Costs amount.

**MTD Actual Costs -** The MTD (Month to Date) Costs field shows the accumulated cost(s) for the Accounting Period. Accounting Periods are defined in the Accounting Periods module of the Administration subsystem.

**MTD External Actual Costs, Budget Balance and Actual Quantities -** If you have the appropriate function responsibility in your user profile, you can use these three columns to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

**YTD Budget -** The Year To Date Budget field shows the accumulated budget(s) for the year.

**YTD Committed -** This column shows the accumulated costs that have been committed to for the year to the current date. These amounts represent costs such as issued Purchase Orders and approved Timesheets. The actual funds may not have actually been paid out yet.

**YTD Budget Balance -** This column shows the dollar amount left for the year (to the current date) on the budget in the expense category indicated. This value is calculated (not stored) as the difference between the YTD Budget amount and the YTD Committed Costs.

**YTD Actual Costs -** This column shows the actual costs for the year to the current date. These amounts represent costs that have actually been invoiced and paid.

**YTD External Actual Costs, Budget Balance and Actual Quantities -** If you have the appropriate function responsibility in your user profile, you can use these three columns to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

## Expense Codes

Expense codes are used within the system to classify types of charges. They are required for cost transactions and are usually included in interfaces to external applications such as general ledger and account payable packages. Entries in this view should attach expense codes to the account number in question. The actual codes are established in the Expense Codes Business Rule. When an expense code is attached to an account in this view, and a special list of values is established for a module, the system only shows the expense codes listed here on the list of values for the Expense Code field when the account number is entered.

The Variable Expense Codes Business Rule determines how defaulted expense codes are handled during stock checkout, planning work order task materials and labor, and in the Timekeeping module. Any desired changes to expense codes can only be made before the costs are actualized. Once actual costs are applied, the expense code on the record cannot be changed.
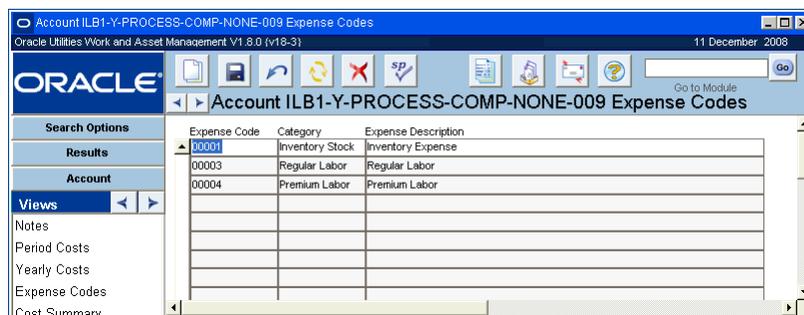


Expense Codes view

*Note:* The list of available expense codes is controlled by the Expense Codes Business Rule.

**How to Attach an Expense Code to an Account Number**
1. **Open the appropriate account record in the Account module of the Resource subsystem.**
2. **Place the cursor in the Expense Code field and Click New.**
3. **Select the appropriate Expense Code from the list of values.**

The system enters the Expense category and the Expense Description as they appear in the Expense Codes business rule.

4.  **Click Save.**

# Notification

Use this view to enter the usernames of the people who should receive an alert when the system encounters a budget overrun. One user can be entered in the Budget Checking By Document Business Rule, but you can enter additional users here.



**Notification view**

# Chapter 5

## Account Distribution Templates

When costs are applied against records that reference accounts, the costs are "rolled-up" to the referenced account as well. While it is most common to only have one account associated to a particular record or line item, there are several modules in the Purchasing subsystem that allow you to reference multiple accounts for a single purchase.

While you can enter information for multiple accounts manually when you create purchasing documents, you can also create account distribution templates that you can reuse so that you do not have to repeat the same work every time you create a new record. Templates can save you time if you need to allocate costs to several accounts, particularly if you repeatedly use the same account combinations or need to reference a large number of accounts. For example, you may want to distribute utility costs across many accounts on a monthly basis. Although you could re-enter the account information manually each month, it is faster to build a reusable template that you can reference on the appropriate requisitions or purchase orders.

## Account Distribution Records

When you build a template in the Account Distribution Templates module, you list the accounts to include and indicate what portion of the total cost to allocate to each account. You can use either percentages or units to indicate how much to allocate to each account.

Once the template is in active status, you can reference it from the Requisition, Purchase Order, Change Order, or Invoice modules. Select the Account Distribution ID from the list of values to apply the account distribution at either the entire document or to specific line items. Once the accounts are copied to a purchasing document, the percentages or units allocated to an account can be changed and accounts can be added or deleted.



**Account Distribution Template**

*Note:* Account distribution templates can only be used for direct purchase (P-type) and service (V-type) purchases. Stores replenishment (S-type) purchases of inventory and expense items use the accounts defined in the Storeroom module. Similarly, purchases originating from work orders use the accounts defined on the Work Order record.

## Account Distribution Field Descriptions

The following fields are included:

**Account Distribution ID -** The unique number identifying the account distribution template. The system will assign this number using settings in the Sequence Number module.

**Status**

    **Created** - Batch processing only activates records that are in Created status.

    **Active** - Only active account distribution templates can be referenced from purchasing documents. Batch processing will activate templates based on the start date entered, but you can also activate templates manually. Total item percentage must equal 100 before status can be set to active. Once a template is active it can no longer be modified.

    **Inactive** - Batch processing inactivates templates using the expiration date. If you want to reuse a template has expired, correct the start and expiration dates and reset the status of the record to Created.

**Account Distribution Name -** You can enter a descriptive name for the account distribution template in this field.

**Description -** You can enter a longer description of the template in this field, including information on when to use the template.

**Template Owner -** The system automatically supplies the name of the person creating the record as the template owner, but you can select another name from the list of values. Template owner is one of the values you can specify when searching the Account Distribution Templates module.

**Total Units -** If you want to specify a unit distribution for the template, enter the total number of units in this field. The system will use this quantity when calculating the percent for each line item. If you want to specify a percent distribution, leave the Total Units field blank.

**Start / Expiration Dates -** Batch processing uses the start and expiration dates to determine if a template should be in Active status.

**Ref ID -** The Reference ID is an optional identifier that may be associated with account numbers in the Account module. When you select a Reference ID from the list of values, the system also completes the Account Number field.

**Account Number -** The unique account identifier the system builds using the segment values in the Account module. When you select an account number from the list of values, the system also completes the Ref ID field if applicable.

**Expense Code -** Expense codes are defined in the Expense Codes Business Rule and are used within the system to classify types of charges. You must indicate an expense code when adding a line item to the account distribution template.

**Percentage (%) -** The percentage of the purchase amount to be applied to this account. If you are specifying percentage distributions for the accounts, you can enter the percentage directly. If you are specifying a unit distribution, the system will calculate the percentage based on the values you enter in the Units field on this line and the Total Units field.

**Units -** The number of units to be applied to this account. The system calculates the percentage based on the values you enter in the Units field on this line and the Total Units field. The total

number of units must match the number on the corresponding requisition or purchase order line item.

**Recalculate Percent -** Click the Recalculate Percent button to recalculate all to the percentage fields after you have made changes and if the system has not automatically refreshed the percent calculations.

**Total Item Units / Remaining Units -** The system calculates the total number of items you have specified for the accounts and how many units are remaining before reaching the quantity specified in the Total Units field.

**Total Item Percent / Remaining Percent -** The system calculates the total of the percentages for the accounts and the percent remaining before reaching 100%.

*Note:* Due to rounding, the system calculations may produce the total equal 100%. If you have distributed all of the units and the Total Item Percent field shows slightly more or less than 100% you should adjust the percentage on one of the line items to insure that the total equals 100%. Once you have done this, avoid clicking the Recalculate button as that will set the percentages back to the original system calculation.

### How to Create an Account Distribution Template

1.  **Open the Account Distribution Template module.**
    The Account Distribution Template module is in the Resource subsystem.

2.  **Click New.**
    The system opens a new Account Distribution Template record showing your name as template owner.

3.  **Enter an Account Distribution Name and a Start Date.**
    The start date is the date that batch processing will change the template status to Active.

4.  **Enter Total Units for the template if you want to use Units to calculate account distributions.**
    If you want to use percent to calculate account distributions, leave the Total Units field empty.

5.  **Click Save.**
6.  **Select an Account Number and Expense Code for the first account.**
    You can also select accounts using a Ref ID. The account number/expense code combination must be unique for each account line item.

7.  **Enter the Percentage or Units to be applied to distributed to the account.**
    Only enter units if you are using units for each account and have entered a total unit amount above. When you enter units, the system calculates the percentage.

8.  **Click Save.**
9.  **Repeat steps 6-8 until all accounts have been added.**
    When you have finished adding accounts, the Remaining Percent field at the bottom of the record must equal zero.

10. **Click Save.**
    Batch processing will activate the template on the start date and you can use it to apply the account distribution to purchasing documents.

# Applying Distribution Templates

Once you have set up the account distribution templates that you want to use, you can easily apply them to requisitions, purchase orders, and change orders. You can do this in one of three ways.

- Specify the Distribution Template ID in the Default Accounts view of the purchasing document before adding any line items. The system will then automatically apply the account distribution to line items as they are added.

- Specify a distribution template in the Line Item Accounts view of each item. You can specify a different account distribution for each item.

- Replace all existing accounts by specifying the distribution template on the main record and selecting Apply Accounts to Items from the Actions list on the Default Account view.

All account information can be changed once the template is copied onto a purchasing document.

Once the system copies template information to the purchasing document, you can change the distribution between the accounts, or add and delete accounts. Changes made to an individual purchasing record are not reflected on the original template. If you want to permanently change the template, you must do so in the Account Distribution Template module.

### How to Apply an Account Distribution Template to a PO

You can use similar steps to apply an account distribution template to a requisition, purchase order, or change order.

1. **Open the appropriate Purchase Order.**
2. **Select Default Accounts from the Views list.**
3. **Select an Account Distribution ID from the list of values.**
   The list of values shows only templates in Active status.

4. **Click Save.**
   The account distribution from the template is now the default account information for new line items added to the PO. If you want to update the accounts for existing line items, continue to Step 5.

5. **Select Apply Accounts to Items from the PO Default Accounts Actions list.**
   When you select the action, the system asks you to confirm that you want to replace the account data on all line items with the default account distribution.

6. **Click the Save button.**
   The system applies the account distribution from the template to all existing line items.

### How to Apply an Account Distribution Template to Specific Line Items on a Purchase Order

You can use the same record for both of the procedures on this page.

You can use similar steps for Requisition or Change Order records.

1. **Open the appropriate Purchase Order record.**
2. **Select the Line Items (List) from the Views list.**
3. **Open the appropriate line item.**
   Click the arrow button at the beginning of the line to open the item.

4. **Select Accounts from the Views list.**
5. **Select an Account Distribution ID from the list of values.**
   If account information already exists, you can change it by selecting a new Distribution ID or modifying the existing account information directly.

6. **Click Save.**

The account distribution from the template is now the account information for this line item only.

### How to Replace Existing Line Item Accounts on a Purchase Order

You can use similar steps for Requisition or Change Order records.

1.  **Open a Purchase Order record with existing line item accounts.**
2.  **Select Default Accounts from the Views list.**
    Verify that the account distribution displayed is one you want to use with all line item accounts. If not, select or enter the appropriate distribution and save the record.

3.  **Select Apply Accounts to Items from the Actions list.**
    You may have to scroll down the Actions list to display this item. A confirmation message appears when you select the action.

4.  **Click Save.**
    The account distribution from the Default Accounts view is copied to all line items, replacing any account information previously entered.

    The new account information will also be used for any new items added to the Purchase Order record.

# Assigning Accounts without Using a Distribution Template

You are not required to use account distribution templates to take advantage of accounting functionality. If you are referencing a singe account or very few accounts an you do not think you will need to use the same distribution again, you an enter account information on purchasing documents directly.

### How to Assign Accounts Without Using a Template

1.  **Open the appropriate record.**
2.  **Select Default Accounts from the Views list.**
    The Default Accounts window opens.

If you decide not to set up default accounts prior to entering line items, select Accounts from the Views list on each line item and assign an account number as you enter items.

3.  **Enter the required information according to the following field descriptions:**
    **Reference ID** - The Reference ID acts like a nickname for an account. If your organization uses Reference IDs the system retrieves an associated account number for you when you choose the appropriate Reference ID from the list of values.

    **Account Number** - Enter the account number manually, select it from the list of values, or use a Reference ID to call it up within the system. Account numbers that you can use must exist in the Account module of the Resource subsystem and must be in Active status.

    **Expense Code** - Enter an expense code to classify the type of charge for each of the account numbers listed.

    **Percentage** - If costs should be applied to more than one account enter the percentage here. Otherwise enter 100 in the percentage field.

4.  **Click Save.**

# Chapter 6
# Regulatory Account

Federal and state regulatory agencies may require your organization to report financial and operational information in conformance with a specified uniform system of accounts. The Regulatory Account module provides a way of distributing costs against such a system of regulatory accounts, without having to derive them from the regular business accounts defined in the Account module.

## Regulatory Account Records

You can use the Regulatory Account module to define the FERC, PUC and FCC accounts required by your organization, and associate them with the appropriate account treatments and usage codes. These accounts can then be referenced as compatible units are planned against Work Order Task records.

Please refer to the Compatible Units User Guide for more information.

You can also define Regulatory Account records without usage codes for gathering costs that do not apply to compatible units.



**Regulatory Account record**

Please refer to the Regulatory Account chapter in the Compatible Units User Guide for more information on this module.

# Chapter 7
## Process

At the top level of the asset hierarchy, Process records group assets that form a system.

## Process Records

The Process module enables you to enter and maintain information about the process as a whole rather than by specific asset.

A Process record provides unique identification, location, accounting, and work order information about the Process. The Work Order information is used by Work Orders that refer to an Asset that is part of the Process - but only when the Work Order Defaults view of the Asset module contains no information. If the Asset Work Order Defaults view contains different information, the Asset defaults supersede the Process Work Order Data.



**Process record**

## Process Field Descriptions

The following fields are included:

**Process -** Two fields are required and make up the unique identifying number for the process. The first field is supplied by the system, which uses a P to indicate that the record is for a process. The second field can be generated by the system if this option is activated in the Sequence Numbers module of the Administration subsystem.

If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

**Process Type -** Process type can be used to categorize the process. This is especially useful when you are searching for Process records. The field has an associated list of values, which is controlled by a code table.

**Description -** The Description field is a standard description field and is required.

**Status -** The Status field is controlled by a drop-down list. There are two possible statuses: Active and Inactive. An inactive process cannot have costs charged to it; when an inactive process is included as a level between an asset and an area, the costs roll-up to the asset but are not passed to the area level. Inactive processes also do not appear on lists of values.

**Building -** The Building field has an associated list of values, which is controlled by a code table.

**Location -** Select a location to describe where in the building to look for the process.

**Maintenance Manager -** The Maintenance Manager field indicates the manager responsible for maintaining the process. The associated list of values reflects the records in the Maintenance Manager module of the Resource subsystem.

**Work Order Data -** The information in the Work Order Data fields is used by Work Order records that refer to an asset that is part of a process – but only when the Work Order Defaults view of the Asset module does not contain information. If the asset work order defaults does contain different information, the asset defaults will supersede the process work order data.

**Planner -** The Planner field indicates the planner responsible for planning work for the process. The field has an associated list of values, which is controlled by the Planner Business Rule in the Administration subsystem.

**Maintenance Approver -** The Maintenance Approver field is for reference only and does not affect the rest of the system. It represents the preferred Approver Title to contact for approval of maintenance documents. The field has an associated list of values controlled by the Approval Limits module in the Administration subsystem. Note that only those Approval Titles of type M or B will show on the list.

**Production Approver -** The Production Approver field is for reference only and does not affect the rest of the system. It represents the preferred Approver Title to contact for approval of production documents. The field has an associated list of values which is controlled by the Approval Limits module in the Administration subsystem. Only those Approval Titles of type P or B will show on the list.

**Backlog Group -** The Backlog Group field represents the team that is usually responsible for doing the actual maintenance on the process equipment. The field has an associated list of values, which is controlled by a code table.

**Department, Area, Account -** The Department, Area and Account fields indicate where the process lies in the operational accounting structure. When you select the department from the list of values, the list of values for the area is limited and when you pick an area the list of values for the account is limited. If you leave the Department and Area fields blank, the list of values for the Account field will only list numbers for accounts that have no department/area association.

**Fixed Asset -** The Fixed Asset field is a reference field that provides data to accounting software outside of Oracle Utilities Work and Asset Management.

### How to Create a Process Record

1. **Open the Search Options or Search Results panel, or to an existing Process record.**
2. **Click New.**
3. **Enter the Process identification number.**
4. **Enter type of the Process.**
5. **Enter the description.**

6. **Enter the number for the Department, Area and/or Account.**
7. **Enter any other information your organization requires.**
8. **Click Save.**
   The system will check that the Process number is unique and then save the record.

# Process Views

In addition to any standard views, the module includes the following:

## Period Costs

The Process Period Costs view presents actual costs which have been charged to the Process record or to an associated asset (summed to the process). Actual cost information is displayed, broken down by period, and expense category. This information is calculated by nightly batch processing and is display-only.

## Cost Summary

This view displays summary budget and actual costs per expense category for the process. These values are summed by batch processing for costs charged against the process or asset which reference the Process record. Data displayed here cannot be updated.

## PM Schedule

The Process PM Schedule view presents a list of current / future PM Master cycle information for PM Masters that are active and reference a P type Asset (Process). If a Work Order record was generated and has not been completed, the Work Order record number is displayed. Otherwise, the next schedule date is listed without a Work Order record number indicating that a Work Order record will be created for that date.

*Note:* PM schedule information can help determine whether a new Work Order record should be created for work on the process or an open or future PM Work Order record could be used instead.



**PM Schedule view**

## Work History

The Work History view shows a list of the Work Order records (from both the active and history work order tables) written against the Process record. The list only includes tasks in Active, Finished, Closed, or History status. If a listed work order has service history information available, the words "Has Service History" appear to right of the description field for that work

order. Select Service History from the Views list to access the work order service history information.



**Work History view**

# Process Actions

In addition to any standard actions, the module includes access to the Asset module and the Account Log as well as:

Create Work Order
Create Work Request

# Chapter 8

## Asset

The Oracle Utilities Work and Asset Management application can store, maintain, and track all data related to your organization's assets down to the component level. An asset can be anything from a piece of equipment to a motor to a room within a building, etc. Each Asset record includes a unique identifier, asset description, condition rating, criticality to operations, and other valuable information. The Asset module provides the information required for work orders, maintenance history records, and functional element lists.

## Asset Records

The Asset module also keeps track of any modifications made to an asset. When assets are referenced on work orders, the system can automatically update the Asset record with updated work history information. A record of past maintenance and parent/child relationships is also retained in the Work Order History view of the module.

The system allows you to track asset reliability, runtime, downtime, operational data, attach bills of materials, analyze performance, related accounts and much more. Most system information can be referenced to and from the Asset module making it one of the most important modules in the system.

Track Depreciation costs for your assets by first entering acquisition information in the Depreciation view, then by creating a depreciation account and marking it in the Additional Accounts view. Please refer to the chapter on Depreciation in the System Basics book for more information.

The Asset module can also handle infrastructure assets providing the ability to identify assets with node to node details.
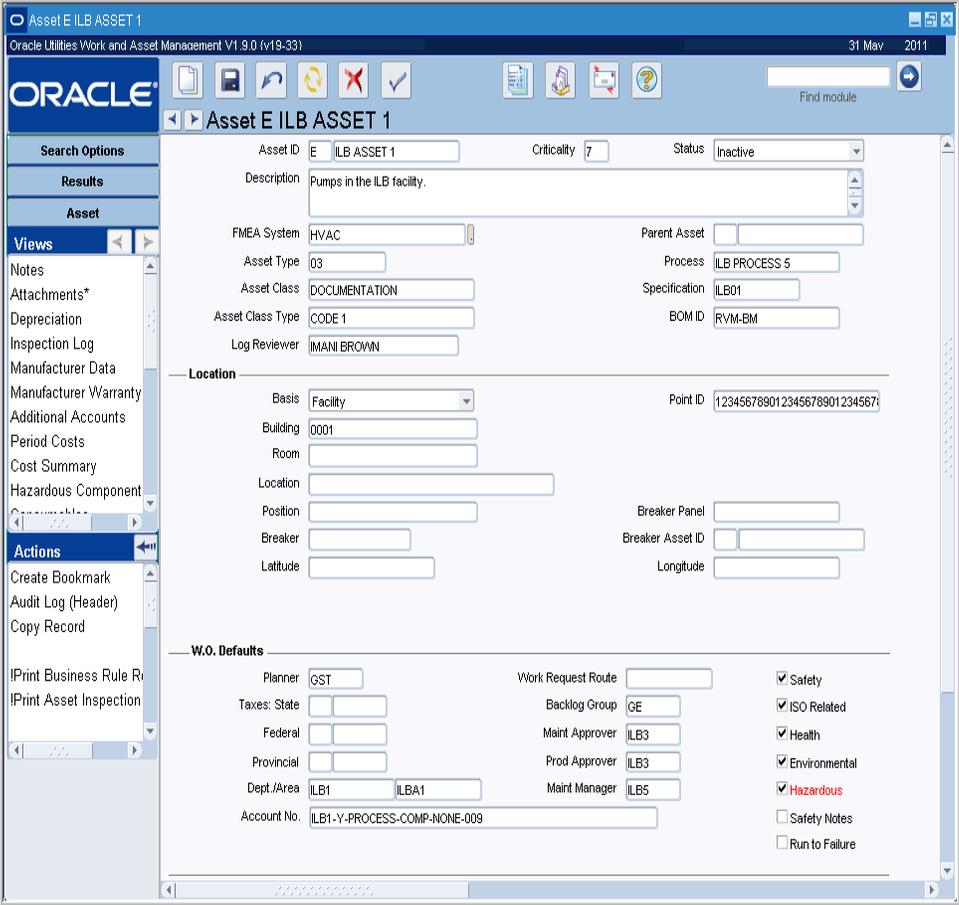


**Asset record**

## Asset Field Descriptions

The following fields are included:

**Asset ID -** The Asset ID is comprised of the asset record type and an ID. The record type has an associated list of values that is controlled by a code table. It allows you to distinguish the kinds of Asset records you have. Some examples are:

> **E** - Equipment
>
> **L** - Instrumentation Loops
>
> **V** – Vehicle

You can create and maintain V (vehicle type) records in the Asset module of the Resource subsystem, but the system also includes the Fleet Asset module, and supporting maintenance modules, in the Maintenance subsystem. These modules include fields that are specific to vehicles. If you create an Asset record for a vehicle in the Asset module, then open that record in the Fleet Asset module – or try to record maintenance using the Fleet Work Order module, etc. - you will not have all of the information that you would have if you had created the record in the Fleet Asset module.

**Criticality -** Use the Criticality field to indicate the work or safety impact this asset carries. The field has an associated list of values controlled by a code table. If the asset were to be taken off-line or break down, what work or safety effect would it have? Values from "1" to "9"

represent 'little or no impact' to 'severe production or safety impact'. This information is used by the system when work orders are generated for the asset. The criticality helps determine the overall work priority.

Note: Once criticality is entered on asset records, it is possible to search the Asset module by criticality or to find multiple assets within a range of criticalities.

Settings in the Criticality Override Business Rule determine whether or not users can modify the criticality on work records that reference the asset.

**Status -** Use the status field to activate or deactivate the asset. Available statuses are: Planned, Active, Inactive, and Retired. Inactive and retired assets are not available for reference on other records. Asset records in Retired status cannot be updated.

If your organization uses depreciation, Depreciation Only is also a valid status. This is used to define a group asset. Please refer to the guide titled Depreciation in the System Basics book for more information.

Organizations that do not use depreciation can retire an asset by changing the status. If you do use depreciation, the asset must be retired through the Change Request module. When an asset is retired in this manner, the system checks the Retired box on the Depreciation view of the Asset module and enters the retirement date.

**Description -** This is a standard Description field. Remember that only the first few words of the description will be visible elsewhere in the system.

**FMEA System -** This field classifies the asset based on the FMEA system that the asset belongs to. For example, a pump might belong to an HVAC (air conditioning) system. Grouping assets by system allows the maintenance planner to perform maintenance for all similar assets in a system. Values for this field are defined by a code table.

**Asset Type -** The type of asset is required. Values for this field are defined by a code table.

**Asset Class -** This field classifies the asset using codes defined in the Asset Class module.

**Asset Class Type -** This field contains the name of the Asset Class Type. An Asset Class Type can include a number of Asset Classes, for example an Asset Class Type called "Infrastructure" might include individual Asset Classes such as highways, bridges, water and electrical utilities.

**Log Reviewer -** This is the name of the person responsible for reviewing any Asset Activity Log records that are created for the asset. This person receives an alert when the Asset Activity Log record status is changed to Pending Review.

**Parent Asset -** Parent asset information is entered only on Asset records that are children of another Asset record.

If you want to search for all of the children for a given Asset record, enter the Asset ID into the Parent Asset ID field on the Asset Search Options window. The search will return a list of all child Asset records for the parent.

**Process -** Assets can be part of larger groups of assets called processes. When you enter a process, you create an association between an existing process record in the Resource subsystem and the asset. The field has an associated list of values that is controlled by the Process module of the Resource subsystem.

*Note:* Use the Attachments view to attach a specifications to an asset. When a Work Order record is written for the asset, access to the specification listed in the Attachments view is provided directly on the Work Order record.

**Specification -** The Specifications field is for information only and is generally used to indicate the primary related engineering specifications, which define the attributes, and specifications for each attribute, that describe the asset.

**BOM ID -** The Bill of Material ID field displays the reference number for any Bill of Materials record associated with the asset. The field has an associated list of values that is controlled by the Bill of Materials module in the Resource subsystem.

**Location Data -** You can use the fields in the Location section to describe the location of the asset. The fields in this section of the Asset record vary depending on the asset basis selected.

**Basis -** Define the Location Basis of the asset by selecting Facility, Address, or Address with Nodes from the drop-down list in this field. The basis selected determines which other fields appear in the Location section of the record.

**Point ID -** The Point ID field is used for interfacing with external applications (such as GIS and SCAIDA), identifying the asset for the interface processing. Enter a value as appropriate for your organization.

If the Location Basis is Facility, the following fields are displayed:

**Building, Room, Location and Position -** These fields indicate exactly where the asset can be found. If the asset is associated with a Component ID record and the Component ID is selected on a Property record (in the Property module of the Inventory subsystem), the system will complete the corresponding Property record fields using this information.

**Breaker and Breaker Panel -** These fields indicate the primary breaker information for power to the asset.

**Breaker Asset ID -** If the breaker is also identified in the application as an asset, you can enter the breaker asset type and asset number in these fields. Once entered, you can drill down on the Breaker Asset ID to open that Asset record.

**Latitude and Longitude -** If appropriate, you can enter latitude (north/south) and longitude (east/west) coordinates to identify the location of the asset. This information can be helpful if the asset location is also tracked in another system that uses GPS coordinates.

**If the Location Basis is Address, the following fields are displayed:**



**Address, Cross Street -** Enter the physical location of the asset as well as the cross street if applicable. These fields are only displayed when the Location Basis field is set to Address.

**Offset and Direction -** These fields provide space to indicate the relative location of the asset and the direction. For example, if the asset is a manhole it may be 50 yards east of the address entered. These fields are only displayed when the Location Basis field is set to Address:

If the Location Basis is Address with Nodes the following fields are displayed:

**From Asset ID and To Asset ID -** Use these fields to show the Asset IDs that are on either side of the asset defined in the current record. The lists of values for these fields show all active assets. The description can be modified if necessary. These fields are only displayed. when the Location Basis is Address with Nodes.

# Work Order Defaults

You can use the Work Order Defaults view to maintain accounting and work-specific information that the system uses to update fields in other records such as Work Requests or Work Orders. If the Asset ID is included on such documents, the system automatically provides the information included in this view. In most cases, the data can be over-written on Work Requests, Work Orders and similar records.

**Planner -** The Planner field represents the person responsible for planning work and materials for the asset if your organization uses planning and scheduling when processing Work Request and Work Order records. The field is controlled by a list of values the system builds using the Planner Business Rule).

**Taxes -** The three tax fields contain codes for various tax percentages that may be charged by Federal/National, State/Regional, and local government. Each field has an associated list of values controlled by a code table.

**Department and Area -** These fields are controlled by lists of values the system builds using the Department and Area modules in the Resource subsystem. If you chose a department and area, the list of values that controls the Account Number field, will show only those accounts associated with the department and area. The system uses this department and area information to fill in the appropriate fields on work related records.

**Account Number -** The Account Number field is controlled by a list of values the system builds using the Account module and the information in the Department and Area fields. If these fields are left blank, the system provides only those account numbers that are not associated with a department and area. The system uses this account number information to fill in the appropriate fields on work related records.

**Work Request Route -** Enter the approval route that should be defaulted on Work Request records when a record in Created status is saved with the Approval Route field left blank. The Work Request Processing Business Rule must also be configured to enable this functionality.

**Backlog Group -** The Backlog Group field indicates which group is responsible for backlogged work against the asset.

**Maintenance Approver -** You can enter the approval title of the person responsible for maintenance related approvals for the asset in this field. This field is for informational purposes only.

**Production Approver -** You can enter the approval title of the person responsible for production related approvals for the asset in this field. This field is for informational purposes only.

**Maintenance Manager -** The Maintenance Manager code determines which Maintenance Manager will bear the costs associated with the asset when work is done. The field is controlled by a list of values the system builds using the Maintenance Manager module in the Resource subsystem.

**Safety, ISO Related, Health, Environmental -** These check boxes allow users to easily recognize equipment that has been identified as requiring special considerations for ISO, safety, environmental or health reasons. This will ensure that the proper procedures, if necessary, are used in planning and working the jobs related to the asset. When an asset is entered on a Work Request, Work Order, or Benchmark Work Order record the system carries over the settings of each indicator. The indicators cannot be modified on work records. If the indicators are changed on the Asset record after a work record that references the asset has been created the information is not updated on the older work records. Users can search work records by the indicator settings by selecting them on the Search Options screen of those records.

**Hazardous -** The system maintains the Hazardous indicator and checks it and makes the word Hazard red when any the stock items listed on the attached Bill of Materials has been defined as a hazardous item in the Catalog module of the Resource subsystem. If the word Hazardous is yellow, the system could not retrieve BOM information, possibly because the BOM ID no longer identifies a valid Bill of Materials record.

**Safety Notes -** The system checks the Safety Notes indicator if there is a safety type note associated with the asset in the Notes view for the record.

**Run to Failure -** Select Run to Failure to indicate that the Asset should be used until it dies. A good example of this concept is the use of a light bulb. This check box is for information only and does not include any business processing. It is, however, copied to work order tasks when the asset is populated on the task. Having the information available at the task level is useful for metrics, especially for comparing the number of failures when the Asset was on a preventive maintenance program and was not.

**Asset Codes -** Used primarily with the Mobile application, asset codes provide an additional basis for filtering the amount of asset data downloaded to the mobile PDA device. Up to three asset codes can be specified for each asset.

**RIVA Asset Type -** If your organization uses Riva asset planning software, you can record the RIVA asset type for the asset in this field.

### How to Create an Asset Record

1. **Open the Asset module.**
2. **Click New.**
3. **Enter the Asset ID by selecting an asset record type from the list of values, and entering a unique code.**
   The system will check that the Asset ID is unique when you save the record.

4. **Enter a Description for the asset.**
5. **Select an Asset Type from the list of values.**
6. **Enter Location information as appropriate.**
7. **Enter an account number.**
   This field is further down on the screen so you may have to scroll to see it.

   If you enter a Department and Area first, list will show only those accounts associated with that Department and Area combination. If you do not supply a Department and Area, the list will be for those accounts that have no association.

8. **Click Save.**

# Creating Work Records from the Asset Module

Once your assets are entered into the system and are in use, a time may come when work needs to be performed on an asset. You can create work requests or work orders relatively quickly by selecting Create Work Request or Create Work Order from the Asset record Actions list. Each action walks you through a wizard that prompts you for specific information that will later appear on the completed record.

The wizards for work requests and for work orders are similar. Here you will go through how to create a work order using the wizard. For more information on work requests please review the chapter for the Work Request module.

As discussed, work orders and service requests can be written against assets for work or repairs that needs to be completed. This work is managed in the Work Order module. While work is being completed, costs for parts and labor are charged against the work order and applied throughout the system included being posted back to the asset for later analysis.

### How to Create a Work Order from an Asset Record

The system can initiate a number of processes for you directly from an Asset record. One of these is to create a Work Order record in Planning status. Follow a similar process to create a work request by selecting Create Work Request from the Actions list.

You can also create work records for an asset from within the Asset Activity Log.

1. **Open the appropriate Asset record.**
2. **Select Create Work Order from the Actions list.**
   If you choose Create Emergency Work Order the system opens a blank E type work order in active status with the Asset ID fields filled in and the name of the logged on user in the Requestor field. The remaining fields must be managed in the Work ORder module.

   The Create Work Order wizard opens.



The system opens the Work Order wizard window with the Asset fields filled in from the Asset record.

The window includes a Description field, which you must fill out, and two fields to identify the asset, which the system has already filled out. It also includes other fields from the Work Order record. Enter a description of the work that needs to be completed.

**Required** - The latest date that the work should be completed.

**Priority** - The Priority represents the relative priority of the work. The system provides a list of values which is controlled by Code Table 41 in the Code Table and Codes module of the Administration subsystem. The system uses this field, with other information about the importance of the Asset, to calculate the priority for the work.

**Failure Code** - The Failure Code shows a predetermined code to categorize the failure. This information can be useful when searching for Work Requests and analyzing problem areas. The system provides a list of values controlled by Code Table 10 in the Code Table and Codes module of the Administration subsystem.

Component - The Component field can be used to indicate that the problem involves a Component which is installed in the Asset. The system provides a list of values of all Components currently installed in the Asset.

**Deficiency Tag** - The Deficiency Tag field can be used if your organization uses a tagging system to mark Assets that require work.

3. **Enter information as required by your business processes.**
4. **Click Next.**

   If there are possible duplicate work records already in the system for this asset, the system opens the following screen listing these records.



5. **Make sure that the work record that you are creating is not a duplicate.**
   You can double-click the record number to open the record if needed.

6. **If the work order is not a duplicate, click Next.**
   If you find duplicates, click Cancel to exit.

7. **Enter the crew that should work on the job.**

Here you can select a crew and update the name of the requestor (the system enters your name but this can be changed).

Check the Auto Close? box if you want the system to automatically close the Work Order if it remains in FINISHED status for the number of days defined in the WO Aging business rule. The check can be removed on the resulting work order if necessary.

8. **Click Finish.**
The system displays the work order record number and verifies the creation of the new record. Click the Work Order button to open the new record. Click OK to return to the Asset record.

If you click the Work Order button, the system opens the Work Order record where you can make any necessary modifications or add tasks. Click the OK button to return to the record you were working on.

The work order does not show in the Work History view of the Asset module until it is activated.

## Create Activity Log Entry from the Asset Record

If you have information about the asset that needs to be recorded but you do not need to create a work order for it, you can use the Asset Activity Log module to store the information. Select Create Activity Log Entry from the Actions list to open the a blank log record with some of the information from the Asset record that you are viewing filled in. Otherwise you can open the log module directly from the Resource subsystem.

# Asset Views

Selections from the Asset module Views list allow you to manage notes and attachments for the asset, review inspection information, manage warranties, interfaces, costs, operational data, runtime, downtime, and a variety of other activities.

## Depreciation/Depreciation Accounts

These views are only needed if your organization uses depreciation functionality. Please refer to the document entitled Depreciation in the System Basics User Guide.

# Inspection Log

Use the Inspection Log view to review the inspection history for an asset. The log shows the Inspection record number, inspection date, who the asset was inspected by, the score, and the related work order and task number if applicable. All of this information is taken from any Asset Inspection Data records that reference the asset. The log shows the most recent inspection first.
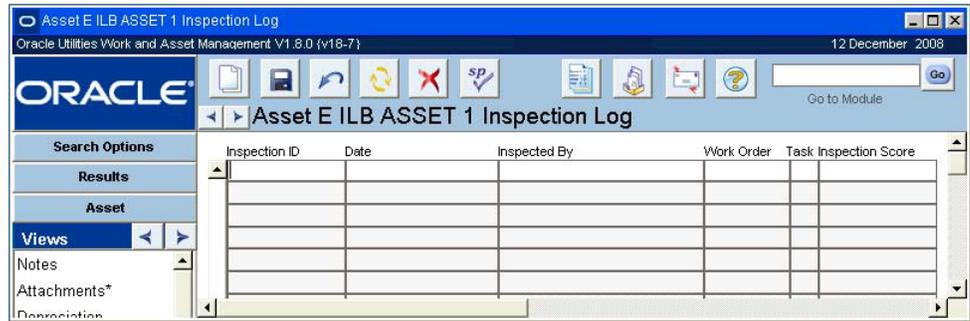


**Inspection Log view**

# Manufacturer Data

Specific manufacturer information can be entered and maintained in the Manufacturer Data view. Such information includes the Manufacturer Code (which returns the Manufacturer Name), the Manufacturer Part, Drawing, Order, and Model / Revision numbers.



**Manufacturer Data view**

If warranty information was entered previously on this view, the expiration date and a brief description of that warranty appears in the Old Warranty Data section. Use the Warranty module and the Asset Manufacturer Warranty view to create new Warranty records and associate them with assets.

# Manufacturer Warranty

Use the Manufacturer Warranty view to associate warranties with the Asset record. When you select a Warranty ID and save the record, the warranty information becomes available on work records referencing the asset. When you specify a Warranty Start Date the system calculates the Warranty Expiration Date. Batch processing changes the expiration status from Active to Expired based on the expiration date.



**Manufacturer Warranty view**

Before you can associate a warranty with an asset, the appropriate Warranty record must exist in the Warranty module.

If a work record is created for an asset that is covered by a warranty, the system displays an informational message informing the user.

## Additional Accounts

While only one account can be charged against an asset per work order task, an asset does not have to have only one associated account. The primary account is established in the Work Order Defaults section of the main record, but additional accounts can be added here. When only one account is associated with an asset and you enter the Asset ID on a Work Order or Work Order Task record, the system automatically enters that account number in the Account field. When there are additional accounts for an asset, the system provides a list of values displaying all of the accounts associated with that asset, so that you can select the appropriate one.
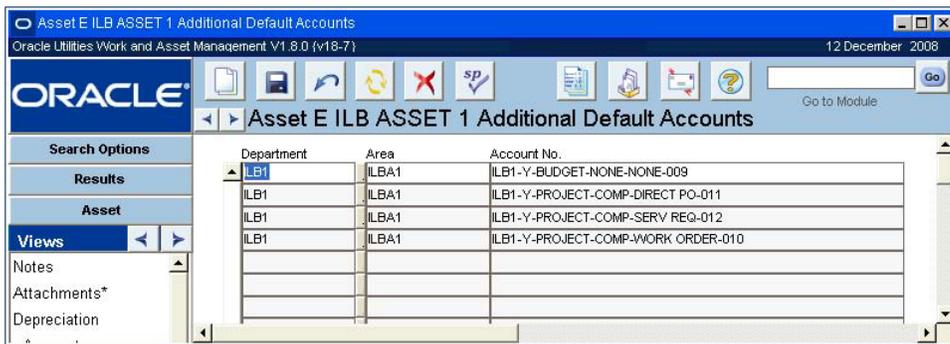


**Additional Accounts view**

**Department and Area -** The Department and Area fields are controlled by linked lists of values; the possible selections for areas will depend on what you select for the department.

**Account Number -** The Account Number field also has a list of values which is linked to the selections you make in the Department and Area fields. You can also use an account number that is not associated with a department and area (for example, an overhead account) by leaving the Department and Area fields empty. If these fields are empty, the list of values for the account number will show only those account numbers that have no department.

## Period Costs

The Period Costs view presents actual costs that have been charged to the asset and its child assets. Cost information is displayed by period, and expense category and cannot be changed in this view.
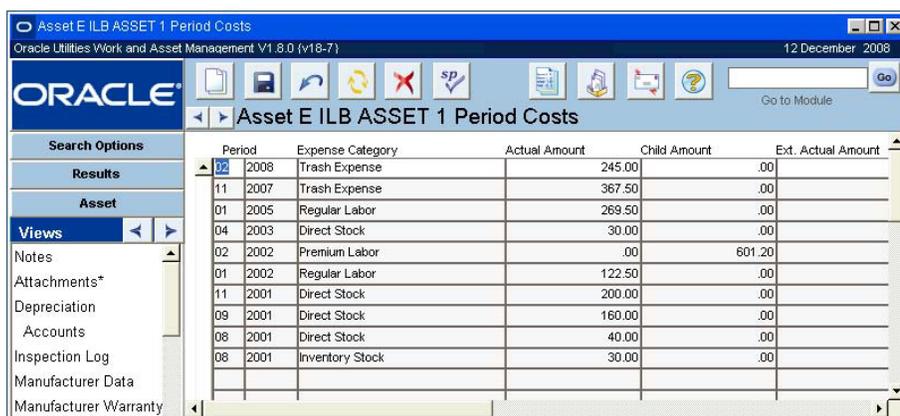


**Period Costs view**

If you have the appropriate responsibilities, this view also displays actual amounts from your organization's external financial system.

Field Descriptions are similar to those discussed for the Period Costs view in the Account module.

# Cost Summary

Use the Cost Summary by Expense Category view to see summary budget and actual costs per expense category for the asset and its child assets. These values are summed by batch processing for costs charged against the asset. In the Renewal Costs columns, the system separately calculates costs for work on Work Order Task records where the Renewal Work field was checked. This means that the work was completed to restore or replace an asset towards its original size, condition, or capacity.



**Cost Summary view**

If you have the appropriate responsibilities, this view also displays actual amounts from your organization's external financial system.

Field Descriptions are similar to those discussed for the Cost Summary view in the Account module.

