QAD Enterprise Applications

## User Guide

# Enterprise Asset Management

Introduction
Navigation
General Module
Maintenance
Inventory
Finance
Purchasing
Projects
Analysis
System Administration
EAM Maintenance Manager Dashboard

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# QAD Enterprise Asset Management User Guide Change Summary

The following table summarizes significant differences between this document and the previous version.

| Date/Version | Description | Reference |
|---|---|---|
| March 2017/EAM 2017 | Introduced Approval Limit Currency, which sets one currency for the system for approval limit values. Approval limits are then converted into the domain's base currency for authorizations during routing. (Ch. 7 Purchasing, Ch. 8 Projects, Ch. 10 System Administration) | page 417, page 547, page 689 |
| | Updated browse information to describe the new All PO/Requisition Lines browse that replaced the All PO Lines browse. (Ch. 7 Purchasing) | page 449 |
| | Added Ch. 11 EAM Maintenance Manager Dashboard, which introduces and describes the EAM dashboard and operational metrics available in the QAD .NET UI. | page 763 |
| | Added information for attaching files to equipment records, quotes, projects, master instruction lists, PM templates, work orders, service requests, MRO part records, requisitions, and purchase orders. (Ch 4 Maintenance, Ch. 5 Inventory, Ch. 7 Purchasing, Ch. 8 Projects) | Chapter links: page 77, page 417, page 273 and page 547 |
| | Updated Registry settings. (Ch. 10 System Administration) | page 742 |
| November 2016/EAM 2016.1-Rev1 | Click the following link for a video demonstration of the new functionality available in EAM 2016.1.<br>EAM 2016.1 Functional Detail Demonstration.mp4 | -- |
| | Updated Registry settings. (Ch. 10 System Administration) | page 742 |
| | Added information on the PO Reroute/Notify Fields browse. (Ch. 10 System Administration) | page 750 |
| | Minor updates and corrections throughout. | -- |

| Date/Version | Description | Reference |
|---|---|---|
| September 2016/EAM 2016.1 | Updated label name Next Issue Date to PM Complete By throughout guide. | -- |
| | Updated label name PM Due to PM Issue By throughout guide. | -- |
| | Introduced Tool Codes. (Ch. 4 Maintenance) | page 108 |
| | Documented methods to record Equipment downtime. (Ch. 4 Maintenance) | page 145 |
| | Documented the steps to copy equipment records to a new piece of equipment. (Ch. 4 Maintenance) | page 164 |
| | Introduced the Tools module and tool management. (Ch. 4 Maintenance) | page 164 |
| | Introduced the ability to copy PM templates across sites. (Ch.4 Maintenance) | page 198 |
| | Documented All Failures browse. (Ch. 4 Maintenance) | page 270 |
| | Added Buyer Commodity Codes menu option. (Ch. 5 Inventory) | page 277 |
| | Documented PO print option that allows you to include user or customer comments on POs. (Ch. 7 Purchasing) | page 495 |
| March 2016/EAM 2016 | Updated the guide to reflect further integration with QAD Enterprise Edition. | -- |
| | Introduced the Work Order Close browse. (Ch. 4 Maintenance) | page 256 |
| | Added information on globally adding or deleting standard clauses for multiple vendors. (Ch. 7 Purchasing) | page 424 |
| | Added information on the new action to reopen a canceled requisition. | page 477 |
| | Added information on the new action to reopen a canceled or a closed PO. | page 508 |
| | Expanded Analysis chapter to include information on additional default reports. (Ch. 9 Analysis) | page 615 |
| | Added new jobs and job program information. (Ch. 10 System Administration) | page 710 |

| Date/Version | Description | Reference |
|---|---|---|
| March 2015/EAM 2015 (12.9) | Added information about linking buyers to commodity codes. (Ch. 3 General Module, Ch. 5 Inventory, and Ch. 7 Purchasing) | page 36, page 291, and page 461 |
| | Added Budget Options to Purchase Order tab on Sites to allow calculation of the percentage of a site's budget already spent. (Ch. 3 General Module) | page 47 |
| | Added Use Over Budget. (Ch. 3 General Module) | page 55 |
| | Added Stores Requisition Approval Group information for sites and inventory. (Ch. 3 General Module and Ch. 5 Inventory) | page 56 and page 365 |
| | Relabeled Lifetime Budgets to Requisition Budget. (Ch. 6 Finance) | Chapter 6 |
| | Defined new functionality on Requisition Budgets Right-Click Menu, including Refresh Budget and Copy Budget Across Sites. (Ch. 6 Finance) | page 383 |
| | Added information on analyzing budget costs. (Ch. 7 Purchasing) | page 471 |
| | Documented approvals when requisitions are over budget. (Ch. 7 Purchasing) | page 472 |
| | Added e-mail purchase orders to suppliers. (Ch. 7 Purchasing) | page 496 |
| | Changed user e-mail from active on Receive E-mail? to mandatory value for all users. (Ch. 10 System Administration) | page 680 |
| | Updated fields available on System Control\|Detail and System Control\| MFG/PRO tabs to update financial transactions. (Ch. 10 System Administration) | page 688 |
| | Added new jobs and job program information. (Ch. 10 System Administration) | page 710 |
| | Added custom programs. (Ch. 10 System Administration) | page 762 |
| | Removed references to QXtend where Journal Entry APIs are now in use. | -- |
| September 2014/EAM 12.8 | Production Driven Maintenance field definitions (General\|Site\| Maintenance tab) | page 51 |
| | Suppress Password for PO and Req approvals field definitions (General\| Site\|Authorization tab) | page 54 |
| | Added PM Route Workflow Procedure Using Work Orders | page 202 |
| | Added Production Driven Maintenance (Ch. 4 -Maintenance) | page 204 |
| | Added PM Route Workflow Procedure Using PM Templates | page 250 |
| | Major Revisions to Ch. 5 - Inventory | page 273 |
| | Rotable Part functionality (Ch. 4 - Maintenance) | page 327 |
| | Added Global Authorized for Requisitions (Ch. 7 - Purchasing) | page 472 |
| | Added Job Program Information (Ch. 10 - System Administration) | page 710 |
| March 2014/EAM 12.7 | Major revisions to Ch. 4 - Maintenance | page 77 |
| | Major revisions to Ch. 8 - Projects | page 547 |
| | Ch. 6 Finance - Added COA Requisition Approval | page 391 |
| | Ch. 6 Finance - Added Project Margin Approval Group | page 409 |
| | Ch. 7 Purchasing - Added All PO/Req Revisions browse | page 450 |
| | Ch. 7 Purchasing - Changes to PO return to vendor section | page 505 |
| | Ch. 7 Purchasing - Added BO Standard Clauses submenu | page 526 |
| | Ch. 7 Purchasing - Changes to BO release section | page 529 |

| Date/Version | Description | Reference |
|---|---|---|
| October 2013/EAM 12.6 | Major revisions to Ch. 3 - General Module | page 27 |
| | Added PM Calibration to Ch. 4 - Maintenance | -- |
| | Added PM Workflow and PM Route to Ch. 4 - Maintenance | -- |
| | Major revisions to Ch. 7 - Purchasing | page 417 |
| | Added Multi Currency Purchasing to Ch. 7 - Purchasing | page 425 |
| | Added Spend Allocation, Fixed Asset Integration, and Margin Approval to Ch. 8 - Project Accounting | -- |
| July 2013/EAM 12.5.1-Rev1 | Enhancements to purchasing modules | page 417 |
| | Enhancements to projects modules | page 547 |
| | Added General Module chapter | page 27 |
| September 2012/EAM 12.5.1 | Added 12.5.1 user interface and other changes | page 11 |
| | Combined navigation and basic function information | page 9 |
| April 2012/EAM 12.5 | Added Blanket Orders functionality to Purchasing | page 535 |
| | Added Fixed Asset integration | -- |
| | Added Project Allocation integration | -- |
| | Added Revision Control integration | page 685 |
| January 2012/EAM 12.4 | Updated Inventory functionality enhancements | page 273 |
| | Added Quote functionality to Purchasing | page 535 |
| | Updated standard reports descriptions in Analysis | page 620 |
| | Added significant updates to System Administration functionality | page 662 |
| October 2011/EAM 12.4 | Updated browse navigation procedures | page 11 |
| | Added copy part across sites information | page 273 |
| | Updated default analysis reports descriptions | page 620 |

Chapter 1

# Introduction

This section discusses overview information about Enterprise Asset Management (EAM).

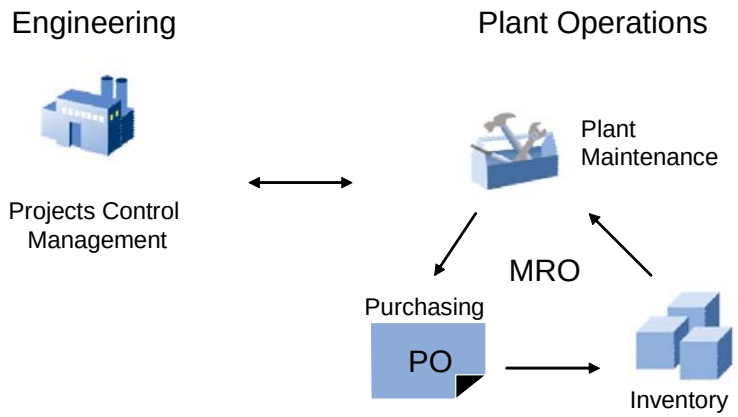
***Asset Lifecycle Management 2***

***EAM Modules 4***

# Asset Lifecycle Management

Use QAD Enterprise Asset Management (EAM) to effectively manage your organization's physical assets. The EAM suite of applications maximizes manufacturing equipment use and minimizes repair costs. Lifecycle management includes design, construction, commissioning, operation, maintenance, and replacement of plant, equipment, and facilities. EAM provides supply chain management solutions for project accounting, plant maintenance, and maintenance, repair, and operation (MRO) including inventory and purchasing. EAM is fully integrated with the Manufacturing and Financial modules in QAD ERP.

**Fig. 1.1**
EAM




## EAM Business Areas

EAM consists of three primary business areas:

- MRO
- Project Controls
- Plant Maintenance

### MRO Inventory and Purchasing

Storeroom managers use MRO Inventory to determine the critical parts to stock, minimizing production downtime and inventory investment. A company cannot stock all potential spare parts that may be required, because of the sheer number and cost.

Buyers use MRO Purchasing to quickly and easily identify the appropriate supplier with the best price. A small manufacturing plant may purchase thousands of MRO items from hundreds of potential suppliers. The electronic authorization process enables managers to review purchase requests and current spending against budget to determine whether to fill the requisition.

### Project Controls Management

Expanding or upgrading manufacturing capabilities is one of the most important annual investments a manufacturing company makes. Bringing projects in on time and within budget is critical to ensure that the asset generates a return on investment. Project engineers use EAM to track and manage spending against a project's budget and authorized spending authority. With real-time information, managers know how much has been spent and how much it will cost to complete a project.

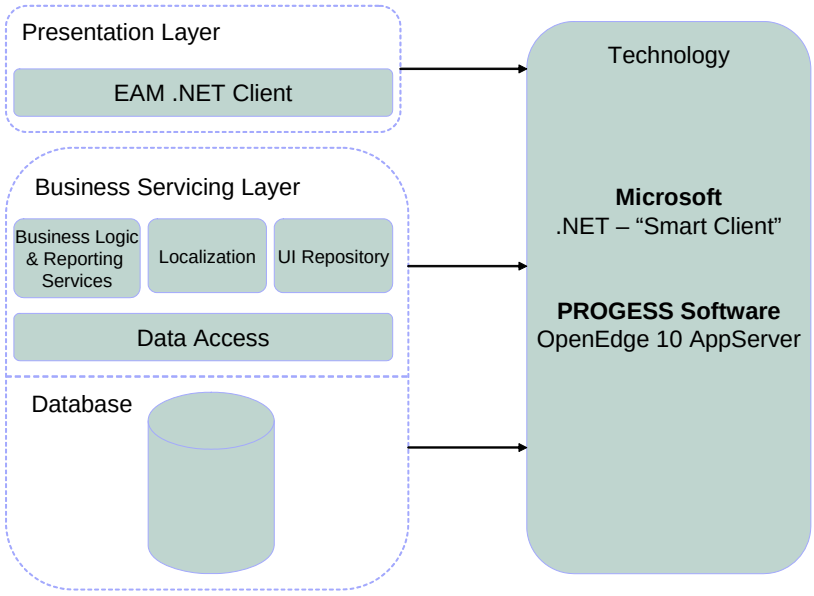
### Plant Maintenance

After the project is complete and plant operations takes control of the asset, maintenance planners use EAM to set up preventive maintenance schedules to properly maintain equipment. The EAM work order system records any repairs and associated cost against equipment. With this information, maintenance managers can determine how best to allocate resources.

## EAM Application Framework

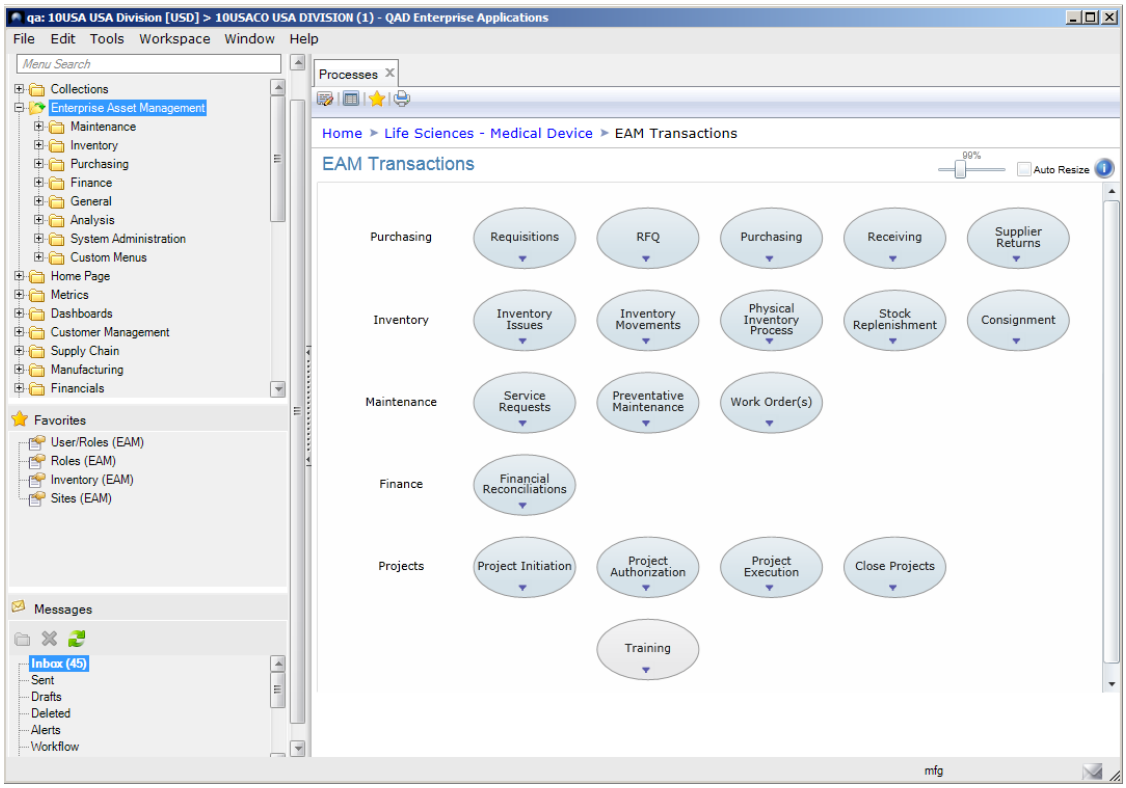
The EAM application framework is an Open Edge Reference Architecture (OERA) compliant system divided into three primary tiers, or layers. The topmost layer, or presentation layer, is a relatively thin client .NET executable designed to run on Windows XP and newer operating systems. The middle layer is based on OpenEdge technology and hosts all business services. The final layer represents databases and any other data source.

**Fig. 1.2**
EAM Architecture




The presentation layer is a series of generic form, menu, browse, and action engines that render nearly every aspect of the user interface at runtime.