# Hazardous Components

The Asset Hazardous Components view presents a list of asset stock items which have been identified as hazardous materials. This is determined by the system using the BOM ID entered on the Asset record. For that BOM ID, the system checks all stock codes listed against the catalog and those which have been marked as "Hazardous" are then listed here.



**Hazardous Components view**

## Consumables

Usage of consumable items, such as fuel, for the asset is displayed on the Consumables view. This information is maintained by the system, drawn from entries made in the Consumables module (within the Inventory subsystem) for the asset. Information displayed includes the Issue Date, Consumable Type, Quantity, and Units, the Current Meter Reading, the Unit of Measure, and the Source.


**Consumables view**

## Child Assets

Use the Child Asset view to see a list of Asset records identified as first generation children of the listed asset. Each Asset record that references the displayed Asset ID as the parent asset, is listed here. The summary asset information cannot be updated in this view.


**Child Assets view**

**How to List an Asset as a Child of Another Asset**

1.  Open the record for the asset that will be listed as a child.
2.  Locate the Parent Asset field.
3.  Enter the Asset ID for the parent asset.
4.  Click Save.

## Asset Activity Log

If you have information about the asset that needs to be recorded but you do not need to create a work order for it, you can use the Asset Activity Log module to store the information. Select Create Activity Log from the Actions list to open the a blank log record with some of the

information from the Asset record that you are viewing filled in. Otherwise you can open the log module directly from the Resource subsystem.


**Asset Activity Log view**

# Key Segments

Asset key segments are used to categorize assets according to structured IDs.


**Segments**

*Note:* The Asset Key Segments Business Rule is used to establish the segments to be used. Segment 1 must be filled in on the business rule for Key Segments to appear on the views list of the Asset and Fleet Asset modules.

Set up structured Asset IDs in the Segments view by selecting options from the lists of values associated to the fields. You can then search for assets by segment in the Asset Search Options screen.

### Asset Segment Entry Help
Place the cursor in the Asset ID field on the Asset Search Options screen and press F1 to open a special search window that allows you to enter search criteria specific to segments.

**Asset Segment Entry Help**

*Note:* The system allows you to enter search criteria based on segments then select from a list of values that only shows assets that meet the criteria that you have entered. The system also supports special lists of values that can be defined by your system administrator in Module Administration - Forms.

### How to Assign Assets to an Asset Key Segment Group

1. **Open the Asset record.**
2. **Choose Segments from the Views list.**
3. **From the list of values choose the group that the asset will belong to.**
4. **Save record.**
   This asset now belongs to the group defined by the asset key segments entered. The grouping can be altered at any time.

### How to Search for Asset Key Segments

1. **Open any module that contains Asset ID as a selection criteria.**
2. **Place the cursor on first field of the Asset ID.**
   This is the short field preceding the Asset ID field.

3. **Enter the Asset Record Type of the required asset.**
   In order to return a meaningful search you MUST enter the record type.

4. **Press the F1 key.**
   The system opens a dialog box where you can select the segments that you want to search by.

5. **Select segments from the lists of values.**
6. **Select the asset from the last list of values in the last field.**
   This field is labeled "Select Asset ID from the LOV based upon the entered data." You MUST select the Asset ID here before returning to the Search Options screen.

7. **Click OK.**
   The system enters the selected asset in the Asset ID field on the Search Options screen.

   It is now possible search based on this asset.

## Asset Interfaces

Use the Asset Interfaces view to identify how the primary asset is physically related with other assets. You must identify which assets feed into the listed asset, as well as which assets are fed by the listed asset.

For example, imagine you have a water pump and an electric motor which are connected with a mechanical shaft. When electricity causes the motor shaft to rotate, the shaft is also connected to

the pump. The pump, the shaft, and the motor can all be considered lateral assets and the entire mechanism is the interface. A good reason to track this is that you might switch out the pump but not the motor, or vice versa, and you would want to be able to identify on which part of the interface maintenance has been performed.

If the shaft is the primary asset indicated on the header, then you would enter the pump and the motor in the Asset Interfaces view. Likewise, on the Asset record for the pump or the motor, you would enter the other two in the Asset Interfaces view. The system does not make these associations automatically.

The Interface Type field, controlled by a code table, allows you to also classify the interface.
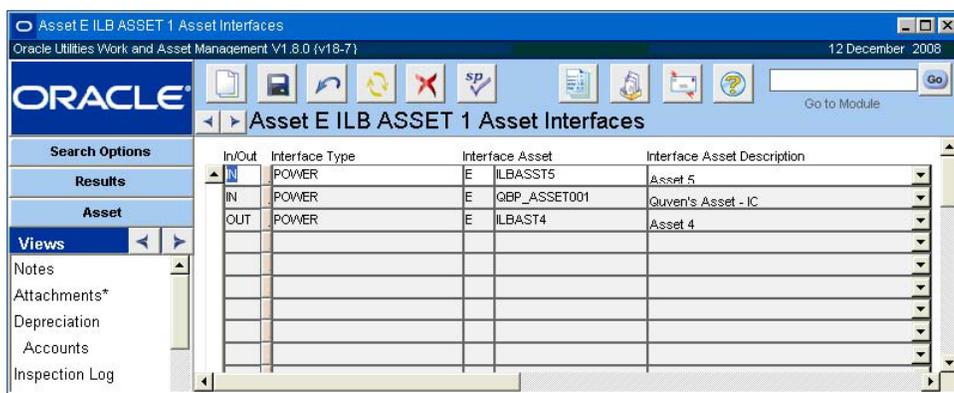

**Asset Interfaces view**

# Permit Template Requirements

Select Permit Requirements from the Views list to enter or review the list of permits that are required for the asset.
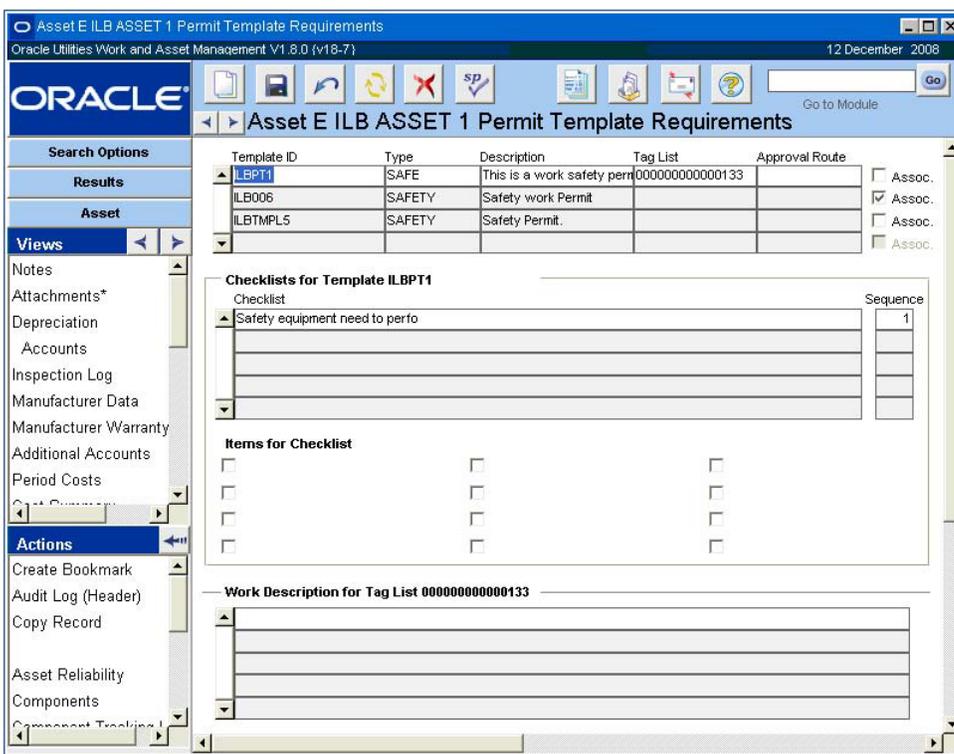

**Permit Requirements view**

# Permit Template Summaries

The upper section shows summary information for all permit templates attached to the asset. You can attach new permit templates by clicking the Insert button and selecting a Template ID.

**Template ID -** The Template ID field contains the unique identifying number for the permit template. If a permit template with attachments is associated with the asset, the attachments are also copied to the asset record in the Permit Attachments view.

**Type -** The Type field indicates the type of the permit template. The field has an associated list of values that is controlled by the Permit Type Business Rule.

**Description -** The Description field contains a general description of the permit template.

**Tag List -** If your organization uses tag point functionality and the template was associated to the asset through the Tag List module, the system enters the Tag List ID in this field. The tag list outlines the isolation points that need to be handled before doing work on the asset.

**Approval Route -** The approval route specifies a series of approvers that will review the record for approval before processing can continue.

**Assoc. check box -** The Associated check box indicates that there are associated assets that have permit templates that also apply. These assets can be listed or viewed in the Associated Permit Requirements view.

## Checklists

The middle section of the window displays any checklists associated with the permit template highlighted above and the specific items on each list. Highlight a list to see the specific items.

If you add a checklist to a permit template after the template has been associated with an asset, the record of the association will not show the additional checklist. In order to update the checklist, you must delete the permit template association, then re-associate it to the asset.

Any given checklist has 12 check boxes. If checklist has more than 12 items, it will probably have been divided it up into two or more checklists.

**Sequence -** The Sequence field indicates an order or grouping for the checklists.

## Work Description for Tag List

The bottom section of the screen shows a display only description of the work to be performed for the highlight tag list. This information comes from the Associated Assets view on the Tag List record.

### How to Associate a Permit Template to an Asset

Typically you would use this process if your organization does not use tag point processing or if the permit you are adding does not have a tag list. If you are using a tag list, you can make the association from the Tag List module.

1. **Open the appropriate Asset record.**
2. **Select Permit Template Requirements from the Views list.**
3. **Select a Permit Template ID from the list of values.**
   The list is controlled by the Permit Template module. When you select the Template ID, the system will supply the permit type and description.

4. **Select an approval route from the list of values.**
5. **Check the Associated Permits check box if permits from associated assets will apply.**
6. **Click the Save button.**

The system saves the association and verifies the other information that needs to be brought over from the permit template. This information will include the various checklists.

**How to Associate a Tag List to an Asset**
1. **Open the Associated Assets view in the Tag List module.**
2. **Select Associated Assets from the Views list.**
3. **Select Associate Tag List from the Actions list within the view.**
4. **Enter the appropriate Asset ID and Permit Template ID to associate.**
   The lists of values show assets and permit templates in active status.

5. **Click the Finish button.**
   The system adds the asset and permit template to the listing of associated assets in the Tag List module. The permit template and tag list are added to the Permit Template Requirements view of the Asset record.

# Associated Permit Requirements

Open the Associated Permit Requirements view for a list of the assets that are associated with the asset for the purposes of permits. For example, if the permit is to open and inspect a complex of high pressure steam pipes, the steam may need to be diverted through a different set of pipes, or the boiler may need to be shut down. In this case both the second set of pipes and the boiler might be listed as associated assets with their own permit requirements.


**Associated Permit Requirements view**

**Asset ID -** The Asset ID fields indicate the asset that is being associated. The field has an associated list of values controlled by the Asset module in he Resource subsystem.

**Description -** The description field represents the description for the associated asset.

**Permit Template and Type -** The Permit Template and Template Type fields indicate the permit template (for the listed asset) that will be shown on the Work Order record. An associated asset may have several permit templates, but only one or two of the templates apply for this association. You would list both templates as separate line items with the same entries in the Asset ID and Description fields.

**How to Associate an Asset with another Asset for Permits**
1. **Open the appropriate Asset record.**
2. **Open the Associated Permit Requirements view.**

In order to open the Associated Permit Requirements view, first select Permit Template Requirements from the Views list, then select Associated Permit Requirements.

3.  **Select the Asset ID from the list of values.**
    The lists are controlled by the Asset module in the Resource subsystem and show all Asset record not just those that have associated permit templates.

4.  **Select the associated Permit Template ID from the list of values.**
    The system supplies the type and the description.

5.  **Click Save.**

# Permit Attachments

When a permit template with attachments is associated with an asset, the attachments are also copied to the Asset record in the Permit Attachments view. Attachments to permits can be useful when the permits require complex procedures. Such details can be detailed in the Procedure module of the Resource subsystem and then attached to the permit template that will be associated with the asset. Any other type of Attachment can be attached to a permit template as well, such as a MSDS, Standard Note, Specification, Drawing, or any other electronic document that can be attached to a record in the system.
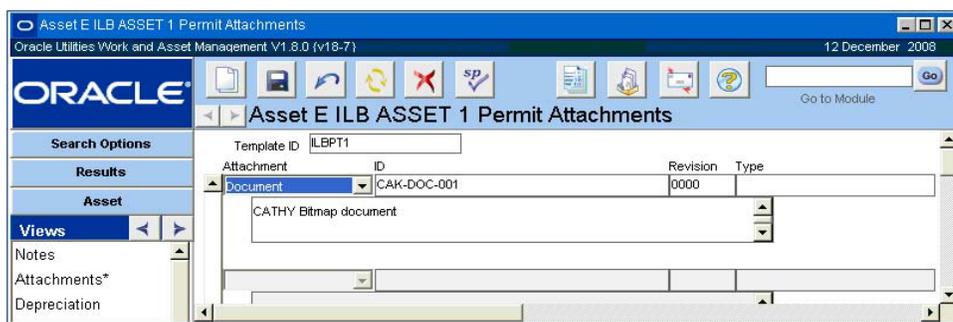


**Permit Attachments view**

*Note:* To view attachments associated to an asset via a permit template, select Permit Requirements from the Asset module Views list then select the Permit Attachments view.

In order to attach a procedure to a specific permit template/asset combination, you must first open the Permit Requirements view for the asset, select the specific permit template, and then open the Permit Attachments view.

# PM Schedule

The Asset PM Master Summary view presents a list of current / future PM Master cycle information. The Work Order record number is displayed on PM Masters records that are active and reference an asset and the generated Work Order record has not been completed. Otherwise, the next schedule date is listed without a Work Order record number, indicating that a Work Order record will be generated for that date. This view also lists the PM Route stops that involve the asset.

**PM Schedule view**

*Note:* This information is helpful when trying to determine whether a new Work Order record should be created for work on the asset or if you can wait for an open or future PM Work Order to cycle.

## PM Route Detail

As PM routes are scheduled, work is performed on selected assets. Scheduled PM route stops referencing the Asset ID are listed on the Asset PM Route view. This view includes the Schedule Dates, Route Numbers, Statuses, PM Interval, Task Type, Work Order number, Component ID, Task Description and Finish Comments fields. The information presented on this view cannot be updated.



**PM Route view**

## Runtime Log

For assets where meter information is tracked (such as mileage, start/stops, etc.), a complete log is available through the Runtime Log view. This is a display-only window that presents readings, units of measure, dates, and more entered into the system through the Runtime Entry module (located in the Maintenance subsystem).

**Runtime Log view**

## Associated Operational Tolerances

The Associated Operational Tolerances view shows information about the operational tolerances for the asset, including the type of measurement and the inner (normal) and outer (maximum allowable) ranges for the asset.



**Associated Operational Tolerances view**

If you mark the Validation check box, the system uses the range information on the Operational Tolerance header record to validate measurement data for the asset. If data is entered that falls outside the normal (inner) range, and the Validation box is checked, an out-of-range alert is sent to the user identified in the Alert User field on the Operational Tolerance record.

Most of the information on the Associated Operational Tolerances view is copied from the Operational Data module and you cannot change it here. However, you can use this view to select a new Measurement ID from the associated list of values, remove a Measurement ID currently associated with the asset, or change the status of the validation indicator.

## Operational Data

The Operational Data view shows operational measurements recorded in the Operational Data module.
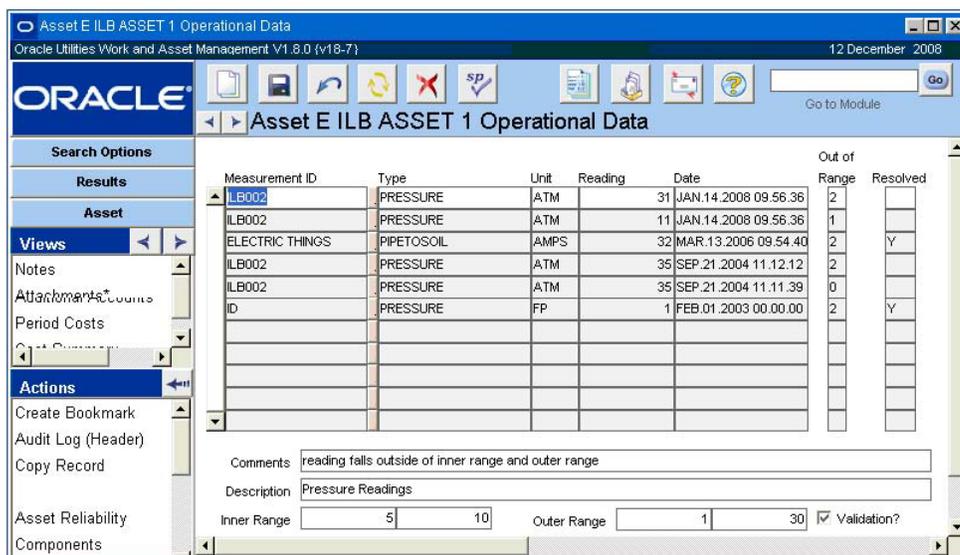


**Operational Data view**

The information displayed includes the reading, unit of measurement, when the reading was taken, and an out of range indication if the reading falls outside of the normal (inner) range established on the Operational Tolerances record. You can change the Resolved indicator to indicate that the person responsible for the asset has reviewed the out of range condition. While the system records the value entered (Y or N) there is no functionality associated with the Resolved indicator.

Values recorded out of the normal operating range (inner range) for the asset display an out-of-range message and an alert is sent to the person responsible for the asset. See the section on the Operational Data module for more on collecting and using operational data.

## Asset Downtime Summary

As work is performed against the asset, downtime information may be gathered through the Work Order Closeout view. A summary of the downtime information may be accessed through the Asset Downtime Summary view. This is a display-only window which displays information about the work orders, time and dates, failure and repair, and more. You can tab through fields to access those not displayed or use the scroll bar located at the bottom to navigate.
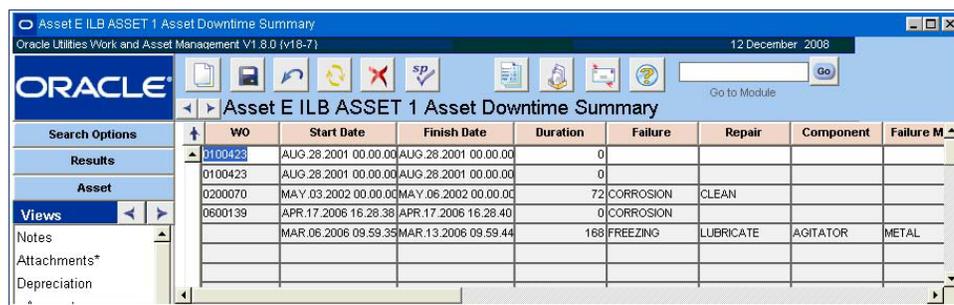


**Asset Downtime Summary view**

The Asset Downtime Summary view functions like all standard Transaction Logs.

## Work History

Through the Work History view, you can access a list of work orders or service requests written against the Asset ID. If a listed Work Order record has service history information available, the words "Has Service History' appear to right of the description field for that Work Order record. Select Service History from the Views list to access the work order service history information.



**Work History view**

# Setting Up Connected Assets

If the location basis of the asset is defined as an Address with Nodes on an Asset record, a "from" Asset ID and a "to" Asset ID can also be entered to show the connections between assets.

An asset may be discrete, such as a building, a vehicle or an equipment item, or it may be linear, such as a sewer line, or a road. If the location basis of the asset is defined as an Address with Nodes on an Asset record, a "from" Asset ID and a "to" Asset ID can also be entered to show the connections between assets. Using this functionality you can create a network of connected assets and review those connections in the asset navigator.

Setting up your assets so that they are recognized as a "system" can help you to manage maintenance. If your organization uses GIS, this functionality can also help to position your assets on the mapping system that you have in use.

You also have the option of using the asset navigator for easy access to asset records, or to provide you with an overview of an asset's properties and related records. Since the asset summary provides you with a listing of any child assets, components, specifications, connected assets, and bills of materials associated to the asset, you can obtain a great deal of information about any asset all in one place.

In the diagram below, the circles labeled M# represent manholes with the lines labeled P# representing pipelines connecting the manholes.
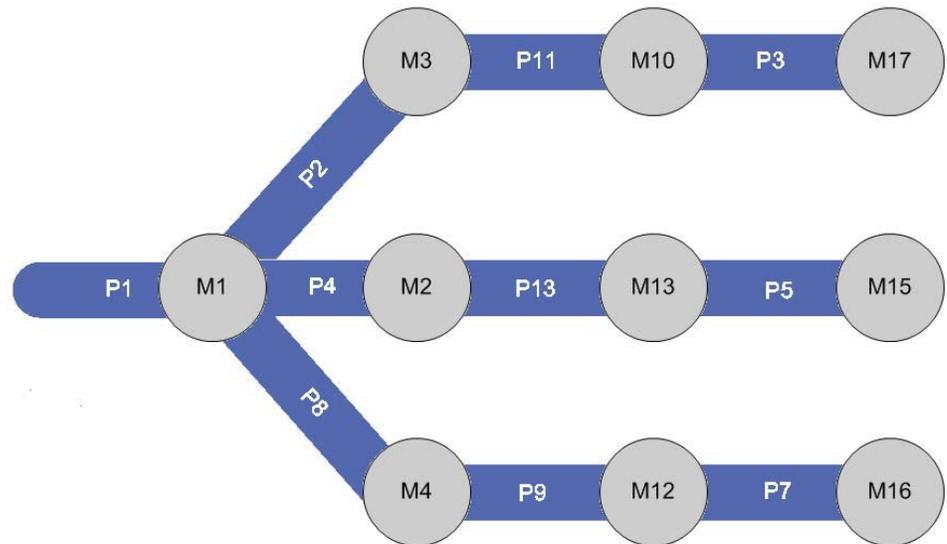
**Representation of a system of connected assets**

## Entering the Asset System

The manholes would be entered as individual assets with address as the location basis. The pipelines would be entered as individual assets with address with nodes as the location basis; the nodes being the manholes. You would then enter the manholes, or nodes, into the From Asset ID and To Asset ID fields to indicate how the assets are connected.

When you begin entering these assets, you must decide which of the connections is to be designated as the primary asset. Later, all of the other connections will be represented in relationship to the primary asset. In the example, the primary asset is P1.



**Asset Record Showing Primary Asset and Two Connections**

**This part of the connection is entered into the system as shown above. Set up the entire network of connections in the same way, making sure that the "from" and "to" Asset IDs are entered in the correct**
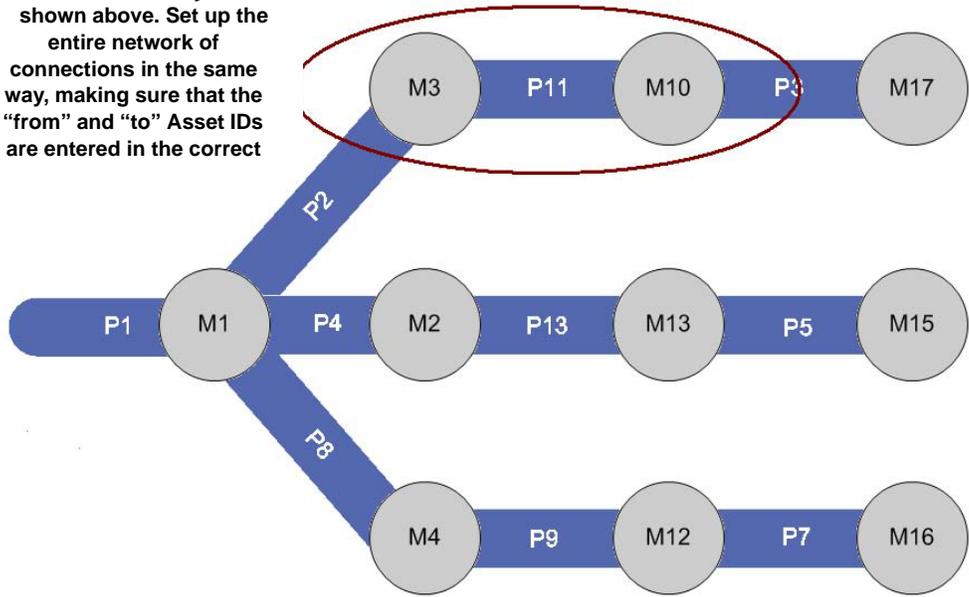


**Representation of a system of connected assets**

This Asset shows pipeline 11 connected to manhole 3 and manhole 10 in the From Asset ID and To Asset ID fields.

# Asset Navigator

The connected assets are represented in the asset navigator as follows:



**Connected Assets as represented in the Asset Navigator**

*Note:* When the assets are properly entered, the system can display the entire system of connections. You must, however, look at the primary Asset ID (I / P1) to see all of the connections. Selecting any of the other points, will only show you the direct connections from that point.

## From Node and To Node

Notice the From Node and To Node columns. If you refer back to the map of manholes and pipelines, you can see that the path is accurately followed in these columns. For the Asset ID I / P11 you can see that the from node is the same Asset ID that was entered in the From Asset ID field, and that the to node is the same Asset ID that was entered in the To Asset ID field on the Asset record.

## Conn Column

The Conn column shows the number corresponding to the location of the connection in relationship to the primary connector.



A negative indicates that the connection is made in the from "Asset ID" direction, whereas a positive number indicates that the connection is made in the "to Asset ID" direction both in relationship to the primary connector indicated as 0.

The large numbers in the diagram below correspond to the numbers in the Conn field in the image above. In this example, the starting point is P11, so the asset navigator only lists the direct connections to P11.
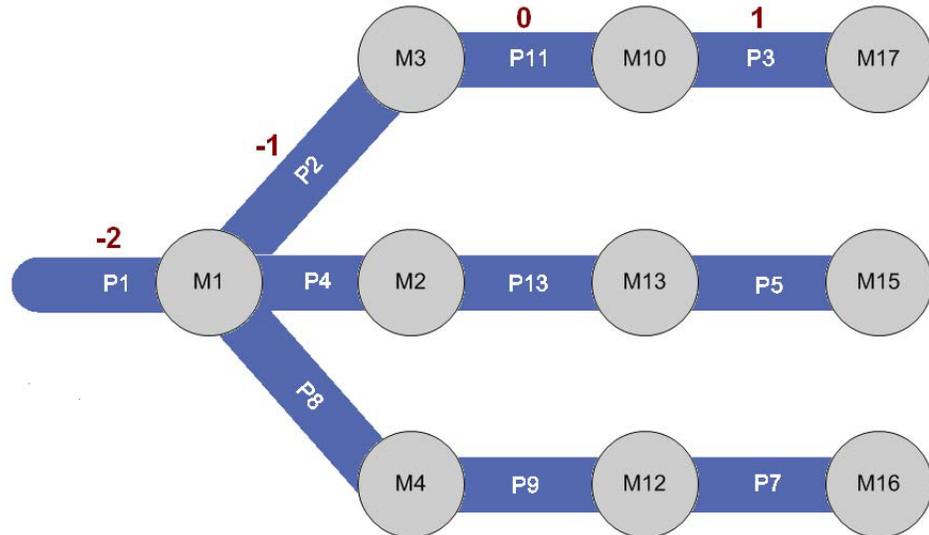


**Representation of a Pipeline with Connected Assets**

Click the Options link next to Connected Assets in the asset navigator to enter the number of levels (the number of connections away from the primary) of connections you would like to display. If nothing is entered, the default is 3 levels.

# Analyzing Asset Performance

As work information is logged into the system, asset performance is collected. This information provides insights into the overall performance from a cost, usage, and configuration.

Analysis of asset performance can help you to plan and manage your organization's resources. You can save a great deal of time and money by keeping an active watch over your assets. This

information can also help you to identify recurring problems, set up preventative measures, and schedule additional work.

Asset performance information should be reviewed briefly when processing work requests to help identify recurring problems.

Performance information should also be reviewed occasionally in greater detail to validate PM schedules and to help determine overall performance and value.

*Asset information can be accessed quickly and easily at the asset level, making the process of analyzing asset performance very simple.*

- If the asset frequently requires work just before a PM master is about to cycle, or it is failing routinely and there are no PM masters associated, you need to review and improve the PM scheduling.

- If it costs you more to keep the asset up and running than it is worth, or the overall downtime is becoming unreasonable, asset performance information can support a decision to replace the asset.

# Collecting Asset Performance Information

*For more information on Service History, Task Closeout, or the Runtime Entry module, please refer to Maintenance guide chapter on Work Order Tasks.*

Performance information can be collected in various areas of the system; basically any record that provides space to enter asset data. Generally you would enter asset data while working on or closing out a work order task. The asset information can be entered through the following:

## Service History View in the Work Order module (under Task)

You can select Service History from the Views list in the Work Order Task module to maintain a history of the service performed on an asset or component. This information is usually entered by the person who performed the work or a supervisor.

This information can be easily accessed at the asset level from the Work History view, making asset performance analysis a simple process.

Service History information is established via a two-step process:

1. Set up a Specification Template record for the type of service performed.

2. Reference it by entering Type and Category.

*Please refer to the Resource user guide for more information on Specification Template records.*

Then users can enter Specification Values for each applicable attribute. For example, if you are performing routine maintenance on a vehicle a customized list of attributes for the work would be set up on a Specification record. On the Service History view users would enter Specification Values for each attribute such as the mileage, date, tire pressure, number of quarts of oil used, oil filter replaced (yes/no), etc.

Work Order Service History entered via work order tasks can also be accessed as Views from the Asset, Component, Function and Process modules.

## Runtime Entry Module

*Additional asset runtime information displays across the bottom of the window for the selected record.*

Asset readings such as mileage, hours of uptime, number of start-stops, and so on are entered and maintained in the Runtime Entry module.

Generally, this information is also entered by the person who performed the work or a supervisor.

## Work Order Task Finishing / Work Order Closeout

During the work order closeout process you can enter asset information in two places.

The first is on the Task Closeout Summary window which opens as the final step when you are finishing a task.

Downtime information is entered as a part of Closeout for standard work orders.

Information can also be entered by selecting Asset Closeout Summary under Closeout Summary on the Views list in the Work Order module.

The Asset Closeout Summary provides information for all the assets associated with the work order. It also shows you more detailed information for a single, selected asset in the area below the Assets list. To select an asset, click it in the Assets list. The asset will be highlighted in the list, and the detailed information below the list changes to reflect the chosen asset.

Log downtime in the Start and Finish fields. The system calculates a duration based on the start and finish times you enter. However, you can change the duration value if necessary.

The Scheduled? field indicates if the asset was officially scheduled for downtime. You can enter Failure and Repair codes from the lists of values associated to those fields. The Component field indicates which component of the asset was worked on.

Other information that can be used for detailed performance analysis includes a review of labor requirements and materials usage on the work order task.

# Accessing Performance Information

Asset performance information can be accessed from a number of locations within the system, depending upon type of information that you are looking for:

## Asset Reliability Module

The Asset Reliability module, located in the Resource subsystem, provides summary reliability data collected from task-level closeout information. Using a date range or lifetime and entered usage hours per day, the system calculates reliability information (by life, time period, or month). This includes runtime, scheduled downtime, downtime failure, and surplus (all by hours and percentage). The system also calculates mean time between failures (MTBF) and mean time to repair (MTTR).

## Asset Module

You can also use views in the Asset module to access performance information. Views available for performance review in the Asset module include:

- Work History
- PM Schedule
- PM Route
- Runtime Log
- Asset Downtime Summary
- Consumables
- Period Costs and Cost Summary by Expense
- Access to the Asset Reliability module

Each of these details provides insights into the performance of the listed asset. Depending upon the nature of what you are researching and to what level of detail you wish to go, you may quickly access all related work orders (and tasks), access transaction logs for costs, labor charges, and materials transactions, and much more.

# Other Analysis Tools

There are many sophisticated applications dedicated to developing and running performance metrics. Information gathered can be exported to these applications (via an interface or through the external application's import utility).

The system offers a variety of reports that provide performance related information, including:

- PM Distribution
- PM Report
- Labor Distribution
- Equipment History Summary
- Historical Cost Performance
- Mechanic Accountability

If you want to incorporate personalized reports into the system, please contact your system administrator.

If you have or wish to develop your own reports that run against information collected in the system, you may integrate the reports directly into the application.

# Chapter 9

## Asset Activity Log

Enter and maintain activity information related to an asset using the Asset Activity Log module. Many business processes require the creation of a work order to record maintenance on assets. However, some instances may arise where valuable information regarding the asset needs to be recorded but a work order is not necessary. Planners, engineers, operators, or other users can use the asset activity log to record asset information in these instances.

## Asset Activity Log Records



**Asset Activity Log record**

The following fields are included:

**Activity Log ID -** This is the unique identifier for the log entry. Your system settings and business processes determine whether the system creates a number for you when the record is saved or if the number can be entered manually. If the number is assigned manually, the system verifies that the number is not a duplicate before the record is saved.

If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

**Log Status -** Available statuses are: Created, Pending Review, and Review Complete. When the record is set to Pending Review status, the system sends and alert to the person indicated in the Log Reviewer field. The reviewer should set the status to Review Complete when he or she has

reviewed the log record. The field next to the status field records the date of the most recent status change.

**Event Date and Reported By -** Use the Event Date field to record the date that the logged event occurred. For example. the activity being logged does not necessarily have to have happened on the date that it is being recorded. Past or future dates can be entered. Use the Reported By field to record the name of the person who should be associated to the creation of the log entry.

**Asset ID and Component -** Enter the ID for the asset, and component if applicable, being logged. The Asset ID is comprised of the asset record type and an ID. The record type has an associated list of values that is controlled by a code table.

**Process, Department, and Area -** If needed, you can use these fields to record the Process, Department, and Area codes that are associated to the asset.

**Log Reviewer  -** Enter the name of the person responsible for reviewing the log. When the status of the record is set to Pending Review, the person indicated in this field receives an alert.

**Crew -** You can use this field to log the ID for any crew associated to the log entry.

**Comments -** Use this free form field to record the any comments to complete the log entry.

**Work Class and Work Category -** If the creation of the log entry prompts the creation of a work record, these fields can be used to describe the type of work that needs to be done. Since they are controlled by code tables, they can also be configured to be used for general information whether or not a work record is created.

**Planner -** Enter the ID for the planner associated to the log entry.

**Runtime Information -** Use the reading fields to enter the asset meter reading, meter units, the date that the reading was taken and the reason code. When these fields are updated and the record is saved, the system saves the information to the Runtime entry module.

```
┌─ Runtime Information ─────────────────────────────────────┐
│  Reading  [          ] [          ] [          ] [          ] │
│            Meter Reading     Units        Date      Reason Code │
└───────────────────────────────────────────────────────────┘
```

*Note:* The fields in the Runtime Information, Downtime Information, and Failure Information sections correspond to the fields that can be entered in the Task Closeout when finishing a work order.

**Downtime Information -** Use the downtime field to record any needed downtime information for the asset. Start and Finish dates and times indicate how long the asset was or will be out of service. The duration is calculated in hours when the start and finish times are entered. Use the Type field to indicate the type of downtime that applies. Select the Scheduled? indicator if this was scheduled downtime. This indicator is informational only and therefore does not trigger any processing or further functionality.

Any information entered in this schedule updates the Asset Downtime Summary view for the Asset record in the Asset module.

**Failure Information -** Use this section to log any failure information related to the asset. Fields are available to enter failure and repair codes as well as the failure mode, root cause, and the failed or related component, if applicable. The Primary Failure indicator can be checked to show that this was the main reason for the asset fail.

Any information entered in this section updates the Failure History module for the asset.

**Work Request and Work Order No.  -** If any of the actions to create a work record are selected and a work record is created from the Asset Activity Log record, the system enters the resulting work record number in the corresponding field. Only one work request and one work order can be created for any asset activity log entry.

**How to Create an Activity Log Entry**

1. **Open the Asset Activity Log module in the Resource subsystem.**
2. **Click New.**
3. **Enter the ID for the asset you want to log.**
4. **Click Save.**
5. **Continuing entering log information as required by your organization.**
6. **Set the Status for the Asset Log record.**
7. **Click Save.**

# Asset Activity Log Views

In addition to any standard views, the module includes the following:

## Log Specifications

Please refer to the chapter on the Specification Template module in the Resource User Guide for more information.

Use the Log Specifications view to enter a service log for the asset. A specification template must already exist for any type and category combination entered in the Log Specifications view. When the Type and Category fields are filled in, the system populates the columns at the lower section of the screen.



**Log Specifications view**

# Asset Activity Log Actions

In addition to standard actions, the following can be completed from within the module.

## Creating Follow-up Work Records for the Asset

You can create a follow-up work request, work order, or emergency work order from the Asset Activity Log module. Select the desired work record type from the Actions list and the system opens a wizard that walks you through the process of creating the work record. The following walks through the creation of a work order. The processes for creating a work request or emergency work order are very similar.

**How to Create a Work Order from the Asset Activity Log**

1. **Open the appropriate Asset Activity Log record.**
2. **Select Create a Work Order from the Actions list.**
3. **Enter a Description of the problem.**
4. **Add any other information your organization requires.**
5. **Click the Next button.**

The system checks the information you have entered against existing Work Requests. It then displays all possible Work Requests that may duplicate the Work Order so that you can avoid creating duplicate Work Orders.

6.  **Click the Next button if there are no matches, or click the Cancel button if you find a duplicate record.**
    If you click the Cancel button, the system will close the wizard and return you to the Asset record.

    If you click the Next button, the system creates the new Work Order record in Planning status and opens a new window which shows the Work Order number. Here, you can also select a Crew, update the name of the Requestor, and check the "Auto Close?" box if you want the Auto Close indicator checked on the new work order.

7.  **Click the Next button or OK button.**
    The Next button will open the new Work Order record for your review and updates. You can then close the Work Order module and return to the wizard and click the OK button. The OK button will close the wizard and return you to the Asset record.

## Create Specification

If you have the appropriate responsibility function in your User Profile record, you can use the Create Specification action to quickly create a Specification record and attach it to the current Asset record.

When you select Create Specification from the actions list, a window opens where you can enter the basic descriptive information for the new Specification. When you finish entering the information, click the OK button to save the new Specification record as an attachment to the Asset record. The system confirms the Specification number and gives you the choice of returning to the Asset record or opening the Specification module where you can add additional information to the specification.

### How to Create a Specification Record from the Asset

1.  **Open the appropriate Asset record.**
    You should open the Asset record you want to attach the new Specification record to.

2.  **Select Create Specification from the Actions List.**
3.  **Enter the Specification ID if one is not automatically assigned.**
4.  **Select a Type and Category from the lists of values.**
    You can also enter a brief description if desired.

5.  **Click the OK button.**
    The system saves the specification as an attachment to the Asset record and opens a confirmation screen.

6.  **Click the Go to New Specification Data button or the Finish button.**
    Click the Go to New Specification Data button to open the Specification module where you can continue adding information to the Specification record.

    Click the Finish button to return to the Asset record. You can return to the Specification module later to complete adding information to the Specification record.

## Create Operational Data

Select Create Operational Data from the Actions list to open the Asset Data module where you can enter reading information that corresponds to established operating ranges and a measurement ID. If no measurement ID has been previously associated to the asset, you cannot create operational data from within the asset activity log. First open the Asset record, select the

Associated Operational Tolerances view and select the appropriate Measurement ID from the list of values. If an appropriate Measurement ID does not already exist, use the Operational Tolerances module in the Resource subsystem to create one and enter the necessary data ranges.

# Chapter 10
## Asset Condition

You can use the Asset Condition menu to create and review class and inspection data for assets.

Asset Condition consists of two sub-modules:

Asset Class - Create asset classes to group assets that comprise an aspect of an infrastructure. Asset classes should be established based on common failure characteristics and effects on the service being provided. The list of values for the Asset Class field in the Asset module uses the classes created in this module.

Asset inspection criteria is also managed in the Asset Class module. Use the Condition Assessment view to establish inspection parameters and a scoring basis for each class of asset.

Asset Inspection Data- Use the Asset Inspection Data module to enter and review asset inspection information. In this module, users enter asset assessments, and the system automatically calculates a score based on the inspection parameters defined in the Asset Class module.

You can also access the Asset Class and Asset Inspection Data modules directly from the Application Map, the Go to Module command, or your Favorites List if you have added them.

# Chapter 11

## Asset Inspection Data

The Asset Inspection Data module provides you with the ability to enter and store asset condition data that results from inspections. Condition criteria is set in the Asset Class module, then inspectors enter observations based on that criteria in the Observations view of this module. By creating fixed inspection criteria, your organization can establish an objective approach to asset inspections. With a well maintained record of routine inspections your organization can facilitate better validation reporting based on asset condition.

## Asset Inspection Data Records

After Inspection Data records are created and observations are recorded., the system summarizes that inspection score on the Asset Inspection Data record in the Condition Data section, and on the Asset Class record in the Inspection Summary section. The system also records all inspection history for the asset showing the inspection record number, inspection date, who the asset was inspected by, the score, and the related work order and task number in the Inspection Log located on the Views list in the Asset module.

While there is no system processing associated to inspection scores, you can use this information to guide your preventive maintenance procedures, to plan work, or to enable a variety of assessments on your assets.



**Asset Inspection Data record**

The following fields are included:

**Inspection ID -** Depending on your system settings the Inspection ID may be user-entered or generated by the system when the record is saved.

**Type -** The type of inspection can be selected from the list of values.

**Status -** Records can only be created when the Inspection status is Active. Records are not updateable in Canceled status.

Valid status changes are: Created to Active, Created to Canceled, Active to Completed, and Active to Canceled.

Changing the status to Completed before any observations have been entered causes the system to assume that the asset has received a perfect score. When the status change is made, the system displays a message. If you choose to save the status change with no observations entered, the system updates the inspection score to 100 for assets with Percentage of New rating basis or 0 for the other rating basis.

**Asset ID -** Use this field to enter the Asset ID of the asset that is being inspected. Remember, only assets with an assigned asset class can be inspected.

**Cond. Assessment -** Use the list of values to select from a validated list of the condition assessments that apply to the asset class of the asset entered. If there is only one condition assessment for the asset, it is returned automatically. The Condition Basis field reflects the basis that applies to the condition assessment that is selected.

**Reason -** Use this field to select the reason for the inspection from the list of values.

**Work Order No -** Use this field to select an associated work order number, if applicable. The list of values is limited to work orders or work order tasks in any status other than Canceled or Closed, that reference Inspection record's Asset ID.

**Inspected By and Inspection Date -** Use these fields to enter the name of the inspector and the inspection date.

**Weather Condition -** Use this field to record the weather conditions at the time of the inspection.

**Ground/Soil Condition -** Use this field to record the ground conditions at the time of the inspection.

**Comments -** Use this field to enter any comments related to the inspection.

**Segment Info -** Use the Segment Information section to enter data related to nodes and measurements. The information entered will depend on your organization's business practices.

**Video Info -** Use the Video Information section to enter the tape number and footage location of the inspection was videotaped.

**Condition Data -** The inspection score, previous score, asset class, condition rating, and condition basis are entered by the system based on the condition assessment, observations, and and previous data entered.

# Asset Inspection Views

In addition to any standard views, the module includes the following:

## Observations View

Enter observations from an asset inspection in the Observations view.



**Observations View**

**Rating Basis -** Displays the rating basis for the asset being inspected. This is determined by the assets class. and condition assessment indicated on the header.

**Category or Defect Type and Failed Criteria, Defect Classification, or Defect Severity -** The labels for these fields depend on the rating basis for the asset. The system uses the inspection criteria established in the Asset Class module for the class assigned to the asset that is being inspected. Select inspection criteria from the lists of values for each column to describe inspection observations.

Any asset that is inspected must have an asset class assigned in the Asset module.

**Observation Details -** Use the fields in this section to further describe observations. All fields, with the exception of Points, Weight, and Score, are user-entered, and the values entered will depend on your organizations business practices. The Points, Weight, and Score fields are populated by the system based on the observations entered, inspection criteria, and scoring basis.

# Chapter 12

## Asset Class

Use the Asset Class module to categorize common assets into groups based on common aspects of infrastructure. These classes are later used to manage your assets according to set criteria. For example, when inspection data is entered in the Asset Inspection Data module, the system limits the assets for which asset data can be recorded to those with an assigned asset class. Furthermore, the inspection data can only be entered according to the criteria established for that asset class.

The parameters you define in the Asset Class module are also used in calculating depreciation forecasts.

## Asset Class Records

Use asset classes to group your assets, identify node types, or to create capital groups. Any classification that is created can be used on asset records.

Asset classes should be established based on common failure characteristics and effects on the service being provided. For example, the assets listed below might be classified as indicated:

Pumps, Filters, Instruments (Mechanical Plant)

Sewer Pipes, Manholes, Lined Channels (Gravity Pipelines)

Deck, Girders, Columns (Concrete Bridges)

The above examples serve a guideline; however, your organization can determine any number of classification methods when creating asset classes.



**Asset Class record**

Use asset classes to group your assets, identify node types, or to create capital groups. Any classification that is created will be used on the asset record.

The following fields are included:

**Asset Class -** This field contains the name of the Asset Class. Asset Classes should be based on common characteristics and effects on the service being provided.

*Note:* Use asset classes to group your assets, identify node types, or to create capital groups. Any classification that is created will be used on the asset record.

**Type -** The name of the Asset Class Type. An Asset Class Type can include a number of Asset Classes, for example an Asset Class Type called "Infrastructure" might include individual Asset Classes such as highways, bridges, water and electrical utilities. You can select an Asset Class Type from the list of values defined for your organization in Code Table 601.

**Status -** Classifications can be set to Active or Inactive status. Classes that are in Inactive status cannot be assigned to assets.

**Description -** This field can be used to enter a description of the class if needed.

**Total Asset Book Value -** The sum of the current book value for all assets in the class.

**Total Accumulated Depreciation -** The total depreciation for all assets in the class for the current period (only when depreciation functionality is used for Assets in your organization).

**Inspection Summary -** The system takes all of the inspection information entered for assets in a class and summarizes it in the Inspection Summary section. Since asset inspections can be scored according to different scoring basis, a rating system is needed to translate the deficiencies of various assets into a common "grade." Therefore, a base ranking of 1-5 is used to provide a common basis for comparison of asset classes with different rating systems where 1 is very good and 5 is very poor. Only information for assets in Active status is summarized here.

The Condition Assessment field allows you to select one of the active condition assessment types defined in the Condition Assessment View to see the inspection summary for that assessment type. The list of values only shows active condition assessments.

The value for Not Inspected reflects the total of all assets in the asset class which do not have a completed inspection using the inspection criteria selected.

*Note:* If you need to access inactive condition assessments, your system administrator can create a custom list of values for you.

The system calculates the **Average Age of Inspections** as the difference between each of the assets' latest inspection age and the current system date totaled then divided by the total number of inspections. The value shown for the **Number of Inspections This Year** is the total for all active assets in the class that have inspection information.

**How to Create an Asset Class**
1. **Open the Asset Class module in the Resource subsystem.**
2. **Click New.**
3. **Enter a code for the asset class and select a type.**
4. **Enter a description of the class.**
5. **Click Save.**

# Asset Class Views

In addition to any standard views, the module includes the following:

## Condition Assessment

You can enter one or many condition assessments for one asset class. Multiple condition assessments are useful in scenarios where a different set of criteria is used depending on when the inspection is done. For example one set of criteria might apply to a yearly inspection whereas a different set of criteria would apply to an 5 year inspection. Enter various condition assessments in the top portion of the screen then define the basis and condition ratings information in the lower section.

**No., Assessment Name and Description -** Enter a name and description to identify the condition assessment. The system assigns an automated sequence number in the No. field for each assessment entered. Use the bottom of the screen to enter the condition basis and ratings for the selected condition assessment. The basis and condition ratings cannot be modified if inspection records have been created for the assessment.

**Status -** Valid statuses include Created, Active and Inactive. The condition assessment can only be modified in Created status. Once the condition assessment is defined, set the status to active. If there are no asset inspection records for the assessment name you can change the status from Active back to Created and make changes.

**Basis -** Once asset classes are defined, the module can also be used define the basis for the condition rating system of assets in the various classes. The Asset Inspection Data module can then be used to create Inspection records for assets in the defined classes. In the Asset Inspection Data module, the system limits the inspection criteria that can be entered to what has been defined here.

There are 3 standard methods that can be used for assessing asset condition:

**Percentage of New -** Using this basis, the condition of the asset is based on passing or failing characteristics of a new asset. A "like new" asset would pass all characteristics and be awarded the maximum points resulting in a 100% rating. A severely broken asset would fail all characteristics of a new asset and be awarded zero points resulting in a 0% rating.



**Condition Assessment view for asset scored on a Percentage of New basis**

As shown, the percentage ratings are translated to the 1-5 condition grade scale. A range of 100% to 80% could be equated to a condition grade of 1, 80% to 60% equated to a 2, and so on. Oracle Utilities Work and Asset Management is delivered with the default scale shown above, however you can change the ranges when you configure each asset class record. Ranges should not overlap.

**General Weighted -** Using this basis, the condition of the asset is based on a general assessment of potential defects using a weighted scale of 1 - 5. Each potential defect is assigned a weight value based on the impact to the service level. A potential defect that has significant impact on the service level will have a higher weight value (e.g., .30) than a potential defect with minimal impact on the service level (e.g., .15). A "like new" asset would exhibit none of the potential defects and be awarded the minimum points resulting in a rating of 1. A severely broken asset would exhibit the highest severity of each potential defect and would be awarded the maximum points resulting in a rating of 5.

With this method the ratings are already on a scale of 1 - 5, however, fractional values might also result since fractional grades might be noted for a given condition. Therefore, the results of the general weighted method also use a standard translation to the condition grade scale. For example, a range of 1 - 2 is equated to a condition grade of 1, a range of 2 - 3 equated to a condition grade of 2, and so on. Oracle Utilities Work and Asset Management is delivered with the default scale shown above.

**Deficiency Scoring -** Using this basis, the asset condition is based on accumulated defect points. As with the general weighted method, each potential defect is assigned a weight value based on the impact to service level. Then each defect is broken down into specific severity levels with a point value assigned to each. The more severe the nature of the defect, the higher the associated point value. Normally, the point scale is a range of 1 - 10, allowing for at least 10 different definitions or levels of severity.

Unlike the general weighted method, each defect and severity identified during inspection is accumulated for the final "deficiency score". That is, if there are 5 defects with a severity of 2 points each, then the deficiency score for the asset would be 10. A "like new" asset would exhibit none of the potential defects and be awarded a deficiency score of 0 (i.e., absolutely no defects were noted). A severely broken asset would exhibit the highest severity of each potential defect, probably numerous times, and would be awarded a higher deficiency score.

With this method you would want to set up ranges of scores that would translate into the 1-5 condition grade scale. For example, a range of 0 - 100 could be equated to a condition grade of 1, 101 - 200 equated to a 2, and so on. Oracle Utilities Work and Asset Management is delivered with the default scale shown above, however you can change the ranges when you configure each asset class record. Ranges should not overlap.

Regardless of the rating basis chosen, only whole numbers can be entered in the limit fields.

Additionally administrators can use the Asset Depreciation Method business rule to define custom depreciation methods which are not included as the standard delivered methods.

# Inspection Criteria

The inspection criteria to be used when assessing assets in the given asset class is entered in the Inspection Criteria view. Generally, inspection criteria consists the category or high-level classifications that are weighted, and the specific characteristic or defect severity that is scored.

By creating fixed inspection criteria, your organization can establish a more objective approach to asset inspections. The Asset Inspection Data module can then be used to create Inspection records for assets in the defined classes with the inspection criteria that can be entered limited to what has been defined here.

Each condition rating basis uses a different technique for the scoring of the assessment and therefore has slight variations on how the data is entered and displayed.

### Inspection Criteria Fields
**Condition Rating Basis -** The system displays the condition rating basis selected for the asset class. This field cannot be updated here.

**Category/Defect Type -** If the condition basis is Percent of New then the label for this field is Category, otherwise the label is defect type. This field simply represents the type or category of defect.

**Weight -** This field is used to indicate the rating for each deficiency entered in the Category/Defect Type field. Values entered cannot be greater than 1, and the field is limited to two decimal places. The total weight should be equal to 1 once you have entered all of the deficiencies.

**Pass Fail Criteria and Points -** If the condition basis is Percent of New then the labels for the fields at the bottom of the screen are Pass Fail Criteria and Points.

When configuring the inspection criteria these fields should be populated with text describing a pass/fail condition, and an assigned point value for the highlighted category. The criteria entered here should describe characteristics of a new asset with each category broken down into the specific characteristics that a new piece of equipment would exhibit. Each characteristic should then be assigned a point value to allow for certain characteristics to contribute more than others to the cumulative point total. There can be an unlimited number of characteristics for each category.

**Defect Classification and Grade -** If the condition basis is General Weighted then the labels for the fields at the bottom of the screen are Defect Classification and Grade.

This assessment basis is similar to Deficiency Scoring in that the asset's condition is based on defects, not on characteristics of a new asset. Each Defect Type is broken down into 5 classifications each with a corresponding point value of 1 through 5. The point value of 1 usually equates to No Defects and 5 usually equates to Failed.

Users are not allowed to insert additional records or delete from the 5 records inserted by the system. The user is only able to modify the descriptive text for each attribute record.
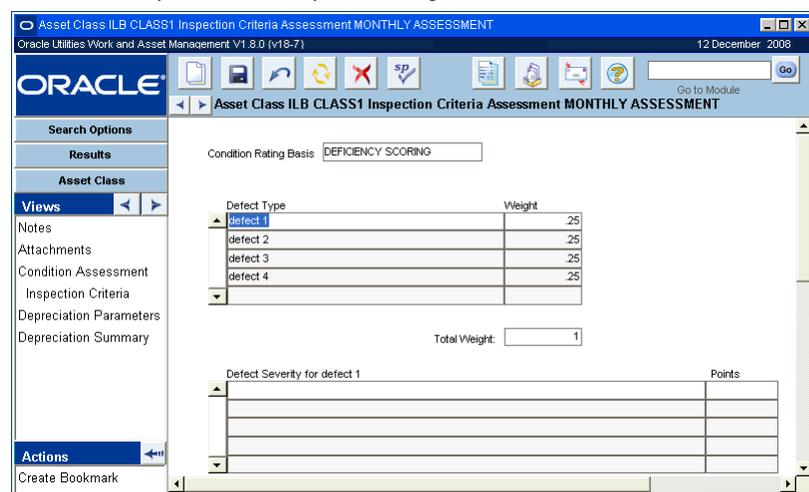


**Inspection Criteria view for Percent of New condition basis**

**Defect Severity and Points -** If the condition basis is Deficiency Scoring then the labels for the fields at the bottom of the screen are Defect Severity and Points.

This assessment basis is similar to General Weighted except that each Defect Type is broken down into an unlimited number of severities each with a corresponding point value. Typically, no more than 10 severities are used and the points associated to each are 1 - 10 with 1 being the least severe condition and 10 being the most severe.

**How to Enter Inspection Criteria**

1.   **Open the appropriate Asset Class record.**

2. **Select Condition Assessment from the Views list.**
3. **Select a scoring basis.**
4. **Modify the scoring ranges if applicable or necessary.**
5. **Click Save.**
6. **Select Inspection Criteria from the Views list.**
   Each condition rating basis uses a different technique for the scoring of the assessment and therefore has slight variations on how the data is entered and displayed.

7. **Enter inspection criteria.**
8. **Click Save.**

## Depreciation Parameters/Depreciation Summary

These views are only used if your organization uses depreciation functionality. Please refer to the document entitled "Depreciation" in the System Basics User Guide.

# Asset Class Actions

In addition to standard actions, the following can be completed from within the module.

## Copy Condition Assessment

Highlight a condition assessment then select Copy Condition Assessment from the Actions list on the Condition Assessment view to open a wizard which will create an exact copy of the entered condition assessment. You can copy to the same asset class or to a different class.
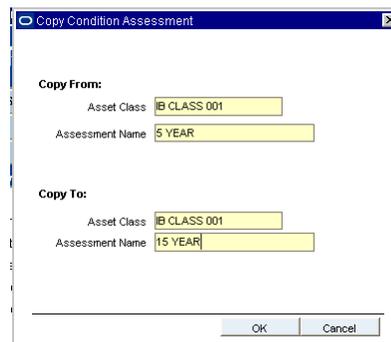


The Basis, ratings, and inspection criteria are all copied to the new assessment that you copy to. This information can be modified or amended on the new assessment as necessary.

# Chapter 13
## Asset Reliability

The Asset Reliability module provides access to asset reliability and availability information. You must specify the time period (either a range or "lifetime") and hours per day of operation on the Search Options screen. When you click search, the system displays calculated information in hours and percentages for: Runtime, Scheduled Downtime, Downtime due to Failure, and Surplus (unused operation time). Also displayed is the Mean Time Between Failures (MTBF) and Mean Time To Repair (MTTR). Calculations are based on the entered selection information and work order closeout entries for the asset.

## Asset Reliability Records



**Asset Reliability record**

The following fields are included:

**Runtime& % -** The runtime value is calculated as the (highest runtime reading of the asset) - (lowest runtime reading of the asset).

The system will only display runtime readings that were entered as hours. The code "HOURS" must exist in Code Table 107 and the asset runtime must be recorded for HOURS in order for the asset reliability data to display.

The percentage fields next to the Runtime column show the runtime percentage of the total time the asset is available, based on the Daily Usage in Hours field selection on the Search Options screen.

**Downtime Scheduled & % -** Number of hours of downtime recorded that were indicated as scheduled in the Work Order Task Finishing wizard.

The percentage fields next to the Downtime column show the downtime percentage of the total time the asset is available. This calculation is based on the Daily Usage in Hours field selection on the Search Options screen.

**Downtime Failure & % -** Number of hours of downtime recorded that were NOT indicated as scheduled in the Work Order Task Finishing Wizard.

The percentage fields next to the Downtime Failure column show the percentage of downtime NOT scheduled of the total time the asset is available. This calculation is based on the Daily Usage in Hours field selection on the Search Options screen.

**Surplus & % -** The remainder of the time in hours (unused operation time) that the asset was available, based on the Daily Usage in Hours field selection on the Search Options screen. This time in hours could be considered Idle time not associated with failure or work. (The total of runtime + downtime scheduled + downtime failure + surplus should equal 100%. If the surplus figure is negative, there is probably an error in runtime or downtime and you should check the accuracy of the data entry.

The percentage in the fields next to the Surplus column show the percentage of the total time the asset is available and is not covered by runtime or downtime. The calculation is based on the Daily Usage in Hours field selection on the Search Options screen.

**MTBF -** An abbreviation for Mean Time Between Failures. MTBF is a measure of how reliable a product is. MTBF is usually given in units of hours; the higher the MTBF, the more reliable the product is.

**MTTR -** An abbreviation for Mean Time To Repair. MTTR is the average time required to perform corrective maintenance on all of the removable items in a product or system, and is usually expressed in units of hours; the lower the MTTR, the more efficient the repairs have been on this asset (when compared to another similar asset). Mean Time To Repair (MTTR) is the most common measure of maintainability. MTTR can be used in a reliability prediction in order to calculate the availability of a product or system.

# Asset Reliability Search Options

Unlike other Search Options screens, you are required to enter an Asset ID, a time period, and the Hours per Day of Operation to open the Asset Reliability information for an asset.

Click Search to display calculated information in Hours and Percentages for: Runtime, Scheduled Downtime, Downtime due to Failure, and Surplus (unused operation time). Calculations are based on the entered selection information and Work Order Closeout entries for the Asset.

Also displayed is the Mean Time Between Failures (MTBF) and Mean Time To Repair (MTTR).

# Chapter 14

## Operational Data

You can use the modules on the Operational Data menu in the Resource subsystem to record operational data for assets within your organization. For example, you may need to monitor pressure readings for a compressor and voltage readings for a power generator system. Although the measurement units in each case will be different (foot pounds for the compressor and volts for the generator), you can create Measurement records appropriate for each type of asset within your organization. The Operational Data modules also include data import and export actions that enable you to import large amounts of operational data into the system from external files, and export data from the system in order to analyze the data using other software programs.

You can configure the system to automatically send an alert to a specified user if an abnormal reading is entered. That user can then issue a work order to inspect and, if necessary, repair the asset. You can also configure the system to cycle a PM master when an out of range reading is entered.

The Operational Data module consists of two sub-modules:

Operational Tolerances - where you can define measurement IDs and operational tolerances and associate measurement IDs with assets.

Asset Operational Data - where you can store data readings.

# Chapter 15
# Operational Tolerances

Operational information can be very useful to maintenance managers, planners and other personnel responsible for the operation of assets. Use the Operational Tolerance module to define measurements which can be associated to assets to determine their operational efficiency.

## Operational Tolerances Records

Define measurement records by specifying the measurement type, unit, and the valid range of values for the measurement. Once you have defined and saved the measurement record, you can use the Associated Assets view (or the Associated Tolerance view in the Asset module) to assign the measurement record to particular Asset ID. You can set the system to create a Work Order record to repair the asset when readings are recorded that fall outside the defined operating ranges.
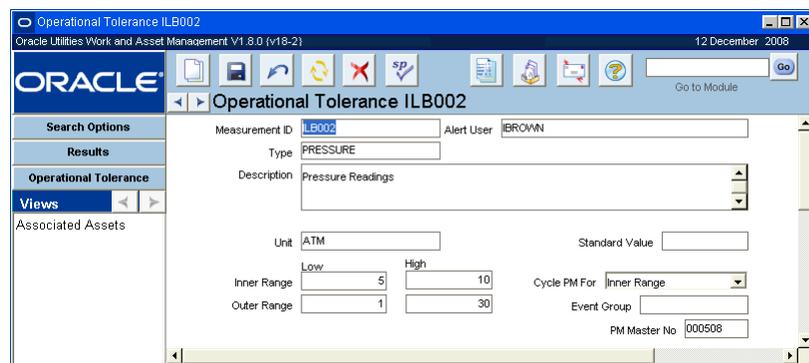


**Operational Tolerance record**

The following fields are included:

**Measurement ID -** The Measurement ID identifies the Measurement record and cannot be updated.

**Alert User -** This user receives an alert when an operational reading is entered for an associated asset that exceeds the normal operating range defined below. In order to enable the alerts process, a username must be entered in the Alert User field and the Validation? check box must be checked for the asset on the Associated Assets view.

**Type -** The measurement type is the characteristic being measured, such as temperature, pressure or flow. The list of values for measurement type controlled by a code table.

**Description -** The system supplies a description of the measurement based on the measurement type you select. However, you can change this description if necessary to provide additional information or clarify details concerning the measurement.

**Unit -** Enter the type of unit for this measurement. Pressure measurements, for example, might be measured in foot pounds or atmospheres. The list of values for this field is linked to measurement type controlled by a code table.

**Inner Range -** The inner range is the normal operating range for the asset. You must enter the low and high values to define this range. During validation, all values falling within the inner range are considered valid and do not cause an alert. Both the low and high values for the inner range must fall within the outer range.



**Outer Range -** The outer range is the maximum operating range. You must enter low and high values to define this range, and these values must include the inner range.

During data validation, values falling within the outer range, but outside the inner range, are flagged with an out of range status of 1. Measurement values falling outside the outer range are flagged with out of range status of 2. Any data readings that fall outside of the expected limits cause an alert to be sent to the person responsible for the assets. In order to enable the alerts process, a username must be entered in the Alert User field of the Operational Tolerances module and the Validation? check box must be checked for the asset on the Associated Assets view. The out of range indicator is visible on the Asset Operational Data record.

**Standard value -** You can record a standard value in this field to assist in your own data analysis. However, the system does not use this number to validate data.

**Cycle PM for -** The value set in this field triggers when a PM Work Order should be created for assets associated to the Measurement ID based on the Inner and Outer ranges indicated. The work order is not created automatically. The person responsible for cycling the PM must manually select Create a PM Work Order from the Actions list to initiate the process. When the reading falls <u>outside</u> of the selected range, the action becomes available. If this field is left blank, the action is not made available.

**Event Group -** Select the event group for the PM Master that you want to cycle when a reading exceeds the operating ranges.

**PM Master Number -** Select the number of the PM Master you want to cycle when a reading exceeds the operating ranges. For a PM Master to show on the list of values, it must be in active status and be a member of the event group defined in the previous field.

### How to Create an Operational Tolerance Record

1. **Open the Operational Tolerance module in the Resource subsystem.**
2. **Click New.**
3. **At a minimum, fill in the required fields based on the following descriptions:**
4. **Enter an Alert User if you want alerts to be sent to the selected user.**
5. **Enter Range and Standard Value information for the measurement.**
   You are not required to define operational ranges to create records. However, you must define ranges if you plan to use data validation.

6. **Enter PM information if necessary.**
   You only need to enter PM information if you want to have a PM master create a work order to inspect/repair the asset when an out or range reading is recorded.

7. **Click Save.**

# Operational Tolerance Views

The module includes the following views:

## Associated Assets

Use the Associated Assets view to specify assets using this particular measurement ID. Enter Asset ID information or select from the list of values. The system will supply a description of the asset but you can change this description if desired. Check the validation box if you want the system to use the tolerance ranges to validate data for this asset.

Validation is required to send alerts and to cycle PM Masters when out of range readings are recorded. In order to enable the alerts process, you must also enter a username in the Alert User field on the main record. When data validation is on, out of range readings are flagged and alerts are sent to the asset planner.

You can also associate assets with measurement IDs and check the validation box using the Associated Operational Tolerances view in the Asset module.
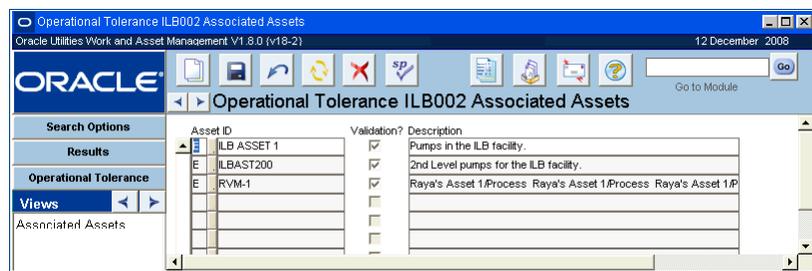


**Associated Assets view**

Several assets can be associated with the same Measurement record. A series of similar pumps, for example, might all be associated with the same Measurement record. If the pumps had different operating ranges, however, or were metered in different units, you would need to establish separate Measurement records reflecting these differences.

# Operational Tolerance Actions

Data entry normally requires that you enter one record at a time. However, using actions available in the Operational Data and Asset modules you can import and export large amounts of asset operational data from Excel spreadsheets or tab-delimited text files. These actions can help you to avoid repetitive keystrokes and to enforce strict data control.

1. Create Data Sheet

   Creating a data sheet is the first step in the data import process. After you have created the data sheet, you enter data on the data sheet that you can then import into Oracle Utilities Work and Asset Management.

2. Export Operational Data to File

   Exporting data from Oracle Utilities Work and Asset Management allows you to analyze the data using Excel or a statistical program.

3. Import Operational Data from a File

   Importing data entered on the data sheet is the final step of the data import process.

The data import and export actions use Excel macros, supplied by Oracle Utilities Work and Asset Management, to format and control the import and export functions. The default locations for the import/export files are specified in the Default Directories Business Rule, but you can also specify alternative directories in your user profile. The system does not create the

destination directories automatically, so you must ensure that the specified directories exist before using the actions for the first time.

**How to Create a Data Sheet**

1. **Open any Operational Tolerance record.**
2. **Select Create Data Sheet from the Actions list.**
   The Create Data Sheets window opens.

3. **Click the Next button.**
4. **Choose from the four options for creating the data sheet.**
   Each of the four options results in a data sheet with labeled columns. In addition, the Measurement ID data sheet includes a labeled row for each asset associated the Measurement ID you specify. Similarly, the asset data sheet has a row for the Measurement IDs associated with the specified asset. Data sheets for PM routes include rows for the Measurement IDs for each asset on the route.

5. **Click the Next button.**
6. **Enter a destination directory or click the Browse button to find a location.**
   The default destination directory is the location specified for operational data exports in the Default Directories Business Rule or in your user profile.

   Important -   Make sure that the file location that you select already exists on the drive. If you select a location that does not exist, the system will not create a datasheet. The best way to find an appropriate location is to browse.

   If you browse to another directory, double-click any file name to copy the path information into the destination directory line. This copies the path information only, not the file name.

7. **Select a file type for the Data Sheet.**
   You can select either a Microsoft Excel or a tab-delimited text file from the pull-down list.

8. **Click the Next button.**
   A confirmation window opens showing the file name, file location and file type you have selected for the data sheet.

   You cannot change the displayed information here. If you need to make changes, press the Back button and enter changes on the earlier windows.

9. **Click the Next button to create the Data Sheet.**
   A message may appear to warn that you are opening an Excel file containing macros. You can click Enable Macros or Yes and wait while the macros execute. Depending on the speed of your computer, this may take several minutes. When done, a message appears saying Excel has finished processing the data.

   Excel opens the new Data Sheet. You can enter data now or close the Data Sheet and continue working in the system.

10. **Click the Done button.**
    You can open the Data Sheet and enter data now or continue working in Oracle Utilities Work and Asset Management.

**How to Export Operational Data to a File**

1. **Open the Search Results window in the Asset module.**
   The Export Operational Data action will export all data available in the module. If you want to export only data for particular assets, search for those assets before selecting the export action. The search results will be used to get data for the export.

2. **Select Export Operational Data to File from the Actions list.**
   The Export Asset Operational Data window opens.

3.  **Click the Next button.**

4.  **Accept the destination directory for the export file or browse to another location.**
    The default destination directory is the location specified for operational data exports in the Default Directories Business Rule or in your user profile.

    If you browse to another directory, double-click any file name to copy the path information into the destination directory line. This copies the path information only, not the file name.

5.  **Select a file type for the export file.**
    Select either a Microsoft Excel file or a tab-delimited text file.

6.  **Click the Next button.**
    A confirmation window opens showing the file name, file location and file type you have selected for the exported file.

7.  **Click the Next button.**
    An Excel message appears warning that you are opening an file containing macros.

8.  **Select Enable Macros and wait while the macros execute.**
    Depending on the speed of your computer, this may take several minutes.

9.  **Select OK when Excel has finished processing the macros.**
    Excel opens the exported file containing the operational data. You can work with this data now or close Excel and continue working in Oracle Utilities Work and Asset Management.



10. **Exit Excel to return to Oracle Utilities Work and Asset Management.**

11. **Click Done.**
    The Export Operational Data action closes.

### How to Import Operational Data from a File

1.  **Open the Search Options window in the Asset Operation Data module.**

2.  **Select Import Operational Data From File from the Actions list.**
    The Import Data window opens.

3.  **Click the Next button.**

4.  **Browse to the file you want to import.**
    Double-click the file name to copy both the file name and path information to the Import Data File window.

5.  **Click the Next button.**
    The Import Confirmation window opens showing the file name, file location and file type of the data sheet to import. You cannot change the displayed information here. If you need to make changes, press the Back button and enter changes on the earlier windows.

6.  **Click the Next button.**
    An Excel message appears warning that you are opening a file containing macros. If the message does not appear, click the Excel button on your Windows taskbar to display the message.

7. **Select Enable Macros and wait while the macros execute.**
8. **Select OK when Excel has finished.**
   The Import Done window opens listing the number of items processed.

   The imported data remains in the Interface Table until batch processing completes the import procedure.

9. **Click the Next button.**
   The Process Interface File window opens, giving you the option of running the batch job now or waiting for next scheduled batch processing of the interface table.

10. **Click Cancel to wait for the next scheduled batch.**
    The Import Data From File Action closes.

# Chapter 16

# Asset Data

After you have established Measurement records and associated them with Asset IDs in the Operational Tolerances module, you can select Asset Data from the Resource subsystem to record and review operational measurements for the asset.

## Asset Data Records

Asset Data records allow you to record operating readings, reading date and comments. Entering a Measurement ID populates operating ranges from the Operational Tolerances record associated to the ID. Related PM Master number and Work Order numbers are also recorded here when applicable. Values recorded out of the normal operating range (inner range) for the asset display an out of range message and the system sends an alert to the person responsible for the asset.



**Asset Data record**

The following fields are included:

**Asset ID -** Enter the Asset ID or select from the associated list of values.

**Measurement ID -** When you enter the Measurement ID, or select it from the associated list of values, the system supplies the Description, Type, Unit, and Range information from the Operational Tolerances record.

**Reading -** Enter the reading from the measurement instrument on the asset.

**Date -** The date and time the reading was recorded. You can use the system calendar to enter the current date and time, or input date and time in the MMM-DD-YYYY HH:MI:SS format. Use the 24-hour clock format when entering the hour.

**Username -** The username is the name of the person recording the reading. You can select the username from the associated list of values.

**Comments -** You can enter any information in the Comments field needed to describe the recorded measurement. In particular, you may want to describe any conditions that might help explain an out of range reading.

**Resolved -** The person responsible for the asset can use the Resolved check box to indicate that the out of range condition has been resolved. While the system records the value entered (Y or N) there is no functionality associated with this indicator.

**Out of Range -** The system uses this view to indicate if a reading is outside the normal (inner) range. There are three possible values:

> **0 -** The reading is within the normal range.

> **1 -** The reading is outside of the normal (inner) range but still within the maximum allowable (outer) range.

> **2 -** The reading is outside the maximum allowable (outer) range.

**Validation -** A check in the Validation box indicates that validation is turned on for this asset. You cannot change this value here, but you can turn the indicator off and on in the Associated Asset view of the Operational Tolerance record or the Associated Operational Tolerances view of the Asset module.

**Range -** The system supplies the high and low values of the inner and outer operating range when you enter a Measurement ID. These values are copied from the Operational Tolerance record and you cannot change these values here.

**PM Master -** If a PM Master is identified to cycle when readings exceed the operating range, the system supplies the number of that PM Master here. If you want to choose another PM Master, you can select from the list of values that contains only active PM Masters from the event group identified on the Operational Tolerances record. The PM Master number cannot be changed once a Work Order record has been generated.

**Work Order Number -** When the PM Master cycles and creates a Work Order record, the system supplies the Work Order record number here. Once a Work Order has been generated for this record, the Create PM Work Order action is no longer available.

### How to Create an Asset Data Record

1.  **Open the Asset Data module under Operational Tolerances in the Resource subsystem.**
2.  **Click New.**
    New Asset Data record

3.  **Fill in the Asset ID, Measurement ID, Reading and Date.**
4.  **Enter optional information as appropriate such as Username and Comments.**
5.  **Click Save.**

# Asset Data Actions

In addition to standard actions, the following can be completed from within the module.

## Create PM Work Order

If the necessary information is recorded in the Operational Tolerances module, the system can cycle a PM Master to create a Work Order to inspect and repair the Asset when an out of range reading is recorded. Select Create PM Work Order from the Actions list to cycle the PM Master and create a work order. This action is not automatic, you must manually select the action to initiate the process.

The Create PM Work Order action is only available when a reading that exceeds the operating range identified in the Operational Tolerances module is recorded. In order to prevent multiple work orders from being created for a single reading, the action is no longer available once a Work Order has been generated.

## Import Operational Data from File

Select Import Operational Data from a File from the Actions list on the Asset Data Search Options screen to import asset data. This processing is described in detail in the Operational Tolerances chapter.

# Chapter 17
## Component ID

Components are stock items such as pumps, compressors, shafts, etc. that can be installed and removed, usually as the major part or parts that make up an asset. Each Component has a unique ID, which is often attached to the physical component for physical tracking.

These parts might be interchanged with similar parts or they might be a unique part that can be installed on one of several assets. Some examples are one pump that can be replaced with another, or a snow plow that can be installed on a truck bumper. Since they are stock items, they can also be listed on bills of materials for assets and can also have their own bills of materials. Some components are significant enough that you might want to track their associated costs.

A component is the lowest level in the asset hierarchy. When costs are charged against a work order written against an installed component, the system applies these costs to the associated component, asset, process, area, department and account number listed on the Work Order record.

## Component Records

Component records consist of four sections each dealing with different information related to the component: general description, current location, product identification, and repair costs.



**Component ID record**

The following fields are included:

**Component ID -** The Component ID uniquely identifies the record. Depending on how your system is configured you can create a number manually when creating new records, or the system will generate an ID for you.

If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

**Description -** You can enter a description of the Component ID in this free form field. Remember that only the first few words of the description will be visible elsewhere in the system.

**Stock Code -** Each component has a stock code associated with it, which it can share with other components of the same type. For example, two identical pumps would have the same stock code but different Component IDs. You can use the associated list of values to choose the stock code, the list is controlled by the Catalog module.

**Type -** The Type field shows the category that the component falls into.

**Weight -** Record the weight and unit of measure of the component in this field. It is for informational purposes only and does not affect other records in the system.

**Serial Number -** Record the serial number for the component in this field. In some cases it may be a good idea to make the serial number the same as the Component ID to facilitate referencing the physical component with the Component's record.

**Tagged -** The Tag indicator is used to indicate components that have a stock tracking tag. It consists of two elements: the Tagged check box and an unlabeled field to enter the type of tag.

**Current Location Information -** The Current Information section of the window contains fields for describing where the component is installed or to indicate an alternate status. This is important information that may change frequently as the component is installed, removed for repair, stored in a storeroom, sent out for work, etc.

**Status**

    **Created -** This is the initial default status used until new records are placed in a higher status. Whenever a change to the status of a component is made, the system inserts a line in the Component Tracking Log describing the change and the new disposition of the component.

    **Installed** - Indicates that the component is currently part of another asset. There are two ways the status can be changed to Installed.

    1. You can change the status manually. When you put a Component ID record in Installed status, you must complete the Asset ID fields.

    2. The system automatically updates the status as part of a work order batch process upon activation of a Work Order record that includes a task to replace a component and the replacement component is checked out of a storeroom (using the Checkout module of the Inventory subsystem) against the Work Order record.

    **In Stores** - The system uses this status to indicate that the component is currently in the inventory of a storeroom. Settings in the Component Processing Business Rule determine if you can set a Component ID record to In Stores manually. If this change is allowed, you must complete the Storeroom field.

    **In Repair** - In Repair status indicates the component is being repaired. This information is for reference only and does not affect records elsewhere in the system.

    When a component is returned from repairs, it is not checked in through the Storeroom Checkout module of the Inventory subsystem. Instead, it is logged in the Component ID module by changing the status to In Stores and supplying a storeroom code.

    **Inactive** - Indicates the Component ID record is no longer used. Records in Inactive status are usually kept in the system only for historical reference.

    **Pending Disposition** - Pending Disposition status is used when a decision is pending on how to deal with a component. This status can be applied manually, or the system will apply

the status to components that are to be removed due to a work order task. Please click here for more on this processing.

**Material Disposition** - Indicates that the component is active in the Material Disposition module.

**Scrapped** - Indicates that the component has been discarded.

**Salvaged** - Indicates that the component has been salvaged.

**Sold** - Indicates that the component has been sold.

**Outside Repair** - Indicates that the component has been sent to an outside maintenance contractor for repair.

**Storeroom -** The Storeroom field indicates which storeroom the component is located in when it is not installed. The storeroom can be updated at any time but the component's stock code must already exist in the catalog for that storeroom. The associated list of values for the field is controlled by the Storeroom Catalog module. The field can also be blank unless the status is set to In Stores.

**Asset ID -** This field indicates the asset that the component is installed in. The system ensures that the Asset ID field is blank unless the Component ID record is in Installed status.

**Process, Department and Area -** These fields indicate the location of the component. The system copies the information in these fields from the Asset record when the component is installed on an asset.

**Spec No. -** The Specification Number field displays the reference number for any attached specification on the component. The field has an associated list of values which is controlled by the Specifications module in the Resource subsystem.

**BOM ID -** The Bill of Material ID field displays the reference number for any bill of materials for the component. The field has an associated list of values which is controlled by the Bill of Materials module in the Resource subsystem.

**Property ID -** The Property ID field represents a unique identification for the item, and corresponds to the Property ID defined in the Property Management module of the Inventory subsystem. This field cannot be updated on the Component ID record. Instead, the system updates the field from the corresponding field on the Property Management record.

**Warranty Expires -** The Warranty Expires field indicates the termination date for the warranty. When a user creates a work record that references the component, the system displays a message indicating that a warranty exists for the component and lists the warranty information in the Warranty view of the record.

**Original Install -** The Original Install field indicates the date the component was first installed. The information for this field is not provided by the system, it must be manually entered.

**Last Install -** The last install date is maintained by the system and cannot be modified. Each time the Component ID is installed into as asset, the system updates this field with the current date.

**Average Repair Costs -** These fields show average costs for repairs on this component as well as on related components.

### How to Create a Component ID Record

1. **Open the Component ID module.**
2. **Click New.**
3. **Enter the Component ID.**
4. **Enter the Stock Code from the list of values.**

5. **Enter the Component ID Type from the list of values**
6. **Enter any other information your organization requires.**
7. **Click Save.**

### How to Identify a Stock Item as a Component

1. **Open the appropriate Storeroom record.**
   The Storeroom module is in the Resource subsystem.

2. **Click Trackable? check box.**
   This check box can function in two ways controlled by the Component ID Rule business rule. If the rule is set to NO, the check box simply acts as a flag on the Storeroom record that the item is considered a Component. If the rule is set to YES, the system requires users to supply a Component ID whenever a transaction involves a component.

3. **Click Save.**

### How to Assign a Component to a Storeroom

Settings in the Component Processing business rule determine whether or not the status can be changed to or from In Stores.

1. **Open the appropriate Component ID record.**
2. **Change the status to IN STORES.**
3. **Select the Storeroom from the list of values.**
4. **Click Save.**
   This status does not affect storeroom quantities.

### How to Install a Component on an Asset

1. **Open the appropriate Component ID record.**
   The Component ID module is in the Resource subsystem.

2. **Enter an asset in the Asset ID field.**
3. **Change the status to Installed.**
4. **Click Save.**
   The component will now be associated to the Asset record.

# Component Views

In addition to any standard views, the module includes the views discussed below. Most of the Component module views are the same as or similar to views in the Asset module.

## Manufacturer

You can enter specific Manufacturer information by selecting Manufacturer from the views list. Manufacturer information includes the Manufacturer Code (which returns the Manufacturer Name), the Manufacturer Part, Drawing, Order, and Model / Revision numbers.

If warranty information for the component was entered previously on this view, the expiration date and a brief description of that warranty appears in the Old Warranty Data section. Warranty information is now maintained on the Manufacturer Warranty view.

## Manufacturer Warranty

Use the Manufacturer Warranty view to associate warranties with the component. Before you can associate a warranty with a component, the appropriate Warranty record must exist in the Warranty module. When you select a Warranty ID and save the record, the warranty information

becomes available on work records referencing the component. When you specify a Warranty Start Date the system calculates the Warranty Expiration Date. Batch processing changes the expiration status from Active to Expired based on the expiration date.

Before you can associate a warranty with a component, the appropriate Warranty record must exist in the Warranty module.

## Vendor

Enter, review, and maintain vendor information specific to the Component ID using the Vendor view. This information includes Vendor Code (which returns the Vendor Name when entered), Part Number, and Original Purchase Order data. Most of the information on this screen is supplied by the system when the component is received.



**Vendor view**

## Period Costs

The Component ID Period Costs view presents actual costs that have been charged to the Component ID. Actual cost information is displayed, and broken down by period and expense category. This information is calculated by nightly batch processing and is display-only.

If you have the appropriate function responsibility in your user profile, you can also use this view to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

Field descriptions are similar to those discussed for the Period Costs view in the Account module.

## Cost Summary

In the Cost Summary by Expense Category view, you can see summary budget and actual costs per expense category for the Component ID. These values are summed by batch processing for costs charged against the Component ID. Data displayed here is view only.

If you have the appropriate responsibilities in your user profile, the two cost views also display actual amounts reported by your organization's external financial system.