**Fig. 1.3**
EAM

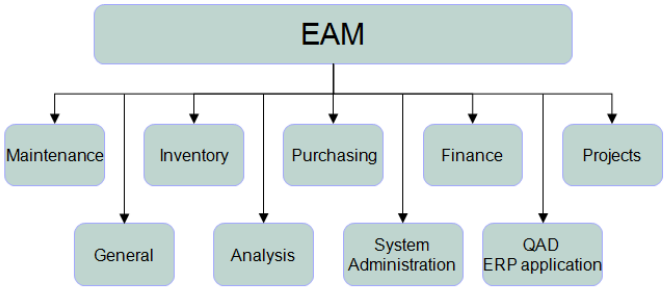



# EAM Modules

EAM groups related functionality into the following modules:

- Maintenance
- Inventory
- Purchasing
- Finance
- Project Accounting
- General
- Analysis
- System Administration

**Fig. 1.4**
EAM Modules




## Maintenance

Use Maintenance to drive work order functionality for maintenance and repair operations (MRO):

- Equipment
- PM/PdM
- Work Orders
- Service Requests
- Labor History
- Codes
- Documents

## Inventory

Use Inventory to manage parts (inventoried and non-inventoried) across single or multiple plants, analyzing usage and reserves, and improving cost effectiveness:

- Inventory
- Physical Inventory
- Stock Replenishment
- Stores Requisition Lists
- Stores Requisition Approval Groups
- Rebuild Locations
- UOM Conversion
- Codes
- Documents

## Purchasing

Use Purchasing to manage indirect purchasing (stock, non-stock, services):

- Purchase Orders
- Requisitions

- Blanket Orders
- Quotes
- Routing Substitutions
- Vendors
- Standard Clauses
- Currency
- Exchange Rates
- Approval Groups
- Codes
- Documents

## Finance

Use Finance to manage accounting, taxes, overhead, and any money-related aspects of EAM operations:

- Accounting
- Tax
- Overhead
- Groups
- Codes
- Capitalization History
- Intercompany Accounts
- Documents

## Project Accounting

Use Project Accounting under Finance to plan, track, and control detailed project budgeting for:

- Capital Projects
- Expense Projects
- Customer-Funded Projects
- Engineer-to-Order (ETO) projects

Project Accounts make status information on the entire budget or each job/phase of the budget readily available and visible by job spending limit or budget level.

## General

Use General to set up common system properties:

- Business Units
- Business Segments
- Domains
- Sites

- Codes
- Employees
- Groups
- Revisions

## Analysis

Use Analysis to display key information in an easy-to-use graphic format:

- Equipment
- Finance
- Inventory
- Labor
- PM
- Project
- Purchasing
- Service Requests
- System Administration
- Work Orders

## System Administration

Use System Administration to alter menus, user permissions, roles, and system-wide configurable features:

- Users
- Roles
- User/Roles
- System Control
- ERP Interface
- User-Defined Fields
- Job Control
- System Sequence
- Site Sequences
- Registry
- Report Setup
- Mandatory Fields
- Req Reroute/Notify Fields
- PO Reroute/Notify Fields
- Screen Editor
- Report Designer
- User-Defined Mail

- Product Line
- Equipment Mapping to ERP
- Production Line Mapping to ERP
- Progress Editor
- Custom Programs

## EAM and Other QAD Applications

EAM trades certain types of information with QAD's enterprise resource planning (ERP) applications, which are hosted through an easily accessible, common .NET interface called the AppShell. Your EAM installation integrates seamlessly into the AppShell.

Chapter 2

# Navigation

The chapter contains information about logging in to and navigating EAM.

***Logging in to EAM 10***

***Using the EAM Interface 11***

# Logging in to EAM

You may use multiple logins, depending on your responsibilities. Login credentials determine access privileges.

- The user ID determines permissions. For example, a system administrator accesses more EAM system features than an inventory clerk does.
- Each site has specific security settings. Logging in to multiple sites can require multiple types of permissions.

***Note*** Your monitor display may differ from the images in this documentation due to security settings.

1. Double-click the QAD Enterprise Applications desktop icon.
2. Enter a user ID or e-mail address and password.

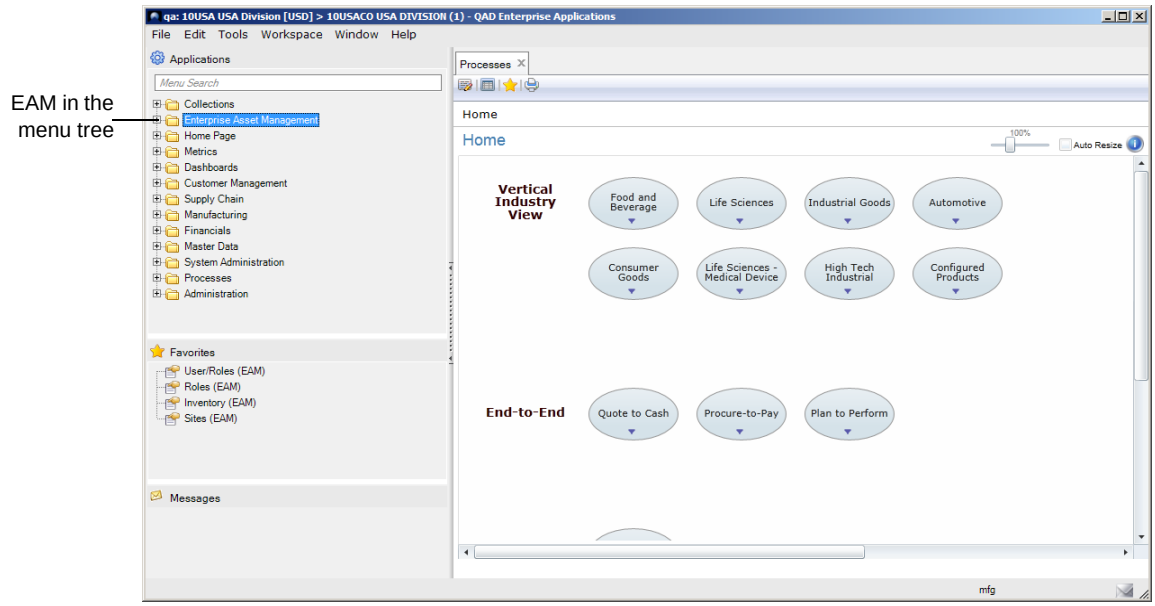
   ***Note*** The Password field is case sensitive, but the User field is not.
3. Accept the default domain.
4. Click OK.

**Fig. 2.1**
QAD Enterprise Applications Login




The QAD Enterprise Application main window opens, with the Enterprise Asset Management folder in the menu tree.

**Fig. 2.2**
QAD Enterprise Application Main Interface



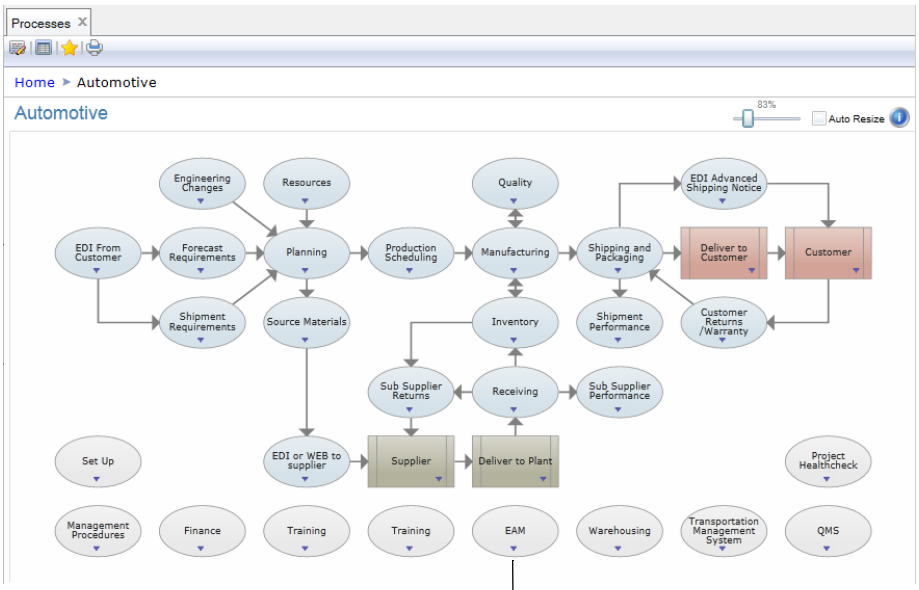

# Using the EAM Interface

## Process Maps

Process maps are interactive flow charts. They link to programs, browses, related documents, and other process maps using advanced features of .NET technology. Process maps diagram EAM best practices in hierarchical order. Swim lanes, the gray stripes on the background, visually separate functional areas, such as conceptual (Setup) or departmental (Purchasing).

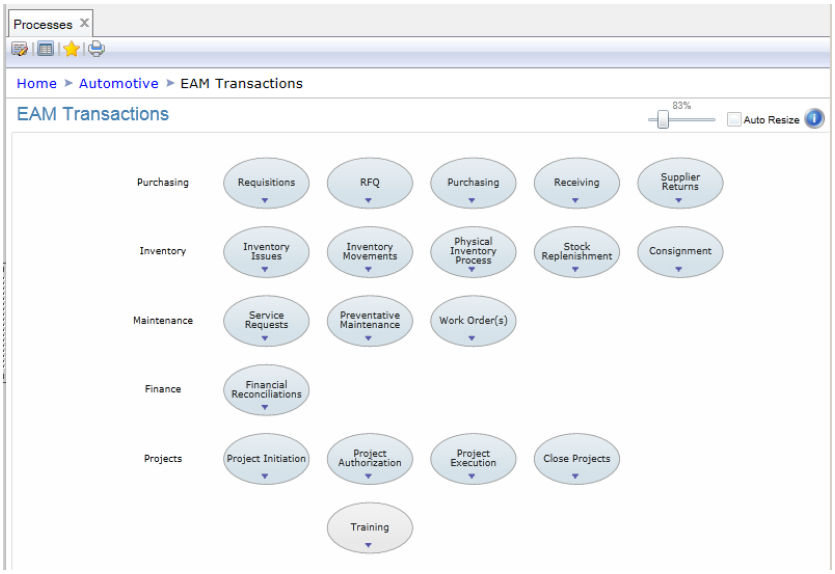
You can access the EAM process maps through any of the Easy On Boarding vertical industry process maps. Each vertical industry map has an EAM option near the bottom of the screen.

**Fig. 2.3**
Easy On Boarding Automotive Process Map




The EAM link in the seven Easy On Boarding options takes you to the same EAM Transactions process map.

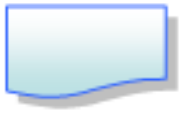
**Fig. 2.4**
EAM Transactions Process Map




To access lower-level maps, click a node.

## Process Map Nodes

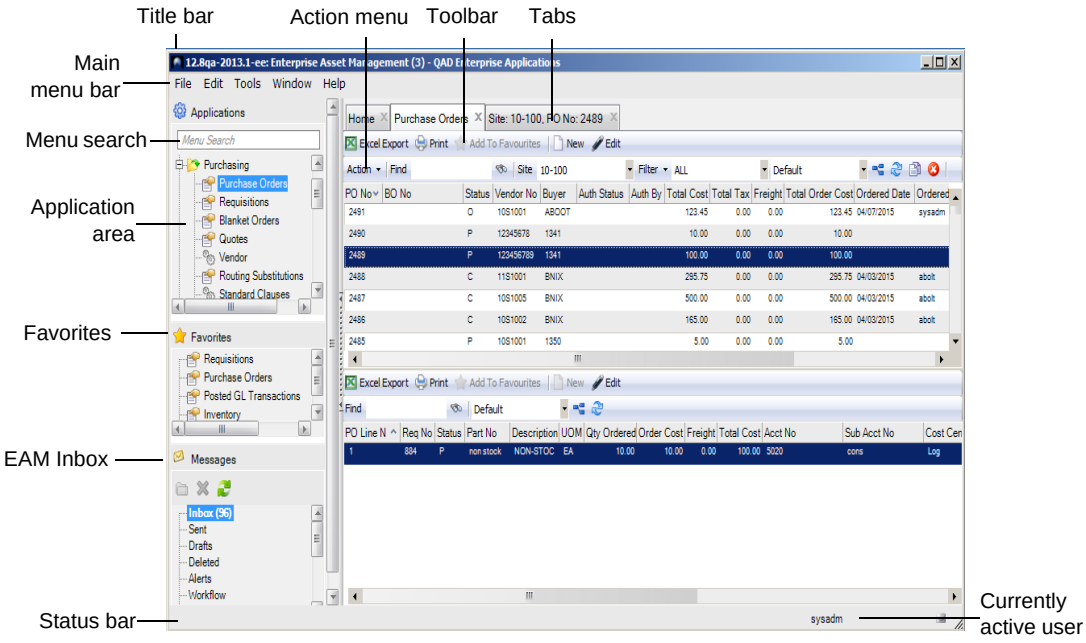
There are six types of process map node in EAM.

| Menu | Other Process Map | Menu Item Collection |
|---|---|---|
|  |  |  |
| Links to a program on the menu | Links to other process maps | Links to groups of programs such as browses |
| **Manual Step** | **Decision** | **Document** |
|  |  |  |
| Indicates that the task does not link to the software | Denotes where a map can flow in one of two directions | Denotes link to documents or files relevant to the task |

## EAM Module Displays

When not managed by process maps, EAM modules use standard display and navigation elements. Each display has a title bar, a vertical menu bar, a status bar, a menu, a toolbar, and an application area.

**Fig. 2.5**
EAM UI Elements



### Title Bar

The title bar displays the name of the database you are logged in to and “QAD Enterprise Applications.”

***Example*** *Production: QAD Enterprise Applications*.

Minimize, maximize, and exit buttons are standard controls for Windows. These tools enlarge, compress, or close the current window. Click exit to close the window and automatically log out of the session.

***Note*** To log out, you can also use File|Exit in the menu.

### Main Menu Bar

The main menu bar is underneath the title bar near the upper left of the window. The menu display contains module-specific commands, so its appearance varies. Sometimes an option in the menu does the same thing as a button on the toolbar. For detailed information on the main menu bar, see the *Introduction to QAD Enterprise Applications User Guide*.

### Application Area

The vertical menu contains all available EAM modules. Vertical menu items can include:

- Maintenance
- Inventory
- Purchasing
- Finance
- General
- Analysis
- System Administration
- Custom Menus

## Status Bar

The status bar is at the bottom of the window. It displays your logged-in user ID, and the active site. If the lower right corner of the window displays a dotted triangle, then you can resize the EAM window by clicking it and dragging.