Field descriptions are similar to those discussed for the Cost Summary view in the Account module.

## Work History

In the Work History view, you can access a list of Work Order records (from both the active and history work order tables) which were written against the component. Only Task records in Active, Finished, or Closed status are included in this view. If a listed Work Order record has service history information available, the words "Has Service History' appear to right of the description field for that work order. Select Service History from the Views list to access the work order service history information.

## PM Schedule

The Component PM Schedule view shows a list of current / future PM Master cycle information. For PM Masters that are active and reference the asset associated with the Component ID, if a Work Order record was generated and has not been completed, the Work Order record number is displayed. Otherwise, the next schedule date is listed without a Work Order record number, indicating that a Work Order record will be generated for that date.

This information is helpful when trying to determine whether a new Work Order record should be created for work on the Component ID or if an open or future PM work order could be used instead.

## PM Route Detail

Scheduled PM route stops referencing the component are listed on the Component PM Route view. This view includes the Schedule Dates, Route Numbers, Statuses, PM Interval, Task Type, Task Description and Finish Comments fields. The information presented on this view cannot be updated.

# Component Actions

In addition to any standard export and bookmark actions, the module actions list includes a link to the Material Disposition module and the Component Log.

# Tracking Components

There are situations where your organization may want to track components to identify each instance of a specified stock code with a unique ID (such as a serial number). These items can then be followed from the storeroom shelf to where they are installed in another piece of equipment, de-installed, repaired, reinstalled, scrapped, or sold.

An example might be a pump (a component) installed in a motor (an asset). When the pump fails, a work order is written to fix the motor, replacing the pump with a new one. Since the pump has been identified as a trackable stock item, it will be automatically tracked as it and its replacement part are processed.

When component tracking processing is turned on, the system follows each Component ID whenever it is physically handled. This includes issuing and returning the stock item from or to stores in the Stock Checkout module, receiving stock from a vendor in the Receiving module, performing physical inventories, and using the Stocking module. Each time a trackable stock item is physically handled, the system requires that you process each transaction in a quantity of one and that you enter a valid Component ID. One exception to this is when requesting trackable stock items on a checkout request. Items can be requested in quantities greater than one, but they must still be processed one at a time.

Setting up component tracking processing is a two step procedure. First you need to check the Trackable check box for each storeroom stock item for which you want to activate tracking. Then you need to create a Component ID record for each particular item on site.

Please refer to the Inventory Overview Trackable Stock Items section for more information on trackable stock.

### How to Turn on Component Tracking
When the Option Status for this rule is set to ON, the system will require users to enter a Component ID for most transactions involving Stock items that have been marked as trackable in the Storeroom. If you turn this rule ON while Components are in different dispositions (e.g.

one installed in an asset, another in repairs, etc.) users may have to Open the Component ID record to set the status before the system will allow them to finish their transaction.

1. **Open the Component ID Rule Business Rule.**
2. **Select ON for the Option Status from the list of values.**
3. **Click Save.**

## Designating Stock Items for Component Tracking

To designate storeroom stock items for component tracking, check the Trackable check box on the Storeroom Stock Item records in the Storeroom module.

### How to Designate Stock Items for Component Tracking
1. **Open the appropriate Storeroom Stock Item record.**
   Storeroom Stock Item records are located in the Storeroom module under Catalog in the Resource subsystem.

*If you are establishing a new stock item as trackable, you will want to consider whether or not to mark it as trackable in each storeroom.*



2. **Check the Trackable check box on the Storeroom Stock Item record.**
3. **Click Save.**

## Replacing Installed Components

*See the Managing Repairables chapter for a more detailed discussion of the materials disposition process.*

When an installed component is faulty and needs to be replaced, the system can automatically update the status and location information of the components concerned to reflect the current disposition of each component. The process is briefly described in the following scenario:

- A pump (Component A) installed in a motor fails and needs to be replaced. A work order is written to replace the installed pump.

- The replacement pump (Component B) is checked out of a storeroom against a work order using the Checkout module of the Inventory subsystem.

- The faulty pump must be evaluated and a decision made to either repair it and return it to the storeroom, scrap it or dispose of it in some other way. The system creates a Materials Disposition record to track these decisions.

The materials disposition process ends when replacement pump (Component B) is installed on the asset and the faulty pump (Component A) has been repaired and returned to the storeroom or dispositioned in some other way. Throughout the process, the system updates the status and location of both components, or you update the records manually, depending on how your system is configured.

# Viewing History Information

The system tracks components, collecting location history, costs, and general transaction information. This information may be viewed via the Work History, Period Cost, and Cost Summary views in the Component ID module.
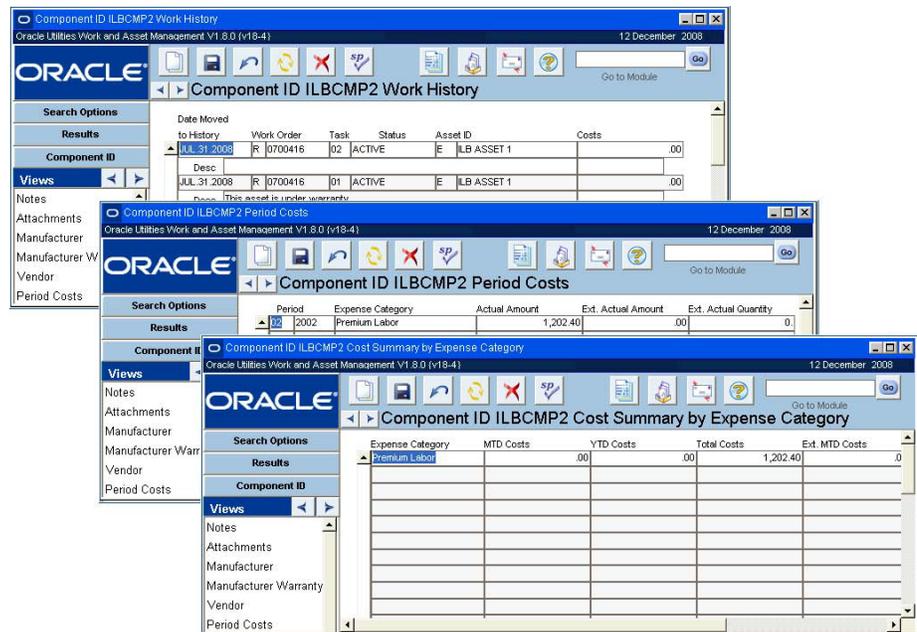


**The Work History, Period Costs, and Cost Summary Views**

You can also view a component's history in the Component Tracking Log. The Storeroom Transaction Log (under Catalog in the Resource subsystem) and the Checkout Transaction Log (in the Inventory subsystem) will also show component summary information.

# Assigning Custodianship to Components

See the chapter entitled Property Management for more information on creating Property Management records and assigning custodianship to components.

Generally, work orders for a component are charged to the asset account if the component is installed, or to the storeroom if it is uninstalled. But your organization may want to treat some items as uninstalled components that are not in a storeroom.

An example would be a portable computer hard drive. The drive may be attached at times to one computer and at other times to another computer. At other times it cannot be attached at all. In such cases, your organization would want to assign custodianship for the item to a specific person.

These situations are handled in the Property Management module where you can give a component a Property ID number and assign it to a custodian.

**The Property Management Window**

## Upload Specifications

After you upload trackable stock items as part of the receiving process, the system prompts you to also upload specifications for those components. This is an optional step.

To use this processing, procurement users must request that vendors provide information about the new stock items via an external spreadsheet file. Please contact your system administrator to access the spreadsheets and for instructions on how to deliver it to your vendors.

Follow the on screen instructions to complete the upload.

*Note:* You can also choose to upload the specifications later by opening the Component ID record for one of the components that was created in the component upload and selecting Upload Specifications from the Actions list. This action only works with components that were added via the upload spreadsheet.

The system creates a new specification record for each Component ID record with the details included in the spreadsheet combined with defining attributes from the Specification Upload Defaults business rule.

Each Component ID record is updated with a reference to the corresponding Specification record in the Spec. No. field. The system identifies the Component ID records by the Manufacturer and Model Numbers that were included on the component upload spreadsheet.

Please refer to the Inventory Overview guide section titled Trackable Stock Items for more information.

## Component Tracking Log

Each time the status of a component is changed the system inserts an entry in the Component Tracking Log. This record keeping can be very useful in tracking the installation and removal of components to and from assets. This log is accessible from both the Component ID and Asset module Actions lists. The information in the log is for display only and cannot be modified. You can, however, click several of the fields to open the corresponding record.

The system updates the status of a component and inserts a line in the log whenever the component is referenced and updated in the Material Disposition, Receiving, Multi-Step Receiving, Stock Transfer, Stock Checkout, Asset, and/or the Component ID module.

# Pending Disposition Status for Components

The system automatically places components in Pending Disposition status under certain circumstances. You must manually change the status when the disposition has been determined. Please refer to the chapter on Material Disposition for more information.

**The process works as follows:**
A work order is activated with a task to replace a component.

The replacement component is checked out of a storeroom (using the Checkout module of the Inventory subsystem) against the work order.

At the end of the day, the system runs a batch process that finds the record for the component taken from stores and changes the status of that record to Installed.

The batch process also finds the record for the component that is being replaced and changes its status to Pending Disposition. At this point a decision is pending about what to do with the replaced component: Repair it on site? Send it out? Scrap it? Etc.

When a decision is made about what to do with the replaced component, you must Open that Component ID record and change the status appropriately.

Remember: The system will automatically place components in Pending Disposition status under certain circumstances and that you must manually change the status when the disposition has been determined.

# Chapter 18
## Component Log

Each time the status of a component is changed, the system inserts an entry in the Component Tracking Log. This record keeping can be very useful in tracking the installation and removal of components to and from assets. This log is accessible from both the Component ID and Asset module Actions lists. The information in the log is for display only and cannot be modified. You can, however, click several of the fields to open the corresponding records.

**How to Change the Order of Component Log Data**
1. **Click the column heading of the column you would like to sort by.**
   The system orders the selected data by that column in ascending order. The button directly above the scroll bar on the left displays a "+" indicating data is in ascending order. A "–" indicates descending order.

2. **Click the + or - button located above the scroll bar on the left.**
   The sign on the button changes according to how the records are displayed.

Each time you click on a column heading that was previously selected, it changes the order of the data from ascending to descending or vice versa.

**How to Rearrange the Columns**
1. **Click and hold on the column heading.**
2. **Drag the column to the desired location (left or right).**
3. **Release the mouse.**
   The column remains where you released it.

In order to save the changes that you make to the transaction log layout, select Save Column Layout from the Actions list. If you want to return the layout to its original state, select Restore Column Layout from the Actions list.

# Chapter 19
## Compatible Units

Compatible units are planning tools that identify assemblies of material items, such as power poles or transformers, with associated labor and equipment estimates. Used primarily in the electronic, gas and water industries, compatible units provide consistency and standardization in the design and construction of capital projects. Using compatible units may also assist your organization in compliance with the reporting requirements of the Federal Energy Regulatory Commission (FERC) and other regulatory agencies.

In the Compatible Units module, you can define and document compatible units meaningful to your organization. Compatible Unit records can contain engineering drawings, listings of stock items comprising the unit, contractor bids, labor estimates and other costing information.

The records defined in the Compatible Units module can be used in designing work orders for capital improvements, as well as maintenance of existing assets. They can also be included with other compatible units to specify larger assemblies in the Compatible Structures module.



**Compatible Unit record**

*Note:* Please refer to the Compatible Units User Guide for more information on this module.

# Chapter 20
## Compatible Structures

Compatible units can be grouped together into larger units called compatible structures. Each compatible structure consists of a number of compatible units along with their associated labor and equipment estimates. Like compatible units, compatible structures can help provide consistency and standardization in design and construction of capital projects and assist in compliance with certain Federal Energy Regulatory Commission (FERC) accounting and reporting requirements.
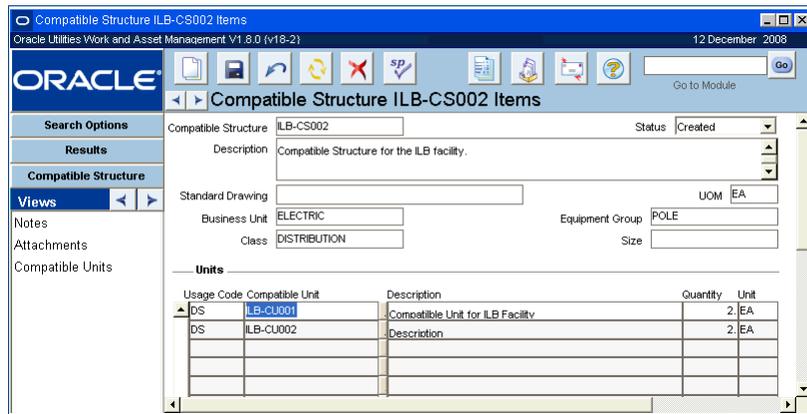


**Compatible Structure record**

Before a compatible unit can be included on a Compatibles Structure record, the corresponding record must be defined in the Compatible Unit module.

*Note:* Please refer to the Compatible Units User Guide for more information on this module.

# Chapter 21
## Change Request

Use the Change Request module to plan and request changes to Asset, Vendor, Catalog, or Storeroom records. Information regarding planned changes is entered and stored in this module until approvers can review the proposed changes and approve or cancel the request.

## Change Request Records

The module provides space to enter the reasons for the proposed change, the anticipated impact of the change, required justifications, and the actual changes required. There are actions available which allow authorized users to create or update the records once they are in the appropriate status.



**Change Request record**

After a change request has been approved, members of organization with the appropriate responsibility can select Apply Changes from the Actions list to complete the change request process and update the appropriate records. For Asset type change requests, associated transactions are written to the account log reflecting the date when the change request was approved.

A change request is not required by the system to update records, however your organization's business practices may require approvals before such changes are authorized and therefore a Change Request record must be initiated.

If a change request for an Asset record has an out-standing Work Order record in Active status, you will not be able to change the status to Completed, Cancelled or Rejected without first locating and closing the Work Order Task records. You can locate work records by selecting Where Used from the Views list and double-clicking the appropriate work order numbers.

## Applying Changes

After a change request has been approved, members of organization with the appropriate responsibility can select Apply Changes from the Actions list to complete the change request process and update the appropriate Asset records. Associated transactions are written to the account log reflecting the date when the change request was approved.

# Change Request Field Descriptions

The following fields are included:

**Request -** Depending on how your organization has configured this field in the Sequence Numbers module of the Administration subsystem, the system will generate a unique number for the request, or you will be able to enter the number manually.

If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

**Status -** Valid status selections for Change Request records:

> **Created**
>
> **Pending Approval** - When status is changed to Pending Approval the request document is routed for approval. The request remains in this status until it is approved or rejected.
>
> **Approved** - An approved request may be processed and the requested change initiated.
>
> **Completed** - Requests in completed status are retained as historical documents and cannot be updated. This status should not be used until all work on the change request has been completed.
>
> **Rejected** - Indicates an authorized approver rejected the request. If this option is selected the system opens a window where the approver can enter a reason. The reason entered appears in the Comments field of the Approval Log view on the Change Request. If the requestor has the appropriate user profile settings, he or she will also receive an e-mail notification of the rejection.
>
> **Canceled** - Cancelled status is used to cancel the request and is used in place of delete.

The system maintains the most recent status change date in the unlabeled field to the right of the Status field.

**Type -** Use this field to indicate the type of change requested. Your organization can add or remove options to by updating Code Table 165.

**Required By -** Indicate the date that the change is needed in this field.

**Class -** This field can be used to classify the change. For example, a change may be temporary or permanent. Your organization can add additional options to by updating Code Table 166.

**Approval Route -** The approval route specifies a series of approvers that will review the record for approval before processing can continue. An approval route must be entered before you can change the status to Pending Approval. Please refer to Approval Routing in the System Basics user guide for more information.

**Initiator -** The initiator is the person planning and requesting the changes. When a new Change Request record is created, the system automatically enters the name of the person creating the record. Alternatively, you can select another name from the list of values, which the system builds using the Employee module in the Resource subsystem. The system also enters the phone number and department from the Employee record when an initiator is entered.

**Record Type -** Change requests can be created for the different types of records determined in the Change Request Record Types Business Rule. The record type determines which view options are available. For example, if the record type is 'Vendor' the Vendor Change Request

option is displayed on the Views list. If the record type is 'Asset' the Where Used and other asset related views are available on the Views list. Special Views and Actions also exist for Storeroom and Catalog record types.

**Description -** Enter a brief description of the changes. Later, the Description field on the Search Options screen of the Change Request module can be used to locate particular Change Request records. Since only the first few words of the description are usually visible, you should be sure to enter the most descriptive words for at the beginning.

**Justification -** Your organization defines justification codes by entering values in Code Table 168 in the Administration subsystem. A typical example would be a code indicating the reason the change is required (for example, OSHA regulations). The field only contains a general code, but you can enter a more detailed justification for the change in the large text field to the right.

**Impact -** Your organization defines impact codes by entering values in Code Table 167. Examples of impact codes would be to indicate the relative impact (e.g. high, moderate, low) or the type of impact (e.g. process shut down, plant shut down).

This field only contains a general code for the impact, but you can enter a more detailed description of the impact in the larger text field to the right of the Impact Type field.

### How to Create a Change Request

1. **Open the Change Request module in the Resource subsystem.**
2. **Click New.**
   A new Change Request record opens.

3. **Select a change type from the Type field list of values.**
4. **Select a record type from the list of values.**
5. **Type a description of the change in the Description field.**
6. **Enter additional information as necessary.**
7. **Click Save.**
   After the Change Request has been created, the next steps are determined by the request type. Options on the Views list and the Actions list are determined by the type of change indicated in the Request Type field.

# Change Request Views

In addition to any standard views, the module includes the following:

## Analysis

The Analysis view provides a centralized location to enter comments about various aspects of the change request. These fields are all 'free-form' text fields and, if you double-click a field, the Text Editor window opens.

You can only enter up to 2,000 characters (about 400 words) into each of these fields. Use each text box to provide additional details about the change such as the systems and equipment that will be affected by the change request, list codes and standards that are applicable to the change request, outline the plan for checking and verifying that the change request is being carried out as planned, or indicate a list documents that will be affected by the change request. The Attachments view may also list, and give access to, these documents, but may also give access to documents that will not be affected by the change (for example copies of communications about the changes).

**Equipment Affected -** The Equipment Affected field provides an area to list and describe the systems and equipment that will be affected by the Change Request.

**Code and Standards -** The Code and Standards field provides an area to list codes and standards that are applicable to the Change Request.

**Verification Plan -** The Verification Plan field provides an area to outline the plan for checking and verifying that the Change Request is being carried out as planned.

**Documents Affected -** The Documents Affected field provides an area to list documents that will be affected by the Change Request. The Attachments view may also list, and give access to, these documents, but may also give access to documents that will not be affected by the change (for example copies of communications about the changes).

# Asset Change Requests

When you select Asset as the record type on a change request and click the Save icon, several Asset Change options become available on the Views list. You can use these Asset Change views to enter requested changes for Asset records. Depending on option you select, the fields on the Asset Change view change to hold information appropriate to the change you are requesting. The fields displayed on the Asset Change views correspond to similar fields in the Asset module.

*Note:* The Asset Change options display on Views list for Asset Change Requests.

The following Asset Change options are available:

**Asset Change (List)** - This view lists all of the asset changes requested on the Change Request record.

**Asset (New)** - Use this option to request that a new asset be created. You can use this view to enter all of the primary asset information with the request. Once the change request record is approved and changes are applied, the information is transferred to the Asset module automatically.

**Asset (Change)** - Use this option to request a change in the recorded information for the asset.

**Asset (Dispose)** - Use this option to request that an asset be retired and to record proceeds received from the sale of the asset.

**Asset (Configure)** - Use this option to request other changes in the Asset record, including location changes and the components installed on the asset.

**Asset (Revaluation)** - Use this option to request a mass revaluation of a group of assets using either a percentage of fixed amount. This might also be thought of as a cost reversal.

You can combine a number of asset changes on one change request. For example, if you are requesting to dispose of one asset and replace it with a new asset, you can enter change information for a current asset and create a new asset on the same change request.

## Common fields for all Asset Change Requests

**Asset -** The two asset fields hold the Record Type and ID number for the new Asset.

**Effective Date -** The effective date represents the date when the change is made or planned for the asset. If you leave the field empty and save the record, the system enters the current date when you save the record. This can be changed if necessary. You can enter retroactive effective dates or dates in the future.

This field may also be important if your changes affect depreciation calculations.

**Post to Prior Year  -** This check box is only used if your changes affect depreciation calculations. Please refer to the Depreciation guide in System Basics for more information.

**Other Fields -** For descriptions of the remaining fields, see the corresponding Asset Field Descriptions and Depreciation Field Descriptions.

## Accounting for Depreciation

All of the Asset Change views include an Effective Date field as well as a Post to Prior Year check box. These two elements influence how costs and adjustments are posted to the account log once the change is approved and applied to the asset.

# Asset (New)

The Asset (New) view collects the information required to create a new asset. After the Change Request is approved and the asset created, you can open the record in the Asset module and add and additional information if necessary.

**Transaction Type -** The transaction type describes the source of the new asset. Transaction Types are defined by your organization in Code Table 136. Some possible types might include:

> **Constructed** - an asset that has been built from internal recourses/funding

> **Contributed** - an asset that has been contributed by an outside entity.

> **Split** - new, updated or retired assets resulting of an asset split.

**Project/Subproject and PO No. -** PO Item, Project and Subproject do not appear on Asset records, however this information can be recorded on the change request if the asset was acquired using a purchase order or if the asset acquisition was related to a project/subproject. While these fields are for information purposes only, they can serve as an indication of the acquisition cost for the asset.

**Other Fields -** For descriptions of the remaining fields, see the corresponding Asset Field Descriptions and Depreciation Field Descriptions.

### How to Request to Create a New Asset

1. **Create a Change Request and select Asset as the record type.**
2. **Select Asset (New) from the Views list.**
3. **Enter the Asset record type.**
   You can also enter the Asset ID if the system is not set to automatically generate Asset ID numbers. However, the Asset ID is not actually required until the Change request is approved and the Asset record is created.

4. **Enter an Effective Date and check the Post to Prior Year check box if necessary.**
   If you do not enter an effective date, the system defaults the current date.

   You can enter a date in the past or future and the system will make any accounting or depreciation forecast corrections needed to adjust for the time lapse.

   The Post to Prior Year check box should only be checked if your organization utilizes depreciation functionality for assets and the accounting for the new asset needs to be applied to a previous period year.

5. **Select a Transaction Type if applicable.**
6. **Enter any additional information as necessary.**
   If you need to enter location or work order information, select More Data from the Views list. Return to the asset change view by selecting Asset (New) from the Views list.

7. **Click Save.**
   If you want to create more than one asset as part of the same change request, Click the New icon and repeat these steps until you have entered information for all the assets to be created. You can also select another asset change view and add other types of asset change requests to this record.

8. **Click the Change Request button to return to the main Change Request record.**
9. **Enter an approval route and set the status to Pending Approval.**

After the change request has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and create the new Asset record.

# Asset (Change)

Use this view to request that new descriptive information be recorded for an existing asset, including changes in how the system tracks depreciation for the asset. The Asset (Change) view displays the current values for the asset and blank fields where you can record your requested changes. If you do not enter a change for a particular field, the current value remains unchanged.

**Transaction Type -** The transaction type describes why the information change is required. Transaction Types are defined by your organization in Code Table 141. Some possible types might include:

> **Damaged** - changes to the asset resulting from damage
>
> **Exchanged** - changes to the asset resulting from an exchange
>
> **Split** - changes resulting of an asset split.
>
> **Transfer** - changes to an asset based on a transfer

**Other Fields -** For descriptions of the remaining fields, see the corresponding Asset Field Descriptions and Depreciation Field Descriptions.

### How to Request an Asset Information Change

1. **Create a Change Request and select Asset as the record type.**
2. **Select Asset (Change) from the Views list.**
3. **Select the appropriate Asset ID.**
   When you select the asset, the system displays current information for the asset in the lower section of the screen.

4. **Enter an Effective Date and check the Post to Prior Year check box if necessary.**
   If you do not enter an effective date, the system defaults the current date.

   You can enter a date in the past or future and the system will make any accounting or depreciation forecast corrections needed to adjust for the time lapse.

   The Post to Prior Year check box should only be checked if your organization utilizes depreciation functionality for assets and the accounting for the new asset needs to be applied to a previous period year.

5. **Select a Transaction Type if applicable.**
6. **Enter the requested changes.**
   Enter your changes in the blank fields in the right side of the screen. If necessary, you can select More Data from the Views list and make requested changes there also. You can return to the current screen by selecting Asset (Change) from the Views list.

7. **Click Save.**
   If you want to enter changes for more than one asset on the same Change Request record, return to the Asset Change (Detail) view, Click the New icon and repeat these steps until you have entered information for all assets you want to include on this request. You can also select another Asset Change view to add other types of asset change requests to this request.

8. **Click the Change Request button to return to the main Change Request record.**
9. **Enter an approval route and set the status to Pending Approval.**

After the change request has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and make the requested asset modifications.

# Asset (Dispose)

Select this option if you want to request that an asset be retired and that proceeds received from the sale of the asset be recorded.

**Transaction Type -** The transaction type describes why the information change is required. Transaction Types are defined by your organization in Code Table 162. Some possible types might include:

**Donated** - Asset that has been donated to an outside entity

**Lost/Stolen** - Asset that has been lost or stolen and no longer exists

**Retired** - Asset that has been retired from service after useful life

**Sale/Auction** - Asset that has been sold and removed from service

**Split** - New, updated or retired assets resulting from an asset split

**Final Reading -** Enter the asset reading at the time of disposal. This field is only updatable if the depreciation method is Units of Production. When a value is entered here the system automatically makes an entry in the runtime log for the asset with a reason of "disposal". Any related depreciation calculations are also adjusted automatically once the change request is approved and processed.

**Cost Adjustment -** Unless you enter a cost adjustment, the system defaults an amount equal to value adjustment needed to write the asset off the books.

**Calculated Net Book Value -** The system calculates net book value as asset cost less accumulated depreciation. Net book value equals salvage value when the asset is fully depreciated.

**Proceeds Received -** The amount received from the sale of the asset.

**Gain/Loss -** The system calculates gain or loss based on the value of the asset and proceeds received.

**Other Fields -** For descriptions of the remaining fields, see the corresponding Asset Field Descriptions and Depreciation Field Descriptions.

### How to Request to Dispose of (Retire) an Asset
1. **Create a Change Request and select Asset as the Record Type.**
2. **Select Asset (Dispose) from the Views list.**
3. **Select the appropriate Asset ID.**
   When you select the asset, the system displays current information for the asset in the lower section of the screen.

4. **Enter an Effective Date and check the Post to Prior Year check box if necessary.**
   If you do not enter an effective date, the system defaults the current date.

   You can enter a date in the past or future and the system will make any accounting or depreciation forecast corrections needed to adjust for the time lapse.

   The Post to Prior Year check box should only be checked if your organization utilizes depreciation functionality for assets and the accounting for the new asset needs to be applied to a previous period year.

5. **Select a Transaction Type if applicable.**

Valid transaction types may include damaged, donated, lost/stolen, retired, sale/action and split.

6.  **If appropriate, enter the proceeds received from the disposal of the asset.**
    The other information in this view is informational only and cannot be modified. After you enter proceeds received information and tab out of the field, the system calculates gain or loss from the sale of the asset.

7.  **Click Save.**
    In order to dispose of another asset on the same Change Request, Click the New icon and repeat steps 3-5 until you have entered information for all assets you want to include on this request. You can also select another Asset Change view to add other types of asset change requests to this request.

8.  **Return to the main Change Request record.**
9.  **Enter an approval route and set the status to Pending Approval.**
    After the change request has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and update the asset record.

## Asset (Configure)

Use this option to request general changes in the Asset record, including location changes and the components installed on the asset. Configuration changes do not require using the Apply Changes action to update the asset. After the request has been approved, the appropriate person in your organization can update the Asset record directly.

**Transaction Type -** The transaction type describes why the information change is required. Transaction Types are defined for your organization in Code Table 163:

**Fields -** For descriptions of the remaining fields, see the corresponding Asset Field Descriptions and Depreciation Field Descriptions.

## Asset (Revaluation)

Use this option to request a mass revaluation of a group of assets using either a percentage or a fixed amount. When you select an asset class, property unit and revaluation type and amount, the system displays a listing of assets in that asset class and property unit, along with the new replacement value. It is also possible to modify the individual replacement values further if necessary. Remove the check from the update box if you don't want to apply the revaluation to a particular asset. When the Change Request record is approved and the changes applied, the system updates each asset on the Mass Revaluation screen with the new replacement value if it is indicated to be updated.

**Mass Revaluation applied on -** The date the change request was applied for mass revaluation. No date is displayed if the change has not been applied.

**Asset Class -** Select an asset class from a list of values containing all asset classes in Active status.

**Property Unit Number -** Select a property unit from the list of values containing all property units for the asset class chosen.

**Revaluation Type -** You can revaluate assets using either a percentage or a fixed amount. When you select a Revaluation Type, the system provides a field to contain the appropriate revaluation amount.

**Percentage or Amount -** Enter the appropriate revaluation percentage or amount. Entering a positive value will increase asset replacement value. Entering a negative value will decrease replacement value.

**Asset ID, Net Book and Current Replacement Values -** When all of the necessary information is entered and saved the system displays all assets in Active status with the asset class and property unit selected and retrieves the last posted net book value and current replacement value for each asset.

**New Replacement Value -** The system calculates a new replacement value using the current replacement value and the revaluation percentage or fixed amount you have entered. You can modify the new replacement value for individual assets if necessary.

**Update -** The system automatically puts a check in the Update box, indicating that the revaluation will be applied to this asset when the record is approved and changes applied. If you do not want the revaluation applied to a particular asset, click to remove the check.

**Description -** As you highlight a line in the table, the description of the selected asset appears here.

### How to Request a Mass Revaluation of Assets

1. **Create a Change Request and select Asset as the record type.**
   Click here for instructions on how to create a Change Request.

2. **Select Asset (Revaluation) from the Views list.**
3. **Select an Asset Class and Property Unit.**
4. **Select a Revaluation Type**
   You can select to revaluate assets using either a percentage or a fixed amount.

5. **Enter the appropriate percentage or fixed amount.**
6. **Save the record.**
   The system displays the assets in class and property unit you selected.

7. **Review the New Replacement Values.**
   You can adjust the new values as necessary for any of the individual assets.

8. **Remove the check from the Update box for any asset you do not want to update.**
9. **Click Save.**
10. **Return to the main Change Request record.**
11. **Enter an approval route and set the Status to Route for Approval.**
    Once the record has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and update the appropriate Asset records.

## More Data

The More Data view contains location, work order default, and depreciation information for the asset. Depending on the detail option selected, the fields on the More Data view change to reflect the type of change requested. The More Data view is available when the update option selected from the Views list is Asset (New) or Asset (Change).

**More Data for the Asset (New) view**

## Manufacturer Warranty

Use the Manufacturer Warranty Data view to request to enter or change in the warranty information associated with the asset. Select a Warranty ID and save the record. When you specify a Warranty Start Date the system calculates the Warranty Expiration Date. Expiration status is a system controlled field based on the expiration date.

The Manufacturer Warranty Data view is available from Views list when the update option selected from the Views list is Asset (New) or Asset (Change).

Before you can associate a warranty with an asset, the appropriate Warranty record must exist in the Warranty module.



**Manufacturer Warranty view**

## Asset / Component

The Asset / Component view provides a way to record additional assets - and installed components that will be affected by a Change Request. The Assets / Components view is available only when the update option selected from the Views list is Asset (Configure).

The upper portion of the screen lists assets that will be affected by the change. The lower portion of the screen shows components for the asset selected in the upper portion.

## Asset Change (List)

The Asset Change (List) view provides list of the asset changes recorded on the Change Request record. Click the arrow button at the beginning of each line to open the Asset Change view for that item. When the Change Request is approved and Apply Changes action is executed, all of the Asset Changes on the list (other than Configuration changes) will be applied.



**Asset Change (List) view**

## Where Used

This view displays any Work Requests and Work Order Task records that have the Change Request Required indicator checked and reference the change request number. The information displayed in this window cannot be modified.

The Where Used view is available when Asset (Configure) is selected from the Views list .



**Where Used view**

# Vendor Change Request

When you select Vendor as the record type on a change request, Vendor Change Request becomes an option on the Views list. Selecting this view prompts the system to open a window that allows you to enter the requested changes for the Vendor record.

**Vendor Change Request view**

**Update Vendor Information Option -** Indicate how the vendor records should be updated by selecting an option from the drop-down list. The available options are:

**New Vendor** - Use this option to request that a new vendor be created.

**Update Main Vendor Address** - Use this option to request that the primary address be updated for an existing vendor.

**Create Alternate Vendor Address** - Use this option to request that an alternate address be added for an existing vendor.

The system creates a record in the Change Request Log each time an action is run from the Change Request module for a Vendor Change Request record. Log records include the name of the action, the date it was run, and the name of the user launching the action.

**Grant Vendor Status Option** - Indicate what status should be granted to the vendor by selecting an option from the drop-down list. The available options are:

**Grant Approved Vendor Status** - Vendors with approved status can provide items meeting the quality/safety requirements defined by the Procurement Level Business Rule. Selecting this option does not automatically grant approved status. The status is granted only selecting Grant Approved Vendor Status from the Actions list or by updating the vendor status in the Vendor module.

**Grant Exemption to Approved Vendor Status** - Exempt vendors are permitted to supply items requiring approved vendors even though they have not been granted approved status. Selecting this option does not automatically grant exempt status. The status is granted only by selecting Grant Exempt Vendor Status from the Actions list or by updating the vendor status in the Vendor module.

**Vendor Code -** The list of values for this field contains the vendor code for all existing vendors, regardless of status. If you are requesting a new vendor, this field will be remain blank until the system updates the field with the new vendor code.

**Vendor Name -** Once the system copies the vendor name from the Vendor record, this field cannot be updated.

**Division, Address and Contact Information -** Use these fields to request changes in the existing address and contact information for the vendor.

### How to Request an Update to Vendor Information
You can both update the vendor's address and grant a status on one Change Request record by selecting an option from both drop-down lists.

1. **Open a Vendor type Change Request record.**
2. **Select Vendor Change Request from the Views list.**
3. **Select Update Vendor Information at the top portion of the window.**
4. **Indicate how the vendor records should be updated by selecting an option from the drop-down list.**
5. **Enter the Vendor Code.**
   If you want to create a new Vendor record you may need to leave the Vendor Code field blank depending on your organization's business practices. You can, however, include as much of the contact information as possible.

6. **Fill in the remainder of the fields as appropriate.**
   If you are updating an existing vendor, the system fills in the fields when you enter the vendor code. Indicate changes by overwriting the information in the existing fields.

7. **Click Save.**
8. **Set the status to Pending Approval to have the change request approved.**


### How to Request an Update to Vendor Status

Selecting either of these options does not automatically grant exempt status. The status is granted only by selecting Grant Approved Vendor Status or Grant Exempt Vendor Status from the Action's list or by updating the Vendor status in the Vendor module.

1. **Open a Vendor type Change Request record.**
2. **Select Vendor Change Request from the Views list.**
3. **Select Grant Vendor Status at the top portion of the window.**
4. **Indicate what status should be granted to the vendor by selecting an option from the drop-down list. The available options are:**
5. **Enter a Vendor Code at the lower portion of the screen.**
6. **Make any appropriate changes.**
7. **Click Save.**
8. **Set the status to Pending Approval to have the change request approved.**

## Storeroom Change Request

When you select Storeroom as the record type on a change request, Storeroom Change Request becomes an option on the Views list. Selecting this view prompts the system to open a window that allows you to enter the update option, a stock code, and the storeroom.
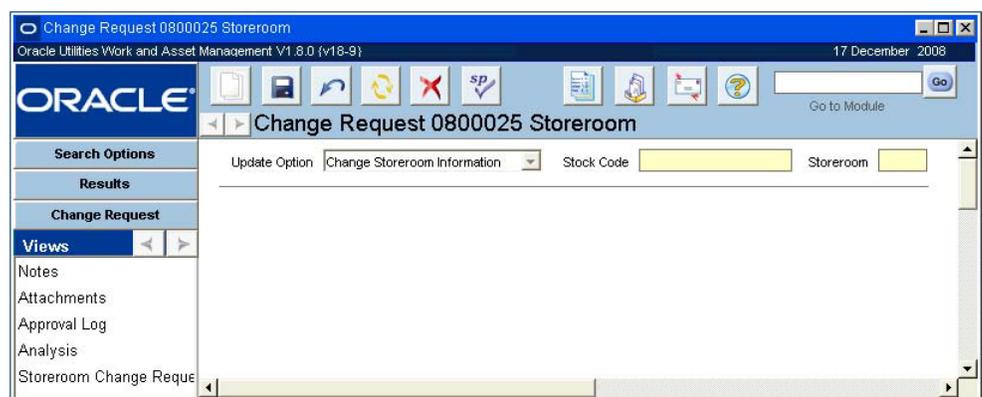


**New Storeroom Change Request**

After the record is saved this portion of the screen cannot be modified. If you entered an incorrect storeroom, stock code, or failed to select the proper Update Option, the Change Request header status must be set to canceled and another Change Request record must be entered with the correct information.

Once these fields are complete and the record is saved, the system opens a second window that shows the primary fields from the Storeroom record as they appear in the Storeroom module. The system also now shows the storeroom and stock code on the header screen.


**Update Fields on Storeroom Change Request**

The left column of fields shows the existing values in the storeroom. You can enter the changes required in the right column. Only the fields that are being changed need to be filled in, an empty field in the Requested Change column indicates that the current value will be retained. This screen shows all of the fields that can be modified using this change request. Once all of the changes are entered Click Save. You can then set the status to Pending Approval to have the change request approved.

After the record is approved, the option to Apply Changes is available on the Actions list. A user with the appropriate authority, usually the approver, can select Apply Changes from the Actions list and all of the changes requested on the Change Request are applied to the Master Catalog module. In order to execute this action the user must have the appropriate Function in his or her responsibility profile.

**How to Request an Update to Storeroom Information**
1.  **Open a Storeroom type Change Request record.**
2.  **Select Storeroom Change Request from the Views list.**
3.  **Enter a stock code and the corresponding storeroom.**
    Make sure that the storeroom and stock code are accurate. After the record is saved the top portion of the screen cannot be modified. If you entered an incorrect storeroom or stock code, the Change Request record status must be set to Canceled and another Change Request record must be entered with the correct information.

4. **Click Save.**
5. **Enter the changes that are required in the corresponding field in the right column.**
   Only the fields that are being changed need to be filled in, an empty field in the Requested Change column indicates that the current value will be retained. This screen shows all of the fields that can be modified using this change request.

6. **Click Save.**
7. **Set the status to Pending Approval to have the change request approved.**
   After the change request has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and update the Storeroom record.

# Master Catalog Change Request

When you select Catalog as the record type on a change request, Catalog Change Request becomes an option on the Views list. When you select this view, the system opens a preliminary window that prompts you to enter the update option and a stock code.
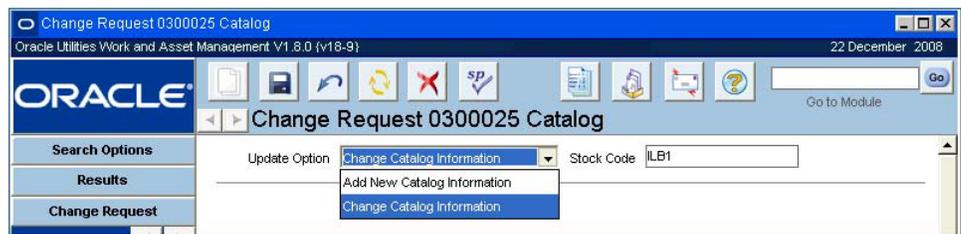


**New Master Catalog Change Request**

*Note:* After the record is saved this portion of the screen cannot be modified. If you entered an incorrect stock code or failed to select the proper Update Option, the Change Request header status must be set to canceled and another Change Request record must be entered with the correct information.

Once these fields are complete and the record is saved, the system opens a second window that shows the primary fields from the Stock Code record as they appear in the Storeroom module. The system also now shows the stock code on the header screen.

**Catalog Change Request - Change Catalog Information**

If you select Change Catalog Information, the left column of fields shows the existing values for the stock code. You can enter the changes required in the right column. This screen shows all of the fields that can be modified using this change request. Only the fields that are being changed need to be filled in, an empty field in the Requested Change column indicates that the current value will be retained. Once all of the changes are entered Click Save. You can then route the Change Request record for approval by selecting that option from the Actions list.

*Note:* If the Storeroom Reorder Processing rule key in the Batch Stock Reorder Business Rule is set to STOREROOM, the system will copy the values entered for Prime Vendor, Vendor Part Number, Manufacturer, Manufacturer Part Number, Buyer and the Tax fields to the Stock Reorder Override view of the storeroom for the item created.

The other option for a catalog change request is to add a new catalog item. With this option selected the Stock Code field is not required. It can be entered or automatically generated when the Catalog record is created. This option allows users to identify items to be included in the master catalog and, if necessary, allow them to identify a storeroom for the item.

After the record is approved, the option to Apply Changes is available on the Actions list. A user with the appropriate authority, usually the approver, can select Apply Changes from the Actions list and all of the changes requested on the Change Request are applied to the Master Catalog module. In order to execute this action the user must have the Function Apply Catalog/ Storeroom Changes in his or her responsibility profile.

**How to Request an Update to Catalog Item Information**
1. **Open a Catalog type Change Request record.**
2. **Select Catalog Change Request from the Views list.**
3. **Make sure that Change Catalog Information is selected in the Update Option field.**
4. **Enter a stock code.**
5. **Click Save.**
6. **Enter the changes that are required in the corresponding field in the right column.**
7. **Click Save.**
8. **Set the status to Pending Approval to have the change request approved.**
   After the change request has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and update the Master Catalog record.

**How to Request the Addition of a New Catalog Item**
1. **Open a Catalog type Change Request record.**
2. **Select Catalog Change Request from the Views list.**
3. **Select Add New Catalog Information as the update option.**
4. **Click Save.**
5. **Fill in the fields as completely and as accurately as possible.**
   If you want to assign the stock item to a specific storeroom/catalog also fill in the Storeroom fields on the right side of the screen.
6. **Click Save.**
7. **Set the status to Pending Approval to have the change request approved.**
   After the change request has been approved, users with the appropriate responsibility can select Apply Changes from the Actions list to complete the process and update the Master Catalog record.

# Change Request Log

The system creates a record in the Change Request Log each time an action is run from the Change Request module for a Vendor Change Request. Log records include the name of the action, the date it was run, and the name of the user launching the action.

# Master Catalog

The Catalog module stores all stock items throughout your organization, while Storeroom records organize these stock items into subsets. Once your organization has created its Master Catalog records, you can create storeroom lists, identifying which stock items are located in which storerooms and the quantities in each storeroom.

## Master Catalog Records

In order to assign a stock item to a storeroom, the item must first be in the Catalog module and the Storeroom record must have been set up through the Storeroom Setup module in the Resource subsystem.



**Master Catalog record**

### How to Create a Stock Item Record in the Master Catalog

1.  **Open the Master Catalog module.**
2.  **Click New.**
3.  **Enter a unique Stock Code.**
4.  **Enter the Stock Type from the list of values.**
5.  **Enter the Description.**
6.  **Enter any other information that your organization requires.**
7.  **Click Save.**
    Once the stock item is created, the next step is to add it to a storeroom.

## Master Catalog Field Descriptions

The following fields are included:

**Stock Code -** The stock code uniquely identifies the Master Catalog record. Depending on how your organization has configured the system, you can create the stock code, or the system will do it for you.

If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

The same physical item can have more than one stock code. For example, you might have an item that is issued using two different unit of issue values, such as BOX and EA. You would create a Master Catalog record with a unique stock code for the item issued by the box, and a Master Catalog record with a it's own unique stock code for the item issued individually. You could then cross-reference the two records using this field and use drill-down to quickly access the associated record.

**Stock Type -** There are five available stock types - Inventory, Expense, Direct, Phantom and Consignment. For more on stock types and how they affect inventory, see the section titled Stock Types.

**Status**
    **Created** - When you created a new record, the system puts it in Created status while you gather information to complete the record and the details. Once the record is complete you can change the status to Active.

    **Active** - Inventory and purchasing transactions cannot take place for the item until the record status is set to Active.

    **Inactive** - Rather than attempt to delete the record – which may interfere with other processing within the system – you should set the status to Inactive. Inventory and purchasing transactions cannot take place for the item when the record status is set to Inactive.

**Description -** The Description field contains a description of the item. You can enter as much text as you need. If you need a larger description area, or need a wider area to get columns of text to align, you can double-click the Description field to open the Editor window, which can be sized to meet your needs. The Editor window also includes a Search button that can be useful for finding specific text in a long note. Remember that the Description field on the Search Results window shows only the first few words that you enter here.

**Class -** The Class field provides a way to classify the stock item. The field has an associated list of values controlled by a code table.

**UOP, UOI and P/I Ratio -** The system uses the unit of purchase, unit of issue, and purchase to issue ratio information to maintain quantities as parts are issued and new parts are received. You may, for instance, issue in individual items but order the items by the box where one box would contain 10 individual items. The unit of purchase would then be BOX, the unit of issue would be EA, and the P/I ratio would be 10.

**Buyer -** The buyer represents the individual given responsibility for purchasing activity for the item. The field has an associated list of values controlled by the Buyer module. If you leave this field blank, the system assigns any purchasing activity for this item to the buyer indicated in the Batch Stock Reorder business rule.

**PO Commodity -** The Purchase Order Commodity field provides a way to classify the stock item for purchasing purposes. The field has an associated list of values controlled by a code table.

**Tax Information -** The three tax fields contain tax codes for state/provincial tax, federal tax and local tax. These fields have associated lists of values that are controlled by Code Tables 160, 159 and 161 respectively, in the Code Table and Codes module of the Administration subsystem.

**Prime Vendor and Lead Time -** These fields are used to indicate the main vendor that can supply this stock item, and the estimated amount of time it will take for the vendor to supply the item after it is ordered. Settings in the Update Primary Vendor Business Rule determine whether or not the prime vendor is updated when Purchase Order records reference the stock item.

**Shelf Life -** Indicates the amount of time that the item can remain in stores before it is no longer useful.

**Capital Spare -** A check in this box indicates that the item is a relatively valuable piece of equipment kept in house as backup if the item primarily used should fail. Items such as a spare motor or generator might fall into this category.

**No Substitute -** This box is checked if the item cannot be substituted for a similar item when stores of this item are not available.

**Hazardous -** These fields indicate if the item is hazardous and the type of hazard.

**Include on BOM? -** The Include On BOM check box indicates that the item can be used on a bill of materials.

**Lot Item -** The Lot Item indicator shows that the item is managed in lots. When an item has been designated for lot management, any inventory activities, including checking the item out against a work order, will require you to enter a Lot ID.

**Temporary Stock -** When a direct type item is purchased for courtesy stores and no stock code is provided, the system checks this box and provides a temporary stock code, based on the PO number.

**Reconcile to CU -** This is only used if your organization uses Compatible Units. Check this box if the item should be tracked for CU Reconciliation. If the box is checked and more or less of the planned quantity is used for work, the item must be reconciled.

**Commodity Coding Information -** Use the Commodity Coding Information fields to establish a commodity code system within your master catalog. Commodity codes represent an intelligent system for classifying items in parallel with your stock item number. Commodity codes can be useful for finding stock items within the system. Vendor records also include a Commodities view where you can enter the commodity codes that a vendor supplies to identify and classify their products or services. The vendor records and the catalog records can then be cross referenced by commodity code to help buyers identify which vendors can supply the restock items.

For more information please reference the Commodity Codes topic in the Stock Codes chapter of the System Basics Guide.

**Material Control Codes -** The bottom portion of the window displays the Material Control Code information. Using these fields, you can indicate any special receipt, inspection, handling and storage requirements for the item. This information is used elsewhere in the system as reminders when the item is ordered, received and processed. Material Control Code information includes:

**Procurement Level** - The Procurement Level field provides one way of classifying the item targeted primarily at purchasing processes. This setting will control how this item can be purchased and how it is received.

If you select a level that indicates the item is a quality item, the system will check the Quality Item indicator for any purchasing documents created for the item. This indicator will also be checked when the item is received in the Receiving and Multi-Step receiving modules, and the item will require special processing. If you select a level that indicates that the item must be purchased from an approved vendor, the system will not allow the issue of any purchase orders including this item to a non-approved vendor.

Procurements levels are created and defined in the Procurement Level Business Rule.

**Quality Class** - The Quality Class field provides another way to classify the item. The system will display the quality class on purchasing, receiving and inventory-related records. The field has an associated list of values controlled by a code table.

**Storage Code** - The Storage Code field provides a way to classify the item by how it should be stored. The field has an associated list of values controlled by a code table.

**Shelf Life Class** - The Shelf Life Class field can be used to indicate how the shelf life of the item is determined. The field has an associated list of values controlled by the Shelf Life Business Rule. Three of the options you can select from are:

- **Internal** - allowing your organization to assign it's own shelf life adjustment to the shelf life. For internal shelf life items, expiration date is determined by delivery date plus shelf life multiplied by the value set the Shelf Life Business Rule.

- **None** - indicating that no adjustment to the shelf life is used and expiration date is determined solely by delivery date and shelf life.

- **Vendor** - indicating that the vendor will supply the expiration date.

**Special Requirement** - The Special Requirement field provides a catch-all for miscellaneous special issues. The field has an associated list of values controlled by a code table.

# Master Catalog Views

In addition to any standard views, the module includes the following:

## Storeroom Quantity Summary

The Storeroom Quantity Summary view summarizes information from each storeroom that carries the catalog item. All information on this view is drawn directly from the Storeroom record and is maintained by the system.

Each row in the grid in the upper section of the Storeroom Quantity Summary view displays quantity, primary bin and status information from a specific storeroom that carries the catalog code. Each storeroom is identified by the Storeroom ID in the first column.

The summary section in the lower section of the Storeroom Quantity Summary view displays total quantities for the catalog item across all storerooms.



**Quantity Summary view**

## Storeroom Reorder Summary

The Storeroom Reorder Summary view summarizes reorder information from each storeroom that carries the catalog item. Each row in the grid displays maximum and minimum quantities, reorder point, and year to date usage from a specific storeroom that carries the catalog code. Each storeroom is identified by the Storeroom ID in the first column.

All information on this view is drawn directly from the Storeroom record and is maintained by the system.



**Reorder Summary view**

# Associated Stock Codes

Occasionally, you may want to indicate an association between two stock codes. Some examples of when you might want to do this are:

- Issuing the same stock item using different units of issue;

- Issuing the same stock item for different purposes (requiring different performance standards from the item).

- Issuing one stock item that needs a supporting item to be used (for example, a motor that requires separately issued anti-vibration seals with installation).



**Associated Stock Codes view**

You can use the Associated Stock Codes view of the Master Catalog record to create an association between existing Master Catalog records, or you may find it necessary to create a new, second Master Catalog record for a stock item.

**Alternate -** This box is checked if the stock code indicated in the Associated Stock Code field can be used as an alternate for the original stock code.

**Associated Stock Code -** The Associated Stock Code field displays the stock code for the other Master Catalog record.

**Relationship Type -** The Relationship Type field displays the relationship chosen when the Master Catalog record was copied. The field has an associated list of values controlled by a code table.

**Comments -** The Comments field displays any comments entered when the new Master Catalog record was created.

### How to Create an Association Between Existing Master Catalog Records

1. **Open one of the appropriate Master Catalog records.**
   The Catalog module is in the Resource subsystem.

2. **Open the Associated Stock Codes view.**
   If no previous associations have been created, the system opens the window with the first line highlighted ready for a new record.

3. **Click the first empty line.**
   The system prepares for a new record.

4. **Select the associated stock code from the list of values.**
   The list is controlled by the Catalog module. Depending on the size of your catalog, you will probably want to enter a partial stock code before calling the list of values.

5. **Select a relationship type for the association from the list of values.**
   This list is controlled by a code table.

6. **Enter comments, if necessary.**
7. **Click Save.**
   The system will save the record of the association and create the second association record for the other Master Catalog record.

You can create a copy of an existing record, including the important details, by selecting Copy to Associated Stock from the Actions list. When the system creates the new Master Catalog record, it also creates mirror records showing the relationship in the Associated Stock Codes views for the two Master Catalog records.

You can delete an Associated Stock Code record. However the system will not delete the mirror record from the Associated Stock Codes view of the other Master catalog record. You should delete the second, mirror association record manually.

## Lots

Certain types of stock are received in lots. Typically, all items in a lot are manufactured in the same production run and so are assumed to be interchangeable – they all meet the same standards and, if there is a problem with one item, that problem is likely to be present for the entire lot. Lot information maintained at the master catalog level applies to all items in the lot, regardless of which storeroom the items are in.

**Lots view**

**Description -** The system copies the description of the item from the Master Catalog header when you enter a Lot ID and save the record. You cannot update this field.

**Lot ID -** The Lot ID field identifies the lot.

**Lot Status**

    **Active** - The lot as a whole is active, however, individual quantities maybe be on hold.

    **Closed** - Lot status can be changed to closed only when there are no quantities.

    **Manual Hold** - Manual hold indicates that the items cannot be used until the status is removed. Items can be placed on manual hold for any reason and remain on hold until the status is changed.

    **Expired Hold** - Expired hold is a system-controlled status indicating that the expiration date for the lot has been passed. If you change the expiration date a future date, the system will change this status to Active.

**Expiration Date -** The system calculates the Expiration Date using information in the Shelf Life and the Shelf Class fields (on the Master catalog record), and the delivery date. You can overwrite the suggested expiration date with your own if necessary. The Expiration Information fields at the bottom of the window display information used to calculating expiration date.

Once an expiration date is reached and the lot is expired, the system will change the lot status to Expired Hold, removing the lot from normal stock activity (such as checkout and issue). If you change the expiration date a future date, the system will change this status to Active and the lot can be used for issues and other stock activity.

**Activated By -** This field displays the username for the person who created the lot record, either here or when it was received through the Receiving module of the Inventory subsystem.

**Total Quantity -** The total number of this stock item identified as being in this lot. This number is only updated by the system when the Lot ID is entered on a stock item receipt or

transfer into inventory. It can not be modified unless you adjust inventory quantities in the Storeroom module.

**Expiration Information -** When an existing Lot ID is selected, the expiration information at the bottom of the window displays the information used to calculate the expiration date. The calculation is based on the information entered when the stock item was received, the setting of the Shelf Life Class field on the Master Catalog record, and settings in the Shelf Life Class business rule.

> **Vendor Expiration Date** - If the shelf life class for the stock code is Vendor (indicated on the Master Catalog record), the system enters the expiration date supplied by the vendor in this field.

> **Cure Date** - If the shelf life class for the stock code is Internal (indicated on the Master Catalog record), and a cure date is entered upon receipt, the system calculates the lot expiration date as the cure date plus the shelf life.

> **Delivery Date** - If the shelf life class is Internal (indicated on the Master Catalog record), and a delivery date is entered upon receipt of the items, the system calculates the lot expiration date using information from the Shelf Life business rule.

> **Shelf Life Class** - The system indicates the class here if the Stock Item has been given a Shelf Life Class in the corresponding field of the Master Catalog record.

### How to Mark a Stock Item for Lot Management

1. **Open the appropriate the Storeroom record for the stock item.**
   The Storeroom module is in the Resource subsystem.

2. **Place a check in the Lot Management check box.**
   You can check the Lot Management check box only if there are no on-hand quantities of the stock item.

3. **Click Save.**
   The system will save the changes and use Lot Management processing when the stock item is received.

### How to Enter Lot Information for a Stock Item

1. **Open the appropriate Master Catalog record.**
2. **Open the Lots view.**
3. **Click New.**
   The system will open a new Lot Management record in ACTIVE status.

   Only Lots in active status can be transferred between Storerooms, checked out, etc.

4. **Enter the Lot ID.**
5. **Enter an expiration date if needed.**
   The system can also be set to calculate the expiration date based on other criteria.

6. **Click Save.**

## Where Used

Open the Where Used view to find out which Bill of Materials (BOM) records include the stock item. Only when the BOM is then referenced on an asset does the system display the department, area, asset type and number, component, BOM ID, sub-assembly (minor BOM) and the quantity of the item included on the BOM.

If the stock item is on a BOM, but the BOM is not referenced on an asset or component, the system does not show the BOM on the Where Used view.

**Where Used view**

## Crafts

For each item in your catalog, you can create a list of crafts that typically use or are responsible for installation and maintenance of the item. You can list one craft once per item.


**Crafts view**

Associated crafts are for informational purposes only and are not used elsewhere in the system.

## Blanket Contract

The Blanket Contract view lists all blanket contracts in Active status containing the stock code as an item that is not in Canceled status. The view shows important information from the blanket contracts such as the blanket contract numbers, the statuses of the blanket contracts, used amounts, and limit amounts, as well as the description of the blanket contracts and the vendors that the contracts were negotiated with. All of the information on this screen is imported from the Blanket Contract module by the system and cannot be modified. You can double-click the blanket contract number or the revision number to open a specific Blanket Contract record. Please refer to the document entitled Blanket Contracts in the Purchasing User Guide for more information on blanket contracts.


**Blanket Contract view**

## Vendor Manufacturer

You can maintain a list of authorized vendors and the manufacturers for each item in your catalog by entering this information in the Vendor & Manufacturer Data view. You can also list the vendor part number and the manufacturer part number for each record.



**Vendor Manufacturer view**

You cannot enter duplicate vendor / manufacturer combinations but you can enter multiple manufacturers for each vendor and multiple vendors for each manufacturer (one for each combination). The system automatically identifies the first record you create as the primary vendor, but you can assign a different record as the primary selecting the check box.

Before you can create a Manufacturer Vendor record, the vendor must be established in the Vendor module of the Purchasing subsystem and the manufacturer must be listed in the appropriate code table. For more on the vendor records, see the section titled Vendors in the Purchasing User Guide.

The vendor and manufacturer part numbers can be entered manually. The system will use this information in the Manufacturer Data view of the Purchase Order module in the Purchasing subsystem.

# Conductor Information

The conductor information view is used to define a stock item as a conductor for use with compatible units. Please refer to Planning Compatible Units for Conductors for more information.

# Master Catalog Actions

In addition to standard actions, the following can be completed from within the module.

As well as access to the Reorder Wizard, Storeroom and Component ID modules. Access to the Account Log and basic search and bookmark actions

## Update BOM

Select Update BOM from the Actions list to delete or replace the stock item from all Bill of Materials records that currently list the stock item. If you choose to delete the stock item, the system searches for the BOM records containing the stock item and asks you to confirm that you want to delete. The item is not deleted from the BOM records until you click OK. If you choose to replace the stock item, the system asks you to enter the new stock code and then updates the BOM records when you click OK on the confirmation message.

You must have the appropriate responsibility in your user profile to access the Update BOM action.

Please refer to the Bill of Material chapter for more information on how to use the Update BOM action.

### Related Topics

How to Delete a Stock Item from a BOM
How to Replace a Stock Item on a BOM

## Copy to Associated Stock

You can copy a Master Catalog record and the important details using the Copy to Associated Stock Action. The action automatically creates records in the corresponding Associated Stock Codes views for both the original and the new Master Catalog records. If you want to indicate a relationship between two existing items, you should use the Alt Stock field on the Master Catalog records.

This action only copies the Master Catalog record. You must create the appropriate Storeroom records to make the new stock code available for issue.

### How to Copy a Master Catalog Record

1. **Open the appropriate Master Catalog record.**
2. **Select Copy to Associated Stock from the Actions list.**
   The Copy Catalog window opens.

3. **Enter a new stock code.**
4. **Click the Finish button.**
   The system creates the new record in Active status. It also creates entries in the Associated Stock Codes views for both the new, and the old, Master Catalog records. You must now open the new Master Catalog record and make any necessary changes.

5. **Click the Close button.**

# Chapter 24

## Storeroom

After stock items are entered and storerooms are established in the Storeroom Setup module, you can enter and maintain information about the stock items available within each individual storeroom. Any stock item entered in the Catalog module can be made available in more than one storeroom. Pricing and quantity information (for the stock item) will vary from one storeroom to the next.

The Storeroom module is used for entering and maintaining information about catalog items available within each individual storeroom. Once an item is logged into a storeroom the system automatically maintains and updates much of the information using data from the Inventory and Purchasing subsystems. Each Storeroom header record represents an item in a storeroom. The record for the storeroom is entered and maintained in the Storeroom Setup module.

## Storeroom Records

You can associate accounting information, such as the asset account number and the credit account number, to Storeroom records. This information is used by the system in processing storeroom transactions such as issues, returns, transfers, etc. Before you can associate this information to the storeroom record, however, the information must first be entered into the system in the Account module in the Resource subsystem.



**Storeroom module**

The system uses the stock code combined with the storeroom code to distinguish a unique record.

When the stock item is referenced on purchasing records or on work records that result in purchasing records, the notes entered for the item carried over to those records along with other relevant information.

### How to Add a Stock Item to a Storeroom

1. **Open the Storeroom module.**
2. **Click New.**
   The system will open a blank record.

3. **Enter the Stock Code, Storeroom and Expense Code.**
   The system supplies Lists of Values for these fields.

   Only Stock Items that are in Active status appear on the list of values. Stock Items are entered in the Master Catalog module.

4. **Enter any other information your organization requires on the various views.**
5. **Set the status to Active.**
   The status field is located below the Description on the right.

6. **Click Save.**

### How to Set a Markup Rate for a Stock Item

1. **Open the Storeroom record for the Stock Item.**
   The Storeroom module is in the Resource subsystem.

2. **Check the Use Markup? check box.**
3. **Enter the Markup Rate.**
   The Markup Rate is the amount by which the system will multiply the Average Unit Price or Standard Price (depending on which is selected) to calculate the Issue Price. If you enter a Markup Rate of less than 1.0, the Markup Rate will act to reduce the Issue Price. For example, if a Standard Price of $1.00 is selected as the basis for the Issue Price and the Markup Rate is .5, the Issue price will be $.50. A Markup Rate of 1.0 would have no effect on the Issue Price, and a Markup Rate of 1.5 would result in an Issue Price of $1.50.

   You can check to make sure you have selected the correct Markup Rate by selecting the Pricing radio button at the top of the window and checking the Issue Price.

4. **Click Save.**

## Storeroom Field Descriptions

The following fields are included:

**Status -** Storeroom records can be in Created, Active or Inactive status. For a Storeroom record to be in Active status, the Catalog record for Stock Code must also in be Active status.

**Stock Code -** The stock code can be selected from a list of values but, because a master catalog can contain many stock items, the system prompts you to begin the process by supplying a partial stock code to help narrow the search.

You can use the '%' sign as a wild card if you want to narrow the list of values based on the middle or end of the stock code. You can also use the Search button in the list of values window to search based on the stock item's description.

The system supplies the description for the stock code from the Catalog module. For more on the Catalog module, see the section titled Master Catalog.

**UOP, UOI and PI Ratio -** The system uses the Unit of Purchase, Unit of Issue, and Purchase to Issue Ratio information to maintain quantities as parts are issued and new parts are received. You may, for instance, issue in individual items but order the items by the box where one box would contain 10 individual items. The Unit of Purchase would then be BOX, the Unit of Issue would be EA, and the P/I Ratio would be 10. The system supplies this information from the Master Catalog record for stock items.

**Stock Type -** There are five available stock types - Inventory, Expense, Direct, Phantom and Consignment. For more on stock types and how they affect inventory, see the User Guide section entitled Stock Types.

The system copies stock type from the Master Catalog record when you create a Storeroom record, but you can change the stock type as long as quantities are zero. An instance in which you may want to change the stock type is if a stock code is handled as an inventory item in one storeroom but as an expense item in another.

**Storeroom -** The storeroom identifier can also be selected from a list of values. The system supplies the description for the storeroom from the Storeroom Setup module. For more on the Storeroom Setup module, see the section titled Storeroom Setup.

**Debit Expense -** You can also use a list of values to select the debit expense code. The system uses this code in conjunction with the account number taken from the Work Order record or other process that required the stock item to be checked out. The account number combined with the debit expense code is used to create an account number when Oracle Utilities Work and Asset Management is linked to an accounting software package. For more on the Stock Checkout module, see the section titled Stock Checkout.

Other fields on the Storeroom record which are not required by Oracle Utilities Work and Asset Management, but which may be important to your organization, are:

**Primary Bin -** The Primary Bin field is for informational purposes only and cannot be updated here. The field indicates where in the storeroom you will find the primary location for the stock item. The primary bin is selected in the Bin Locations view.

**Asset Account -** The asset account number indicates the account that owns the item while it is in this storeroom. It is combined with the asset expense code to form an account number when Oracle Utilities Work and Asset Management is linked to an accounting software package.

**Credit Account -** The credit account number indicates the account that will be credited when the item is checked out of this storeroom. The system does not use this information internally. The information is combined with the credit expense code and passed to the general ledger when Oracle Utilities Work and Asset Management is linked to financial accounting software.

**Asset Expense -** You can use a list of values to select the asset expense code. It is combined with the asset account to form an account number for use with accounting software.

**Reorder Type -** The Reorder Type field is controlled by a drop-down list of four possibilities. Settings in the Batch Stock Reorder business rule determine how records are automatically created as a result of the setting of this field.

> **Automatic Reorder** - Selecting Automatic Reorder allows the system to automatically reorder for you when the quantity reaches or falls below the Reorder Point set on the Pricing view. The system will generate a Requisition or a Purchase Order record according to the settings established in the Batch Stock Reorder Business Rule. The system shows the type of document that will be produced in the Source field.
>
> When cutting a purchase order, the system checks to see if the item is included on an active blanket contract (in the Blanket Contract module of the Purchasing subsystem). If the item is not on a blanket contract, the system will simply create a new Purchase Order record in the status indicated in the Batch Stock Reorder Business Rule. If the item is on a valid contract, the system will use the contract to order against (it will also include the Blanket

Contract ID on the Requisition record). If the contract is not valid for any reason – has expired, for example – the system will create a record in the Reorder Review module of the Inventory subsystem.

**Reorder Review** - If you select Reorder Review, the system flags the item for reorder review when the quantity reaches or falls below the Reorder Point set on the Pricing view. Reorder review is conducted in the Reorder Review module of the Inventory subsystem.

*Note:* The system does not alert users when a Reorder Review record is automatically created. Therefore, it is important to make a review of new items in the Reorder Review module part of your regular routine. One simple way to do this is to create a saved search.

**Contact Reviewer** - If you select 'Contact Reviewer', the system sends an alert to the designated reviewer when the quantity reaches or falls below the Reorder Point set on the Pricing view. The reviewer is designated in the Batch Stock Reorder Business Rule.

**No Auto-Reorder** - Selecting No Auto-Reorder removes the item from the automatic reorder process and requires that someone track the item for reorder. No Auto Reorder is the only option available for Direct, Consignment, and Phantom, stock types.

**Credit Expense -** You can use a list of values to select the credit expense code. It is combined with the credit account to form an account number for use with accounting software.

**Source -** The Source field indicates whether the automatic reorder process will initiate a Requisition or a Purchase Order record, which is determined by the settings established in Batch Stock Reorder Business Rule. For more on requisitions, see the section titled Requisitions. For more on purchase orders, see the section tilted Purchase Orders. The field has an associated list of values controlled by controlled by a code table.

**Reviewer Code -** Enter a code to classify storeroom records by reviewer. The field has an associated list of values controlled by controlled by a code table.

**Markup -** Use this check box and associated field to indicate if there is a markup to be charged when the item is checked out of the storeroom. If a markup is to be used, indicate the rate in the field to the right of the check box.

You can discount the price charged for the item by entering the wrong value. A markup rate of '2' doubles the price of the item, a markup rate of '1.1' raises the price by 10% but a rate of .1 actually discounts the price to 10%.

**ABC Class -** These two fields represent the ABC class for the item in the storeroom and the last date that the ABC class was calculated. This information is supplied by the system and cannot be modified.

**Last Issued -** The Last Issued field is completed by the system and indicates the date that the item was last issued from this storeroom. The system gets this information from the Stock Checkout module of the Inventory subsystem. For more on stock checkout, see the section titled Stock Checkout.

**Last Physical -** These two fields display the identification number and date of the last physical inventory that included the item for this storeroom. The system supplies this information using data from the Physical Inventory module of the Inventory subsystem. For more on physical inventories, please refer to the section titled Physical Inventory.

**Last PO No. -** These three fields display the PO number, quantity ordered and date for the most recent purchase order that included the item for the storeroom. This information is provided by the system using data from the Purchase Order module of the Purchasing subsystem. For more on purchase orders, see the section on Purchase Orders.

**Last Blanket -** These two fields display the number and date of the last blanket purchase order used to create a purchase order for the item and the storeroom. Usually, the Last PO No. fields and the Last Blanket fields will be associated, because the purchase order will have been created

using the blanket purchase order. For more on blanket purchase orders, see the section titled Blanket Contract.

**Trackable -** Checking the Trackable check box indicates that this item is associated with one or more components. This field is only an indicator unless the Component ID Rule Business Rule is activated. If this field is checked and the business rule is active, the system will require you to enter a Component ID for any transaction that changes the quantity of the item for the storeroom.

An example might be a model of coolant pump that is being tracked. If there are four in stock; when one is released from the storeroom for installation in a refrigeration unit, Oracle Utilities Work and Asset Management will require the Component ID for the pump that is installed.

For more on Component ID, see the section titled Component ID.

**Repairable -** An item checked as 'Repairable' should be inspected to see whether it should be repaired before it is returned to the storeroom. However, this information is not used elsewhere in the system unless your organization has the system configured to support component repair.

*Note:* Also see the section on Materials Disposition for more on the accounting related repair of components.

In the field to the right of the Repairable check box, you can enter a standard return value for items if the item has a component identification number and the REPAIRABLE RETURN CREDIT VALUE is set to ON in the Repairables Processing Business Rule. Under these conditions, when the item is returned to a storeroom through the Stock Checkout module in the Inventory subsystem, the system can credit the work order that called for the component to be uninstalled, with the value in this field.

**Inspect -** An item that is marked 'Inspect' should be inspected by the receiving department before receipt is finalized. However, this is the only place this information is shown.

**QC Required -** An item checked as 'QC Required' should be inspected before receipt is finalized. You can enter a code for the inspector in the field next to this check box. However, this is the only place this information is shown.

**Inspector -** The unlabeled field next to the QC Required check box is informational only and represents the Inspector to contact about the inspection of the item.

**Lot Management -** Checking the 'Lot Management' check box indicates that this item comes in lots and that the lots are being tracked. If this field is checked, the system will require you to enter a lot number for any transaction that changes the quantity of the item for the storeroom.

# Storeroom Views

In addition to any standard views, the module includes the following:

## Storeroom Pricing

The Storeroom Pricing view is designed to help you monitor pricing and inventory of the item within the storeroom.
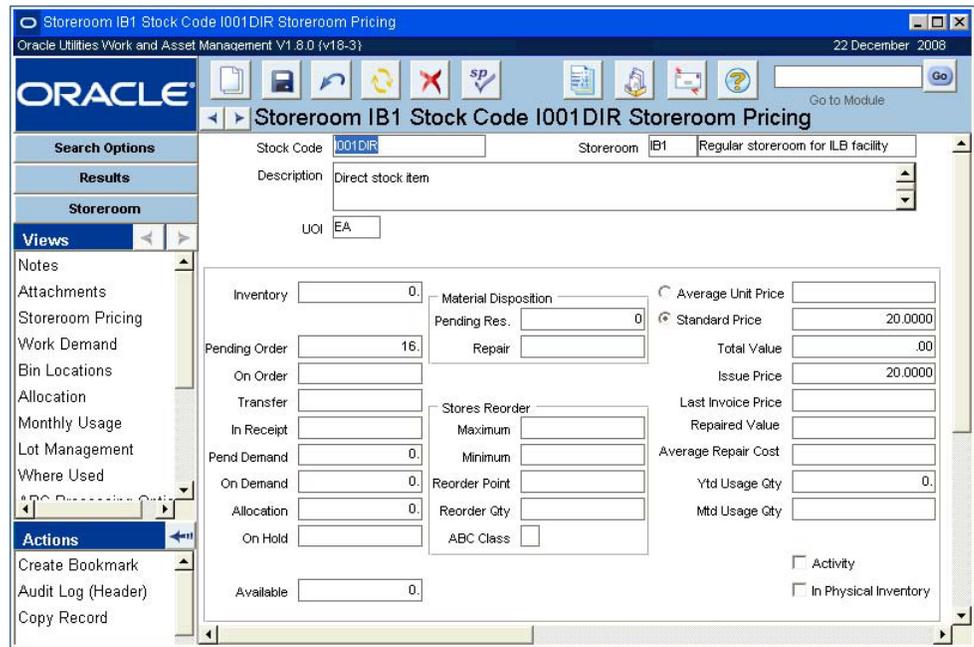


**Storeroom Pricing view**

The upper third of the view displays the stock code and description and storeroom code and description. The rest of the view displays the following fields:

**Inventory  -** Shows the number of items in inventory as they are recorded in the Physical Inventory module.

**Pending Order -** The total number of items with this stock code that appear on a Requisition or a purchase order that has not been issued.

Settings in the Storeroom Demand Allocation Business Rule determine whether the Pending Order quantity also includes Request for Quotes line items which originated from an Approved Requisition.

**On Order -** The total number of items with this stock code that appear on an issued purchase order but have not yet been received.

**Transfer -** This field displays how many of the item are scheduled for transfer to the storeroom from another storeroom. The system calculates this number based on transfers recorded in the Stock Transfer module of the Inventory subsystem. The field cannot be updated manually.

**In Receipt  -** The number of items that are in receipt but have not yet been accepted and stocked in the storeroom.

**Pending Demand -** This field shows the sum of the remaining quantities needed on all Work Order Task records for the stock code. The system only uses Task records in Planning or Approved status to make the calculation. Direct type stock items are not included in Pending Demand because they are not maintained in the storeroom.

**On Demand -** Shows the number of the item that are needed to fill active Work Order, Fleet Work Order, Stock Transfer or Checkout Request records. The system calculates this information based on data taken from the Work Order module of the Maintenance subsystem (as well as fleet work orders and PM driven work orders), and the Stock Transfer and Checkout Request modules of the Inventory subsystem. Direct type stock items are not included in the On Demand quantity because they are not maintained in the storeroom.

*Note:* Settings in the Available Quantity Calculation Business Rule and the Storeroom Demand Allocation Business Rule determine how the On Demand and On Hold quantities are calculated.

**Allocation -** This field reports the quantity of direct purchase items stored as courtesy. For more on courtesy stores, see the discussion on stock types in the System Basics User Guide.

**On Hold -** This field shows the quantity of this stock item on hold in the storeroom for any reason.

**Available -** The system calculates this information by adding the values in the Inventory and the On Order fields and subtracting the value in the On Demand and On Hold fields to display the amount of items with this stock code that are available. The field cannot be updated manually, but the quantity can be adjusted manually through the Inventory Quantity Adjustment view.

> **Pend Res.** - This field shows the sum of all records in the Material Disposition module with a status beginning with the word Pending. i
>
> **Repair** - This field reports items that are in the Component ID module as components and which have a status of 'in repair'. For more on Component ID status, see Component ID.
>
> **Maximum** - You can set a maximum quantity that should be held in the storeroom in this field. The system uses this as a target maximum when processing automatic reorders.
>
> **Minimum** - You can set a minimum quantity that should be held in the storeroom. The system uses this as a target minimum when processing automatic reorders.
>
> **Reorder Point** - When quantities reach or fall below the Reorder Point, the system automatically reorders the item, or flags it for review. For automated reorder processing, this is the "trigger" point.
>
> **Reorder Qty** - The reorder quantity is the amount the system will order (e.g. in sets of 5) during automatic reordering. You must enter a Reorder Quantity greater than zero. If you leave this field blank or enter a zero, the system does not know how much to order and returns an error message during batch stock reorder processing.
>
> **ABC Class** - The ABC Class field represents the ABC class for the item in the storeroom. This information is supplied by the system and cannot be modified.

**Average Unit Price -** The system maintains the average unit price (AUP) as the average cost per item, using price adjustments, purchase orders, and invoices to recalculate AUP. When selected, this is used in conjunction with and markup rate (if appropriate) to calculate the issue price. The setting of the Average Unit Price Calculation rule key in the Invoice Setup Criteria business rule determines how this value is calculated. This field keeps track of the current average price of the unit, based on all invoices for that item and storeroom. In order to use the average unit price as the issue price, click the radio button next to the Average Unit Price field. The settings in the Receiving Configuration business rule determines whether or not this price factors in taxes when it is calculated. The setting of the Average Unit Price Calculation rule key in the Invoice Setup Criteria business rule determines how the average unit price is calculated.

**Standard Price -** For stores issues and returns only, you can set an item price. If you enter a value and choose the Standard Price button, the system uses the price and the markup rate (if the Use Markup box is checked on the Data view of the Storeroom header) to calculate issue price. You can determine the standard price and enter it in this field. In order to use the standard price as the issue price, click the radio button next to the Standard Price field.

*Note:* Standard pricing uses a manually entered price while average unit pricing uses a system-maintained price. The system maintains the issue price based on the storeroom pricing option selected.

**Total Value -** The dollar value of items currently in inventory. The system calculates total value as the AUP multiplied by inventory quantity. Using the standard price does not affect the total value. The Total Value is calculated by multiplying the quantity on hand by the average unit price.

**Issue Price -** Used only for issuing and returning stock through the Stock Checkout module. It is calculated by the system, using the AUP or standard price (whichever radio button is selected) and then multiplied by the markup rate (if the Use Markup indicator is checked on the Storeroom Data window). The Issue Price is the price at which the item should be issued. You have two choices for the issue price; the Average Unit Price and the Standard Price. In order to select which price will used when the item is issued, click the radio button next to the option that you want to use.

**Last Invoice Price -** The system supplies this information based on the last recorded invoice. For more on invoicing, see the section titled Invoicing.

**Repaired Value -** You will only be able to see this field if you have the Repairable Processing Business Rule configured to use the Material Disposition module in the Inventory subsystem. The Repaired Value represents the value of the item when it is returned from repairs to the storeroom. You should enter a value here because it affects the Average Unit Price and other value calculations for the storeroom. The value in this field will affect the total value of the storeroom and other calculations.

**Average Repair Cost -** The system calculates the average repair cost by totaling all of the costs listed on Work Order records for repairing the item and dividing that amount by the number of times the item has been repaired. This field is system maintained and can not be modified.

**YTD Usage Quantity and MTD Usage Quantity -** These quantities reflect the net total issued for the current year and month. For each return, these values decrease by the return quantity. This information is automatically maintained by the system.

**Activity Indicator -** The system checks this box to indicate that there has been movement in or out of the storeroom for that stock item, or if the reorder information is changed. The box remains checked until a batch process runs that looks for stock item records which have been marked as active. The batch process then completes the activity and removes the activity indicator.

**In Physical Inventory Indicator -** The In Physical Indicator signifies that the item is in the process of being inventoried.

### How to Adjust the Inventory Quantity of a Stock Item

1. **Open the appropriate Storeroom Catalog record.**
2. **Select Adjust Inventory Quantity from the Actions list.**
   The system opens the Quantity Adjustment window showing the current quantity in the Old Quantity field.

   This action is available only for inventory and expense type stock items. Depending on the records you have viewed previously during your session, it may be necessary to click the Refresh icon on the toolbar to display the Adjust Inventory Quantity option on the Actions list.

3. **Enter the New Quantity or enter the Adjustment Quantity.**
   The system will calculate the Adjustment Quantity or the New Quantity, depending on which field you complete. The New Quantity represents the quantity after adjustment, while the Adjustment Quantity represents the quantity by which you want to change the on hand number.

You must use a slightly different procedure to change the quantity of stock items that are tracked by lots. Instead of entering the new quantity at the upper portion of the screen, enter a Lot ID and the new quantity in the bottom section.

You can enter negative quantities to adjust the quantity down, but the system does not check to make sure that the result is not a negative on hand quantity.

4. **Select an Adjustment Reason from the list of values and enter comments if necessary.**
   This list is controlled by a code table.

5. **Click the Save Changes button.**
   The system will make and save the adjustments, and close the Quantity Adjustment window.

### How to Adjust the Inventory Quantity of a Lot Managed Stock Item

Note: You must use a slightly different procedure to change the quantity of stock items that are not tracked by lots. The three fields in the upper part of the window are reserved for stock items that are not marked for lot management. If the stock item is marked for lot management, these fields cannot be updated.

1. **Open the appropriate Storeroom record.**
   The Storeroom module is in the Resource subsystem.

2. **Select Adjust Inventory Quantity from the Actions list.**
   The system opens the Quantity Adjustment window showing the current quantity in the Old Quantity field.

   This action is available only for Inventory and Expense type stock items. Depending on the records you have viewed previously during your online session, it may be necessary to click the Refresh icon on the toolbar to display the Adjust Inventory Quantity option on the Actions list.

3. **Select an Adjustment Reason from the list of values.**
   This list is controlled by Code Table 187 in the Code Table and Codes module in the Administration subsystem.

4. **Select a Lot ID from the list of values.**
   This list is controlled by entries on the Lots view of the Catalog module.

5. **Enter the New Lot Quantity.**
   This number must be higher than the Old Lot Quantity. If it is not, the system will send you a warning and will not let you save the change.

6. **Click the Save Changes button.**
   The system will make and save the adjustments, and close the Quantity Adjustment window.

## Maintaining the Average Unit Price

The system maintains the stock item AUP (Average Unit Price) in the storeroom automatically. Whether initially set by a user (using the Adjust Average Unit Price action in the Storeroom module) or by the system, the AUP is calculated as follows:

AUP = Total Value / Inventory Quantity

*Note:* The setting of the Average Unit Price Calculation rule key in the Invoice Setup Criteria business rule determines how this value is calculated.

When a purchase order is received, the system adjusts the total value (by received quantity x purchase order item price) and the inventory quantity (by received quantity), then recalculates the AUP.

When the invoice is entered, approved, and posted, if there is a price difference, the system applies the difference to the total value, then divides by the current inventory quantity to recalculate AUP.

### How to Set or Reset an Average Unit Price for a Stock Item

Although the system maintains the AUP for you, occasions may arise where you need to manually change the Average Unit Price. You can do so in the Average Unit Price Adjustment view. You can adjust the average unit price for all types of stock item except direct and phantom types.

1.  **Open the Storeroom Catalog record for the stock item.**
    The Storeroom Catalog module is in the Resource subsystem.

2.  **Select Adjust Average Unit Price from the Actions list.**
    The system opens the Price Adjustment window with the Old Price displayed from the Storeroom Catalog record Pricing window.

    Note: This action is available only for inventory and expense type stock items. Depending on the records you have viewed previously during your session, it may be necessary to click the Refresh icon on the toolbar to display the Adjust Average Unit Price option on the Actions list.

3.  **Enter the New Price.**
4.  **Select an Adjustment Reason from the list of values and enter comments if needed.**
5.  **Click the Save Change button.**
    The system saves the change, closes the Price Adjustment window, recalculates the Issue Price (if the Issue price is based on the Average Unit Price) and enters a write-off (IW) transaction into the Storeroom Transaction Log to account for the storeroom value difference. You can check the new Issue Price by selecting the Pricing radio button at the top of the storeroom Catalog record.

## Work Demand

You can use the Work Demand view to review any active Work Order, Checkout Request and Transfer Request records that are placing demand on the storeroom for an item.