**Fig. 2.6**
EAM Status Bar




## Toolbar

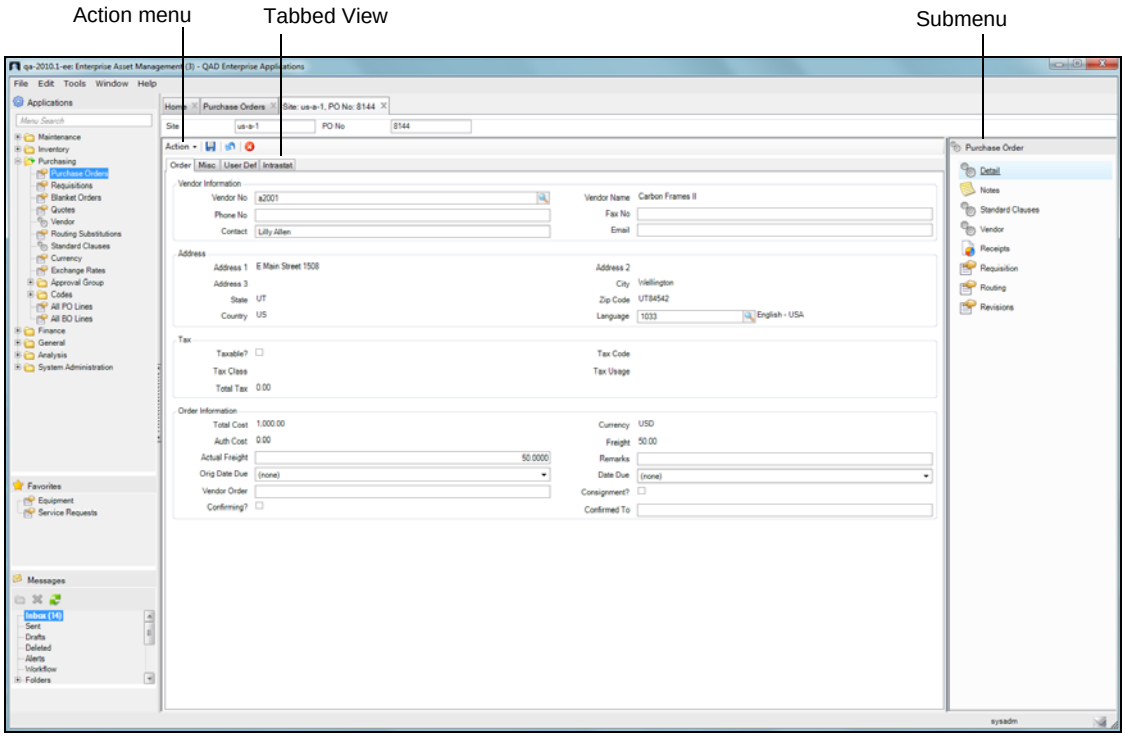
The toolbar contains standard functions, and functions unique to EAM modules. Tools that display on the toolbar vary by module and display.

**Fig. 2.7**
Toolbar




When adding or editing a record, EAM displays a submenu.

**Fig. 2.8**
EAM Tabbed Elements




## Help

The Help menu contains options that display details about the QAD Enterprise Applications .NET User Interface, EAM, and client installation. For detailed information on the Help Menu, see the *Introduction to QAD Enterprise Applications User Guide*.

## Module Menu

The module menu contains all available EAM modules to which you have access. Menu items can include:

- Maintenance
- Inventory
- Purchasing
- Finance
- General
- Analysis
- System Administration

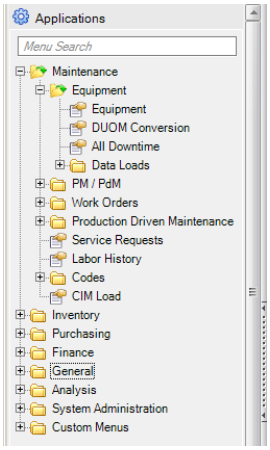
- Custom Menus

## Opening a Module

Use Menu Search to find a specific module within the menu. The system displays matching options as you type.

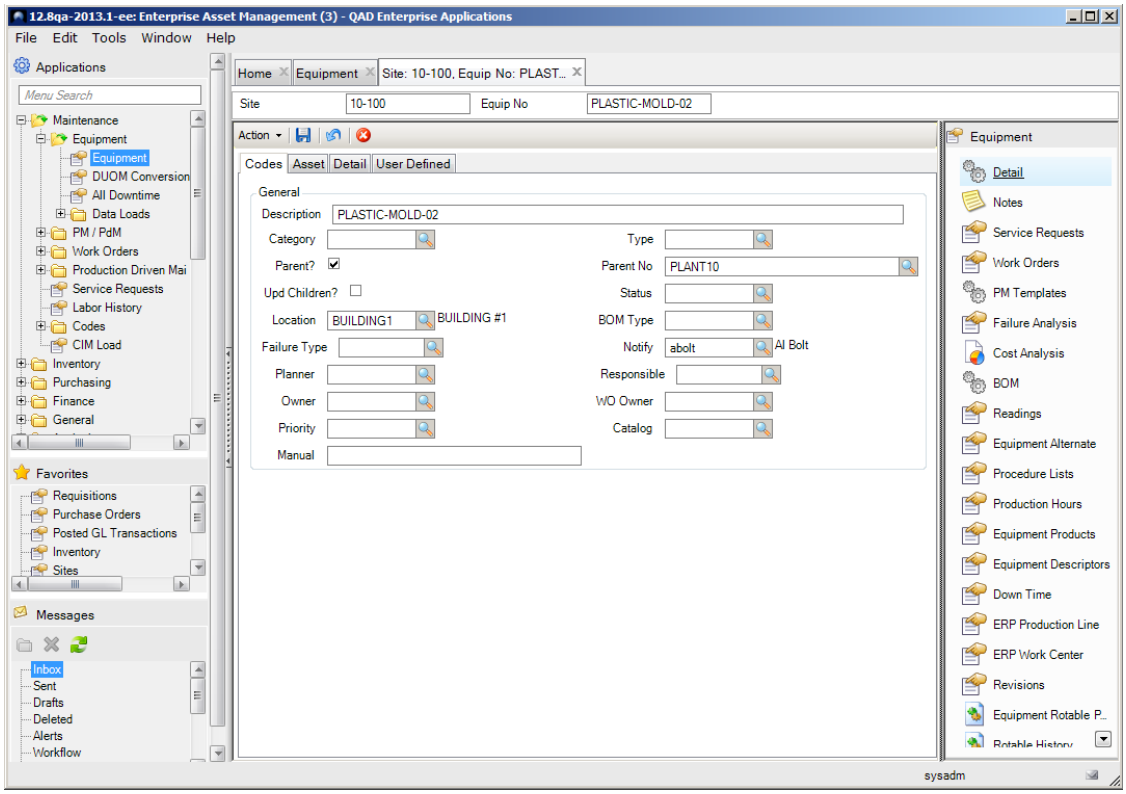
Double-click a vertical menu folder or click the plus sign to expand its display options. Double-click an option to open a browse or list.

**Fig. 2.9**
EAM Module Menu




Double-click a record in a browse or click Edit to open tabs for an existing record. Click New to open tabs for a blank record.

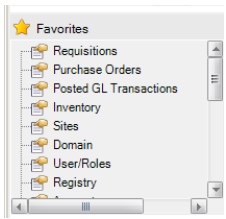
**Fig. 2.10**
EAM Submenu and Record Tabbed View




## Favorites

The Favorites pane is a custom menu you create using menu options or drag-and-drop techniques.

**Fig. 2.11**
EAM Favorites




### Adding Favorites

Add favorites in the following ways:

- Right-click a menu folder or menu item in the Applications pane and choose the Add to Favorites option.
- Select the menu folder or item you want and drag it from the Applications pane to the Favorites pane.
- Drag and drop URLs from Internet Explorer or Mozilla Firefox to the Favorites pane.
- Drag and drop an item or program (executable) from the file system (for example, from Windows Explorer) to the Favorites pane.

EAM stores favorites on the server rather than on client computers. When you log on to the system from a different computer than your usual client computer, you still see your favorites. Additionally, having your favorites on the server protects them from any disk problems that might occur on your client computer.

***Warning*** If several users share a user ID, favorites can become corrupted.

### Organizing Favorites

Organize your favorites into folders and subfolders, rename menu items and folders, rearrange folders and items, and remove menu items you no longer want.

To organize menus into a hierarchy, right-click in the menu space and choose Create New Folder. You can then drag the folder to any position and drag menu items or other folders into it.

To rename or remove a menu item, right-click the item and choose the option you want. You can also display properties and enter design mode for enabled programs.

To change the icon of a menu item, right-click the item and choose Change Icon. Browse to a graphics file and select it.

To collapse the display of all open folders, right-click any item and choose Collapse Menus.

When you right-click a folder, you also can create a subfolder within the currently selected folder.

You can launch a group of menu items organized under a folder simultaneously. Right-click the folder and select Menu Collection. The folder icon changes to a collection icon. Click the icon to launch all the functions at the same time.

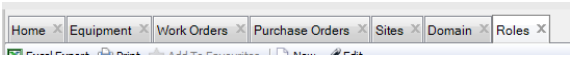
## Mail

EAM includes an internal e-mail system. This system facilitates communication between users or sends system messages for authorization routing or rerouting, status changes on work orders, failed processes, and so on. To integrate it with your corporate e-mail, such as Outlook or Gmail, select SMTP in the System Control module.

## Tabs

Each open module or submodule displays a tab near the top of the EAM display. For example, you are working from a work order with a PO assigned to it. You can keep both the work order and the purchase order open and work with them as needed. Click a tab to activate its display. The active tab is white and displays data in the application area, and the inactive tabs are gray.

**Fig. 2.12**
EAM Tabs




Press the Tab key to jump from field to field in a tab. Tabbing goes from left to right, top to bottom.

### Lookups

Use lookups to search for codes or records. Some fields have lookups associated with them. Lookup buttons have a magnifying glass icon. Click the magnifying glass to open a window that contains all records of a type. If you know the beginning of the record or code, type information in the Find field. Click the button with the binoculars to run the search.

## Browses

A browse lists the records that meet specified site criteria in the current module. EAM browses look and function like Excel spreadsheets. Column headers provide flexible, dynamic display options through ordering, hiding, showing, sorting, and grouping records. All users can view a browse. You can add a browse to your Favorites directory.

If your security settings permit reporting, you can export data to Excel.

### Ordering Columns

Drag a column heading to move it to the right or left in the display. A black arrow indicates where the column will be inserted when you release the mouse button.

### Hiding a Column

Use this option to remove individual columns from the display.

1. Right-click a column heading.
2. Scroll down to the Hide This Column option.
3. Release the mouse button. The column no longer displays in the browse. The data is still stored in the system.

**Fig. 2.13**
Hiding a Column

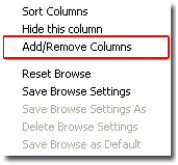



### Adding Columns

Use this option to add or remove columns.

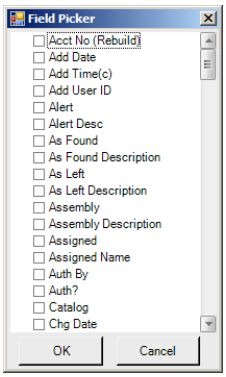
1. Right-click a column heading.
2. Scroll down to the Add/Remove Columns option.

**Fig. 2.14**
Add/Remove Columns




This option displays a list of all possible columns for the current record type.

**Fig. 2.15**
Adding Columns




3 Select the check box to add a column to the display.

4 Click OK.

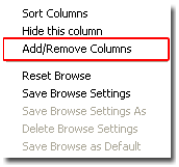
## Removing Columns

Use this option when you want to remove multiple columns from the display.

1 Right-click a column heading.

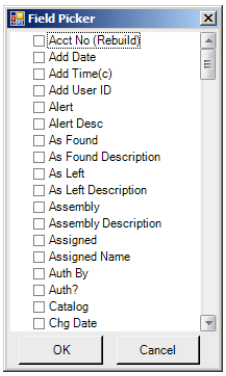
2 Scroll down to the Add/Remove Columns option.

**Fig. 2.16**
Add/Remove Columns




This option displays a list of all possible columns for the current record type.

**Fig. 2.17**
Removing Columns



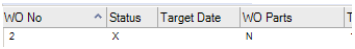

3 Clear the check boxes of the columns you want to remove from the display.

4 Click OK.

## Sorting a Single Column

Click a column heading to sort all by ascending or descending order. If the column contains both alphabetical and numerical data, the system sorts by numbers first, then letters. The currently sorted column displays an arrowhead pointing up (for ascending sort) or down (for descending sort).

**Fig. 2.18**
Sorting a Single Column




***Note*** If a column contains large amounts of data, EAM may issue a time warning before beginning the sort.

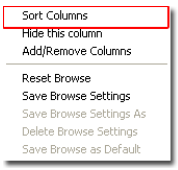
## Sorting Multiple Columns

Specify up to three column headings to sort, each by ascending or descending order.

1 Right-click a column heading in the current browse.

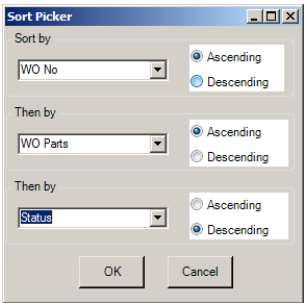
2 Select the Sort Columns option.

**Fig. 2.19**
Sort Columns




The Sort Picker lists all column headings in the current browse. The application sorts first on the top heading in the list. If there are multiple records with the same sort criteria—for example, Priority 1—you can further sort by Requestor, and then by Equipment Number. Click OK to sort the browse view.

**Fig. 2.20**
Sorting Multiple Columns




## Saving a Custom Browse

Save changes to a default browse for future use. A saved custom browse is associated with your user ID. Use the browse from any computer.

1 Right-click over the column heading.

2 Select the Save Browse Settings As option.

**Fig. 2.21**
Save Browse As




3 Enter the name of your custom browse in the window.

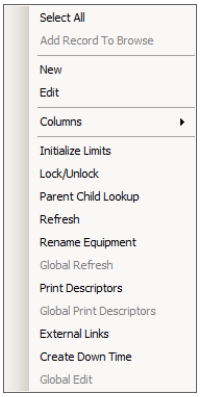
4 Click OK.

From the right-click menu, delete the custom browse or set it as the default view.

## Right-Clicking a Browse Record

Right-click over a record to open the right-click menu. Right-click menu options differ between programs. Right-click menus contain administrative functions and the active Action menu.

**Fig. 2.22**
Record Right-Click Menu




## Group

The Group icon looks like a flowchart and is located in the Toolbar.

**Fig. 2.23**
Group

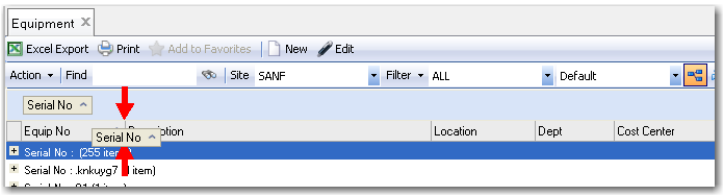


1 Click Group.

2 Drag the column header to group records. For example, a planner groups the records by Equipment number, then by Priority.

Click Group or drag the columns back into place to ungroup.

**Fig. 2.24**
Grouping Records




## Viewing the Current Record

The highlighted line in the list on the browse tab refers to the selected record. The bold text on the modules field identifies the currently highlighted or selected equipment record by displaying its unique identifier and description.

## Selecting a Record

There are several ways to select and highlight records in the browse:

- Double-click the highlighted record.
- Use the Find feature.
- Use the record filter.

## Action Menus

Many browses include an Action menu. Access it from:

- The drop-down menu over the browse
- The right-click menu

## Find

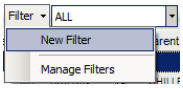
Use Find to search for a specific record. Find searches the column on the far left.

## Record Filters

Use a filter to specify the information display on a specific browse. Each module has a number of fields that can establish the criteria for filtering a browse list.

1 Click the arrow beside the Filter option on the toolbar to access the options. To build a new filter, select the New Filter option.

**Fig. 2.25**
Filter Menu Options

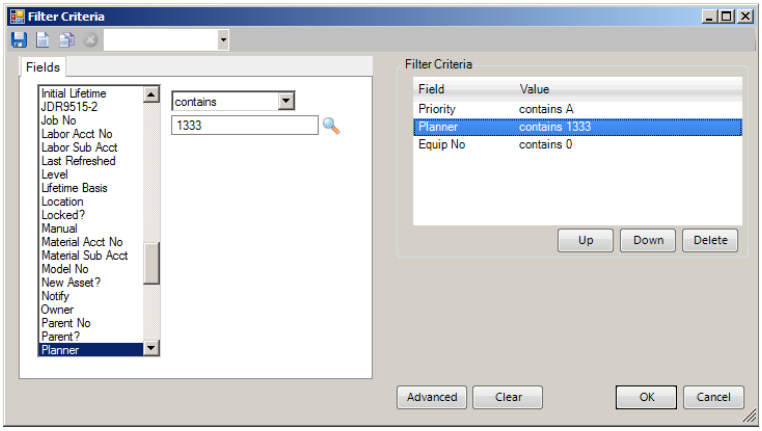



2 Name the new filter.

3 Click OK.

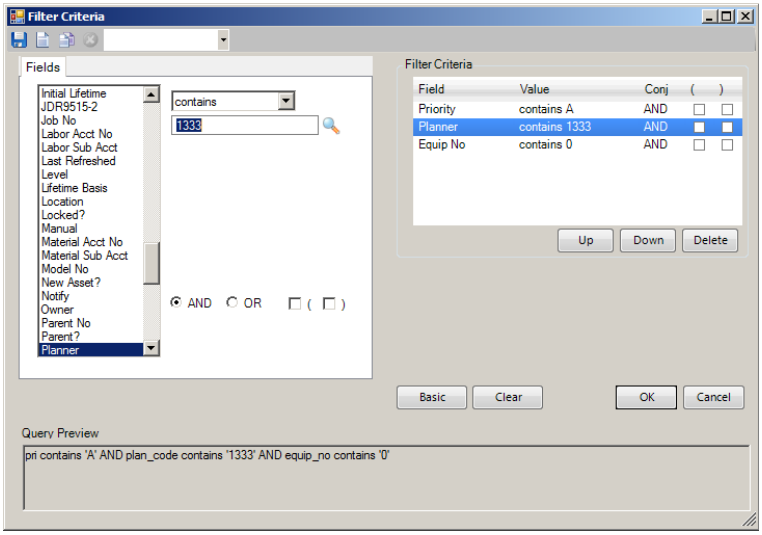
The Filter Criteria window opens.