This record shows two work records the first needs 3 of this stock item and the second needs one. The first is in Pending status because the Work Order record is in either Created, Pending Approval, or Approved status. The second is in Open status because the Work Order record is Active.
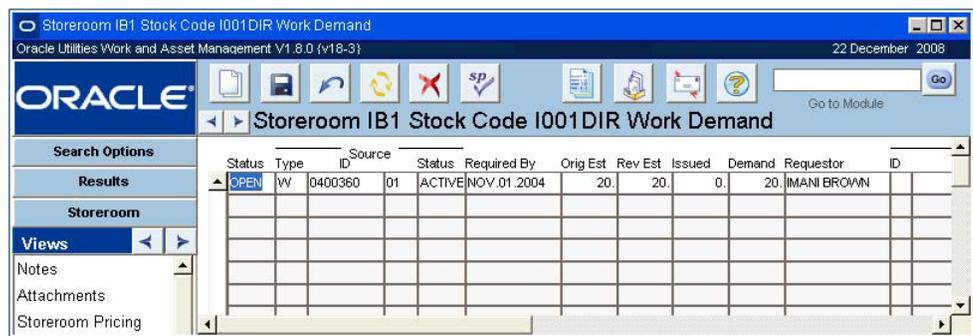


**Work Demand view**

All of the information presented in this window is provided by the system from other modules and cannot be updated manually. The information on the Work Demand view includes:

**Source Fields -** The Demand Source fields show the work record number ('C' indicates a checkout request, 'W' indicates a work order and 'T' indicates a stock transfer), the record status, required by date, the estimated quantities, the number of items actually issued and on demand, and the requestor.

Possible demand statuses are Pending, Open, and Completed. Pending and Open only refer to demand placed by Work Order records. When the Work Order record is in Created, Pending Approval, or Approved status the items will be in Pending status. The items are in Open status when the Work Order record is Active.

Items in Completed status do not automatically show in the view. In order to see items in Completed status, place the cursor in the status field, press F7, then select Completed from the list of values. Press F8 to see the results.

**Asset Fields -** The Asset fields indicate the asset number for the asset requiring work and description of the task.

**Summary Fields -** The summary fields at the bottom of the window show the number of items Pending release and the number that are Open.

## Bin Locations

You can use the Bin Locations view to specify where to keep the stock item in the storeroom. You can use the Bin field to name the location of the bin or to track a label for the bin. You can also identify one bin as the primary bin. The system copies the primary bin location/label to the Data window of the Storeroom Catalog header.
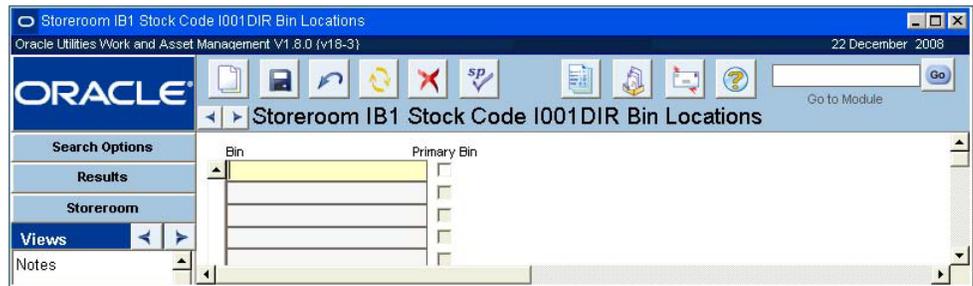


**Bin Locations view**

## Allocation

The Allocation view is only available for direct stock types. It presents detailed information on items allocated, or reserved, as courtesy stores items, including the quantities requested and allocated, the name of the requestor, and required date. Courtesy storage items are "allocated" to ensure that the items are reserved for the intended user.



**Allocation view**

## Monthly Usage

The Monthly Usage view presents a log of stock item usage in monthly increments. The Monthly Usage view presents the following information: Year, Month and Quantity. The system supplies this information and it cannot be updated manually.



**Monthly Usage view**

## Lot Management

Certain types of stock are received in lots. The Lot Management view displays any Lot IDs that were identified with the stock item when it was received into inventory.



**Lot Management view**

In order to identify a Stock Item as one you want to manage in Lots, check the Lot Management check box on the Storeroom record (in the Resource subsystem) for that Stock Item.

## Where Used

Select Where Used from the Views list to open a window displaying a summary of all the Bills of Materials (BOM) that include the stock item. The displayed information includes the department, area, asset type and number, component, BOM number and the quantity for each bill of materials.

Remember: You can drill down to the specific records associated with the information in each of the fields.

## ABC Processing Options

ABC classification represents a way of prioritizing how items are stocked, inventoried and reordered. The system can be configured to automatically reorder items. For each unique combination of a storeroom and a stock item on the storeroom's catalog, you can use the check boxes in the ABC Processing Options view to determine what you want the system to do with the ABC information.
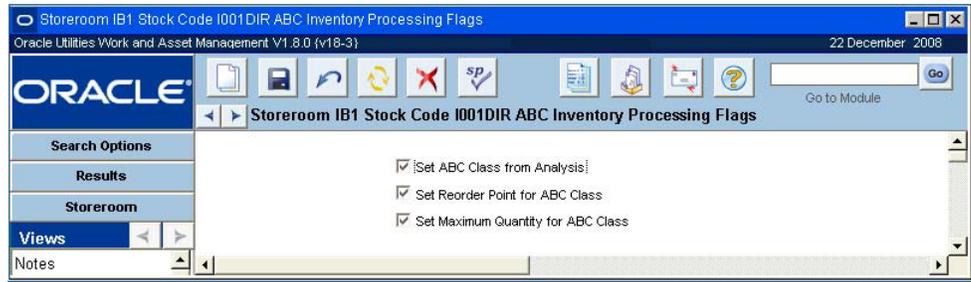
**ABC Processing Options view**

## Stores Lookahead

Select Stores Lookahead from the Views list to see projected supply and demand for the stock item due to transactions such as purchase orders, work orders, checkouts and return requests, etc. The information in this window is calculated by the system and cannot be updated here.
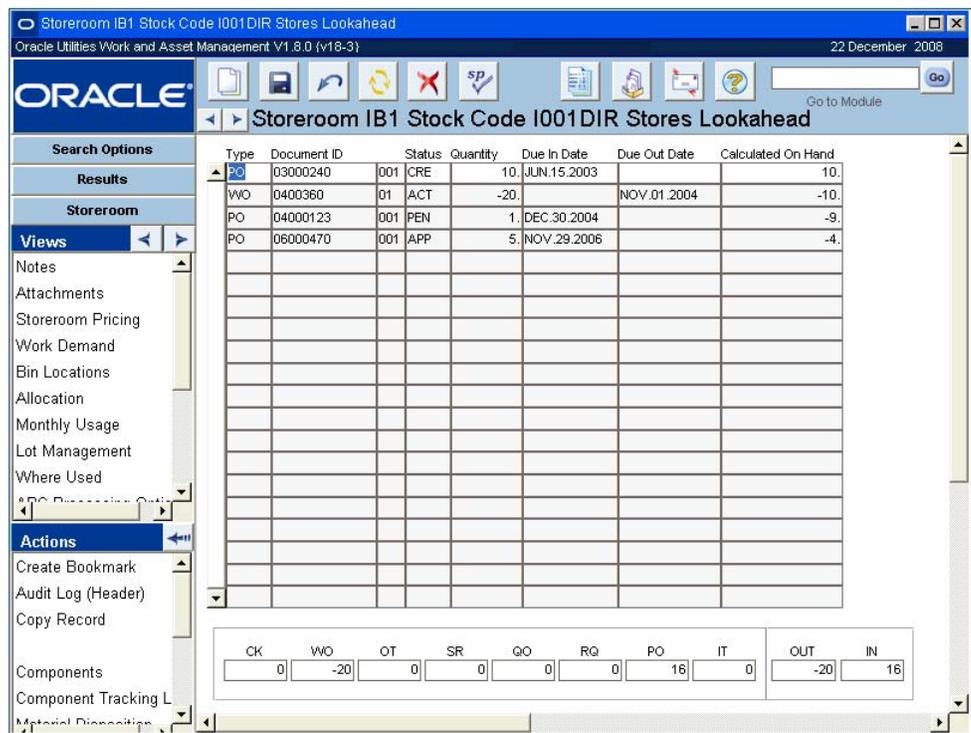


**Stores Lookahead view**

Type

**Transaction types for Due Out quantities are:**

CK - Approved Checkout Request

OT - Outgoing Transfer

WO - Active Work Order

**Transaction types for Due In quantities are:**

IT - Incoming Transfer

PO - Purchase Order

QO - Request for Quote

RQ - Approved Requisition

RR - In Progress Return Request

SR - Reorder Review

**Document ID and Item Number -** These fields indicate the record number and line item number for the transaction. You can drill down on the ID number to display the Work Order, Purchase Order, Requisition or other source document record.

**Status -** The status indicates the current status of the transaction. The system will display transactions from the point that they are created to the point that they are completed. For example, Purchase Order records will be displayed until all items are either canceled or accepted into inventory.

**Quantity -** The Quantity field indicates how many units are due in or scheduled to go out.

**Due In Date and Due Out Date -** These fields indicate the projected dates when the transaction will be complete.

**Calculated On Hand -** The Calculated On Hand field displays the quantity of the item that should be on hand when the transaction is complete. This quantity is calculated as the current On Hand quantity plus or minus the quantity related to the transaction.

**Summary Box -** The box at the bottom of the window contains summary information based on the type of records displayed. The OUT and IN fields show the total number of items due out and due in, respectively.

## Unused Demand

Select Unused Demand from the Views list to see a listing of Work Order, Checkout Request, and Stock Transfer records that placed demand on the stock item but did not ultimately use the entire amount requested. This view provides visibility of demand placed but not used (over-demand) that caused inventory quantities to be increased over the maximum level. None of the fields on this screen can be modified. You can double-click the Work Order field to open the associated work record.


**Unused Demand view**

When demand is released from a stock item the system checks to see if an over-stock condition exists in the storeroom. If it finds that the inventory quantity of the item exceeds the maximum quantity, an alert is sent to the supervisor indicated on the Storeroom Setup record. The alert navigates the supervisor to the associated storeroom record to review Pending Demand and Pending Orders as well as to the Unused Demand view where he or she can identify which work records may have caused the over-stock. The system also displays an alert to the user when he or she completes a work record with unused quantities that will put the storeroom quantities over the maximum.

The supervisors and users who will receive alerts related to unused demand should make sure that the "Receive Alerts in Alerts Inbox" check box is checked in their User Profile. Otherwise they will not receive the appropriate alerts.

**Unused  -** This is the unused demand quantity, or the number of items that were "released" from demand. The system calculates this number by subtracting the number of items that were issued from the revised estimate quantity. This field only shows the number that were unused for that particular work record.

**WO and Task -** The system shows the Work Order and Task record numbers for which the items were intended to be used. Double-click either field to open the associated work record. Double-click either field to open the corresponding work record.

**Inventory, On Order, On Demand -** These fields show the number of items that remained in inventory, on order, or on demand when the items were released from demand for the work record represented on that line. They are the same values that are shown for these fields in the Storeroom Pricing view when the items are released.

**Maximum -** The set maximum amount of this stock code allowed in the storeroom.

**Transaction -** The date that the items were issued or released from demand.

**Planner -** Shows the supervisor code for the person responsible for the work record requiring the item.

**Rev Est -** Shows what was estimated as the amount of the item needed as it was indicated on the work record.

**Issued -** The number of items that were actually issued in order to complete the work.

**Released By -** The name of the person responsible for issuing the items.

**Plant -** Shows the plant number where the work or issue took place.

## Blanket Contract

The Blanket Contract view lists all blanket contracts in Active status containing the stock code as an item that is not in Canceled status. The View shows important information from the blanket contracts such as the blanket contract numbers, the statuses of the blanket contracts, used amounts, and limit amounts, as well as the description of the blanket contracts and the vendors that the contracts were negotiated with. All of the information on this screen is imported from the Blanket Contract module by the system and cannot be modified. You can double-click the blanket contract number or the revision number to open a specific Blanket Contract record. Please refer to the document entitled Blanket Contracts in the Purchasing Subsystem User Guide for more information on blanket contracts.



**Blanket Contract view**

# Stock Reorder Overrides

The Stock Reorder Overrides view is only available when the Storeroom Reorder Processing rule key in the Batch Stock Reorder business rule is set to STOREROOM. This setting causes the system to use buyer, vendor, manufacturer, and tax information from the storeroom when generating Requisitions and Purchase Order records. Typically, this information is taken from the Catalog module and is not entered at the storeroom level. You may want to use storeroom data, however, if your facilities are spread over a wide area, with different tax structures and vendors, but share the same master catalog.

Setting the business rule to use storeroom data only impacts Requisitions and Purchase Order records generated by batch processing, not other purchasing documents. If batch processing encounters records where buyer, vendor, or tax information is missing, it writes an error to the Job Manager Log. If such errors occur, you can update the appropriate Storeroom records and batch will process the record on the next run.
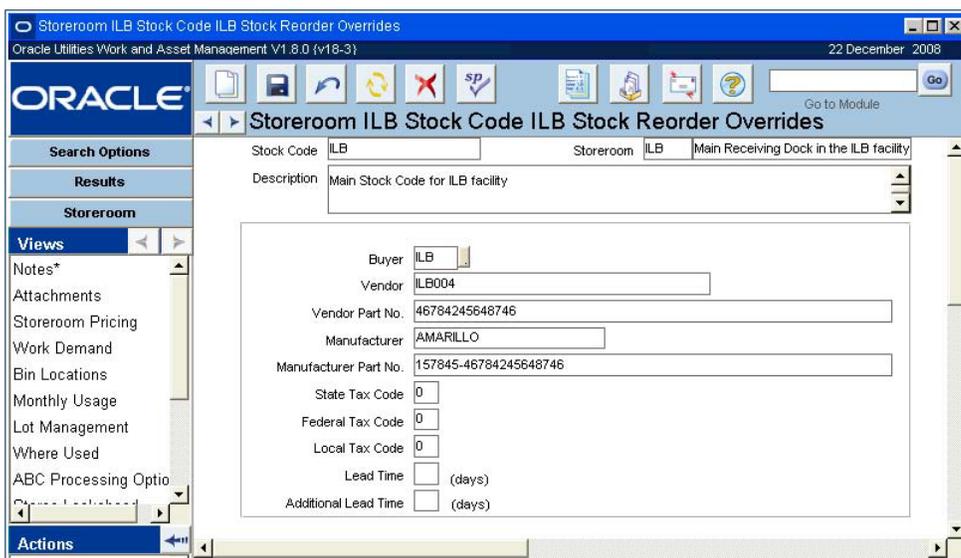


**Stock Reorder Overrides view**

*Note:* This view is only available if your organization as set the Batch Stock Reorder Business Rule to use storeroom data.

**Buyer -** The buyer is the individual responsible for purchasing the item. The field has an associated list of values controlled by the Buyer module in the Administration subsystem.

**Vendor and Manufacturer Information -** You must enter a primary vendor for each stock item and the vendor must be established in the Vendor module of the Purchasing subsystem. You can also list the Manufacturer for each item, along with vendor and manufacturer part numbers for each record, but this information is not required. For more on the vendor records, see the section titled Vendors in the Purchasing subsystem.

**Tax Information -** The three tax fields contain tax codes for State/Provincial tax, Federal tax and Local tax. These fields have associated lists of values that are controlled by Code Tables 160, 159 and 161 respectively, in the Code Table and Codes module of the Administration subsystem.

**Lead Time -** The estimated number of days it will take for the Vendor to supply the item after it is ordered. If your organization uses Vendor information from the Storeroom, you should enter Lead Time here.

**Additional Lead Time -** The estimated number of days your organization requires, in addition to the Vendor lead time, for procurement.

# Chapter 22

## Storeroom Setup

Before stock items can be placed in a storeroom, the storeroom must be defined. You can define the profile for each of your storerooms in the Storeroom Setup module.

## Storeroom Setup Records

You can define the profile for each of your storerooms in the Storeroom Setup module. Once both a Storeroom Setup record and a Master Catalog record exist, you can associate the two by creating a Storeroom Catalog record. The Storeroom Catalog record then functions as a usable stock item.



**Storeroom Setup Screen**

The following fields are included:

**Storeroom -** The storeroom code uniquely identifies the storeroom.

**Type -** The Type field categorizes the storeroom. It has an associated list of values controlled by Code Table 4 in the Code table and Codes module of the Administration subsystem.

**Description -** The Description field can be used to provide details about the storeroom.

**Location -** The Location field can be used to indicate the physical site for the storeroom.

**Supervisor -** The Supervisor field indicates the supervisor responsible for the storeroom.

**QC Storeroom -** The QC Storeroom field contains the code for the storeroom responsible for any quality control inspections done in support of this storeroom.

**Default Markup Rate -** The Default Markup Rate field indicates the markup rate that the system automatically enters when you create a new Catalog (e.g. stock item) record. You can change the markup rate for individual items on the appropriate Catalog record.

**Default Account and Expense Codes -** The information entered in the Default Account and Expense Code fields in the center section of the Storeroom header record is automatically copied to new storeroom records when you insert new records in the storeroom. You can use the list of values associated with each field to select the default asset and credit account numbers and the asset, credit and debit expense codes. In order to enter an account here, the account must first be established and set to Active status in the Account module.

**Default Repairable Account Number -** The Default Repairable Account Number field will only display if the Repairable Processing business rule is set to show the field. This is the account number that the system will insert on any Work Order record for repairable components tracked in the Material Disposition module of the Inventory subsystem. This account number can be changed on the Work Order record, if necessary, but if not, the account number represents the account that will be charged and credited for the repairs and return of the component. The field has an associated list of values controlled by the Account module in the resource subsystem. In order to enter an account here, the account must first be established and set to Active status in the Account module.

**Storeroom Accounts -** You can use the Storeroom Accounts section of the Storeroom Setup header record to establish additional default accounts for the storeroom. The information you enter in these fields is not directly linked to any other part of Oracle Utilities Work and Asset Management, but is used when interfacing to other software applications such as a general ledger application. Each field has an associated list of values controlled by the Account module in the resource subsystem. In order to enter an account here, the account must first be established at set to Active status in the Account module.

**How to Set Up Storerooms**

You can enter shipping and invoicing address information for the displayed storeroom using the Addresses view in the Storeroom Setup module.

1. **Open the Storeroom Setup module under Catalog in the Resource subsystem.**
2. **Click New.**
3. **Enter a unique storeroom ID in the Storeroom field, select a Type and enter a Description.**
4. **Enter the location of the storeroom and the storeroom supervisor.**
5. **Enter account numbers and expense codes as appropriate to the account types indicated.**
6. **Fill in additional fields according to the** Field Descriptions**.**
7. **Click Save.**

Select the Statistics view in the Storeroom Setup module to display statistical information for the storeroom.

# Storeroom Setup Views

The module includes the following views:

## Addresses

Select Addresses from the Views list to enter shipping and invoice addresses for the storeroom. This information is automatically transferred to Purchase Order and Invoice records when applicable.
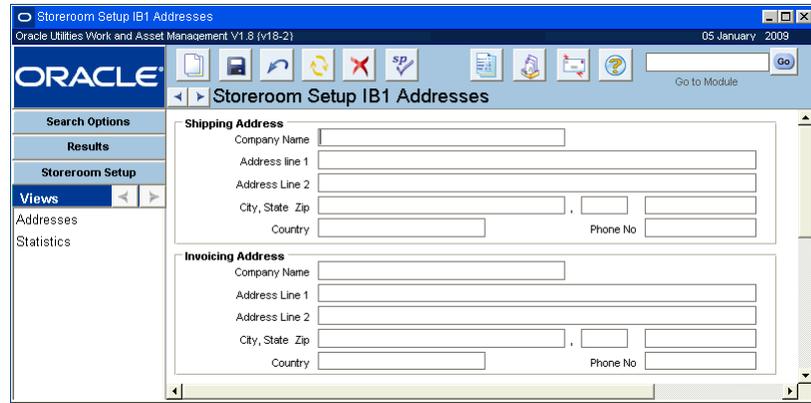
**Addresses view**

## Statistics

Select Statistics from the Vies list to review summary information for the storeroom. For each stock type the system shows the number of items and the total dollar value.
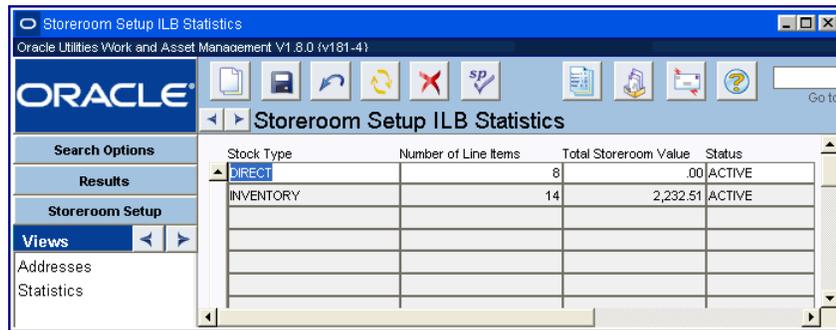


**Statistics view**

# Storeroom Setup Actions

In addition to standard actions, the following can be completed from within the module.

## ABC Inventory Processing

Total value usage is calculated by multiplying the item value by the total usage over a time period.

ABC classification represents a way of prioritizing how items are stocked, inventoried and reordered, by ranking total value usage of each item. Total value usage is calculated by multiplying the item value by the total usage over a time period.

Using ABC processing requires some preparation using several areas of the system. Since the calculations are based on usage history, you should make sure there is a sufficient history before running ABC processing.

### About ABC Inventory Processing

Typically, a storeroom contains a mix of a relatively few high value items and a large number of less expensive ones. The more valuable items may need to be closely monitored and controlled, while the inexpensive items do not need to be managed as carefully. Using ABC processing, you can classify stock items in three categories, from A (high value usage) to C (low value usage). You can also identify stock items to exclude from ABC processing.

Once stock items have been ranked by total value usage, this information can be used to dictate physical inventory cycles. For example, you might decide that a high dollar usage item, class A, should be inventoried every 3 months, class B every 6 months, and class C each year. ABC data can also be used to reset the ABC class, Reorder and Maximum Quantity on Storeroom records.

The parameters for calculation are defined in the ABC Inventory Business Rule. For each class (A, B, C), you can define:

- **% of Items** - the percentage of items to include in the ABC Class.

- **% Over Safe** - the percentage over the safety level (minimum quantity) to set the reorder point quantity for the ABC Class.

- **# of Months** - the desired reorder frequency for the ABC Class.

Once you have set the parameters and marked the Storeroom records that are to be included in the calculations, you can run ABC processing.

The following steps are involved in running ABC processing:

After running all four actions all of the storeroom records marked for ABC processing, are assigned an ABC class and updated with the appropriate reorder quantity values. Each of the actions can also be run separately, but by doing so only each targeted change pertaining to the action takes effect.

## Collecting ABC Analysis Data

Running ABC Step 1

During the first step, the system collects historical dollar usage value data for all stock items with ABC processing options activated within the selected storeroom.

### How to Collect ABC Analysis Data
1. **Open the Storeroom Setup module and navigate to the appropriate Storeroom record.**
   The Storeroom Setup module is located in the Resource subsystem.

2. **Select Collect ABC Analysis Data from the Actions list.**
   The system displays a confirmation window where you can accept or change the storeroom for which you are about to run ABC inventory processing.

3. **Click the Create ABC Analysis Records button.**
   If ABC inventory processing has never been performed on the listed storeroom, the system asks if you wish to continue. Otherwise, the system tells you the date on which ABC inventory processing was last performed for the listed storeroom and asks if you wish to continue.
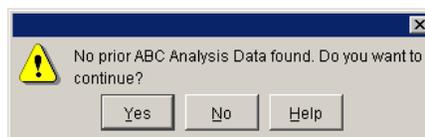


4. **Click the Yes button.**
   The system generates internal ABC Analysis records and presents you with a count of items processed.
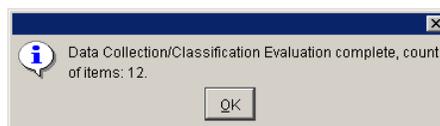
Collected data is stored behind the scenes and cannot be accessed from within the application. It does not impact the Storeroom records until you execute either the Update Quantities on Storeroom Records action or the Update ABC Class action.

## Updating ABC Class on Storeroom Items

Running ABC Step 2

After historical data has been collected, the next step is to update the ABC class on Storeroom Catalog records.

### How to Update the ABC Class on Storeroom Items

1.  **Select Update ABC Class from the Actions list in the Storeroom Setup module.**
    The system displays a confirmation window, defaulting the Storeroom ID to the storeroom listed on the underlying Storeroom Setup record.

2.  **Select the Update ABC Class on Storeroom button.**
    The system updates Storeroom Catalog records according to collected ABC information, presenting the total number of records processed.

## Reorder Quantities on ABC Analysis Records

Running ABC Step 3

The next step is to calculate reorder quantities for the stock items. The system updates reorder quantities on the ABC Analysis records generated earlier.

### How to Update Reorder Quantities on ABC Analysis Records

1.  **Select Update Reorder Quantities on ABC Analysis Records from the Actions list in the Storeroom Setup module.**
    The Update Reorder Quantities window displays.

2.  **Choose which class of records to update.**
    Select A only, both A and B, or all three classes.

3.  **Click the Update Reorder Quantities button.**
    The system updates the records and shows a count of the number of items processed.

    Collected data is stored behind the scenes and cannot be accessed from within the application. It does not impact the Storeroom records until you execute the Update Quantities on Storeroom Records action.

## Updating Reorder Quantities on Storeroom Records

**Running ABC Step 4**

The final step is to update reorder quantities on the Storeroom Catalog records.

### How to Update Reorder Quantities on Storeroom Records

1.  **Select Update Reorder Quantities on the Storeroom records from the Actions list in the Storeroom Setup module.**
    The Update Reorder Quantities window displays.

2.  **Choose which class of records to update.**
    Select one of the following options from the list of values: A only, both A and B, or all three classes.

3.  **Select the Update Reorder Quantities button.**
    The system presents a count of the number of items processed and updates the appropriate Reorder Quantity fields on the Storeroom Catalog records.

# Stock Reorder Overrides

The Stock Reorder Overrides view is available only if your organization has configured the Batch Stock Reorder Business Rule to use buyer, vendor, manufacturer, and tax information from the storeroom when generating Requisitions and Purchase Order records. Typically, this information is taken from the Catalog module and is not entered at the storeroom level. You may want to use storeroom data, however, if your facilities are spread over a wide area, with different tax structures and vendors, but share the same master catalog.

Setting the business rule to use storeroom data only impacts Requisitions and Purchase Order records generated by batch processing, not other purchasing documents. Batch processing writes an error to the Job Manager Log if it encounters records where buyer, vendor, or tax information is not available. If such errors occur, you can update the Storeroom records and batch will process the record on the next run.

**Buyer -** The buyer is the individual responsible for purchasing the item. The field has an associated list of values controlled by the Buyer module in the Administration subsystem.

**Vendor and Manufacturer Information -** You must enter a primary vendor for each stock item and the vendor must be established in the Vendor module of the Purchasing subsystem. You can also list the Manufacturer for each item, along with vendor and manufacturer part numbers for each record, but this information is not required. For more on the vendor records, see the section titled Vendors in the Purchasing subsystem.

**Tax Information -** The three tax fields contain tax codes for State/Provincial tax, Federal tax and Local tax. These fields have associated lists of values that are controlled by Code Tables 160, 159 and 161 respectively, in the Code Table and Codes module of the Administration subsystem.

# Chapter 25
## Storeroom Transaction Log

Upon each instance of a storeroom transaction that impacts price or quantity the system automatically generates a Storeroom Transaction Log record. This provides a complete history of stores transactions such as stock issues and returns, price or quantity adjustments, and so on. This information is for display only and cannot be modified.



**Storeroom Transaction Log record**

This module uses standard functionality used in all Transaction Logs to rearrange columns, save the layout, and sort data. Please refer to the System Basics guide chapter on Transaction logs for more information.

# Chapter 26
# Bill of Material

You can build parts lists for assets, components and fleet assets by using the Bill of Materials module. A bill of materials can be a great advantage for maintenance personnel when they are working on a work order. The list provides a quick, easy way to order parts. Rather than researching stock items in the Catalog module, they can refer to the parts list for the asset directly from the Work Order record, picking the needed parts and ignoring the others.

## Bill of Materials Records

A bill of materials (BOM) is a list of parts required to maintain a piece of equipment. Defined in the Bill of Materials module (in the Resource subsystem), BOMs can be referenced on Asset or Component ID records to identify the stock items needed to maintain the associated asset or component.



**Bill of Materials record**

Bill of Materials records can be multilevel, with a list of components and lists of parts for the components, lists of parts that make up the parts, and so on. The level of detail you build into your Bills of Materials depends on your organization's resources and needs.

The following fields are included:

The upper section of the Bill of Materials header window displays general information about the bill of materials.

**BOM ID -** The system can create a unique BOM identification number for you if the field is listed in the Sequence Numbers module, or you can provide your own. If you enter an identification number the system checks to make sure it is unique when you Click Save. When updating, all fields except the BOM ID may be modified.

**Reference BOM ID -** You can cross-reference another bill of materials by entering the identification number in the Reference BOM ID field.

**Asset Type -** Asset Type helps you categorize different bills of materials, making it easier to locate the BOM ID when you want to attach to a specific Asset or Component ID record.

**Manufacturer Information -** If the bill of materials is related to a specific Asset or Component that has Manufacturer information, you can enter the Manufacturer Code and Part Number.

**The Items List -** The lower section of the window displays summary information about the parts in the list. Each line represents an item at the top level of the list; each item may have a sub-list of items that you can display by clicking the V button at the start of each line. After viewing a sub-list, you can return to higher levels by clicking either the Top Level or Up One Level buttons.

**Breakdown For -** When you initially open the record, the Bill of Materials list shown is for the top level of the list. The Breakdown For field indicates this by showing the same number as shown in the BOM ID field at the top of the window. However, each of these parts may have a lower sub-list of parts. For example an engine can consist of valves, pistons, etc. all with parts lists of their own. You can access the sub-lists (if any) by clicking the V buttons at the start of each line in the list. Return to the top level by clicking the TOP Level button. If a further breakdown exists for a BOM item, the V button will appear bold.

If a breakdown already exists, the system populates the "BREAKDOWN for" field with the selected stock code and lists the parts which make up that stock code. You can add, modify, or delete items as required. If no breakdown exists for the stock code, the system prompts you to create a new breakdown parts list. Click OK and the system populates the "BREAKDOWN for" field with the selected stock code and waits for you to add BOM Items to the breakdown list.

The system will not prevent you from listing a part on its own sub-list. In other words, the same part can be used on both the parent and child levels. Doing so, however, is illogical and will cause the system to behave erratically when you attempt to display the sublevel breakdown.

When you are finished entering information on the bill of materials breakdown, click the Save icon or press F10 to save the record in the system. To return to a higher level of the BOM breakdown, click the Top Level or Up One Level buttons.

After you enter or update breakdown information for a BOM item, you will most likely want to copy that information to all other BOM records where the stock code exists. You can use the Replace Breakdown action to complete this task. This action is described in more detail in the next section.

**Top Level -** Return to the top level of the BOM breakdown hierarchy by clicking the Top Level button.

**Up One Level -** Move up one level in the BOM hierarchy by clicking the Up One Level button.

**BOM Item -** The BOM Item field displays the stock code for the item. The item must first exist in the master catalog. A list of values is attached to help you identify the stock codes for the parts you want to list. The item description and unit of issue (UOI) associated with the stock code are entered in the appropriate fields by the system and may not be modified.

Click the column heading button to sort by this column.

**Type -** All items on a bill of materials will have a type code of 'C' for catalog.

**Sequence Number -** In order to list the parts specified order, enter a sequence number for each item. The system will not use the sequence number order until the next time you open the record.

**Item Description and UOI -** The information in these fields is carried over from the master catalog record for the BOM item.

**Quantity -** The Quantity field represents the total number of the part required for the item. For example, a single pump may need several seals of the same type. This information is helpful when reserving parts on a work order.

## Replace Breakdown

If you have entered or updated breakdown information for a stock item on the BOM, you can use the Replace Breakdown action to copy that information to all BOM records where the item exists. When you open the breakdown you want to copy and select Replace Breakdown from the Actions list, the system asks you to confirm that you want to copy the current breakdown to the other records. Click OK to copy the breakdown or click Cancel to return to the BOM without making changes.

The Replace Breakdown action is not available at the Top Level of a BOM record and is available only when a breakdown exists for the stock code.

## Additional Information

There is a hidden window off of the Bill of Materials header window that gives additional information about a part.

For each BOM Item, at any level in the breakdown, you can enter and maintain Reference BOM ID, related Drawing Number, Drawing Item Number and Service information. Click the arrow button to the left of the Item Description field to open the Additional Information window. The BOM Item is automatically populated with the selected BOM Item ID. Enter the appropriate information and Click Save.

After viewing the Additional Information window, you can return to the BOM header record by clicking the Bill of Material header button.
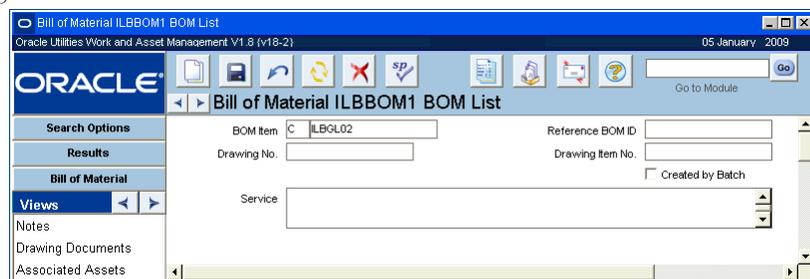


**Additional Information view**

**Reference BOM ID -** The Reference Bill of Material field displays the information from the same field on the Bill of Materials record. The reference Bill of Materials would be a master, or related, Bill of Materials that you would want to cross-reference.

**Drawing Number -** The code or number for and drawing provided by the manufacturer.

This field does not drill-down to the Attachments module in the Resource subsystem. However, you can scan in the manufacturer's drawing and associate it to the Bill of Materials (but not the line item) through the Bill of Materials Drawings view available by clicking the Documents button on the Bill of Materials window, or through the Views list.

**Drawing Item Number -** The Drawing Item Number field represents the reference number of the item on the manufacturer's drawing. The Document ID number in the Bill of Materials Drawings view should clearly refer to the Drawing Number field in the Additional Information window.

**Service -** You can describe any service notes in the Service field. It has the same features as the Description field in a standard Notes view; you can double-click the field to open the text editor, or prepare the notes in another application and paste them into the field.

**Created by Batch -** The system checks the Created by Batch check box if the stock item was automatically added to the BOM because of information in the inventory or receiving log.
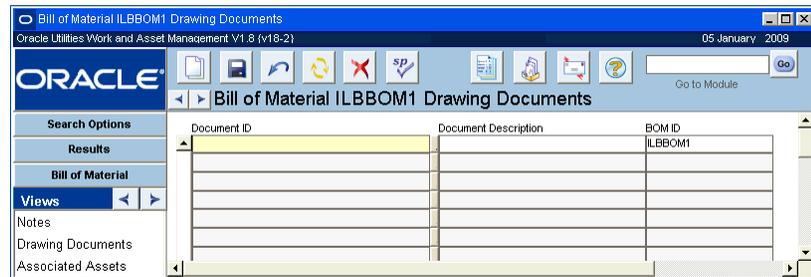
# Bill of Materials Views

The module includes the following views:

## Drawing Documents

You can associate a document to a bill of materials using the Bill of Materials Drawing Documents view. These documents are likely to be drawings but could be specifications, warnings, etc.

Before a document can be listed in the view, you must build a record for it in the Document Control module of the Resource subsystem (within the Attachments menu). For more information on using attachments, see the section titled Attachments.

The system provides a list of values to help you locate the correct Document ID. The Document Description is returned by the system and may not be updated. The BOM ID listed is also placed by the system and may not be modified.



**Drawing Documents view**

## Associated Assets and Components

You can select from the Views list to review and maintain a listing of assets and components associated with the current Bill of Materials record. When you make changes to these views and save the record, your changes are automatically reflected on records in the Asset and Component ID modules.

The list of values for the Asset ID and Component ID fields do not include assets or components already associated with the Bill of Materials record.

The list of values for Component ID also excludes components that are in Inactive, Scrapped, or Salvaged status.



**Associated Assets view**

**How to Build a Bill of Materials**

1. **Open the Bill of Materials module.**
2. **Click New.**
   A new Bill of Materials record opens.
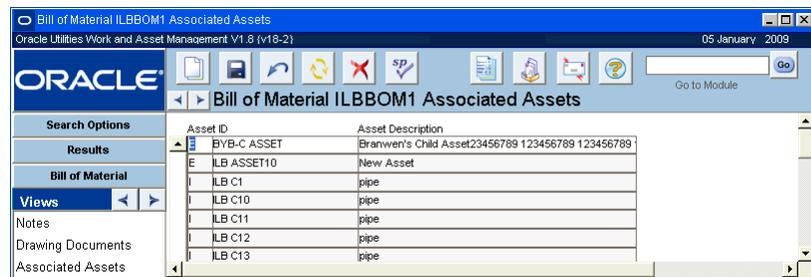
The Bill of Materials screen is divided into a header section and a detail section. The header contains descriptive data displayed above the center line while the detail contains the specific stock information for the parts list. You have to save header information before you can enter and save any details.

3. **Fill in the required fields according to the following field descriptions.**
   **BOM ID** - Required by the system, BOM ID is a unique alphanumeric identifier for a bill of materials. You create the BOM ID. When you save the record the system checks to see if the ID that you entered is unique.

   **Description** - Enter detailed information about the BOM in the Description field.

4. **Fill in any additional fields according to the following field descriptions.**
   **Ref BOM ID** - If needed, enter an existing BOM ID as a cross-reference.

   **Manufacturer / Asset Type / Manufacturer Part Number** - Asset Type is used to identify which BOMs are associated with which types of assets. Select an Asset Type from the list of values. Based on the entry selected, the system returns the corresponding type description. If the Asset Type selected has one specific manufacturer, enter the manufacturer code and the manufacturer part number. The system retrieves the Manufacturer name based on the code selected.

5. **Click Save.**

BOMs may consist of "breakdown" lists for certain stock items, identifying the parts that make up the stock item. The use of breakdowns creates several levels within the BOM.

6. **Begin to identify the bill of material items according to the following field descriptions.**
   **BOM Item /Type/ Item Description / Unit of Issue** - The BOM Item field displays the stock code for the item. The item must first exist in the master catalog. A list of values is attached to help you identify the stock codes for the parts you want to list. The item description and unit of issue (UOI) associated with the stock code are entered in the appropriate fields by the system and cannot be modified. All items on a bill of materials will have a Type code of 'C' for catalog.

   **Sequence** - Use sequence numbers (in increments of five or ten) so you can easily add stock items later to specify the order the parts may be needed.

Each BOM item is a separate record, so you have to save each line as you go.

   **Quantity** - Enter the estimated quantity (of the BOM Item selected) that is required to maintain the asset type. Later on, when the BOM is attached to an asset or component that a work order has been written against, this information helps the planner determine how many of a particular stock item should be reserved in order to complete the work.

7. **Click Save.**

**How to Add Parts to the Bill of Materials Breakdown List**

Before an item can be associated with a bill of materials, it must first be entered in the Catalog module.

You can also add parts to a the breakdown list by selecting the Update BOM action in the Catalog module.

1. **Place the cursor in the first empty BOM Item field.**
   If no empty line is visible, click any BOM item and press the F6 key or click the New icon.

2. **Enter a stock item from the list of values.**
3. **Enter any other information your organization requires.**
4. **Click the Save button.**

**How to View a Lower List of Parts on a Bill of Materials**

If a lower breakdown exists for a BOM item, the V button at the start of the line will be bold. If you try to open a sub-list for part that does not have one, the system will warn you that there are no breakdown items and ask if you want to insert some.

1. **Find the part for which you want to see a sub-list.**

2. **Click the line for the part.**
   The system will highlight that line.

3. **Click the V button to the left of the line.**
   The system will move the part number into the Breakdown For field above the list and will replace the upper-level list with the sub-list. You can add, modify, or delete parts on sub-lists as required.

   If there are sub-lists associated with this level of parts, you can examine them using the same steps.

4. **Click the Top Level or Up One Level buttons to return to higher parts levels.**


### How to Add a Sub-List to a Part

1. **Find the part for which you want to add the sub-list.**
2. **Click the line for the part.**
   The system highlights that line.

3. **Click the button to the left of the line.**
   The system will warn you that there are no breakdown items and ask if you want to insert some.

4. **Click the OK button.**
   The system will move the part number into the Breakdown For field above the list and will replace the upper-level list with a blank sub-list.

5. **Add the parts for the sub-list.**
   The system supplies a list of values for the BOM Item (which is the stock item number for the part).

6. **Click the Save button.**


### How to Add a Bill of Materials to an Asset

1. **Open the Bill of Materials record.**
2. **Select Associated Assets from the Views list.**
3. **Select the Asset ID you want to associate with the BOM.**
   The list of values includes only assets that are not already associated with the bill of materials.

4. **Click the Save icon.**
   The systems updates the both the Bill of Materials and Asset records to show the BOM associated with the asset.

Use similar steps with the Associated Components view to add a bill of materials record to a component.


### How to Make a Bill of Materials Accessible for Work Orders

Once the Bill of Materials has been associated with an asset, the system will automatically provide the Bill of Materials when there is a Work Order Task record for that asset. This association can also be made as part of creating the basic Bill of Materials Header record.

1. **Place the cursor in the Asset Type field.**
2. **Use the list of values to enter the asset to which the Bill of Materials will relate.**
3. **Click the Save button.**

# Adding Attachments to the Bill of Materials

From the Views list on the BOM record you have access to:

- **Drawings:** Enter and delete drawing documents associated with the displayed BOM. When you are associating drawing documents with a BOM, the drawings have to be defined in the Document Control module first.

- **Notes:** Enter and maintain notes and comments specific to the BOM record.

# Using a BOM as a Picklist When Planning Parts

A bill of materials is helpful when you are planning parts for a work order task. When work order tasks are written against an asset or component with an attached BOM, the parts list can be used as a "picklist" for planning the necessary materials.

If the asset and the component both have a BOM attached, the system uses the component's BOM for the picklist.