**Fig. 2.26**
Basic Record Filter Manager




An advanced user can use the Advanced view. Click Advanced to open more query options in the fields list. Create more complex filters by grouping data with and/or statements and parenthetical statements.

**Fig. 2.27**
Advanced Record Filter Manager




## Entering Fields in the Filter Manager

The Fields list displays all possible fields in the database entry associated with the current module. Click a field to add it to the Filter Criteria list. Specify the value in the list; for example, to filter records by this month, enter:

```
this month
```

```
past 30 days
```

The system can process plain language commands such as past year (versus 365 days) or your name (as opposed to user ID). When adding multiple filter criteria, select AND to indicate that the filter records must meet all criteria. Select OR to indicate that the filter records can meet any one of the filter criteria.

Another filtering mechanism is parentheses. Enclose parts of the filter criteria in parentheses to indicate that this criterion is the first, and most important, filter criteria. The system follows mathematical progression when filtering records by filtering criteria in parentheses first, then AND, then OR from left to right.

Use the Up and Down buttons or drag and drop the filter entries to change the filter priority. Click Delete to remove the entry from the list. Fields removed from the filter criteria remain in the database.

For example, a planner filters by all equipment associated with a specific user ID, with a status of 1 or 2, and by cost center.

## Printing

Print the records in the browse list. Use the Print button in the toolbar or the Print option in the File menu.

Chapter 3

# General Module

This chapter contains information about the EAM General module, which is used to set up and manage system-wide data.

***Introduction to the General Module 28***

***Business Units 28***

***Codes 63***

***Employees 69***

***Groups 73***

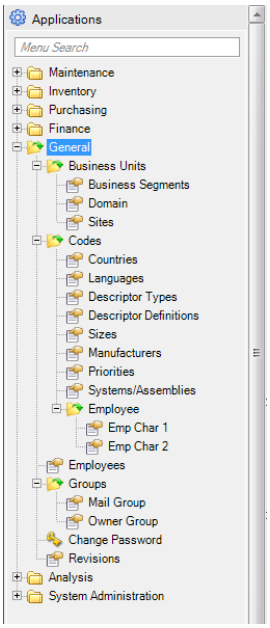
***Revisions 75***

# Introduction to the General Module

Use the General module to maintain system files and tools, such as:

- Business units
- Domain, entity, and site relationships
- Codes
- Employees
- Mail and owner groups

**Fig. 3.1**
General Menu




# Business Units

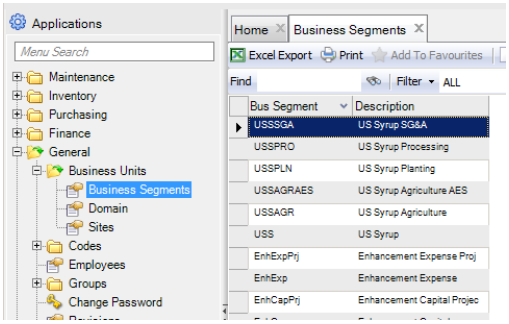
Use the Business Units section to create, view, modify, and delete the domain, entity, and site codes. The codes set up in EAM should match the codes in the QAD ERP application.

## Business Segments

An organization may have specialized business segments that operate as distinct units, concentrating on particular interests or tasks. Managers can track which business segments are initiating capital or expense projects, and identify the driving business segments in the Project module.

In the System Registry, you can add up to eight levels to the business segment format. Define the format based on your organization’s requirements. Not only can you format the business segment, but you can select the length of the business segment for a total of up to 15 characters among the 8 levels of formatting.

**Fig. 3.2**
Business Segments Browse




### Creating a Business Segment

Follow these steps to create a business segment:

1. Open the Business Segment browse, located in General|Business Units|Business Segments.
2. Click New and then enter the following information:

   *Bus Segment.* A 15-character field that is used to enter a business segment code. The format of the Bus Segment field changes to display dashes, depending on the format definitions in the System Registry.

   *Description.* Description usually includes the name of the business segment.
3. Press Enter to save.

### Editing a Business Segment

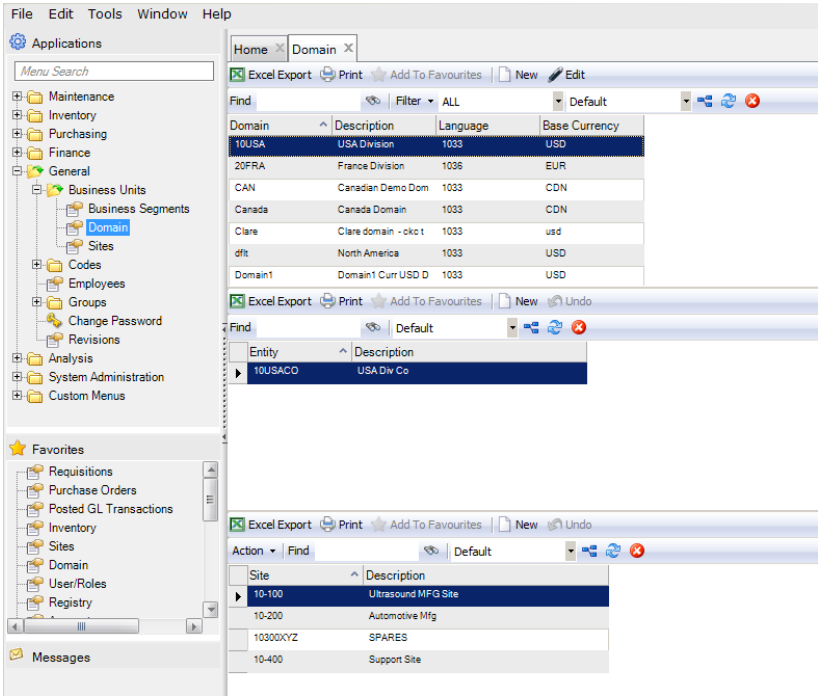
To edit a business segment, click the Business Segment or Description fields and then make the necessary changes.

## Domain

The Domain browse, which is in General|Business Units|Domain, is used to organize and display domain records. This data is important when EAM integrates with the QAD ERP system. In this browse, you can create and edit domain records as well as access supporting functions.

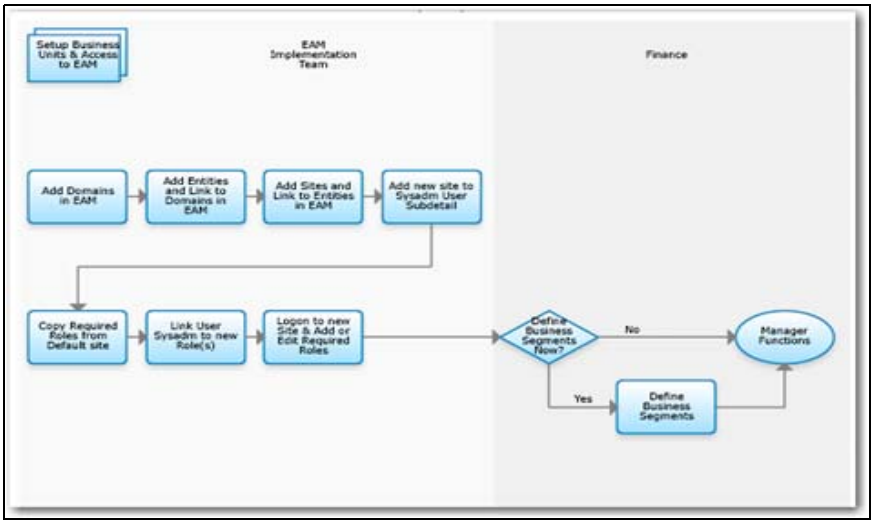
When you select a domain in the upper browse, the middle browse displays the entities associated with the domain, while the lower browse displays the sites associated with the entity.

**Fig. 3.3**
Domain Browse




## Process Flow to Set Up Business Units and Access to EAM

**Fig. 3.4**
Set Up Business Units and Access to EAM Process Flow




1 Set up one or more domain codes.

2 Set up one or more entity codes.

3 Set up one or more site codes.

4 Add new site to the sysadm user-subdetail.

5 Copy an existing role to the new site.

6 Log on to new site and edit or set up required roles.

7 Link user sysadm to new security group.

8 Log on to new site and set up required roles.

9 Link user sysadm to new required roles.

10 Set up business segment codes.

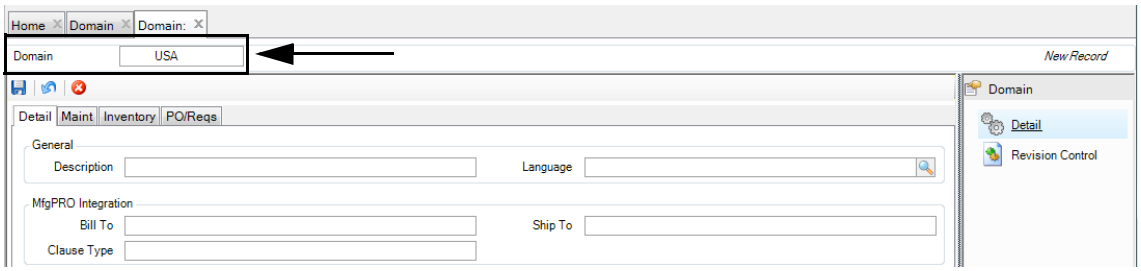
## Creating a Domain Record

Follow these steps to create a domain record:

1 Open the Domain browse and click New. A blank domain record opens.

2 Enter a domain code that matches a code in QAD ERP.

**Fig. 3.5**
Domain Code Field




3 Enter information in relevant fields on the Detail, Maint, Inventory, and PO/Reqs tabs. See “Filling out the Domain Record” on page 32.

4 Once all the information has been entered, click Save.

5 Add an Entity record and associate it with the Domain record that was created. Select the Domain, and in the middle browse click New.

6 Enter the Entity code in the Entity field and a short description in the Description field. Press Enter to save. See “Adding an Entity Record to a Domain” on page 39.

***Important*** The entity codes must match the codes set up in QAD ERP.

7 Add a Site record and associate it with the Entity record that was created. Select the Entity, and in the lower browse click New.

8 Enter the site code in the Site field and a short description in the Description field. Press Enter to save. See “Adding a Site Record to an Entity Record” on page 40.

***Important*** The site codes must match the codes set up in QAD ERP. When you save the Site, the new Site appears in the General|Business Units|Sites.

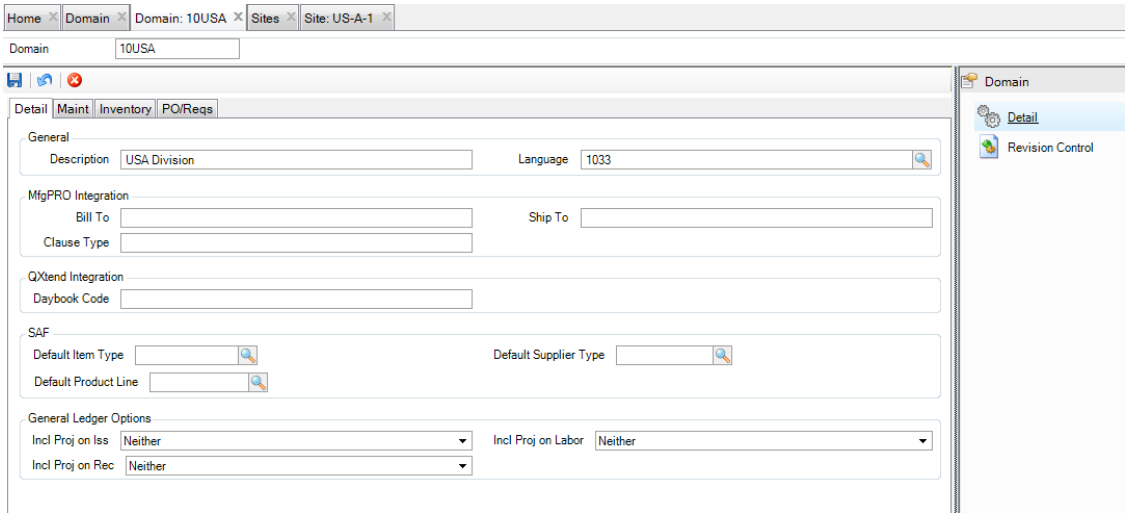
## Filling out the Domain Record

Enter information about the domain on the Detail, Maint, Inventory, and PO/Reqs tabs.

Domain: Detail Tab

On the Detail tab, enter domain information.

**Fig. 3.6**
Domain: Detail Tab




### General

*Domain.* Enter a code (maximum eight characters) identifying a specific domain. Codes are restricted to upper and lowercase letters and numbers. A primary domain code must be unique within a database and across connected databases. EAM domains must match QAD ERP domains.

*Description.* Enter a brief name (maximum 14 characters) to associate with this domain. This name must be unique within a database and across connected databases.

*Language.* Enter the default language for this domain. The EAM domain language must match the QAD ERP domain language.

### MfgPRO Integration

*Bill To.* The default bill-to address that is used on all POs for this specific domain.

*Ship To.* The address type stored in Addresses in the ERP system to designate ship-to addresses.

*Clause Type.* Refers to the Type field in QAD Enterprise Edition (EE) master comments. In EE, master comments can be used in various places. To help organize these comments, a user-defined Type field is used to group them. The ERP Interface|Download routine only displays the EE master comments based on the Clause Type entered in this field.

### Financial Integration

*Daybook Code.* Enter the daybook code associated with this domain. The daybook code must be defined in QAD EE Financials. For more information regarding daybooks, see the *QAD Financials User Guide*.

### SAF

*Default (SAF) Item Type.* Enter a default item type code associated with a part transaction. When EE tells EAM that the item type concept is required, EAM finds the parts record associated with the GL Transaction and provides the parts.type_code value. If parts.type_code is blank or no parts record can be found, EAM uses the default found here.

*Default (SAF) Supplier Type.* Enter a default supplier type code associated with a purchasing transaction. When the supplier type concept is required, EAM uses the mglt_det.po_no to find the po_header. It then finds the vendor for that po_header and supplies vendor.type_code. If the record cannot be found or the value is blank, EAM uses the default found here.

*Default (SAF) Product Line.* Enter a default product line code associated with a part purchasing transaction. When the product line concept is required, EAM uses mglt_det to find the relevant parts and po_line and pulls the product_line_no from those records. If the record cannot be found or the value is blank, EAM uses the default found here.

***Note*** EAM only supports SAF when integrated with EE. EAM does not store SAF details related to transactions. EAM draws the SAF concepts it needs from EE based on a transaction line's cost center, account code, and project number. EE then compares those three values to its SAF Structures and returns the concepts that EAM must fulfill.

### General Ledger Options

*Inc Proj on Iss.* When an issue transaction is tied to a project, select on which side in the GL you want the project ID included: Debit side, Credit side, Both, or Neither.