While viewing the Work Order Task window, select BOM Picklist from the Views list to open the Picklist window. For each item required, specify the storeroom and the planned quantity and save the record. The system automatically generates a Material Requirement record for each stock item planned using the BOM Picklist window.

# Updating BOM Records

As new parts are added to your catalog and other parts become unavailable, it may be necessary for you to update existing BOM records. While you can update individual records in the BOM module one at a time to reflect the changing stock numbers, it is more efficient to update all associated BOM records from the Catalog module. From the catalog, you can either delete a stock code from all BOM records where it occurs, or replace one stock code with another.

**How to Delete a Stock Item from a BOM**
1. **Open the Master Catalog record for the stock code you want to delete from all BOMs.**
2. **Select Update BOM from the Actions list.**
   The system opens a window where you can select to delete or replace BOM items.

   You must have the appropriate responsibility in your user profile to access the Update BOM action.

3. **Click the Delete Stock Item on BOMs radio button and click Next.**
   The system searches for BOM records containing the stock code and tells you how many BOM records will be changed.

4. **Click Finish to delete the stock code from the BOM records.**
   Or click Cancel to return to the Catalog record without deleting the stock code from the BOM records.

**How to Replace a Stock Item on a BOM**
1. **Open the Master Catalog record for the stock code you want to replace.**
2. **Select Update BOM from the Actions list.**
3. **Click the Replace Stock Item on BOMs radio button and click Next.**
   The system opens a window where you can enter a replacement stock code.

4. **Enter the stock code for the replacement item and click Next.**

The stock code you enter must be in Active status. When you click Next, the system searches for BOM records containing the current stock code and tells you how many BOM records will be changed.

5. **Click Finish to replace the stock code with the replacement stock code.**
Or click Cancel to return to the Catalog record without replacing the stock code on the BOM records.

# Chapter 27

## Document Control

Enter and maintain information about attachments in the Document Control module. There are a variety of items that may be attached to records, including procedures, standard notes, material safety data sheets (MSDS), asset specifications and other electronic documents. Once associated with a record, attachments are available whenever the record is viewed. See the section on Attachments for a more complete discussion on using and printing attachments.

The Document Control record contains of summary information about attached documents, including location (path) and file type. This location and type information allows you to view and print attached documents using an external application (such a word processing program or graphics program) that can read the document. Document attachments can be stored in your network's file system, with drive and path specifications, or within the database as BLOBs (Binary Large Objects).

## Document Control Records

The document control module also includes a document revision function where you can track sequentially numbered revisions. The bottom portion of the window shows revision and file information for the Current revision of the document.



**Document Control record**

### Updating Document Control Records

When working in the Document Control module, you must ONLY use actions from the Actions list to modify an existing record. If you need to update file information such as the File Name or File Path, select Update Document from the Actions list. The system displays messages and prompts to remind you of this special processing.

The following fields are included:

The Document Control record is divided into two sections. The upper portion maintains summary information about the document. The bottom portion of the window shows revision and file information for the Current revision of the document.

Please review the User Guide for Attachments in System Basics for information on how to create temporary attachments directly on a record using the Create Document Record action.

**Document ID -** The system uses the Document ID to identify the document record. This ID can be produced in several ways. Depending on how your organization has configured the system, you may be able to create your own Document ID or the system may do it for you.

**Status -** Available statuses for document records are: Created, Active, Under Revision, Review, Cancelled/Obsolete, Temporary, and Archived. Documents in Active, Temporary or Archived status can be included on other records as attachments.

**Created** - All new records are placed in Created status initially while information is being added and verified.

**Active** - Only document records in Active status can be included on other records as attachments.

**Under Revision** - Use this status to indicate a document is undergoing modification and is not currently active. When a document has been revised, you may want to put it in Review status and notify the reviewer - this process functions as a simplified approvals process.

**Review** - This status indicates that the new revision is ready for review but is still not active.

**Canceled/Obsolete** - Documents in Cancelled status are no longer current and cannot be used as attachments.

**Temporary** - This status generally indicates that the attachment record was created by the system using an action from another module. The system identifies the document this way to make it easier to identify documents that may need to be deleted or archived after one use.

**Archived** - You can use this status in a number of ways to fit your business practices. For example, Archived status can specify master documents that are maintained in a controlled area.

**Use Revision Handling -** If you check in the Use Revision Handling box the system only allows you to have one active revision at a time.

The Use Revision Handling indicator also controls how the Revision Number and Description, File Type, Size, Name and Path, and which other fields can be updated. If the indicator is not checked, these fields can be updated header record after you select the Update Document action. If the indicator is checked, these fields can only be updated by creating a new revision.

**Type Codes -** These three fields allow you to classify your document in various ways. They each have associated lists of values, which are linked so that the selection in the first field controls the options in the second, and the selection in the second controls the options in the third.

**Description -** The Description field contains a description of the document's contents. You can enter as much text as you need. You can edit existing records by adding and deleting text, etc. You can also copy and paste text from other sources.

If you need a larger description area, or need a wider area to get columns of text to align, you can double-click the Description field to open the Editor window, which can be sized to meet your needs. The Editor window also includes a Search button which can be useful for finding specific text in a long note.

**Entered -** When you save the record the system completes the Entered field with the date the record was created.

**Created -** The Created field contains the date the document was created.

**Issued -** The Issued field contains the date the document was issued. This field is not associated with the issued date shown in the Distribution view.

## Current Revision

The lower portion of the Document Control window shows information for the Current Revision of the document. If the Use Revision Handling indicator is checked one revision can be active at a time - the others are 'locked' and kept in a historical mode.

You can update the record information by creating a new revision. Select Create New Revision from the Actions list to open the Create Document Revision dialog box. If you attempt to update a field and you get an error message, try creating a new revision or unchecking the Use Revision Handling box.

**Revision (Number and Author) -** These two fields represent the sequence number for the revision and the author. The system creates a sequentially higher revision number for each revision record you create using the Create Document Revision window.

**Stored In -** The Stored In field indicates how the file is stored. Document attachments can be stored in your network's file system, with drive and path specifications, or within the database as BLOBs (Binary Large OBjects).

**Revision Description -** Enter descriptive text about the revision.

**Media -** The Media field represents the primary form in which the file is stored. Some examples might be electronic files, binders, paper, microfiche, etc. The field has an associated list of values controlled by controlled by a code table.

**File Type -** The file type represents the extension for the type of application that will be used to read or edit the file. Some examples are: .DOC for Word documents, .WPD for WordPerfect documents, HTM for web pages, PDF for certain graphic files, etc. The field has an associated list of values controlled by controlled by a code table.

**Size -** You can indicate the size of the file using the Size field. It is a good idea to indicate the file size if the files will be accessible across a slow network, an intranet or the internet. Some files may be too large to conveniently download, and the file size can indicate this.

**File Name and File Path -** The file name is the name of the file and the file path indicates where to find the file. Do not repeat the file name in the file path. The file path can be entered in three ways:

- As a standard mapped drive - O:\documents\ userguide\

- As a UNC machine name - \\walnutcreek\users\myname\

- As a URL - http://bali:1710/synergen/webhelp/

You can enter the file name or browse to and select the file, letting the system enter the file name and path. However, you can browse only to files stored in standard file system locations, not on UNC or URL paths. For UNC and URL locations, you must enter the file name and path manually.

**Location -** The Location field indicates where a hard copy, or disk back-up) is stored, if appropriate.

**Manufacturer and Document Number -** If the file is a document or graphic (for example, a schematic) provided by a manufacturer, you can enter the manufacturer's name and the manufacturer's document number in these fields for reference. You can also use the manufacturer's document number to find records by entering all or part the number in the Doc No field on the Document Control search options screen.

Remember: In order to view or print non-Oracle Utilities Work and Asset Management files, you will have to have the appropriate program available to the computer that will be displaying or printing the document.

**How to Create a Document Record**

1. **Open the Document Control module.**
   You can also generate a new Document record from a Procedure record.

2. **Select Create Document from the Actions list.**
   The system opens a dialog to prompt for the information needed to create the Document Control record.

3. **Enter a unique Document ID.**
   The identification can be a file name or an internal tracking number, etc.

4. **Enter a description.**
5. **Choose the location where the document must be stored.**
   The available options(e.g. File System or Database) and default value for this drop down list are configured through the Document Storage Types business rule.

6. **Enter the file name and path or select Browse to find the file on your local system.**
   If you use the Browse button, the system automatically populates the File Name and File Path fields. Your computer must have a Windows file association for the file type in order to display the file in your browser program correctly. You can only browse to files in standard drive locations.

   You can enter a file path as a standard drive location, a UNC machine name, or as a URL.

7. **Click Save.**
   If the document should use revision handling, open the record and select "Use Revision Handling."

   When the Use Revision Handling indicator is checked only one active revision is allowed at a time.

8. **Set the record status to Active.**
   The document can only be added as an attachment or otherwise accessed from other places in the system if it is in Active status.

**How to Update a Document Record**
This process only applies for records where revision handling is not in use. If the Use Revision Handling box is checked, select Create New Revision from the Actions list.

1. **Open the Document Control module to the appropriate record.**
2. **Select Update Document from the Actions list.**
   You cannot update fields directly in this module.

   The system opens a dialog box where you can enter changes to the fields.

3. **Enter updates as needed.**
4. **Click Save.**

# BLOBs

You also have the option of storing documents in your network's file system, with standard drive and path specifications, or within in the database as binary large objects (BLOBs). This allows your organization to control access to the document using Oracle Utilities Work and Asset Management security features while also giving potential access to users who can use the database, but not other parts of your organization's network. These files can be viewed and printed as long as you have accesses to an application that can read the document.

**BLOB Attachment**

To store a document within the database, select Database from the list of values for the Stored In field on the Document Control record. You must also enter the file path information to the current location in the file system. When the Document Control record is saved, the attachment document will be saved within the database.

# Document Control Views

The module includes the following views:

## Distribution

The Distribution view supplements the Document Control module by providing you with a way to track distribution of documents within you organization. Some examples of when this view can be used are

- When putting together documents that require input or commentary from several people, or

- When checking out manuals, videos and other materials for classes or shop use.:



**Distribution view**

### How to Record the Issue of a Document to a User

1. **Open the Document record in the Document Control module.**
2. **Select Distribution from the Views list.**
3. **Select the appropriate Recipient from the list of values.**
4. **Enter the Issue Date.**
   You can double-click in the field to use the calendar tool.

5. **Enter the Quantity issued.**
6. **Select a media type from the list of values.**
   The list is controlled by a code table.

7. **Select a user name from the list of values in the Issued By field.**
   The default for this field is the user that initiated the record.

8. **Enter any additional comments.**
9. **Click Save.**

### How to Record the Return of a Document from a User
1. **Open the Document record in the Document Control module.**
2. **Select Distribution from the Views list.**
3. **Find the checkout record.**
4. **Enter the Return Date.**
5. **Click Save.**

## Revision History (List)

Select Revision History (List) from the Views list to open the window that shows summary information for all revisions of the document. The revisions are displayed from most recent at the top of the list, to the original (Revision 000) at the bottom of the list. You can use the scroll bar to the left of the list to find the record that you want to see in detail. Once you find the record, click to highlight it then select Revision History Detail from the Views list. This opens a window that shows detailed information about the chosen revision. The information in both of these views is for review only and cannot be changed.
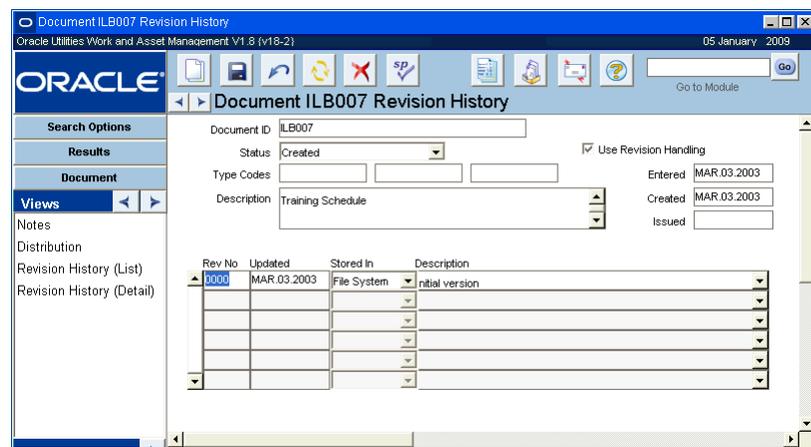

**Revision History (List) view**

*Note:* The summary list of revisions provides you with revision number, last updated date, where the file is stored, and a description of the file.

## Revision History (Detail)

Selecting Revision History (Detail) from the Views list opens a view of detailed information about a revision. You must highlight the revision whose details you want to see in the Revision History List. The details of this record are identical to those shown in the Current Revision view of the Document Control record, but they cannot be updated because they are related to older versions of the document.

**Revision History (Detail) view**

**How to Create a Document Revision**

When the Use Revision Handling indicator is checked, you have to create a new Revision record in order to change key fields.

1. **Open the appropriate Document Control record.**
2. **Select Create New Revision from the Actions list.**
   This action opens the Create Document Revision window where you enter revision information.

*The Use Revision Handling indicator must be checked for this option to appear on the Actions list.*



3. **Enter a short description of the nature of the new revision.**
   The File Type, Stored In, File Name, and File Path are filled in according to the original revision. You can make changes to these fields as necessary.

*Note: Be sure that the file name and path fields point to the new revision of document.*

4. **Click the Create Revision button to close the window and save the revision record with a new revision number.**
   If you decide not to save these changes, clicking the Cancel button closes the window and does not save the new record.

## Document Control Log

Select Log from the Actions list to view the Document Control Log. This log can also be accessed by selecting Document Log from the Resource subsystem. This is a standard Oracle Utilities Work and Asset Management transaction log.

## Document Control Actions

In addition to standard actions, the following can be completed from within the module.

# View Document

Selecting View Document from the Actions list opens the attachment file in the application associated with the file (for example, Excel for a .XLS file). Once the file is open, you can view or edit it if necessary.

Rather than opening the specific application for the document to be viewed, the View Document functionality uses http commands to view documents from the browser. To view a file, the file name extension must have a MIME type association to the application used to view the document. Bitmap images, for example, usually have a .BMP extension which is associated with Windows Paint or some other graphics program.

## Browse

Click the Browse button on the Document Control window to open a Browse window where you can search for file you want to attach.

*Note:* The Browse button is not available if Use Revision Handling is checked and cannot be used for files stored on UNC or URL paths.

### How to Browse for Files

1. **Use the drop-down list on the Look in box to navigate to the drive that you want to search.**
2. **Select the folder and file name from the main Browse panel.**
3. **Use the drop-down list on the Files of type box in the Browse window to specify the file type you want to find.**
   Only files of the specified will be visible in the Browse window.

4. **Click the Open button on the Browse window when you locate the file that you want to attach.**
   The system automatically enters the File Name, File Path, and File Type in the Document record.

# Chapter 28
## Document Control Log

The Document Control Log tracks all documents that are attached in the Document Control module. This information is for display only and cannot be modified.

Select Log from the actions list in the Document Control module to access this log.



**Document Control Log**

This module uses standard functionality used in all Transaction Logs to rearrange columns, save the layout, and sort data. Please refer to the System Basics guide chapter on Transaction logs for more information.

# Chapter 29
## Procedure

You can use the Procedure module to maintain lists of step-by-step directions. Each procedure is assigned a unique number, or Procedure ID, which is then used to attach the procedure to other kinds of records. For example, when you write a Work Order record against an asset where a procedure is attached, or against an asset that requires a permit with an associated procedure, you can use the procedure number to access the procedure online directly through Work Order and other related modules.

Creating and maintaining procedure lists is extremely helpful for repetitive tasks. Once a list is created, you no longer need to key-in instructions each time similar work is to be performed. Simply reference the procedure number and the most current list for that procedure is automatically made available to whoever is performing the work.

Only the most current information is retrieved each time the list is accessed either by printing the work order package or online through the Work Order module. This prevents you from having to find each place the procedure number is referenced and making the same change repeatedly.

You can create the actual list of procedures by entering steps on the Procedure record, or you can choose to attach a document that lists the procedures if necessary. Step procedures can also contain Job Hazard information that can help to identify potential hazards in the work place and recommended safe actions and protective equipment to reduce risk.

## Procedure Settings

The Procedures Authority Business Rule controls which users can modify different types of procedures. You can only modify information for types that you are authorized to change.

When you enter a new procedure record, you can indicate whether the procedures are attached as a document or if they are to be indicated as steps on the record by selecting either Document or Step in the Format field. Also enter a Type indicating the type of work the procedure pertains to, the work Category, the related Asset Type and the Filename if the procedure is available elsewhere.

## Procedure Records

For Procedure records with a Step type indicated in the Format field you enter the steps in bottom half of the window. For each step, you must enter a unique step number and a detailed description. You may also enter the estimated duration for each step as well as a label. Once you save the record only the step Description and Duration fields can be modified on a Procedure record.

**Procedure record**

The following fields are included:

**Procedure/Revision -** The Procedure field contains the identification number for the procedure. Depending on how your organization has configured the system, you will be able to enter your own number, or the system may create a number for you. When you save the record, the system checks to ensure that the number is unique.

**Lock Procedure? -** If the Lock Procedure? box is checked when the record is first created, the system will prevent users from modifying steps information.

**Use Activation Authority? -** Settings in the Procedures Authority business rule determine whether or not a user can check or uncheck this box. If the box is checked, only users listed in the business rule can change the Procedure record to active status.

**Format -** The Procedure record is divided into two sections. The appearance of the area below the Format field is controlled by that field and includes two possible views:

> **Step** - When you select Step, the view shows fields appropriate to creating a step by step procedure.

> **Document** - When you select Document, the view shows fields appropriate to creating a document attachment to a record in the Document Control module. This type of procedure is typically stored outside of the system. However, if your organization uses Oracle 8 or higher you may also be able to store the documents within the database.

**Status -** Valid procedure statuses are: Created, Pending Approval, Approved, Active, Under Revision, Obsolete, Closed, Cancelled.

If the status is set to Under Revision, and if the format of the procedure is Document, the Document cannot be attached to a Permit record.

Only one revision of the Procedure can be in Active status. When a new revision is approved and placed in Active status, the system sets the status of the previous revision to Obsolete.

If modifications need to be made to a procedure in Active status, a new revision must be created and approved. The system creates a new revision number when you complete the Create New Procedure Revision action.

**Title -** Enter a brief descriptive title to help identify the procedure. Together with the Procedure ID, the title is visible when the Procedure is attached to other records in the system.

**Description -** You can also enter a longer description to supply additional information about the procedure. When the procedure is attached to other records in the system, the description will be visible only when the user selects to view the attachment.

**Type -** Select a Procedure Type from a list of types defined for you organization in Code Table 16.

**Category -** Select from a Procedure Category from the list of categories defined for you organization in Code Table 28.

**Requestor -** The person requesting the current revision of the Procedure record. The list of values for his field includes all active users.

**Required  -** The date that the Procedure should be completed.

**Approval Route -** The approval route specifies a series of approvers that will review the record for approval before processing can continue. An approval route must be entered before you can change the status to Pending Approval. Please refer to Approval Routing in the System Basics user guide for more information.

**Asset Type -** Select a type from the list of Asset Types defined for your organization, such as Equipment, Building, Room, Tag Point, or Infrastructure. Asset Types are defined in Code Table 29.

**Step Filename -** If a separate document exists which provides additional detail about the procedure steps you can reference that document in this field. However you must still enter basic step information in the Steps View to make the information accessible to workmen viewing the procedure as an attachment.

**Step Format  -** Selecting Step in the Format field shows the Steps view of the Procedures window. This view shows fields appropriate to creating a step by step procedure and associating job hazards.

If more than 3 Step records are displayed, you can use the scroll bar on the left of the window or use the Scroll Up / Previous Record buttons or the Scroll Down / Next Record buttons to navigate through the records.

In order to insert new steps, you must enter a unique Step Number (unique to the listed Procedure) and label. It is recommended that you increment Step Numbers by 5 or 10 so that you can insert Steps in between at a later time. Duration is optional.

*Note:* You cannot switch between the Steps view and the Document view for Procedures in Active Status. In order to change views, first change status to Under Revision and then change the view.

The Job Hazard Analysis section displays the associated Job Hazards for the step selected. In order to see the entire list of hazards associated with all steps, select Job Hazard from the Views list.

Job hazards cannot be entered directly on this view. In order to make any job hazard modifications you must use the Create New Procedure Revision, Add/Delete Job Hazards, and Modify Job Hazard actions described later in this chapter.

**Document Format -** Selecting Document in the Format field, shows the Document view of the Procedures window. This view shows fields appropriate to creating a document attachment to a record in the Document Control module.

*Note:* You cannot switch between Steps View and Document View for Procedure records in Active status. In order to change views, first change status to Under Revision and then change the view.

This type of procedure is typically stored outside of the system. However if your organization uses Oracle 8 or higher you may also be able to store the documents within the system.

The system fills in the fields with the Document ID, Description, Revision number, Author, and Revision Description from the Document Control record.

The Document ID Field has an associated list of values controlled by the Document Control module in the resource subsystem. When you enter the Document ID, the system will supply information to the other fields.

**Link Procedure and Document Statuses? -** If the Link Procedure and Document Statuses box is checked they system uses the related Document Control record's status to determine the Procedure record's status. If the Document Control record status is Created, Active or Closed, the Procedure record status will match. If the Document Control status is Archived, Review or Temporary, the Procedure record status shows "Under Revision". When the document's status changes, the system updates the Procedure record status.

*Note:* If the Procedure status and the Document status are linked. The system will not allow you to select a document in Active status unless you have the appropriate responsibilities set in the Responsibility module.

**View Doc -** The View Document button opens the application (for example, Word for a .DOC file) associated with the file. The new application then opens the file for you to view or edit.

# Procedure Views

The module includes the following views:

## Procedure Log

Select Procedure Log from the Views list to open the Procedure Log. The system records when an action takes place that affects the information in the database. This provides a tracking tool that can be useful in finding out when changes were entered into the system.



**Procedure Log**

## Similar Procedures

Select Similar Procedures from the Views list to list procedures that are related to the process that you are currently viewing. From that list you can double-click a new procedure to open its record.
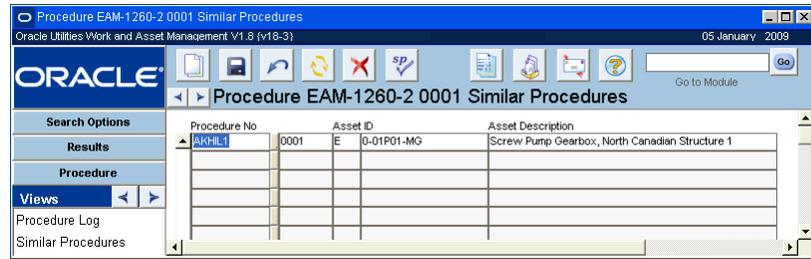


**Similar Procedure view**

## Protective Equipment

The Protective Equipment view lists both the equipment specified in the procedure and steps for which the equipment is recommended. The protective equipment list is copied from the Job Hazard records associated with the procedure, but can be modified on the Procedure record. Equipment items are listed in the upper grid only once, even if they are required for several steps. As you select a particular equipment line in the upper section, the information in the lower part of the view changes to list the steps which require that equipment.
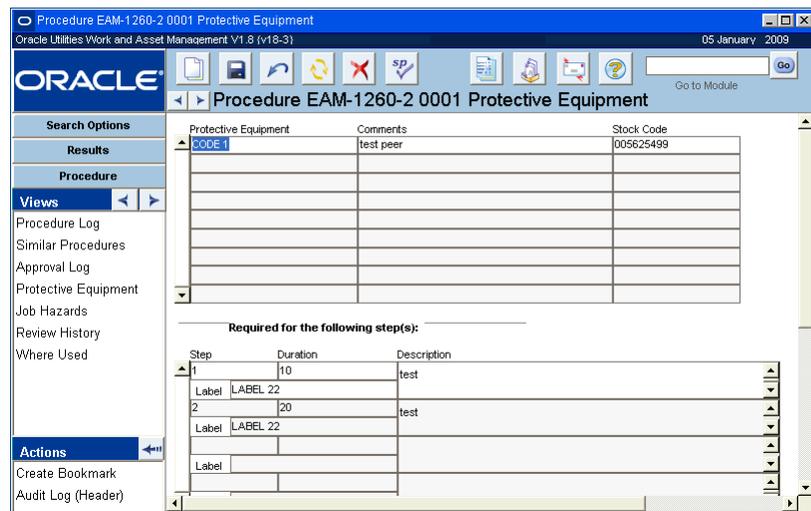


**Protective Equipment view**

## Job Hazards

Job Hazard records are created in the Job Hazard module.

The Job Hazard view lists, by step, the specific hazards identified for this procedure. Job hazards can only be associated with step-type procedures.
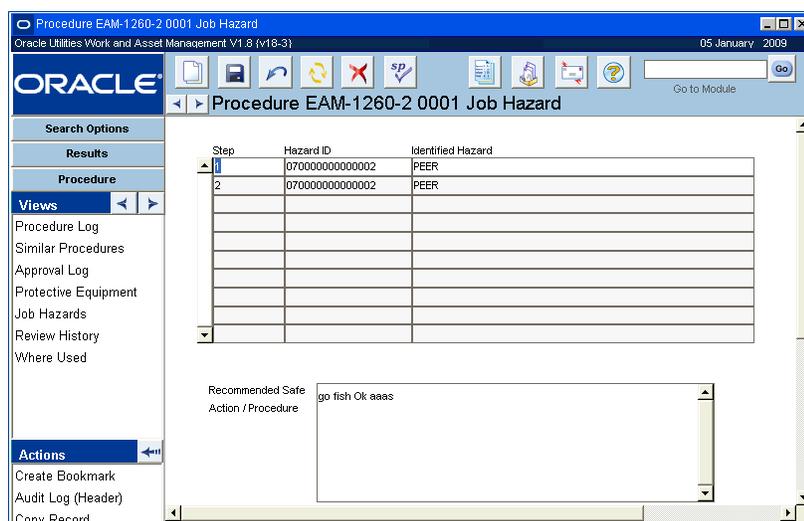


**Job Hazard view**

If you have the appropriate function in your responsibility profile, you can use the Create New Procedure Revision, Add/Delete Job Hazard or Modify Job Hazard actions to update the job hazard information associated with the procedure steps.

## Review History

The Review History view provides a place for reviewers to record their comments about a particular procedure. While any user can record comments about a procedure at anytime, this view can be particularly useful for capturing and reviewing input while a procedure is undergoing revision.

## Where Used

The Where Used view shows a list of work records that reference the current procedure and revision. If a procedure is revised and activated, and the previous version is associated with a Work Order Task in Approved or Active status, the planner of the work order task will receive an alert saying the task is referencing an obsolete procedure.

## Create New Procedure Revision

When procedures are in Active status, you cannot modify them directly. To make changes to an Active procedure, select Create New Procedure Revision from the Actions list. You must have the appropriate function in your responsibility profile to access the Create New Procedure Revision action.

The system asks if you want to place the current revision in Under Revision or Obsolete status. Select Under Revision if you want the current revision to remain available as an attachment, select Obsolete if you want to make the current revision immediately unavailable as an attachment.

Once you have selected a status for the previous revision, the system creates a new revision and displays the number. Click the OK button to open the new version in Created status and make changes. When the new revision is complete, route it for approval. Once approved, the new

revision can be set to Active status. If the previous version had been in Under Revision status, the system sets its status to Obsolete when the new revision is activated.

If a procedure is revised and activate, and the previous obsolete version is associated to a Work Order Task that is in Approved or Active status, the Planner on the task receives an alert saying the work order task references an obsolete procedure.

Select the Add/Delete Job Hazard or Modify Job Hazard actions to make changes to new revision.

**How to Create a New Revision of a Procedure**
1. **Open the appropriate Procedure record.**
   The record must be in Active status.

2. **Select Create New Procedure Revision from the Actions list.**
   The system asks if you to choose a status for the current revision.

3. **Click the Under Revision or Obsolete button.**
   Click the Under Revision button if you want the current revision to remain available for attachments until the new revision is active.

   Click the Obsolete button if you want the current revision to be unavailable as an attachment.

4. **When you click either button, the system creates a new revision of the procedure and displays the revision number.**
   Click OK to go to the new revision, where you can select the Add/Delete Job Hazard or Modify Job Hazard actions to update the procedure.

# Add/Delete Job Hazard

If you have the appropriate function in your responsibility profile, you can select Modify Job Hazard from the Actions list to add or delete hazards from procedure steps. The action works similarly whether you are adding or removing a hazard.

The Add/Delete Job Hazard action is available when the Procedure record is in Created or Under Revision status.

**How to Add or Delete a Job Hazard**
1. **Open the appropriate Procedure record.**
   The procedure must be in Created status.

2. **Select Add/Delete Job Hazard from the Actions list.**
3. **Select the Add or Delete option and click the Next button.**
4. **Select a Job Hazard ID from the list of values.**
   If you are adding a hazard, the list shows those Job Hazard records not currently associated with the procedure. If you are deleting a hazard, the list shows the hazards that are currently associated with the procedure.

   The recommended safe action text can be updated if necessary.

5. **Click Next.**
6. **Select the steps to add the hazard to (or remove the hazard from).**
   You can also click the Select All or Clear All buttons to mark or clear all the boxes.

7. **Click Finish to add / delete the hazards and open a confirmation page.**
8. **Click Close to return to the Procedure record.**
   Or click Start Over to add/delete additional job hazards.

# Modify Job Hazard

If you have the appropriate function in your responsibility profile, you can select Modify Job Hazard from the Actions list to change the recommended safe actions or to add protective equipment to the procedure. If you want to delete protective equipment, you must open the Job Hazard module and make the change there.

Use this process to change the recommended safe action text or add protective equipment items for the current procedure only. Any changes you make will not be reflected on the records in the Job Hazard module.

The Modify Job Hazard action is available when the Procedure record is in Created or Under Revision status.

### How to Modify Job Hazard on a Procedure

1.  **Open the appropriate step Procedure record.**
    The procedure must be in Created or Under Revision status.

2.  **Select Modify Job Hazard from the Actions list.**
3.  **Select the Hazard ID you wish to modify.**
    The list of values contains only those job hazards associated with the current procedure / revision.

4.  **Make any necessary changes to the Recommended Safe Action text and click Next.**
5.  **Select from the list of values to insert additional protective equipment items.**
    The list of values includes only protective equipment items not already selected for the job hazard.

6.  **Click Next when you are finished adding protective equipment.**
7.  **Check the steps you want to attach the updated job hazard to.**
    You can also click Select All to add the modified hazard information to all the steps.

8.  **Click Finish to apply the changes to the procedure and open a confirmation page.**
9.  **Click Close to return to the Procedure record.**
    Or click Start Over to enter additional job hazard modifications.

### How to Create a Procedures Record

1.  **Open the Procedures module**
    The Procedures module in Resource subsystem.

2.  **Click New.**
3.  **Enter a unique ID number for the Procedure.**
    This number may also be generated by the system depending on your system configuration.

4.  **Select a Format for the Procedure.**
    If you want to create the Procedure as a set of steps entered in this module, select the Step Format. If you want to attach an external document to the record select Document.

5.  **Enter a Title for the Procedure.**
6.  **Enter any other information you organization requires.**
7.  **Click the Lock check box if you want to limit who can adjust the procedure.**
8.  **Click Save.**

### How to Add a Step to a Procedure

You must have the proper authority (established in the Procedures Authority business rule) in order to change Locked Procedures.

1.  **Open the appropriate Procedure record.**

The Format field must be set to Step. If it is set to Document you can only attach external files to the record.

2. **Click the first open Step field.**
3. **Enter a number to represent where in the Procedure the Step should be done.**
4. **Enter the Step description in the Description field.**
5. **Enter any other information you organization requires.**
6. **Click Save.**


**How to Attach a Procedure to a Record**
1. **Establish the Procedure record.**
2. **Open the appropriate record.**
3. **Select Attachments from the Views list.**
4. **Click the first open Attachment ID field, or Click New.**
5. **Select the Attachment type (Procedure) from the drop-down list.**
6. **Select the Attachment ID from the list of values.**
7. **Click Save.**
    The check boxes have no function for Procedure type attachments. Only external attachments will print or be copied to Work Orders and Purchasing documents when the check boxes are marked.

# Chapter 30
# Standard Notes

Enter and maintain a set of standard notes in the Standard Notes module. These notes can later be attached to records in any module that supports Attachments. These notes are identified by unique Note ID's, allowing you to modify Note text in one place (through this module) instead of modifying each instance where it is referenced.

Your system sequence number settings and business processes determine whether the system creates an ID for you when the record is saved or if the ID can be entered manually. If the ID is assigned manually, the system verifies that it is not a duplicate before the record is saved. If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

Once entered, only the description can be modified. When finished, press the "Save" button to commit the record or press "Cancel" to prevent your changes from being committed.
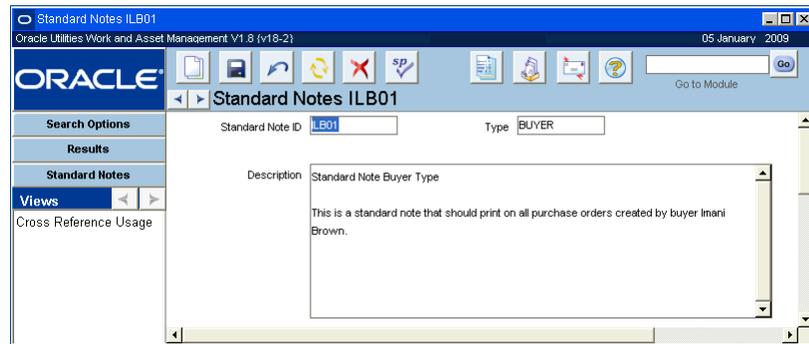


**Standard Note record**

As you type description text (up to 2000 characters), the system automatically wraps to the next line when appropriate. If you want to use the editor, simply double-click the Description field. You are then placed in the editor where you may use all features of the editor to process text.

## Cross Reference Usage

Cross Reference Usage functionality is not available in this release.

**How to Create a Standard Notes Record**
1. **Open the Search Options window, or to an existing Standard Notes record.**
2. **Click New.**
3. **Enter a unique ID number.**
4. **Enter the note Type from the drop-down list.**
5. **Enter the Standard Note in the Description field.**

   **Click Save.**

# Chapter 31

## MSDS

Material Safety Data Sheets (MSDS) are delivered from the vendor with goods that are hazardous or contain hazardous materials. The details of an MSDS can be entered into the system, or the actual MSDS can be scanned. When the system saves the new MSDS record it assigns the record a unique identification number. Once this is done, you can associate that number to other types of records throughout the system. Any record that can have attachments can have an MSDS attachment if the option has been activated in the Attachment Types Business Rule.

## MSDS Records

Assign Document IDs to your MSDS files in the Document Control module then reference the Document ID on the MSDS record (circled field).

MSDS records can also cross-reference Document IDs stored in the Document Control module. For example, if you scan all MSDS forms and store them as image files, you can assign each of these files a unique Document ID in the Document Control module. Then you can reference the Document ID on the MSDS record and select View Document from the Actions list to automatically open the associated graphics application and display the MSDS.

In order to enter an MSDS manually you create the MSDS record in the MSDS module.



**MSDS record**

When you create a new MSDS record make sure to select the appropriate Chemical Label from the list of values. Based on the chemical label selected, the system retrieves the corresponding value for the Label Description field. You can also enter the MSDS expiration date if available.

If the MSDS has been defined in the Document Control module, select the Document ID from the list of values. You can also reference an existing stock item in the master catalog by selecting a stock code from the list of values.

Since an MSDS refers to a specific product from a manufacturer it would usually be attached to a stock item record in the Catalog module. For such attachments, the system can carry the association over to Work Request and Work Order records so that the attachments can be

viewed along with any of these documents. A second way to do this is to attach the MSDS to a specific Work Order Task record (or any other record that allows attachments).

Select View Document from the Actions list to open the application (for example, Word for a .DOC file) associated with a file that is attached to the MSDS record. The new application then opens the file for you to view or edit. This action is only available when a Document ID has been indicated on the record.

### How to Create an MSDS Attachment

Before you can complete an MSDS attachment the chemical label must first be established using the Chemical Label module in the Attachments module of the Resource subsystem.

1. **Open the Search Options or Search Results panel, or to an existing MSDS record.**
2. **Click New.**
3. **Enter the MSDS number.**
   The number must be unique.

4. **Enter the Chemical Label from the list of values.**
   The entries for this list of values are established in the Chemical Labels module.

5. **Enter any other information your organization requires.**
   The Document ID field can be very useful. You can refer to a physical file. Or, you can enter the MSDS in an electronic form - for example a scan of the vendor's MSDS - attach the electronic file in the Documents Control module of the Resource subsystem, and use the Document ID to refer to that file.

6. **Click Save.**

### How to Set Up an Electronic Copy of Vendor's MSDS

1. **Scan the MSDS using a scanner.**
   The file can be saved as a bitmap (.bmp) but this produces fairly large files that require a lot of disk space. You may want to look into .pdf as a storage format.

2. **Attach the graphic file in the Document Control module.**
3. **Check that prospective users will have the appropriate software to view the file.**
   For example, if the file is a .pdf file, the user will have to have access to Acrobat reader (a free program available from Adobe Systems).

4. **Use the Document ID number to cross-reference the file between the Document Control module and the MSDS module.**

# MSDS Views

The module includes the following views:

## Vendor

Vendor information includes the Vendor Code, Vendor Contact, an MSDS alternate Reference Number, and Vendor Emergency and Alternate Phone Numbers. If you enter the vendor information related to the MSDS document that was sent by the vendor, the system will automatically add the MSDS as an attachment to any purchase orders created that reference that vendor ID.

**Vendor view**

# Manufacturer

Information in the Manufacturer view includes the Manufacturer Code, Manufacturer Contact, an MSDS alternate Reference Number, and Manufacturer Emergency and Alternate Phone Numbers.



**Manufacturer view**

# Location

In the Location view you can enter a list of locations where the original MSDS form or copies of it may be found.



**Location view**

## Synonyms

In the Synonyms view you can enter and maintain a list of other names or description (synonyms) by which this MSDS form may be identified. Synonyms serve as a cross-reference to MSDS Chemical Labels module via the Chemical Labels Synonyms view.
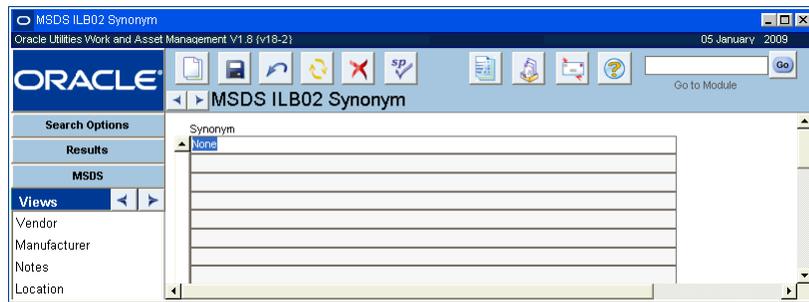


**Synonyms view**

## View Document

You can select View Document from the Actions list to open the application (for example, Word for a .DOC file) associated with a file that is attached to the MSDS record. The new application then opens the file for you to view or edit. This action is only available when a Document ID has been indicated on the record.

# Chapter 32
## Chemical Label

Part of Oracle Utilities Work and Asset Management MSDS processing, the Chemical Label module provides a means to enter and maintain standard chemical labels used for classifying hazardous materials. First the chemical labels must be defined via the Chemical Label module and then they can be referenced on various MSDS records via the MSDS module.



**Chemical Label record**

When inserting a new Chemical Label record, enter the required information identified by the highlighted fields. You must enter a unique Chemical Label. If you try to use a label that has already been used, the system will warn you that the record has already been inserted. When updating existing Chemical Label information, both the Label Description and the Transportation of Dangerous Goods (TDG) number assigned to the stock code in the TDG Product field.

## Synonyms

In the Synonym view, you can enter and maintain a list of other names or descriptions (synonyms) which identify the Chemical Label. Synonyms serve as a cross-reference to MSDS module via the MSDS Synonyms view



**Synonyms view**

**How to Create a Chemical Label Record**
1.  **Open the Search Options or Search Results panel, or to an existing Chemical Label record.**

2. **Click New.**
3. **Enter the Chemical Label.**
   The label must be unique. If you try to use a label that has already been used, the system will warn you that the record has already been inserted.

4. **Enter the Description**
5. **Enter the Transportation of Dangerous Goods number, if available.**
6. **Click Save.**
   The system will save the record and put the chemical label in the appropriate list of values.

# Chapter 33

## Specification

Specifications are detailed descriptions of requirements, dimensions, materials or other details about types of equipment. Specifications vary from engineering, to service history, to accounting types.

With the Specifications module you can develop detailed descriptions of requirements, dimensions, and materials. Specifications may vary in type from engineering to service history to accounting to just about anything that you need to define.

Building specifications is a two-step process:

1. Develop a Specification Template record used to capture all relevant attributes for a particular type of equipment. For example, a template for motors may include attributes such as block size, horsepower, etc.

2. Generate actual Specification records from the template, capturing the values of the attributes listed, and assigning a unique specification number to each.

For example, you might set up a template for motors, identifying the attributes in which you are interested such as block size, h.p., and so on. You could then use this template to construct specifications for each type of motor.

## Specification Records

Specifications are divided into types and categories, which help define the specification. For each Specification record, the list of attributes (e.g.: weight) is drawn from the specification template. You then enter the specification value (e.g.: 273.5 lbs.) for each attribute. Once defined, you may then attach the specification number to Asset and Component ID records.

**Specification record**

Direct access to specifications is available wherever attachments are available including on Work Order and Task records. This provides you immediate access to information important for completing work.

Once you save the header information in the upper part of the Specifications window, you may enter, modify, or delete attribute information in the bottom portion of the window. For each new Specification header records, the system retrieves sequence number and specification attributes from the Specification Template record (identified by the specification type and category combination) when you first place your cursor in the Attribute fields. This list serves as a starting point where you enter specification values for attributes which apply to the item listed in the Description (header), delete Attribute records which do not apply, and add records which were not part of the template.