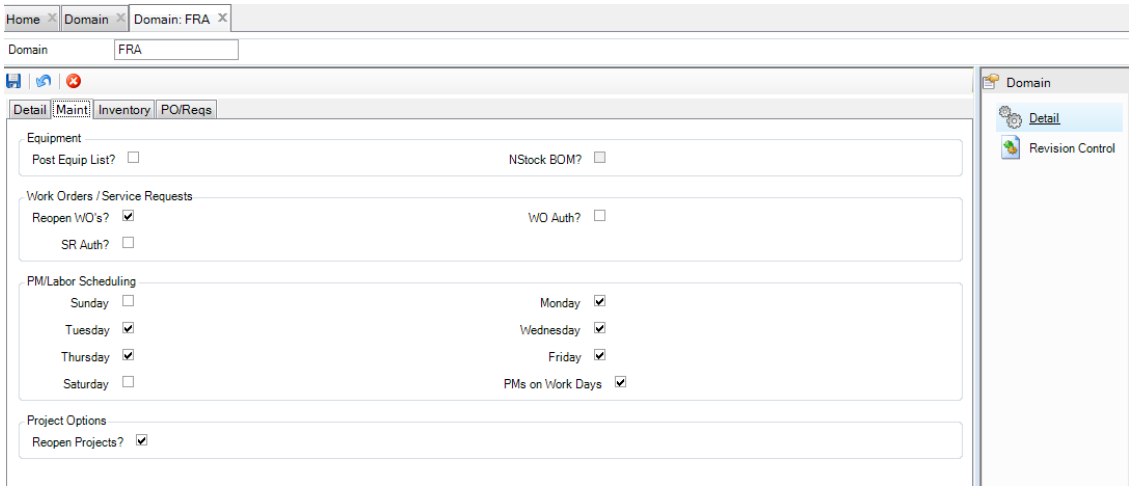
*Inc Proj on Labor.* When a labor transaction is tied to a project, select on which side in the GL that you want the project ID included: Debit side, Credit side, Both, or Neither.

*Inc Proj on Rec.* When a receipt transaction is tied to a project, select on which side in the GL that you want the project ID included: Debit side, Credit side, Both, or Neither.

## Domain: Maintenance Tab

On the Maintenance tab, enter system control information to set up domain-wide parameters.

**Fig. 3.7**
Domain: Maintenance Tab




## Equipment

*Post Equip List?* If this option is selected, the system posts all stock parts with their Add to BOM? option selected (on the Codes tab of the Inventory screen) to the equipment bill of material (BOM) structure when issued from stores.

*NStock BOM?* This option controls whether non-stock parts are added to the BOM for any piece of equipment referenced on a requisition. The NStock BOM? option is disabled and cleared when the Post Equip List? option is cleared.

## Work Orders/Service Requests

*Reopen WOs?* If this option is selected, users with the required role setting can reopen a work order. You can issue parts, distribute labor, and receive and charge POs against the work order. If a work order is closed or canceled and this option is selected, change the status of the work order to Open before you make changes. If the option is cleared, you cannot reopen the work order.

*WO Auth?* If this option is selected, a user with the required role setting must authorize the work order before any associated parts, labor, or receipts against a PO can be initiated.

*SR Auth?* If this option is selected, a user with the required role setting must authorize a service request. The service request must be authorized before it can become a work order.

## PM/Labor Scheduling

*PM/Labor Scheduling.* Select this option to automatically schedule PMs meeting calendar criteria, such as specifying holiday closures.

The selected days of the week are used in scheduling preventive maintenance work orders. For example, if Saturday is selected, and a PM comes due on a Saturday, the system generates the PM work order for that Saturday. If Saturday is cleared, the system does not generate the PM work order. It sets the schedule start date to the next available work day. The system finds the next available day to schedule that work order.

*PMs on Work Days.* When a PM is due, the system compares the original scheduled date for the PM to the Sunday-through-Saturday settings (for PM/Labor Scheduling) to determine the actual date.

For example, if the PM is due on a Saturday and Saturday is cleared, the system validates the PM work schedules. If it is selected, the PM scheduled start date is the next available workday. If the PMs on Work Days option is cleared, the system schedules it for Saturday even though the Saturday is cleared. It schedules the work order for a day that is not scheduled for PM work.

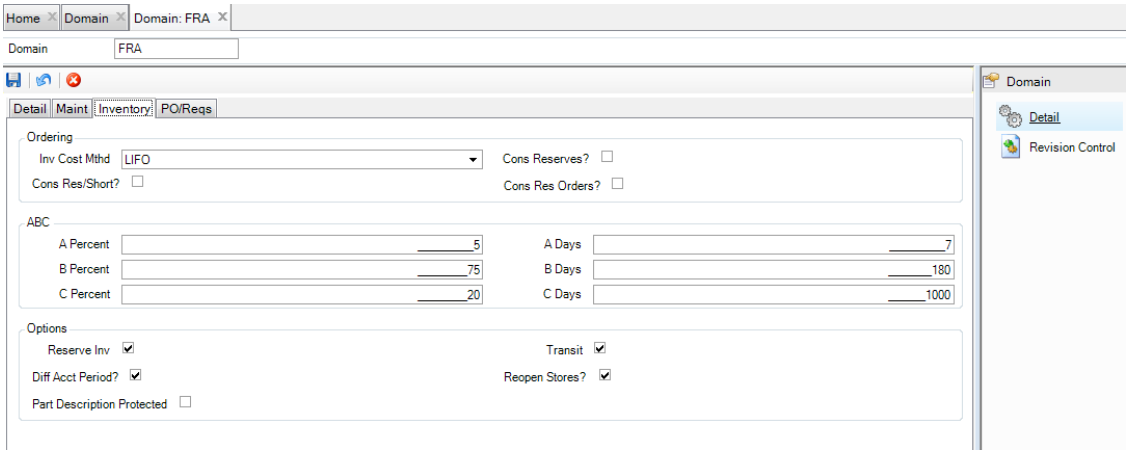
### Project Options

*Reopen Projects?* Indicate whether users with the required role setting can reopen closed projects.

## Domain: Inventory Tab

Enter system control information to set up domain-wide parameters on the Inventory tab.

**Fig. 3.8**
Domain: Inventory Tab




### Ordering

*Inv Cost Method.* Set the inventory cost method for all sites associated with a domain. EAM supports the following inventory evaluation methods: FIFO (first in, first out), LIFO (last in, first out), and Weighted Avg (weighted average). Select one of these options to control how EAM determines the value of the inventory for all items.

*Cons Reserves?* EAM uses this option when calculating the number of parts required to replenish inventory based on the reorder point and the management maximum quantities. The purpose of Consider Reserves is to add (selected) or ignore parts that are reserved for specific jobs from the stock replenishment run.

*Cons Res/Short?* The system uses this option if there are currently more parts reserved than available in inventory. When calculating the reorder quantity on the stock replenishment run, EAM adds the number of parts reserved and short.

*Cons Res Orders?* Use this option to add (selected) or ignore the requisitions on-order for parts that are reserved for specific jobs from the stock replenishment calculation.

**ABC**

*ABC Percent.* Specify the relative percentage of inventory value for A-, B-, or C-type parts.

*ABC Days.* Specify the number of days used to calculate the next physical inventory due date.

**Options**

*Reserve Inv?* If this option is selected, EAM automatically reserves all parts on a stores requisition (work order parts list). When a stores requisition is created, EAM automatically reserves all parts on the list. If this option is cleared, you can still selectively reserve parts on specific critical stores requisitions.

*Transit?* This option determines whether the system uses transit accounts when relocating parts between sites. If Transit? is cleared, when a part transfer is done from one site, inventory is automatically relieved from the original site, and it appears in the destination site. If Transit? is selected, when the part is issued from the original site, it goes into a transit account (similar to an intercompany charge account). The part remains in the From Site's transit charge account until the inventory clerk receives the part into the destination site. At receipt, the corresponding debit and credit are made against the Transit account and the part moves into the destination site. After the part is in the To Site's inventory, you can issue it.

*Diff Acct Period.* This option determines whether sites currently in different accounting periods can process intercompany transactions. If selected, you can process intercompany transactions between sites in different accounting periods. If cleared, you can process intercompany transactions only between sites in the same accounting period.

*Reopen Stores?* Use this option to determine whether users with the required role access can select the reopen action on closed stores requisitions. Select this option if you return an item to the store room that was issued but not used for a stores requisitions.

*Part Description Protected.* To ensure that part descriptions are protected and consistent across all sites, EAM allows you to prevent the part descriptions from being edited when the Copy Parts Across Sites action is performed. Select this check box to prevent the part description from being edited when a part is copied to another site. If this check box is not selected, when a part is copied to another site, a user can open the part record in that site and edit the part description.

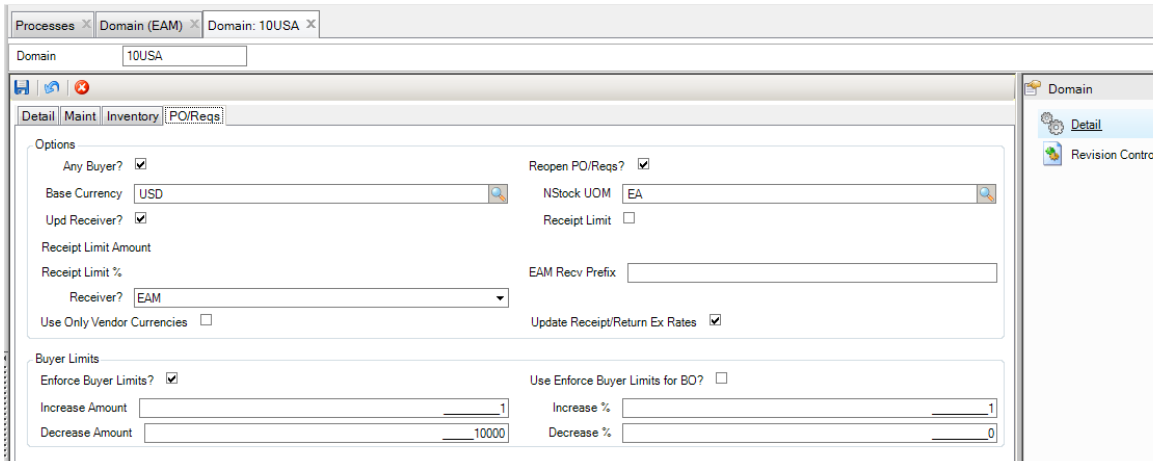
*Buyer/Commodity Purchasing?* Select this box to link buyers with the commodities they buy, by site. When this check box is selected, Commodity becomes a required field on the Inventory|Inventory|General tab, and the Requisitions Line Detail tab.

***Note*** Buyer/Commodity Purchasing automatically sets the Buyer and Commodity fields to mandatory when saving both Inventory and Requisitions. If you turn off Buyer/Commodity Purchasing, EAM clears the mandatory requirements for both Buyer and Commodity. You must reapply mandatory settings for those fields individually for Inventory and Requisitions, if needed.

Domain: PO/Reqs Tab

On the PO/Reqs tab, enter system control information to set up domain-wide parameters.

**Fig. 3.9**
Domain: PO/Reqs Tab




## Options

*Any Buyer?* With this option selected, buyers can modify any approved PO in their assigned sites. With the Any Buyer? option cleared, only the buyer who approved a PO can modify or edit the purchase order.

*Reopen PO/Reqs?* If this option is selected, users with the required security setting can reopen POs or requisitions once they have been closed. Reopen the closed PO before you make adjustments, such as a return to vendor or additional receipts.

*Base Currency.* Select a base currency from the lookup of valid currencies. The currency must be the same currency defined for the domain in QAD EE. All entities in a domain use the same base currency. Transactions in other currencies are converted into the designated base currency before being passed to the QAD ERP application.

*NStock UOM.* Any time a non-stock item (does not have an EAM inventory part record) is specified on a requisition, the system uses the default unit of measure (UOM) from the parts record. Select from the lookup, which is then validated from the unit of measure table.

*Upd Receiver?.* This option determines whether users can update purchasing receivers.

EAM provides the choice of whether a receiver number is automatically generated. Sometimes Accounts Payable departments prefer to input the packing slip number as the receiver number. If selected, you can manually enter the receiver number when receiving against a purchase order. Clear the option to automatically generate a receiver number.

*Receipt Limit.* Select this option to receive orders exceeding the cost shown on the purchase order. When an order exceeds the cost on the purchase order, the system checks the receipt limit. You can receive the item if the cost does not exceed the specified percentage or amount, whichever is greater. Enter the percentage, amount, or both.

*Receipt Limit Amount.* Enter an amount to allow an item to be received with more than the original quantity ordered.

*Receipt Limit%.* Enter a percentage to allow an item to be received with more than the original quantity ordered.

*Receiver?* Select EAM or MFGPRO to use the EAM or QAD ERP receiver number sequences.

*EAM Recv. Prefix?* Enter the prefix for EAM receiver numbers. The prefix allows you to identify receipts from EAM in QAD ERP.

*Use Only Vendor Currencies.* By default, this check box is clear, meaning any currency can be used in purchasing. Select this option to enable the Vendor Currency submenu for vendors. When vendors are downloaded from EE into EAM, the Vendor Currency submenu is populated with supplier bank currencies from QAD EE. Only the specific currencies listed in the Vendor Currency submenu are available to use in EAM Purchasing for the vendor.

*Update Receipt/Return Ex Rates.* Select this box to enable an update to the defined currency exchange rate when you receive a PO. See “Receiving Purchase Orders” on page 503.

**Buyer Limits**

*Enforce Buyer Limits?* Use the buyer limit with the PO or requisition approval process. Once a PO or requisition is approved, you can change the cost from what was originally approved. The buyer limit prevents the buyer from exceeding the approved cost by a percentage above the approved cost and the designated dollar amount. If exceeded, the system reroutes the PO or requisition for approval.

***Note*** If the Enforce Buyer Limits? check box is not selected, Use Enforce Buyer Limits for BO? is disabled.

*Use Enforce Buyer Limits for BO?* Select this check box if buyer limits should also be applied to the blanket orders based on a domain-level configuration setting. If this check box is selected, the same buyer limits that are used for requisition and purchase orders are used for blankets. By default, this check box is not selected.

If a blanket order is authorized and the expiration amount is changed, the following logic is used:

- If Use Buyer Limits for BO? is not selected, the expiration amount can be increased or decreased with no limitations, without the BO becoming unauthorized.
- If Use Buyer Limits for BO? is selected, any change to the expiration amount triggers the system to check that the change is within the buyer limit tolerance defined on the domain-level configuration.

  If the change is outside of the buyer tolerances:

  - Upon saving the BO, the user receives a message stating that the change has exceeded the Buyer Limits and the BO becomes unauthorized.
  - If the user selects OK, the BO Auth Status changes to Previously Authorized, requiring the BO be reauthorized.

  If the change is within the buyer tolerances:

  - Upon saving the BO, the expiration amount is updated and the Auth Status remains Authorized.

*Increase Amount.* Enter an amount that represents how much a buyer can increase an already-authorized purchase order or requisition without having to reroute the PO or requisition for reapproval.

*Increase %.* Enter a percentage that represents how much a buyer can increase an already-authorized purchase order or requisition without having to reroute the PO or requisition for reapproval.

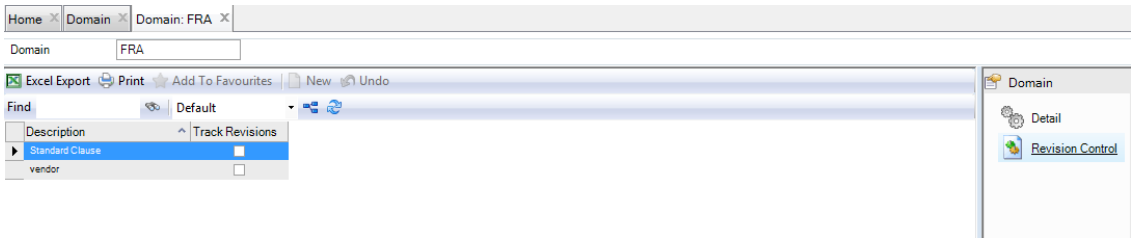
*Decrease Amount.* Enter an amount that represents how much a buyer can decrease an already-authorized purchase order or requisition without having to reroute the PO or requisition for reapproval.