The system uses a template then individual Specification records so that you can have one all-encompassing record that indicates ALL of the attributes for a type of equipment, and you can draw on that record to choose from those attributes to describe an individual specification which might not include all of the attributes.

Once both the template and the individual specifications are defined you can attach Specifications to Asset ID and Component ID records. Then when work orders written against an asset or storeroom with a specification attached, have the specification available at the work order or work order task level, providing immediate access to information important for completing work.

### How to Build a Specification from a Specification Template

You must have already created a Specification Template record so that you can build the specification from the template. The specification is the record that you ultimately attach to the assets or components.

1. **Open the Specification module.**
2. **Click New.**
   A new Specification record opens.

   Like a specification template, the Specification record is made up of header information at the top, and detail information at the bottom.

3. **Enter a Specification ID.**

The Specification module includes the Copy Specification Action which allows you to copy an existing specification entirely. Depending on your system settings, you can either create a new specification number, or the system creates one for you.

You must enter a unique specification number. If you enter a number that is not unique, the system will warn you when you try to save the record.

4.  **Select the Specification Type and a Category.**
    Each specification type has its own list of category values. This combination will determine which specification template you are using.

5.  **Enter a detailed description of the specification's intended use.**
6.  **Click Save.**
7.  **Place the cursor on the first line in the lower half of the window.**
    The system retrieves the sequence number and specification attributes from the specification template identified by the type and category combination that you entered. This list serves as a starting point and can be modified if necessary.

8.  **Delete any attributes that you do not need by selecting the item and clicking the Delete icon.**
9.  **Add new attributes by pressing the New icon or F6 while the cursor is on one of the lines in the bottom portion of the screen.**
    For any new attributes entered, enter a unique sequence number and specification attribute.

    When inserting new attributes, it's a good idea to increment sequence numbers by 5 or 10 so that you may insert new records in between at a later date. sequence numbers are used to display data in a specified order.

10. **Enter the appropriate Specification Value for each attribute.**
    If lists of values were established on the Specification Template record, these fields will be controlled by lists. You can also add lists of values here by selecting Configuration from the Views list.

11. **Click Save.**
    The Specification record is now ready to be used as an attachment.

# Chapter 34
## Specification Template

You begin building specifications using the Specification Templates module. Each specification template is comprised of a specification type and category, and a list of specification attributes which apply to the item for which the specification is being built. The actual values for each attribute are entered through the Specifications module.

An example of the template / specification relationship might be where you want to build engineering specifications for a certain type of starter.

If you create a Specification Template, create a Specification from it, then go back and make a change to the Specification Template, the changes will not update the Specification record. Conversely, changes made to an individual Specification are not updated on the Template.

## Specification Template Records

Begin by creating a template for that kind of starter (if that template does not already exist). The specification type would be Engineering and the Category would be something such as 4160STR (a value in the Category list of values). The description would identify general descriptive information about that kind of starter.



**Specification Template record**

The Specification Template module includes the Copy Spec Template Action which allows you to copy an existing specification entirely. Depending on your system settings, you can either create a new specification number, or the system creates one for you.

Next, enter the specification attributes - those requirements, dimensions, materials, and that make up the item. These attributes could be such things as amps capacity, bus volts, casing type, and size. If needed add lists of values for the attributes by selecting Configuration from the Views list.

The same template can be used for more than one Specification record. Specification records use the template to retrieve the initial set of Attribute records which may be added to, deleted from, or updated as required.

When inserting new attributes on the template, it's a good idea to increment the sequence numbers by 5 or 10 so that you may insert new records in between (either through the Specification Template or the Specifications modules). Sequence numbers are used by the system to display data in a specified order.

**How to Build a Specification Template**
1. **Open the Specification Template module in the Resource subsystem.**
2. **Click New.**
   A new Specification record opens.

3. **Fill in the required fields.**
   The Type and Category combination is the unique identifier. Therefore, after saving the Specification Template record, the type and category cannot be changed.

4. **Enter a description of the specification in the Description field.**
5. **Click Save.**
6. **Enter the Specification Attributes.**
   The Attributes may serve as a checklist of requirements or materials or indicate details about an item such as dimensions, materials, capacity, bus volts, casing type, size, and so on.

   Enter the Attributes in these fields, then you enter the specific values on the Specification record that you will create next.

   You can also set Lists of Values for the Attributes by selecting Configuration from the Views list when you are on a specific Attribute.

   Since Sequence Numbers are used by the system to display data in a specified order, you may want to increment the Sequence Numbers by 5 or 10 in case you need to add intermittent attributes later.

7. **Click Save.**
   The system creates the record and you are ready to create individual Specifications based on the Template.

**How to Create a Specification Record**
1. **Open the Search Options window, or to an existing Specification record.**
2. **Click New.**
3. **Enter a unique Specification ID.**
4. **Select a Type from the list of values.**
5. **Select a Category from the list of values.**
6. **Enter a Description of the specification.**
7. **Click Save.**

**How to Add Specifications to a Specification Record**
1. **Open the appropriate Specification Record.**
2. **Click the first specification line.**
3. **The system supplies all of the specifications from the Specification Template.**
4. **Delete, update or add specifications as appropriate.**
5. **Click Save.**

**How to Attach a Specification Record to a Stock Item**
1. **Establish the Specification record.**
2. **Open the appropriate Stock Item Record.**
3. **Select Attachments from the Views list.**
4. **Click the first open Attachment ID field, or Click New.**

5. **Select the Attachment type (Specification) from the drop-down list.**
6. **Select the Attachment ID from the list of values.**
7. **Click Save.**

   The check boxes have no function for Specification type attachments. Only external attachments will print or be copied to Work Orders and Purchasing documents when the check boxes are marked.

### How to Add the Specifications to a Specifications Template

1. **Open the appropriate Specification Template record.**
2. **Click the first blank Sequence number field.**
3. **Enter a Sequence number and Specification Attribute.**
4. **Click Save.**

# Specification Template Views

The module includes the following views:

## Specification Configuration

When you create the first specification line item you can select Configuration from the Views list to define the list of values type that should be used to populate the Specification Value field in the Specification module. You can select a list of values based on a Code Table or a List based on an entered query. If you select a query type, a query must be entered in the Query field.



**Configuration view**

A list of values type is not required. If no list of values is chosen, user's can enter any value in the Specification Value field of the Specification record. The chosen list of values can also be overridden on Specification records created from a template that uses the list of values.

**Seq No.  -** This sequence number corresponds to the Sequence number of the attribute on the Specification Template record that will be controlled by this list of values.

**List of Values -** You can choose to use a list of values that is based on either a Code Table that exists in the system or on a custom query entered in the Query field.

**Code Table -** If you choose CODE_TABLE_KEY_VALUE in the List of Values field, select the Code Table that you want to use in this field.

**Query -** If you choose USE_QUERY_KEY_VALUE enter the custom query text in this field.

When defining a list of values for a Specification Template record using the USE_QUERY_ KEY_VALUE option, you must:

- include the aliases CODE and CODE_DESC in the select clause

- have no more than two columns in the select clause. (If the select clause has more than two columns, only the first two will be processed.)

- avoid the use of asterisks (*) in the select clause

The following is an example of a correct query:

select employee_no code, name_first || ' ' || name_last code_desc from sa_employee where employee_status = 'ACTIVE' and plant = :global.plant

## Copying Specifications

The Specification and Specification Template modules include a copying Action that allows you to duplicate an entire Specification record. Selecting the action from the Actions list opens a wizard. Depending on your configuration, the system will either prompt you to create a Specification number, or it will create one for you. Once you click Next, the system confirms the new Specification record and gives you the option of opening that record. You then have the option of modifying the record as desired.

# Chapter 35

# Job Hazard

Use the Job Hazard module to identify potential hazards in the work place, along with recommended safe actions and protective equipment that can be used to reduce risk.

## Job Hazard Records

Once a hazard has been described, the Job Hazard record can be associated with records in the Procedure module, which then can be attached to work orders and records in the form of step by step instructions. You can update all Procedure records referencing a particular job hazard by selecting the Revise Procedure action and choosing the procedures to update. The updated procedures can then be activated through the approval process in the Procedure module. You can also modify hazard information from within the Procedure module, but those changes do not copy back to records in the Job Hazard module.



**Job Hazard record**

The following fields are included:

**Hazard ID -** The Hazard ID number identifies the record. Depending on the configuration of the system you can enter a unique number, or the system automatically creates a number for you.

**Title -** Enter the title of the Job Hazard in this field.

**Type -** You can select a Job Hazard Type from the list of hazard types defined by your organization.

**Category -** You can select a Job Hazard Category from the list of hazard categories defined by your organization.

**Recommended Safe Action / Procedure -** Use this area to describe steps that workers can take to avoid the described job hazard or minimize their exposure to it. The recommended safe actions should be stated clearly and with enough detail to help workers recognize and avoid the specific hazards.

**Protective Equipment -** After you enter the basic hazard information and save the record, you can select Protective Equipment from the Views list, or just click in the Protective Equipment grid, to identify equipment that can be used to control the potential hazards. The Protective Equipment field has a list of values showing the protective equipment items defined for your organization. You can enter any appropriate comment and select any stock code in Active status.

### How to Create a Job Hazard Record

1. **Open the Job Hazard module.**
2. **Click New.**
3. **Enter the required fields.**
   At a minimum you must enter the Identified Hazard title and describe the Recommended Safe Action in the text box provided. You also must enter a Hazard ID if your system is not set to create the ID number.
4. **Select a hazard type and category if you want to classify the hazard.**
5. **Identify protective equipment that can help control the potential hazard.**
   You can select the protective equipment from a list defined for your organization and enter additional comments to clarify the proper use of the protective equipment. Select a stock code for the protective equipment from the catalog.
6. **Click Save.**

# Job Hazard Views

The module includes the following views:

## Where Used

The Where Used view displays a listing of Procedure records associated to the current job hazard. The list contains Procedure records in both Active and Under Revision status. While the information on this view cannot be updated, the Revise Procedure action provides the ability to update the procedures listed with any new information from the Job Hazard record.



**Where Used view**

# Job Hazard Actions

In addition to standard actions, the following can be completed from within the module.

## Revise Procedure

As working conditions change and new safety information becomes available, it may be necessary to modify job hazard information. While you can not modify the hazard information on active Procedure records directly, you can select actions that permit you to modify all the procedures associated with a particular Job Hazard record or to modify the hazard information on a single procedure.

If you make changes to the Job Hazard record, and if you have the necessary responsibility in your user profile, you can select Revise Procedure from the Actions list to update all procedures referencing the Job Hazard record. When you select the procedures to update and click Finish, the system copies recommended safe action and protective equipment list from the current record to new revisions of the selected procedures.

The new revisions of the current Procedure records can be further modified, if necessary, and routed for approval from the Procedure module.

### Revising Job Hazards on Individual Procedures

It may also be necessary to modify the job hazard information for a single procedure, without changing the main Job Hazard record or other procedures referencing the job hazard. If you have the necessary responsibility in your user profile, you can select Modify Job Hazard from the Actions list in the Procedure module to make changes to the job hazard information on a single procedure. If you want to modify a procedure that is in Active status, you must first create a new revision of the Procedure.

**How to Revise Procedures from a Job Hazard Record**

1. **Open the appropriate Job Hazard record.**
2. **Make any changes necessary and Click Save.**
   You can revise the Recommended Safe Actions and the Protective Equipment list.

3. **Click Save.**
4. **Select Revise Procedure from the Actions list.**
   When you select the action, a screen opens showing the procedures associated with the job hazard that are in Active or Under Revision status.

5. **Click the Select box for those procedures you want to revise.**
6. **Click the Finish button.**
   For each selected procedure that had been in Active status, the system creates a new revision updated with the revised safe actions and protective equipment listing and places the previous revision to Under Revision status.

   For each selected procedure that was already in Under Revision status, the system updates new revision with the revised safe actions and protective equipment listing from the current record.

7. **Click the Close button to return to the Job Hazard record.**
   You can make additional changes to the modified Procedure records and route them for approval from the Procedure module.

**How to Create a New Procedure Revision**

1. **Open the appropriate Procedure record.**
   The record must be in Active status.

When a procedure attached to a work order task in Approved or Active status is made obsolete, the system places an "Obsolete" warning on the attachments view and notifies the task planner of the status change.

The Procedure module Procedure Log view keeps a record of the status changes made to the Procedure record.

Use this procedure to change the recommended safe action text or add protective equipment items for this procedure only. Any changes you make will not be reflected on the records in the Job Hazard module.

2.  **Select Create New Procedure Revision from the Actions list.**
    The system asks if you to choose a status for the current revision.

3.  **Click the Under Revision or Obsolete button.**
    Click the Under Revision button if you want the current revision to remain available for attachments until the new revision is active. Click the Obsolete button if you want the current revision to be unavailable as an attachment. When you click either button, the system creates a new revision and displays the revision number.

4.  **Click OK to navigate to the new revision.**
    From the new revision, you can select the Add/Delete Job Hazard or Modify Job Hazard actions to update the procedure.

### How to Revise Job Hazard Information on a Single Procedure

1.  **Open a new revision of the Procedure record.**
    The revision must be in Created or Under Revision status.

2.  **Select Modify Job Hazard from the Actions list.**
3.  **Select the Hazard ID you wish to modify.**
    The list of values includes only the hazards currently associated with the procedure record.

4.  **Make any necessary changes and click Next.**
    You can modify the Recommended Safe Action text, but not the Hazard ID or title. When you click next, a new panel opens showing the protective equipment listed for the job hazard.

5.  **Add additional protective equipment as necessary and click Next.**
    The system displays the steps included on the Procedure record.

6.  **Check the steps where you want to attach the updated job hazard.**
    You can also click Select All to add the modified hazard information to all the steps.

7.  **Click Finish to update the hazard and return to the Procedure record.**
    When you finish updating the procedure, route it for approval. When the record is approved, set the status to Active. Once the new revision is in Active status, the system sets the previous revision to Obsolete status if it is not already in Obsolete status.

The process is identical to how to add a job hazard, only you select the Delete radio button.

### How to Delete a Job Hazard from a Procedure

1.  **Open a new revision of the Procedure record.**
    The revision must be in Created or Under Revision status.

2.  **Select Add/Delete Job Hazard from the Actions list.**
    The system asks if you want to add or delete a job hazard.

3.  **Click the Delete Job Hazard radio button and click Next.**
    A new panel opens where you can select a job hazard to delete from the procedure.

4.  **Select a Hazard ID from the list of values and click Next.**
    A new panel opens where you can select steps from the procedure.

5.  **Select the steps where you want to remove the job hazard.**
    You can select the steps by clicking the Select box for the appropriate step. You can also click Select All to check all the boxes.

6.  **Click Finish to update the record and display a confirmation screen.**
7.  **Click Close to return to the Procedure record.**
    You can also click Start Over to add or delete additional job hazards.

## Associating Job Hazards to Procedures

Making job hazard information assessable to workers is a two-step process. First you must add the job hazard information to a Procedure record, then you attach the procedure to a work order task.

## Creating Procedure Records for Job Hazard Analysis

The Procedure module is used to maintain lists of step-by-step directions. Each procedure is assigned a unique number, or Procedure ID, which is then used to attach the procedure to other kinds of records.

In addition to managing job hazard information, procedure lists can be extremely helpful for recording repetitive tasks. Once a list is created, you no longer need to key-in instructions each time similar work is to be performed. Simply reference the procedure number and the most current list for that procedure is automatically made available to whoever is performing the work.

### How to Create a Procedure Record for Job Hazard Analysis

1. **Open the Procedure module.**
   The Procedure module is located in the Resource subsystem under Attachments.

2. **Click New.**
   At a minimum, fill in the following fields:

   **Procedure/Revision** - The Procedure field contains the identification number for the procedure. Depending on how your organization has configured the system, you will be able to enter your own number, or the system may create a number for you. When you save the record, the system checks to ensure that the number is unique.

   **Lock Procedure?** - If the Lock Procedure? box is checked when the record is first created, the system will prevent users from modifying steps information.

   **Title and Description** - Enter a brief descriptive title to help identify the procedure. Together with the Procedure ID, the title is visible when the Procedure is attached to other records in the system. You can also enter a longer description to supply additional information about the procedure. When the procedure is attached to other records in the system, the description will be visible only when the user selects to view the attachment.

3. **Select Step in the Format field.**
   The bottom portion of the screen displays the fields necessary to enter steps for the procedure.

Document format procedures are not used with job hazard analysis functionality.

4. **Complete additional fields as necessary.**
   If needed, you can also enter the following fields for classification purposes:

   **Type and Category** - Procedure types are defined by your organization in Code Table 16. Categories are defined in Code Table 28.

   **Requestor** - The person requesting the current revision of the Procedure record. The list of values for his field includes all active users.

   **Required** - The date that the Procedure should be completed.

   **Approval Route** - The approval route specifies a series of approvers that will review the record for approval before processing can continue. An approval route must be entered before you can change the status to Pending Approval. Please refer to Approval Routing in the System Basics user guide for more information.

Asset Type - Select a type from the list of Asset Types defined for your organization, such as Equipment, Building, Room, Tag Point, or Infrastructure. Asset Types are defined in Code Table 29.

Step Filename - If a separate document exists which provides additional detail about the procedure steps you can reference that document in this field. However you must still enter basic step information in the Steps View to make the information accessible to workmen viewing the procedure as an attachment.

5. **Click Save.**
   The system saves the record and allows you to enter steps for the procedure.

6. **Enter Steps.**
   To insert new steps, you must enter a unique Step Number (unique to the listed Procedure) and label. It is recommended that you increment Step Numbers by 5 or 10 so that you can insert Steps in between at a later time. Duration is optional.

# Adding Job Hazards to Procedure Steps

Add a job hazard to a procedure steps by selecting the Add/Delete Job Hazard action from the Procedure module Actions list. After the job hazard is added, job hazard information copies to the Job Hazard and Protective Equipment views of the Procedure record.

After you associate job hazards to the procedure steps, the Job Hazard Analysis section displays the associated Job Hazards for the step selected. To see the entire list of hazards associated with all steps, select Job Hazard from the Views list. Job hazards cannot be entered directly on this view.

The Where Used view in the Job Hazard module shows all Procedure records associated with a job hazard.

Once a job hazard is associated to a Procedure, the Procedure record is also listed in the Job Hazard module Where Used view. The list shows Procedure records in both Active and Under Revision status. The information on this view cannot be updated, however you can use the Revise Procedure action to update the procedures listed with any new information from the Job Hazard record.

### How to Add a Job Hazard to a Procedure

See the section titled "How to Create New Procedure Revisions" for more on creating new revisions.

1. **Create or open the appropriate Procedure record.**
   The Procedure record must be in Created or Under Revision status. If you want to associate a job hazard with an existing procedure in active status, you must first create a new procedure revision.

2. **Select Add/Delete Job Hazard from the Actions list.**
   The system asks if you want to add or delete a job hazard.

3. **Click the Add Job Hazard radio button and click Next.**
   A new panel opens where you can select a job hazard to add to the procedure.

4. **Select a Hazard ID from the list of values and click Next.**
   A new panel opens where you can select steps from the procedure.

5. **Select the steps where the job hazard would apply.**
   In the example above, you would want to warn the person loading and off-loading the truck of the potential dangerous substance in the containers. Click the Add box next to the steps where the hazard applies. You can also click Select All to check all the boxes.

6. **Click Finish to update the record and display a confirmation screen.**
7. **Click Close to return to the Procedure record.**
   Or click Start Over to add additional job hazards.

The job hazard information you added can be viewed on the Job Hazard and Protective Equipment views of the Procedure record. When the Procedure record is approved and set to Active status, it is ready to be attached to other system records.

## Making Job Hazard Information Available to Workers

The second step in making hazard information accessible to workers is to attach Procedure records that include job hazard information to work orders or work order tasks. The system can be set so that the procedure steps and job hazard information can be printed separately or with the work order or work order task. A listing of tasks that the procedure has been attached to is displayed in the Procedure module Where Used view.

Follow a similar process to attach the procedure to an asset or other record types that support attachments.

**How to Attach a Procedure to a Work Order**
1.  **Open the appropriate work order task.**
2.  **Select Attachments from the Views list.**
3.  **Click New.**
4.  **Select the Attachment type (Procedure) from the drop-down list.**
5.  **Select the appropriate Procedure ID from the list of values.**
6.  **Click the Print? box if you want the procedure to print with the task.**
    Click Save.

# Chapter 36
## Keys and Locks

The Keys and Locks module provides a simple way to track key/lock assignments to individuals. Both keys and locks are identified by unique IDs but may also belong to a key or lock set. The Keys and Locks record contains all descriptive information about the keys, locks and sets, along with a record indicating where they are assigned.

## Keys and Locks Records



**Keys and Locks record**

The following fields are included:

**Set ID -** When inserting a new Keys and Locks record, enter a unique Set ID any other required information. Enter the exact same Set ID on a new record to prompt the system to set the copy number to the next highest subsequent number.

**Copy Number -** Copy number is maintained by the system. It is generated when the record is initially saved. If you enter a duplicate Set ID the system sets the next highest sequence number for the Copy No. to indicate that this is a copy.

**Parent Set ID -** In order to make the key or lock a part of a set, enter the ID of for the Parent Set in this field. Once a Parent record has been created, you can enter child records on parent header or directly in the Subsets view.

**Type -** Use the Type field to identify the kind of set being identified: "Key", "Key Set", "Lock", or "Lock Set".

**Set Category -** Use this field to further categorize the key or lock type. The list of values for this field is defined by your organization in a code table.

**Status -** Status indicates whether the item is currently assigned, available or inactive. The status field works in conjunction with the Assigned and Returned fields.

When you set the status to Assigned, you must also enter Assigned Date and Name.

When you enter a "Returned Date", the system resets the status to Available and clears assignment information. You may also choose to manually set the status to "Inactive".

**Assigned Employee Name and Number -** The Assigned Employee Number (the first field) is not required when issuing Keys or Locks, however Employee Name is required. If you enter an employee number, or select one from the list of values, the Name field is filled in automatically. Otherwise, you may enter a name which is not associated with an employee number. This allows you to track keys and locks issued to non-employees (such as contractors).

### How to Create a Keys and Locks Record

Duplicate key/lock sets are defined on different Keys and Locks records. They have the same Set ID with sequential copy numbers.

1. **Open the Keys and Locks module in the Resource subsystem.**
2. **Click New.**
   A new Keys and Locks record opens.
3. **Complete the fields according to the** Keys and Locks Field Descriptions**.**
4. **Click Save.**

### How to Make a Key or Lock Part of a Set

Before you can make a Key or a Lock part of a set, the record for the set must be created.

1. **Open the Key or Lock record.**
2. **Select a Parent Set ID from the list of values.**
   This list only shows active Set IDs.
3. **Click Save.**

### How to Remove a Set from Circulation

1. **Open the appropriate Keys and Lock record.**
2. **Change the Status to Inactive from the pull-down list.**
3. **Click Save.**

## Assigning Keys and Locks to Employees

Once you are ready to distribute the keys and locks, you must enter the assigned employee on the Keys and Locks record.

### How to Assign Keys or Locks to Employees

1. **Open the appropriate Keys and Locks record.**
2. **Set the status to Assigned.**
3. **Enter the employee number in the Assigned Employee field.**
4. **Enter the date in the Assigned Date field.**
5. **Click Save.**

## Returning Keys and Locks

To return the keys or locks, set the record status back to Available. The system will automatically remove the employee name and the assigned date and will record the transaction in the log. Select Log from the Views list to review this information.

**How to Return a Set from an Employee**
1. **Open the appropriate Keys and Lock record.**
2. **Enter the Returned Date.**
3. **Change the Status to Available from the pull-down list.**
   The system validates whether the returned date is after the assigned date, then clears the information in the Assigned Employee Number, Name and Assigned Date fields.

4. **Click Save.**

# Keys and Locks Views

The module includes the following views:

## Subsets

If the type on the header is KEY SET or LOCK SET, the Subsets view is available so that you can access a list of items that belong to the set. Think of this as a set of keys to your house. The set would include keys to the front door and the back door. Each of these keys could be entered in the subset view to indicate that they were part of the set.



**Subsets view**

Items already identified as a subset of the Key/Lock are displayed. You can also automatically create new Key records by entering them here, as a subset of the displayed Key / Lock. When entering new subset records, the system automatically generates a new Keys and Locks record using the entered Set ID and description and information from the parent set. The Type is automatically set as Key, and this cannot be changed.

## Log

As keys and locks are issued and returned, the system automatically maintains an audit trail in the Log view. Here the system records checkout and return activity for the key, key set, lock or lock set. This information is system maintained and cannot be modified. The upper portion of the

window summarizes the set ID and copy number which identifies the header record, while the lower portion records specific information about checkouts and returns.



**Log view**

**Assigned Number and Name -** These two fields indicate the employee responsible for the key(s) or lock(s).

**Date Assigned and Returned -** These two fields indicate the start and end dates for that responsibility.

# Chapter 37

## Employee

Enter human resources or administrative information about employees in the Employee module. Timekeeping, leave schedules, pay rates, and other information related to your employee's standing in your organization is maintained here. Whenever an employee number is referenced throughout the system, the information in the Employee module is used to populate other fields related to that employee.

The system uses Employee Job Title, Supervisor, and Crew/Craft fields from the Employee module for default information on Work Order, Purchase Order, Timesheet, Scheduling records, or elsewhere.

Even if you use a separate human resources system, you will benefit from storing information on your employees in Oracle Utilities Work and Asset Management since the module is extensively integrated throughout the system.

## Employee Records

If an employee needs to work within the system you must set up a User Profile record and assign responsibilities to that employee to provide access to the system. However, employee records are not required to have a corresponding User Profile. The module can be used to simply store information about employees who do not use the application.

Employee information includes the Employee Number and Name, User ID, Status, Address, and a variety of details about their job-position within your organization. Settings in the Timekeeping Authority business rule determine which employee records you can access.

The system can automatically create timesheets for employees who work a fixed schedule. When the Automatically Create Timesheet indicator is checked on the Auto-Timesheet Schedule view, the Employee record is flagged with "Auto-Timesheet" near the top of the window to indicate that automatic timesheet functionality is active for this employee.

Settings in the Timekeeping Authority business rule determine which employee records a user can access.

**Employee record**

The following fields are included:

**Employee Number -** If the Employee Number is not system generated, enter a unique Employee Number. The system verifies the number is unique when you save the record.

If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

**Status -** Employee records may be in either Active or Inactive status. Only employees who are in Active status can perform tasks such as issuing and receiving stock.

**Hired -** Enter the date the employee was hired.

**Terminated -** If the employee is no longer employed, enter the date the employee was terminated.

**SS Number -** You can limit viewing of the employee's social security number to authorized users through settings in the Responsibility module.

**Name and Address -** The only fields that you are required to enter are Last Name and Employee number. However, entering more complete information about the employee is helpful since this information is used by other areas within the system. The fields in the middle section of the record hold the employee's name, address and telephone information.

**Payroll-Related Fields -** Most of the fields in the lower section of the window are used in the Timekeeping module for generating payroll reports and other timekeeping processing, including special processing for accommodating union related requirements. Many of the fields have an associated list of values so that you can access the codes easily.

Enter the Job Title, Supervisor, Job No., Resource Type, Administrative, Pay Group, pay rate (Rate), and Classification in the appropriate fields. These fields are entered according to your individual business practices.

**Department, Area, and Location -** Enter the Department and Area that the Employee works under, if applicable. On any other records where the employee number would be tied to a department and area, the system defaults the department and area entered here.

**Crew/Craft -** Enter the default Crew and Craft that this employee works under. When the Employee number is entered on other records, this Crew/Craft combination will be entered automatically where appropriate. The system can only track an employee on one craft, however that craft can be on any number of crews. Generally employees can change these defaults on

other records when it is necessary if they have the proper authority and your business processes permit it.

The Crew field has an associated list of values that is controlled by the Crew module in the Maintenance subsystem.

The Craft field has an associated Lists of Values that is controlled by the Craft Rates business rule. This rule also controls the pay rate and associated regular and premium expense codes for the various crafts.

**Overtime Volunteer -** If this employee is eligible and/or has volunteered to work overtime hours, a check in these boxes indicates whether or not the employee should be included on the list of values for the Crew or Zone, respectively. The related Crew and Zone fields appear in the Overtime Standing view, as well as on the Search Options screen. If, for instance, you wanted to find all employees who are available to work overtime you could enter Y in the Crew and Zone fields on the Employee Search Options screen, and find all of these eligible employees.

### How to Create an Employee Record

1. **Open the Search Options or Search Results window, or to an existing Employee record.**
2. **Click New.**
3. **Enter a unique Employee number.**
   The system will do this for you when you save if the option is activated in the Sequence Numbers module of the Administration subsystem.

   If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

4. **Enter a Hired date.**
5. **Enter the employee's Name.**
6. **Enter any additional information required by your organization.**
7. **Click Save.**

# Employee Views

In addition to standard notes, attachments, and approval views, the module includes the following:

## Wage Rate

Through the Wage Rate History view, you may enter and maintain wage rate information specific to the employee. Access to both the Wage Rate view and the Rate field on the main Employee record is controlled by function settings in our responsibility profile. After you update the rate information and save the record, the system automatically updates the Rate field on the main record on the date you enter in the Effective Date field.



**Wage Rate view**

## Auto-Timesheet Schedule

If an employee routinely works a fixed schedule and charges time against the same charge numbers, the system can be configured to automatically create timesheets for that employee. When the relevant information is entered on the Auto-Timesheet Schedule view and the Automatically Create Timesheet box is checked, batch processing creates timesheets for each workday within the pay period and sends an alert to the employee's home page informing them that the timesheet for the pay period was created.

Settings in the Scheduled Holidays Business Rule determine holiday dates and charge numbers for all employees with automatically created timesheets.

You can enter the information required for automatic timesheets in the Employee module, or by using the User Enrollment Action when you are creating a new Employee record.

**Auto-Timesheet Schedule view**

The upper section of the Auto Timesheet Schedule view contains basic information from the main record identifying the employee, crew and craft. An employee must have an assigned craft and be a member of a crew before the system can create automatic timesheets for that employee.

The middle and lower sections of the view contain the scheduling information required by the auto timesheet processing.

## Auto Timesheet Schedule Fields

**Automatically Create Timesheet? -** Check the Automatically Create Timesheet box to enable auto timesheet processing for this employee.

**Work Day Start/End Time -** Enter the start and end times for the employee or select the appropriate times from the list of values. Both fields use a colon to separate hours and minutes (5pm, for example, is entered as 17:00). You can enter the times directly or select from one list of values for hours and then from a second list for minutes.

**Default Next Approver -** Enter the Approval Title to use for Next Approver on timesheets created for the employee. If you do not enter a default title, timesheets will be created without a Next Approver.

**Start Date -** Enter the date that you want the system to begin creating auto timesheets for this employee.

**Daily Timesheet Charges -** The fields in the lower section of the Auto Timesheet Schedule view correspond to the similar fields in the Timekeeping module. For each charge type and number, select the days of the week that a timesheet should be created on. This allows you to set different charge types for different days of the week. The system uses the information you enter here to create timesheet line items for each timesheet created except for scheduled holidays and vacations.

If a pay period opens or closes in the middle of a week, timesheets will be created only for the work week days falling in the pay period.

You can also enter similar information in the User Enrollment Action to enroll a new user for Automatic Timesheets.

**How to Schedule an Employee for Automatic Timesheets**
1. **Open the appropriate Employee record.**
2. **Select Auto-Timesheet Schedule from the Views list.**
3. **Check the Automatically Create Timesheet box.**
4. **Enter the start time and end time for the employee's work day.**
5. **Enter a Start Date.**
   Enter the date you want the system to begin creating automatic timesheets for the Employee.

6. **Check the days of the week that the employee works.**
7. **Click Save.**
8. **Enter the appropriate charge information.**
   Complete all the required fields. When you select a charge number, the system supplies the Charge description. You can enter an additional comment for each charge number if necessary.

   Enter as many line items as needed to account for the employee's daily time charges, excluding holiday and vacation time.

9. **Click Save.**
   The system will begin creating automatic timesheets for the user on the next workday in the open pay period after the start date.

## Scheduled Leave

Scheduled Leave information includes the Leave Start and End Dates, a Reason, total number of Days Off, and Comments. This data is helpful to schedulers when scheduling work to be performed. Information on the Scheduled Leave view is taken from the Leave Request module and cannot be updated directly.
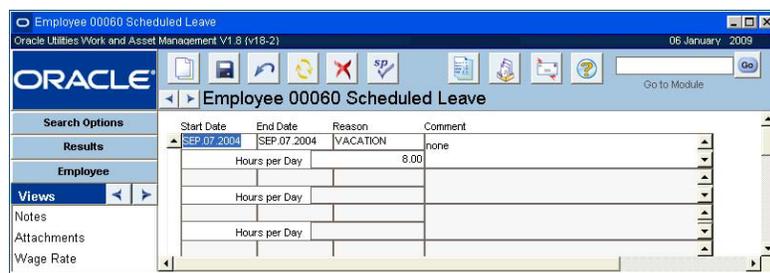

**Scheduled Leave view**

## Leave Summary

Select Leave Summary from the Views list to open a window showing a summary of leave taken by the employee. This information is copied from posted timesheets and cannot be updated directly.
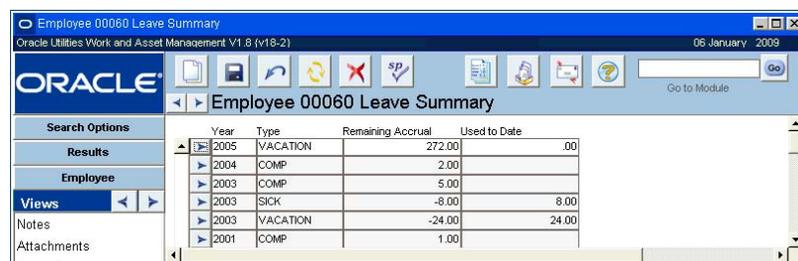

**Leave Summary view**

Click the arrow next to any item to open the details screen for that line.

## Leave Accrual

For each Leave Summary record, a Leave Accrual detail record is available (by clicking the arrow button to the left of the Leave Summary record). Once the values in the Accruals section are defined the system calculates the balances as timesheets are processed.

Authorized users can create accrual records or update amounts by clicking new in the Leave Accrual view and entering the appropriate number of hours and accrual rates for each leave type.



**Leave Accrual view**

# Training (Detail)

Select Training (Detail) from the Views list to open a window where you can enter or view details of the training completed by the employee. Here you can add or change the training information. This information includes the course title and description, as well as Training Dates, Craft Information, and Certification Information.



**Training view**

*Note:* The Course field can hold up to 20 characters and is controlled by Code Table 45. This is a non-validating Code Table meaning that if a code or course description is typed into the field the system will add it to the list of values, but will not add it to Code Table 45. This is why there can be more choices available on the list of values than show on Code Table 45.

The Course field corresponds to the Qualifications fields in the Permit Templates and Permits modules in the Maintenance subsystem. You can link qualified employees to Permit records using the Course codes listed in the Employee record and settings in the Permit Types Business Rule. Please review the discussion of the Permit Types Business Rule for more information.

# Training (List)

Select Training (List) from the Views list to open a window where you can add or view a list of the trainings completed by the employee. You can view the Course name, description and the

scheduled and completed dates for each training course. Click the arrow next to any item in the list to open the details view for that training course.



**Training (List) view**

## Overtime Standings

Based upon the settings entered in the Overtime Standings Business Rule, the system calculates overtime rankings based on time worked and seniority for crews. Select Overtime Standing from the Views list to open a window where you can review and manually update this information. The Last Overtime Adjustment date cannot be modified.



**Overtime Standings view**

# Employee Actions

In addition to standard bookmark, copy record, and audit log actions you can also navigate to the User Profile module and the Account Log from the Actions list in the Employee module.

# Chapter 38
# Maintenance Manager

Maintenance Manager information entered through this module serves as the validation table whenever a Maintenance Manager Title is entered elsewhere in the system. Associated information may then be retrieved by the system and displayed on the current window.

## Maintenance Manager Records

Maintenance managers create a relationship between specific people and a collection of assets (usually by process or work area).

The Maintenance Manager module in the Resource subsystem enables you to create a relationship between maintenance managers (specific people) and a collection of assets (usually by process or work area). As work is performed against assets, the cost of work is summed up the account hierarchy, asset hierarchy, and to the associated Maintenance Manager record.

The cost summary information presented in the maintenance manager is typically only used by maintenance managers as a way to track all costs associated with the assets for which they are responsible. This information can help managers to budget and plan work. Maintenance managers can use the system to analyze asset operational information and further track the assets for which they are responsible.

When updating existing information, all fields except for Maintenance Manager Code may be modified.



**Maintenance Manager record**

To create a new maintenance manager title and have work costs summed to it, you must:

1. Create the record in the Maintenance Manager module

2. Reference the Maintenance Manager record on the related Asset records for use on work orders.

**How to Create a Maintenance Manager Record**
1. **Open the Maintenance Manager module.**
2. **Click New.**
3. **Enter the Maintenance Manager code.**

This must be a unique code and will appear on the list of values in the Maintenance Manager field of the Work Order Defaults window in the Asset module of the Resource subsystem. If you enter a duplicate code the system will warn you that the record has already been inserted when you try to save the record.

4. **Enter the Crew from the list of values.**
   Usually, this will be the crew that the manager supervises.

5. **Enter the description of the manager's function.**

6. **Enter the Last Name and First Name for the manager.**
   This will generally be the first and last name of the person responsible.

7. **Click Save.**

**How to Assign a Maintenance Manager to an Asset**

1. **Open the Asset record to which you will assign the manager.**

2. **Click the Work Order Defaults button.**
   The Asset - Work Order Defaults window opens.

3. **Enter the Maintenance Manager from the list of values.**

4. **Click Save.**
   Once you have entered a Maintenance Manager record:

5. **Open the Asset module and locate existing assets in the maintenance manager's area of responsibility.**

6. **Enter the maintenance manager title in the Maint Manager field.**



**Asset Record with Maintenance Manager referenced**

This information defaults to work orders (and work requests) written against the listed asset.

7. **Click Save.**
   Once you make this association, work costs incurred work orders referencing the asset are automatically summed to the maintenance manager title entered on the work order.

Although the system automatically enters the maintenance manager associated to the asset that you enter on a work order, it can be changed if necessary.

# Maintenance Manager Views

The module includes the following views:

## Period Costs

The Period Costs view shows costs which have posted to processes or assets referencing the displayed Maintenance Manager code. Information presented in this view cannot be modified.



**Period Costs view**

If you have the appropriate function responsibility in your user profile, you can also use this view to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

Field descriptions are similar to those discussed for Period Costs view in the Account module.

## Cost Summary

The Cost Summary by Expense Category view shows Month-to-Date costs, Year-to-Date costs, and Totals per expense category. These costs are summed by batch processing from processes or assets referencing the displayed Maintenance Manager code. Information displayed cannot be updated here.



**Cost Summary view**

If you have the appropriate responsibilities in your user profile, the cost views also display actual amounts reported by your organization's external financial system.

Field descriptions are similar to those discussed for the Cost Summary view in the Account module.

# Chapter 39
# Function

A Function record serves as a "cost bucket" where costs can be applied similar to asset on a work order or a charge number on a timesheet. Use the Function module to define Functions and, as costs are incurred against a Function, view the charges.

## Function Records

Functions are stored with an asset record type of "F" so that you can reference them in the Asset field on Work records.



**Function record**

The following fields are included:

**Function ID -** Depending on your system settings the Function ID may be system generated, or user entered. The system verifies that the number is unique when the record is saved.

**Criticality -** Use the Criticality to indicate the work or safety impact and help determine the overall work priority. The field has an associated list of values controlled by Code Table 40. Values from "1" to "9" represent 'little or no impact' to 'severe production or safety impact'. This value will be carried over when the Function is referenced on a work record.

**Work Order Data -** The information entered in the Work Order Data fields is carried over to work records when the function is referenced.

**Accounting Information -** When the Function is referenced on a work record, the system applies related costs to the Department, Area, and Account indicated in these fields. The system only allows account numbers that are associated to the department and area that are entered. If the Department and Area fields are left blank, the system only allows accounts that are not associated to any department or area.

**How to Create a Function Record**

1. **Open the Search Options or Search Results panel, or to an existing Function record.**
2. **Click New.**
3. **Enter the Function Identification Number.**
   This number must be unique. The system will provide a number if the option has been activated in the Sequence Numbers module of the Administration subsystem.

   If you create this record ID manually, avoid the use of the special characters ', ", &, or % as they may result in processing errors.

4. **Enter the Function Type using the list of values.**
5. **Enter the Description.**
6. **Enter the Account Number.**
   This is the account to which the charges will accumulate for the General Ledger.

7. **Enter any other information your organization requires.**
8. **Click Save.**

# Function Views

In addition to any standard views, the module includes the following:

## Period Costs

The Period Costs view displays per period actual costs by expense category. Information on this view is display only and cannot be updated. These are costs charged against the Function, posted by nightly batch processing.



**Period Costs view**

If you have the appropriate function responsibility in your user profile, you can also use this view to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

Field descriptions are similar to those discussed for Period Costs view in the Account module.

## Cost Summary

If you have the appropriate responsibilities, the cost views also display amounts from your organization's external financial system.

Through the Cost Summary by Expense Category view, you may view Month-to-Date costs, Year-to-Date costs, and Totals per expense category. These costs are posted by batch processing for charges against the Function. Information displayed here cannot be updated.



**Cost Summary view**

If you have the appropriate function responsibility in your user profile, you can also use this view to compare actual amounts from an external financial system with estimates and budgets maintained by Oracle Utilities Work and Asset Management.

Field descriptions are similar to those discussed for Period Costs view in the Account module.

## Work History

Through the Work History view, you may access a list of Work Order records that were written against the function. If a listed work order has service history information available, the words 'Has Service History' appear to right of the description field for that work order. Select Service History from the Views list to access the work order service history information.



**Work History view**

# Function Actions

In addition to standard bookmark, copy record, and audit log actions you can also navigate to the Account Log from the Actions list in the Function module.

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