*Decrease %.* Enter a percentage that represents how much a buyer can decrease an already-authorized purchase order or requisition without having to reroute the PO or requisition for reapproval.

## Enable Revision Control for Vendor and Standard Clause Browses

To enable revision control for the Vendor and Standard Clauses browses in the Purchasing module, open the Revision Control submenu. Select the Track Revisions check box to turn on revision control for the Vendor or Standard Clause browses.

**Fig. 3.10**
Vendor and Standard Clause Revision Control



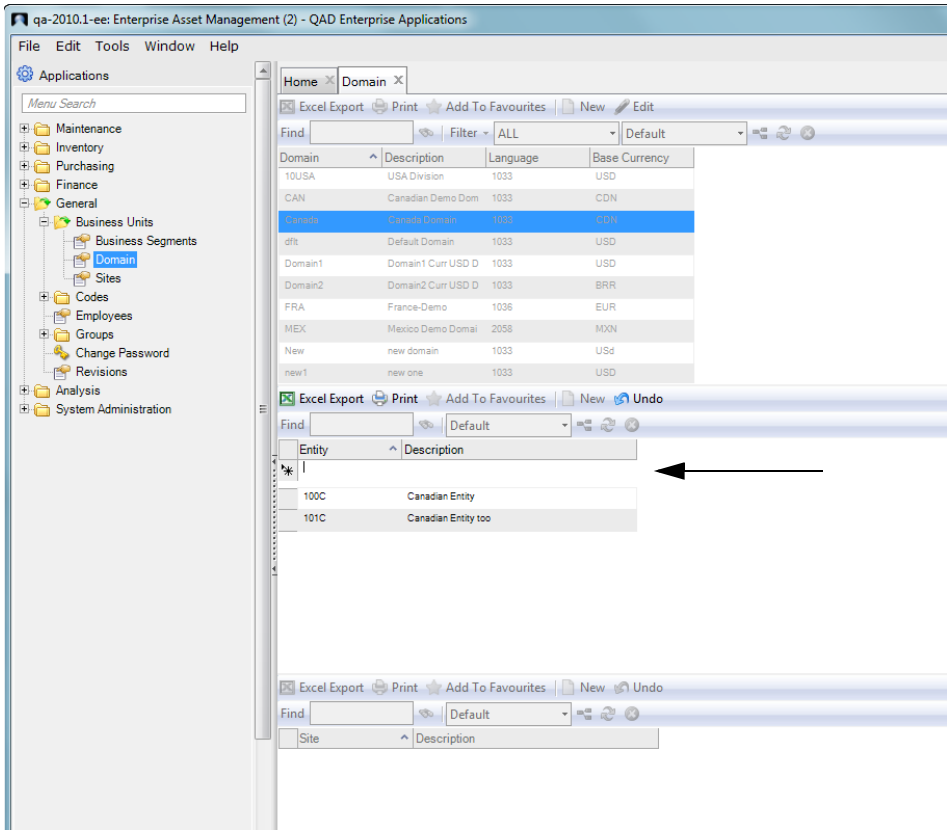

## Adding an Entity Record to a Domain

To add an entity record and associate it with the domain record, select the domain, and in the middle browse click New.

Enter the entity code in the Entity field and a short description in the Description field. Press Enter to save.

***Important*** The entity codes must match the codes set up in QAD ERP.

**Fig. 3.11**
Adding an Entity Record



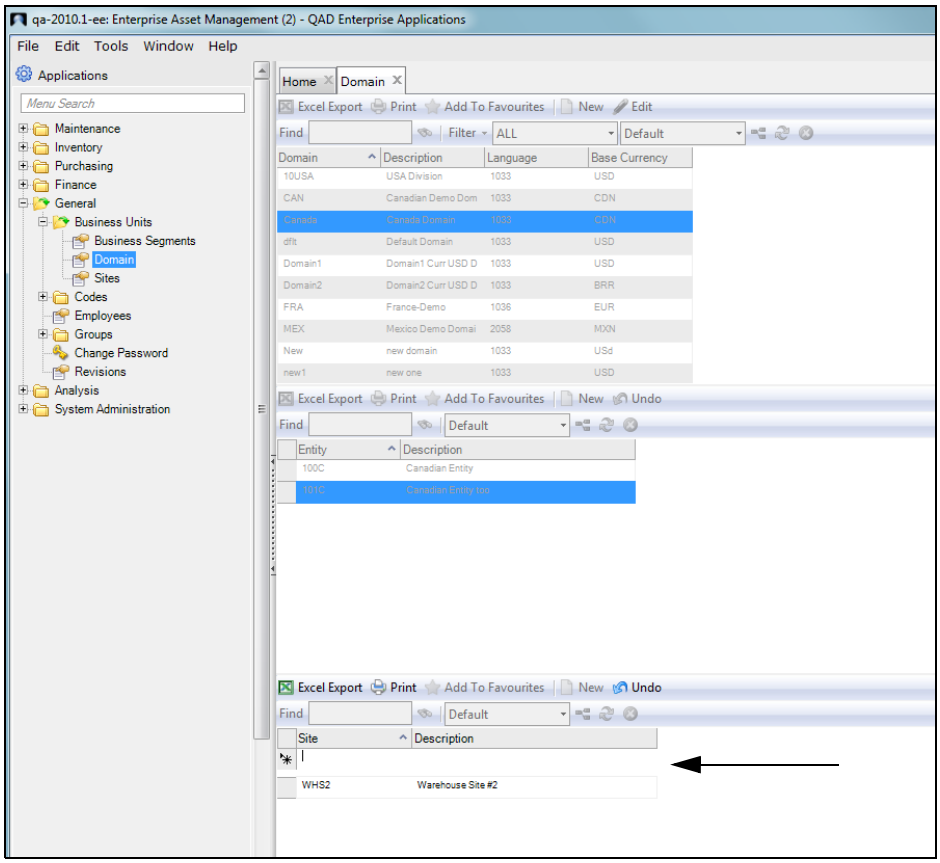

## Adding a Site Record to an Entity Record

To add a site record and associate it with the entity record, select the entity, and in the lower browse click New.

Enter the site code in the Site field and a short description in the Description field. Press Enter to save.

***Important*** The Site codes must match the codes set up in QAD ERP.

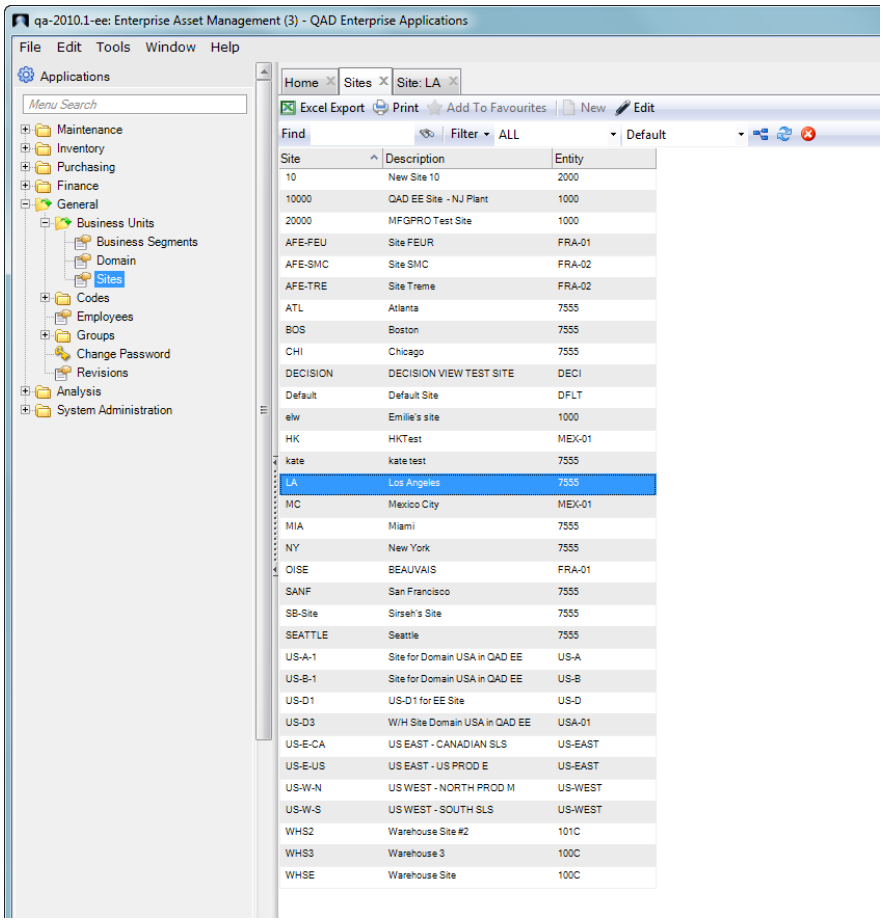
**Fig. 3.12**
Adding a Site Record




## Sites

The Sites browse, which is in General|Business Units|Sites, is used to define and edit site control settings for EAM modules. If your user ID has access to multiple sites, you can change the active site to work with EAM modules.

**Fig. 3.13**
Sites Browse




## Creating a Site Record

Follow these steps to create a site record:

1. Open the Domain browse and add the site to the domain entity. See “Adding a Site Record to an Entity Record” on page 40.
2. Open the Sites browse.
3. Find the site you created in the list. Double-click and open the site record.
4. Enter information in relevant fields on the Detail, Purchase Order, Inventory, More Inventory, Maintenance, Authorization Options, Misc, and MFG/PRO Options tabs. See “Filling Out the Site Record” on page 42.
5. Click Save.

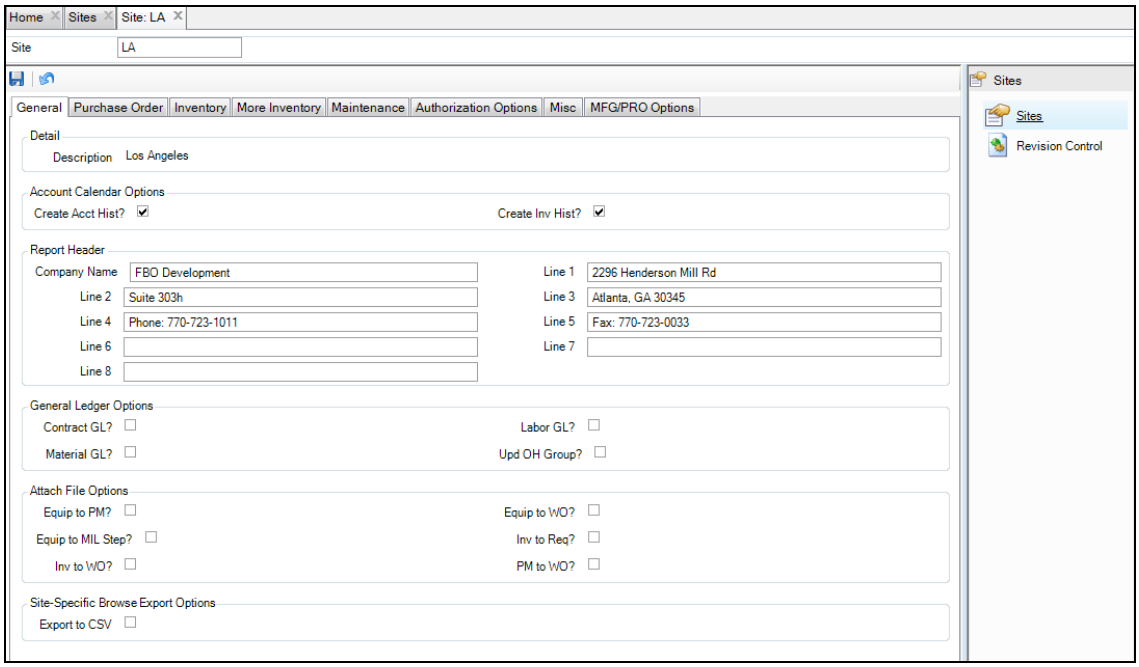
## Filling Out the Site Record

The site record contains the controls for various functionality options for a site. Enter the information in the following tabs:

- General
- Purchase Order
- Inventory
- More Inventory
- Maintenance
- Authorization Options
- Misc
- MFG/PRO Options

Sites: General Tab

**Fig. 3.14**
Sites: General Tab




### Detail

*Description.* This field displays the site description.

### Account Calendar Options

*Create Acct Hist.* If this check box is selected, the system stores GL account activity history.

*Create Inv Hist.* If this check box is selected:

- The system stores a history of specific part numbers.
- Whenever an accounting period, which is set up in Acct Calendar Maintenance, is closed, the system automatically records an inventory activity history for that period. The inventory activity history is not stored on a period-by-period basis.

**Report Header**

*Company Name.* Enter the official company name. All the information in this section appears on the purchase order document.

*Line 1, Line 2, Line 3, Line 4, Line 5, Line 6, Line 7, and Line 8.* These fields display the lines of the company's address. This information appears on the purchase order document.

**General Ledger Options**

*Contract GL?* If selected, all requisitions that are flagged as contract create a general ledger transaction in EAM.

*Material GL?* If selected, EAM creates a general ledger entry for all inventory transactions, such as physical inventories, issues, receipts, adjustments, and returns to stock, as well as PO receipts and returns to vendor.

*Labor GL?* If selected, all labor postings create a general ledger transaction in EAM.

*Upd OH Group?* If selected, users are allowed to modify the overhead code on transactions in EAM.

**Attach File Options**

*Equip to PM?* If selected, files that are attached to an equipment record automatically copy to any PM record associated with that piece of equipment.

*Equip to WO?* If selected, files that are attached to an equipment record automatically copy to any work order associated with that piece of equipment.

*Equip to MIL Step?* If selected, files that are attached to an equipment record automatically copy to any master instruction list (MIL) step associated with that piece of equipment.

*Inv to Req?* If selected, files that are attached to an inventory part record automatically copy to any requisition line record, including that part.

*Inv to WO?* If selected, files that are attached to an inventory part record automatically copy to any "fabricated" work orders for that part.

*PM to WO?* If selected, files that are attached to a PM template record automatically copy to any work order record created from that PM record.

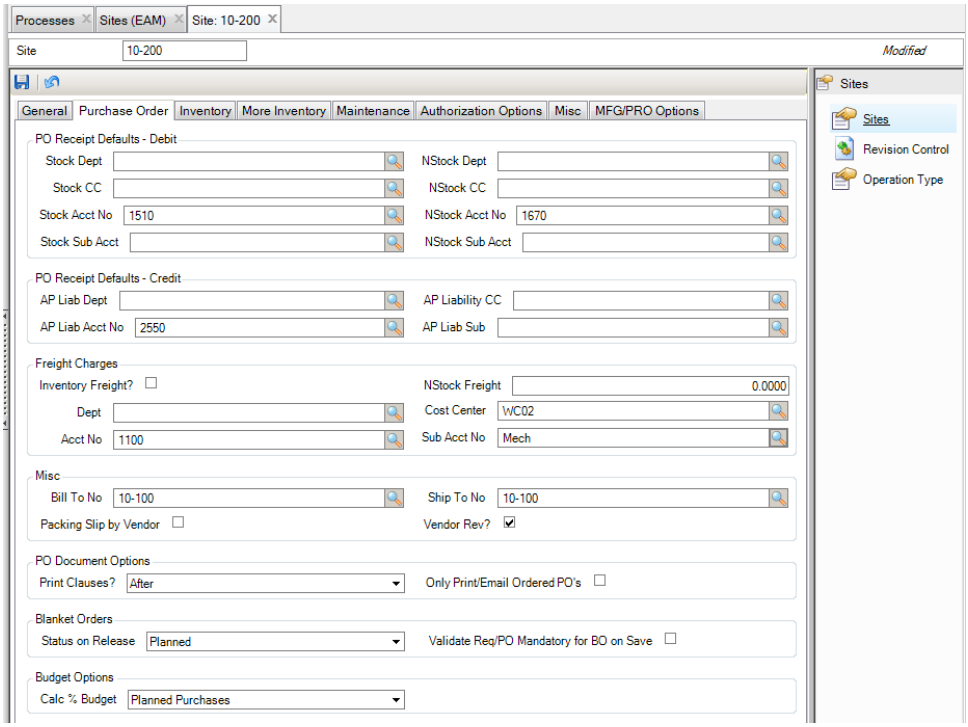
**Site-Specific Browse Export Options**

*Export to CSV?* Select this check box to export a site-specific browse to a `.csv` file.

Sites: Purchase Order Tab

Enter site information on the Purchase Order tab.

**Fig. 3.15**
Sites: Purchase Order Tab




## PO Receipts Defaults – Debit

If no accounting structure is specified for the debit side of the Receipt transaction, EAM uses the accounts specified in the PO Receipts Defaults – Debit section. When items are issued out of inventory, then the same accounting structure is credited.

*Stock Dept.* At the time that a stock part is received, if that stock part does not have a stock department number, the system looks up the specific site and looks for a specified stock department for PO receipts.

*Stock CC.* At the time that a stock part is received, if that stock part does not have a stock cost center, the system looks up the specific site and looks for a stock cost center for PO receipts.

*Stock Acct No.* At the time that a stock part is received, if that stock part does not have a stock account number, the system looks up the specific site and looks for a stock account number for PO receipts.

*Stock Sub Acct.* At the time that a stock part is received, if that stock part does not have a stock sub-account number, the system looks up the specific site and looks for a stock sub-account number for PO receipts.

*NStock Dept.* Non-stock items on requisition lines are automatically set to auto-issue. You can specify a department number to expense or debit upon receipt of a non-stock item. If one is not specified, the system looks up the site's non-stock PO receipt debit department number field.

*NStock CC.* Non-stock items on requisition lines are automatically set to auto-issue. You can specify a cost center to expense or debit upon receipt of a non-stock item. If one is not specified, the system looks up the site's non-stock PO receipt debit cost center field.

*NStock Acct No.* Non-stock items on requisition lines are automatically set to auto-issue. You can specify an account number to expense or debit upon receipt of a non-stock item. If one is not specified, the system looks up the site's non-stock PO receipt debit account number field.

*NStock Sub Acct.* Non-stock items on requisition lines are automatically set to auto-issue. You can specify a sub-account number to expense or debit upon receipt of a non-stock item. If one is not specified, the system looks up the site's non-stock PO receipt debit sub-account number field.

**PO Receipts Defaults – Credit**

When a part is received into stores from a PO, the PO Receipt Debit accounting structure (Stock or Non Stock) is debited. An off-setting AP Liability accounting structure, also know as Expensed Items Receipt, is then credited for accounts payable. You can specify an AP Liability accounting structure in the PO Receipts Defaults – Credit section.

***Note*** If you connect EAM to QAD Purchasing, EAM copies the Expensed Items Receipt accounting structure from QAD to these fields, overriding what you have entered.

*AP Liab Dept.* At the time that a requisition line item is received from a PO, the stock or non-stock department is debited or increased, and an offsetting liability is credited for accounts payable. The system looks at the specific site's AP Liability Department Number against which to credit all inventory receipts.

*AP Liab Acct No.* At the time that a requisition line item is received from a PO, the stock or non-stock account number is debited or increased, and an offsetting liability is credited for accounts payable. The system looks at the specific site's AP Liability Acct No against which to credit all inventory receipts.

*AP Liability CC.* At the time that a requisition line item is received from a PO, the stock or non-stock cost center is debited or increased, and an offsetting liability is credited for accounts payable. The system looks at the specific site's AP Liability CC against which to credit all inventory receipts.

*AP Liab Sub.* At the time that a requisition line item is received from a PO, the stock or non-stock sub-account number is debited or increased, and an offsetting liability is credited for accounts payable. The system looks at the specific site's AP Liability Sub Acct No against which to credit all inventory receipts.

**Freight Charges**

*Inventory Freight?* If selected, Freight is included in the part expense for stock or non-stock parts. Stock or non-stock parts include the estimated freight percentage on the requisition as part of their inventoried cost.

*Dept.* If freight is specified on a requisition line item, at the time of receipt, the cost of the freight is distributed to the freight department for the specific site.

*Acct No.* If freight is specified on a requisition line item, at the time of receipt, the cost of the freight is distributed to the freight account number for the specific site.

*NStock Freight.* Number identifying the additional percent added to a non-stock part's cost to cover freight.

*Cost Center.* If freight is specified on a requisition line item, at the time of receipt, the cost of the freight is distributed to the freight cost center for the specific site.

*Sub Acct No.* If freight is specified on a requisition line item, at the time of receipt, the cost of the freight is distributed to the freight sub-account number for the specific site.

**Misc**

*Bill To No.* Select the default bill-to address that is used on all POs for the specific site.

*Ship To No.* Select the default ship-to address that is used on all POs for the specific site.

*Packing Slip by Vendor.* Default is cleared. If this check box is selected, the packing slip entered during receiving must be unique for a vendor.

*Vendor Rev?* Select this option if you want a revision number incremented on reprinted PO indicating that changes have been made to the PO.

**PO Document Options**

*Print Clauses?* This option controls whether standard clauses print before or after the line items on a purchase order document.

*Only Print/Email Ordered POs.* Default is cleared. If this check box is selected, you cannot print or e-mail a PO unless it has a status of Ordered.

**Blanket Orders**

*Status on Release.* Specify the status that is automatically assigned to a PO that is released from a blanket order for the site. The status options are Planned (P) or Ordered (O).

*Validate Req/PO Mandatory for BO on Save.* Select this check box to have EAM validate that all mandatory fields for POs and requisitions are populated before saving a new BO or its associated lines.

**Budget Options**

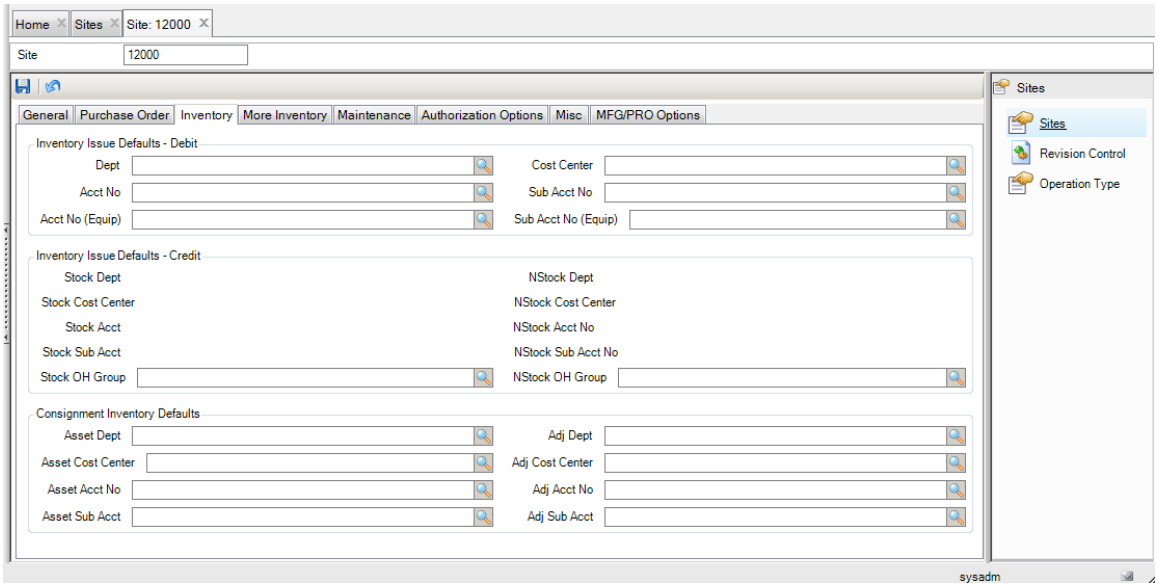
*Calc% Budget.* The default is Expensed. Select the value to use in calculating the percentage of a site's budget already spent and, depending on the setting, committed for projects and for cost centers, accounts, and sub-accounts. This value is compared to the requisition budget amount selected.

- Expensed: PO receipts = (Expensed/Budget) * 100
- Committed: PO with a status of Ordered (O) = ([Expensed + Committed]/Budget) * 100
- Auth Purchases: Authorized Requisitions/POs = ([Expensed + Committed + Auth Purch]/Budget) * 100
- Planned Purchases: Requisitions/POs with a status of Planned (P) = ([Expensed + Committed + Auth Purch + Planned Purch]/Budget) * 100

***Note*** Budget = YTD or Current Period as set in "Sites: Authorization Options Tab" on page 54.

Sites: Inventory Tab

**Fig. 3.16**
Sites: Inventory Tab




### Inventory Issues Defaults – Debit

*Dept.* Select the department against which the inventory expense is reported. Department is not part of the GL accounting structure.

*Cost Center, Acct No, and Sub Acct No.* If an expense account is not otherwise specified, the Cost Center, Acct No, and Sub Acct No fields serve as the default accounting structure that is debited during the inventory issue transaction.

*Acct No (Equip) and Sub Acct No (Equip).* When a part is issued to a piece of equipment, the system automatically pulls in the equipment's material account number. If one does not exist, then it looks for the site's default account number. By specifying a site default, you ensure that there are no issues to a blank account number. This represents the debit side of a general ledger transaction. The inventory account receives the credit side of the transaction.

*Acct No (Equip).* Displays the account number that is debited when a part is issued to an equipment ID that is missing a material account number.

*Sub Acct No(Equip).* Can also be used if you want the site default to include a sub-account number.

### Inventory Issues Defaults – Credit

*Stock Dept, NStock Dept.* Select the stock/non-stock department against which the inventory expense is reported. Stock/Non-Stock Department is not part of the GL accounting structure.

*Stock Cost Center, Stock Acct No, Stock Sub Acct No, Stock OH Group, NStock Dept, NStock Cost Center, NStock Acct No, NStock Sub Acct No, NStock OH Group.* Transactions for non-stock items can be separated from the routine stock transactions by specifying an accounting structure that is specifically for non-stock issues. If no accounting structure is specified for the credit side of the issue transaction, EAM uses the applicable (Stock or Non Stock) accounting structure specified in the following fields.

Both the Stock and Non-Stock related accounting structures are defaulted from the selections made on the Purchase Order tab. On the Purchase Order tab, these accounting structures serve as the site's default PO Receipt Debit accounts. On the Inventory tab, they serve as the site's default Inventory Issue Credit accounts. To add or modify these accounts, access the fields on the Purchase Order tab.

### Consignment Inventory Defaults

*Asset Dept.* When consignment inventory is purchased, select the department against which the consignment inventory expense is reported. Asset Department is not part of the GL accounting structure.

*Asset Cost Center, Asset Acct No, Asset Sub Acct No.* When you purchase consignment inventory, select the accounting structure that is expensed.

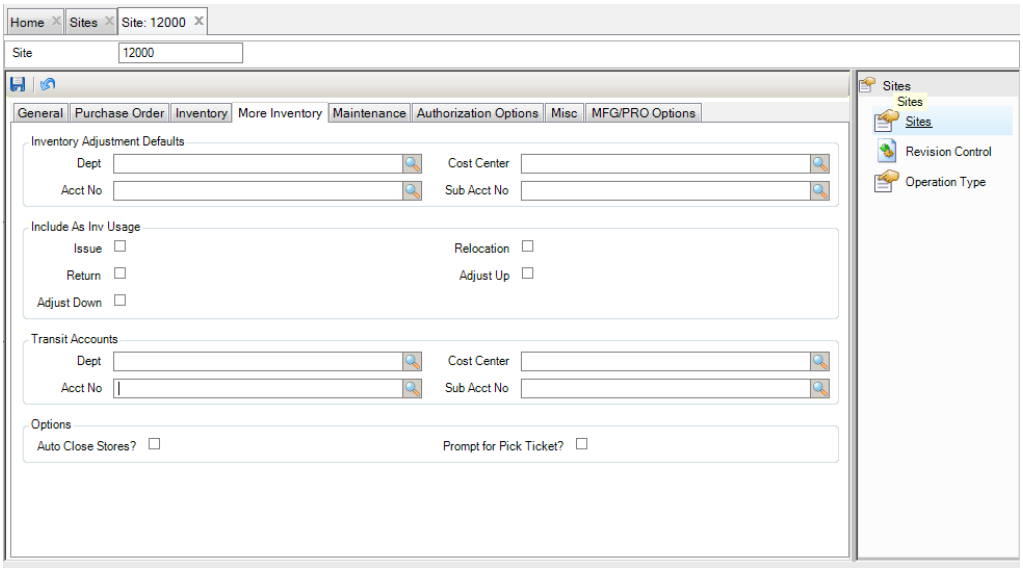
*Adj Dept.* For adjustments in consignment inventory, select the department against which the consignment inventory expense is reported. Adjustment Department is not part of the GL accounting structure.

*Adj Cost Center, Adj Acct No, Adj Sub Acct No.* If a physical inventory or cycle count determines there are more parts in consignment inventory than the system records reflect, inventory personnel enter the new count to increase the quantity. To remedy the absence of an audit trail and account for the change in consignment inventory quantity, the Consignment Inventory accounting structure is debited and this Consignment Inventory Adjustment accounting structure is credited.

If a physical inventory or cycle count results in a downward adjustment, the Consignment Inventory accounting structure is credited and the Consignment Inventory Adjustment accounting structure is debited.

Sites: More Inventory Tab

**Fig. 3.17**
Sites: More Inventory Tab



**Inventory Adjustment Defaults**

*Dept.* For inventory adjustments, select the department against which the inventory adjustment expense is reported. Department is not part of the GL accounting structure.

*Cost Center, Acct No, and Sub Acct No.* If a physical inventory or cycle count determines there are more parts in inventory than the system records reflect, inventory personnel enter the new count to increase the quantity. To remedy the absence of an audit trail and account for the change in inventory quantity, the inventory accounting structure is debited and the Inventory Adjustment accounting structure is credited.

If a physical inventory or cycle count results in a downward adjustment, the inventory accounting structure is credited and the Inventory Adjustment accounting structure is debited.

**Include as Inv Usage**

EAM automatically maintains a monthly cumulative count of each inventory stock item's usage. In other words, usage is the quantity of parts used for each month within a selected year. Select those transactions that you want to be included as usage. To view the usage history for a part, access Analysis|Inventory|Inventory Usage Analysis|Inventory Usage Analysis (EAM).

*Issue.* Select this check box to decrease the inventory on-hand quantity when a part is issued.

*Relocation.* Select this check box to include a warehouse transfer or a relocation of a part to a different site in the usage calculation.

*Return.* Select this check box to include the return of a part in the usage calculation.

*Adjust Up.* Select this check box to include an inventory adjustment to increase the on-hand quantity of a part in the usage calculation.

*Adjust Down.* Select this check box to include the inventory adjustment to decrease the on-hand quantity of a part in the usage calculation.

**Transit Accounts**

The Transit accounting structure is used if the Transit? check box is selected in the domain's Inventory tab in General|Business Units|Domain. See "Domain: Inventory Tab" on page 35.

*Dept.* When Transit? is selected and parts are transfered, specify the department against which the expense is reported. Department is not part of the GL accounting structure.

*Cost Center, Acct No, and Sub Acct No.* If the domain's Transit? check box is selected, EAM credits the inventory accounting structure and debits the Transit accounting structure when a part is issued from stores.

Likewise, when the part is received in the other site, an offsetting credit is issued against the Transit accounting structure. This Transit accounting structure can be viewed as an intercompany charge account and should always equal zero when all inventory transactions are completed.

**Options**

*Auto Close Stores?* Select this check box to automatically close stores requisitions once they issue 100% of planned quantities. If you select this check box, stores requisitions automatically close when complete, which saves you time because you are not required to manually close the stores requisitions.

*Prompt for Pick Ticket.* Select this check box to use pick tickets at a particular site.

After the inventory issue transaction is complete in EAM, the printed pick ticket form is used for physically pulling parts from stores. Users with the appropriate authorization can perform a direct inventory issue transition and print the pick ticket for stores personnel. Afterward the stores employee uses the printed pick ticket as a reference to locate the part and to manually pull it from the shelf/bin. If a comment is entered during the issue transaction, the text appears in the Comment field on the pick ticket report.

If this check box is selected, you are prompted during an inventory issue with a dialog box where you can choose whether to print a pick ticket or not.

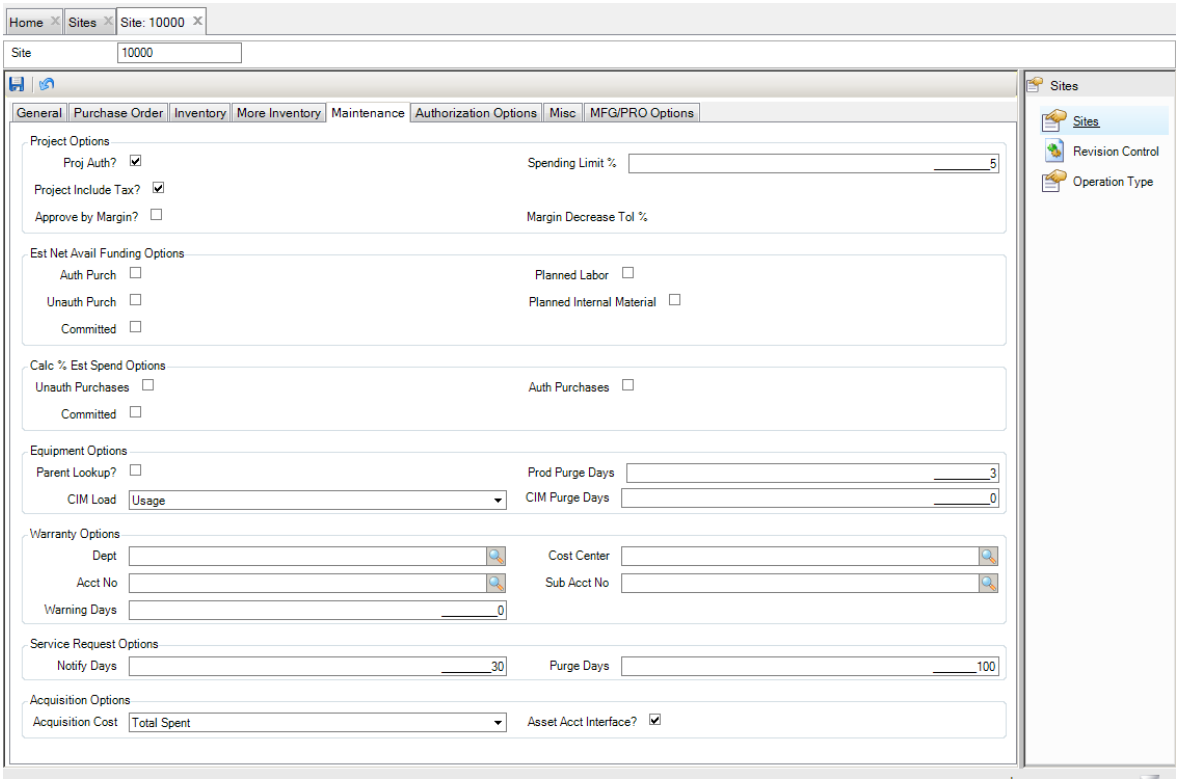
The pick ticket prompt is presented during the following material issue scenarios:

- Issue transaction using the issue transaction option through Inventory Maintenance
- Issue transaction invoked from Work Order Maintenance
- Issue transaction invoked from Stores Requisition Maintenance

***Note*** The pick ticket does not apply to a purchase order for a stock item that was created from a requisition or blanket order that had the Auto Issue? check box selected.

Sites: Maintenance Tab

**Fig. 3.18**
Sites: Maintenance Tab




## Project Options

*Proj Auth?* If this check box is selected, projects must be authorized before any expenses are reported against them.

*Spending Limit %.* The percentage of the project's spending limit that you can overspend. For example, if the spending limit for the project is $1,000 and the Spending Limit % is set to 10%, you are allowed to spend $1,100.

*Project Include Tax?* Select this check box to include tax amounts in the cost amounts for the project.

*Approve by Margin?* Select this check box to approve a customer-funded project based on Planned Margin% instead of the Project Requested Funding Amount. You can only select this option if the Proj Auth check box has been selected for the site. When Approve by Margin is selected, it is only used for projects with a Customer Funded funding type. A separate project margin approval group is used to routing for approval.

*Margin Decrease Tolerance% .* This option is enabled when Approve by Margin? is selected. The percentage that you enter in this field determines if a change to the Planned Margin% for a Project must be reauthorized:

- **Outside of Tolerance%.** If the percentage decrease in the Planned Margin% is outside this Tolerance%, then the project must be routed through a margin approval group for authorization.
- **Within Tolerance%.** If the percentage decrease is within this Tolerance%, then the Auth-Margin% is updated without additional authorization.
- **Zero Value.** If you do not specify a value, any change requires reauthorization as no Tolerance% value is defined.

### Estimated Net Available Funding Options

*Auth Purch, Planned Labor, Unauth Purch, Planned Internal Material, and Committed.* Select one or more of these cost options to include in the Estimated Net Available Funding amount for a project. Each of these costs is visible on the Cost tab of the project.

This Net Available Funding amount is calculated as Funding Amount minus the total spent and any of the amounts selected here for a project. This gives a project manager an estimation of remaining net funding available by considering any or all of these costs, already in the pipeline for the project, in addition to Total Spent.

### Calc % Est Spend Options

*Unauth Purchases, Auth Purchases, and Committed.* Select one or more of these options (Purchasing Costs on a Project), to include the cost in the calculation of the % Spending Estimate for the project.

### Equipment Options

*Parent Lookup?* Select this check box to use the graphical representation of the equipment lookup for this site. The graphical lookup provides much more information than the standard equipment lookup. At a glance, you see which pieces of equipment are parents and what pieces of equipment have been attached to them. Also, you can view whether a piece of equipment is locked. The graphical representation is available from any field that normally accesses the Equipment lookup.

*Prod Purge Days.* Enter the number of days before EAM purges the data in the Maintenance|Equipment|Data Loads|Production Hours browse.

*CIM Load.* When using the CIM functionality, you must write a routine that extracts information from ERP into a simple text file for EAM to read. The CIM Load setting controls whether EAM expects the simple text file to include the equipment usage (the accumulated usage for the time frame being reviewed) or the equipment reading (the current meter reading for the DUOM). There is a job called CIM Load that performs the CIM Load function. See “CIM Load” on page 726.

*CIM Purge Days.* Currently not available.

### Warranty Options

*Dept., Cost Center, Acct No, Sub Acct No, Warning Days.* Currently not available.

### Service Request Options

*Notify Days.* Enter the number of days before EAM sends an e-mail to the Notify user ID that is associated with the equipment referenced on a service request. If a service request has not been resolved after this number of days, the system sends an e-mail to the equipment’s Notify user ID. If Notify Days is set to zero, when you create a service request, an e-mail is sent to the Notify user ID upon saving.

*Purge Days.* Enter the number of days the system maintains the records of closed or canceled service requests under Service Request History. The system purges all records of closed or canceled service requests older than the number of days indicated here.

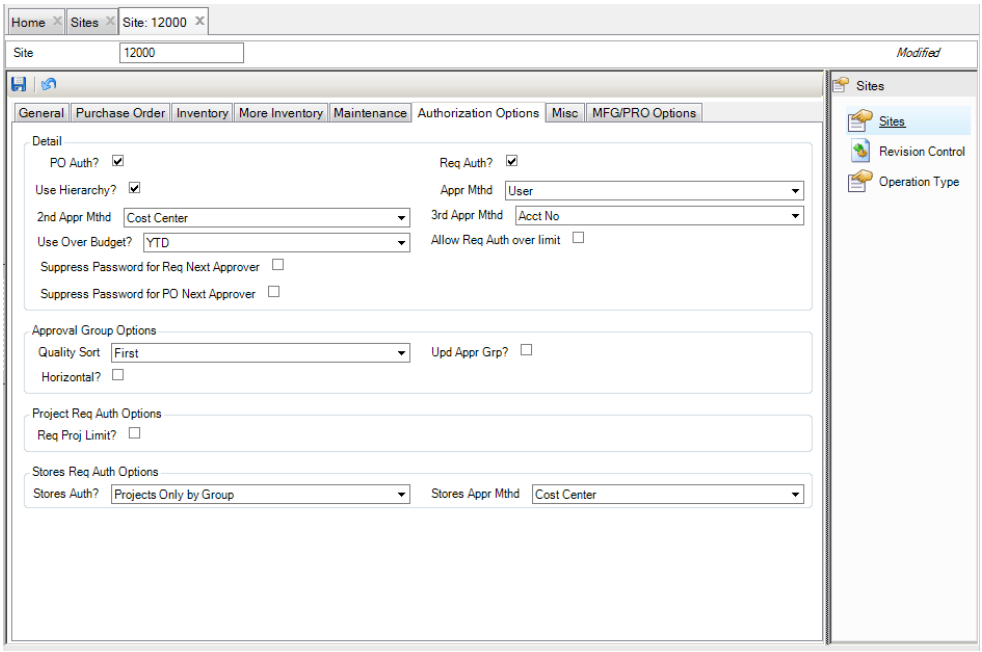
### Acquisition Options

*Acquisition Cost.* Currently not available. Total Spent, Total Invoiced, Total Paid.

*Asset Account Interface?* Currently not available. There is a Fixed Asset Integration for QAD EE in the Project module.

Sites: Authorization Options Tab

**Fig. 3.19**
Sites: Authorization Options Tab




## Detail

*PO Auth?* If this check box is selected, purchase orders must be authorized. You must define an Approval Limit Currency in System Control to use PO authorizations. See “System Control: Detail Tab” on page 688.

*Req Auth?* If this check box is selected, requisitions must be authorized. You must define an Approval Limit Currency in System Control to use requisition authorizations. See “System Control: Detail Tab” on page 688.

***Note*** If you select Req Auth? you must select an approval method in the Appr Method field. If Req Auth? and Use Hierarchy? are selected, select all three approval methods.

You can specify a particular requisition approval group for the following:

- Project/Job
- Account Number
- Cost Center
- User

If Req Auth? is selected, EAM first checks if there is a Project/Job on the requisition header for which a req approval group has been specified. If yes, EAM uses this group for approval routing.

If not found, then EAM checks the site control setting Use Hierarchy? flag.

If Use Hierarchy? is not selected, then EAM simply checks the record specified as the basis for routing (Cost Center, Account, or User) to determine which req approval group to use for routing. If none is found, EAM displays an error message stating that there is no approval group.

If Use Hierarchy? is selected, EAM follows the logic of checking in order the records specified as first, second, and third approval options to locate the correct approval group. If none is found, EAM displays an error message stating that there is no approval group.

*Use Hierarchy?* Select this check box to use all or any of the three methods for routing approval:

- **Account based.** Account-based routing requires that you assign a specific requisition group to a specific account number. EAM routes a requisition based on its account information to the group associated with the account number on the requisition. This information is in Finance|Accounting|Accounts.
- **Cost center based.** Cost center-based routing requires that you assign a specific requisition group to a specific cost center number. EAM routes cost center information to the group associated with the cost center number on the requisition. This information is in Finance|Accounting|Cost Centers.
- **User-based.** User-based routing depends on the user who initiates the routing. The user group is assigned to the User Profile.

In all three options, EAM requisition initiators must have a cost center or account group in their profiles. In this way, you can control who can purchase against cost center and account numbers.

*Appr Method, 2ndAppr Method, and 3rdAppr Method.* When you select Use Hierarchy?, EAM considers all methods in a user-defined sequence. The first method is cost center, the second is account, and the third is user. EAM uses the cost center approval group first.

If no cost center is listed or no requisition approval group is linked to the cost center, it uses the account approval group.

If no requisition approval group is linked to the account, EAM uses the user-based method for routing.

If the user who initiates the routing does not have a requisition approval group assigned to the User Profile, the routing is aborted.

*Use Over Budget.* If Req Auth? is selected, this drop-down menu is active. Select a budget period of either YTD or Current Period. This amount is used to compare with Calc% Budget amounts. See “Budget Options” on page 47.

*Allow Req Auth Over Limit.* Select this check box to allow requisition authorizations over the project spending limit.

*Suppress Password for Req Next Approver.* When a requisition routing is in process, this option suppresses the prompt for password for requisition next approver. If this check box is selected, you are logged in to requisitions, where you are the next approver. You are not presented with a password prompt when you select Authorize or Global Authorize. The option is validated for the requisition site, but not the user site.

***Note*** When you perform the Global Authorize action and initiate routing, you are always prompted for a password, regardless of the new setting. If you select the Global Authorize action for a mix of requisitions that are already in routing and others set to have routing initiated, you are prompted for a password if you are not the next approver, regardless of the setting.

***Note*** If you authorize a group of requisitions using the Global Authorize action, but you are not the Next Approver and do not have the required spend limit for some of the requisitions, the requisitions are not approved or disapproved and are not updated with any comments. If this situation occurs, the details are displayed in the Global Validation Message Log.

***Note*** If you initiate a routing and are not a Next Approver or on the routing list, you are prompted to enter your password and continue with all other existing authorize prompts.

*Suppress Password for PO Next Approver.* When a PO routing is in process, this option suppresses the prompt for password for the PO next approver. If this check box is selected, and you are logged in to the PO as the next approver, you are not presented with a password prompt when you select Authorize or Global Authorize. The option is validated for the PO site, but not for the user site.

***Note*** When you perform the Global Authorize action and initiate routing, you are always prompted for a password, regardless of the new setting. If you select the Global Authorize action for a mix of POs that are already in routing and others set to have routing initiated, you are prompted for a password if you are not the next approver, regardless of the setting.

***Note*** If you authorize a group of POs using the Global Authorize action but you are not the Next Approver and do not have the required spend limit for some of the POs, the POs are not approved or disapproved and they are not updated with any comments. If this situation occurs, the details are displayed in the Global Validation Message Log.

***Note*** If you initiate the routing and are not a Next Approver or on the routing list, you are prompted to enter a password and continue with all other existing authorize prompts.

### Approval Group Options

*Quality Sort.* Select First or Last to have the quality approver listed as the first or last approver in the approval group.

*Upd Appr Grp?* Select this check box to override the requisition's approval routing.

*Horizontal?* Select this check box to allow horizontal approvers to be added to requisition approval groups. Horizontal approvers align with requisition approvers by having the same approval limit. As the requisition approver approves, the horizontal approver is routed to next for approval. When this option is selected, the final approver is a horizontal approver with the required spending amount.

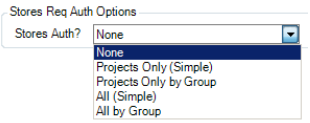
### Proj Req Auth Options

*Req Proj Limit?* For requisitions that are tied to projects, select this check box to have the requisition approved based on the user's setting for Requisition Project Limit rather than the Requisition Limit or Requisition Cap Limits.

### Stores Req Auth Options

*Stores Auth?* The default setting is None. If authorization is required, select from one of the following options to enable authorization by a stores requisition approval group or by a single user.

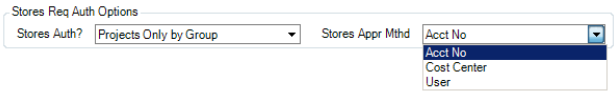
**Fig. 3.20**
Stores Req Auth Options




- **None** EAM does not require any authorization for a stores requisition. You can issue the stores requisition directly from the Action menu of the lower browse of Inventory|Stores Requisition Lists.
- **Project Only (Simple)** When parts are issued to a project, EAM requires approval from a single user with security to authorize a stores requisition.
- **Projects Only by Group** When parts are issued to a project, EAM routes project stores requisitions through the assigned stores requisition approval group, as defined in the projects stores req approval group.
- **All (Simple)** EAM requires approval from a single user with security to authorize a stores requisition.
- **All by Group** EAM routes all stores requisitions through the assigned stores requisition approval group, as defined in the Stores Appr Mthd field.

*Stores Appr Mthd.* The Stores Appr Mthd drop-down menu is active when either Projects Only by Group or All by Group is selected from the Stores Auth? drop-down menu. Select Acct No, Cost Center, or User. In all three instances, EAM stores requisition initiators must have a cost center or account group in their profiles. In this way, you can control who can purchase against cost center and account numbers.

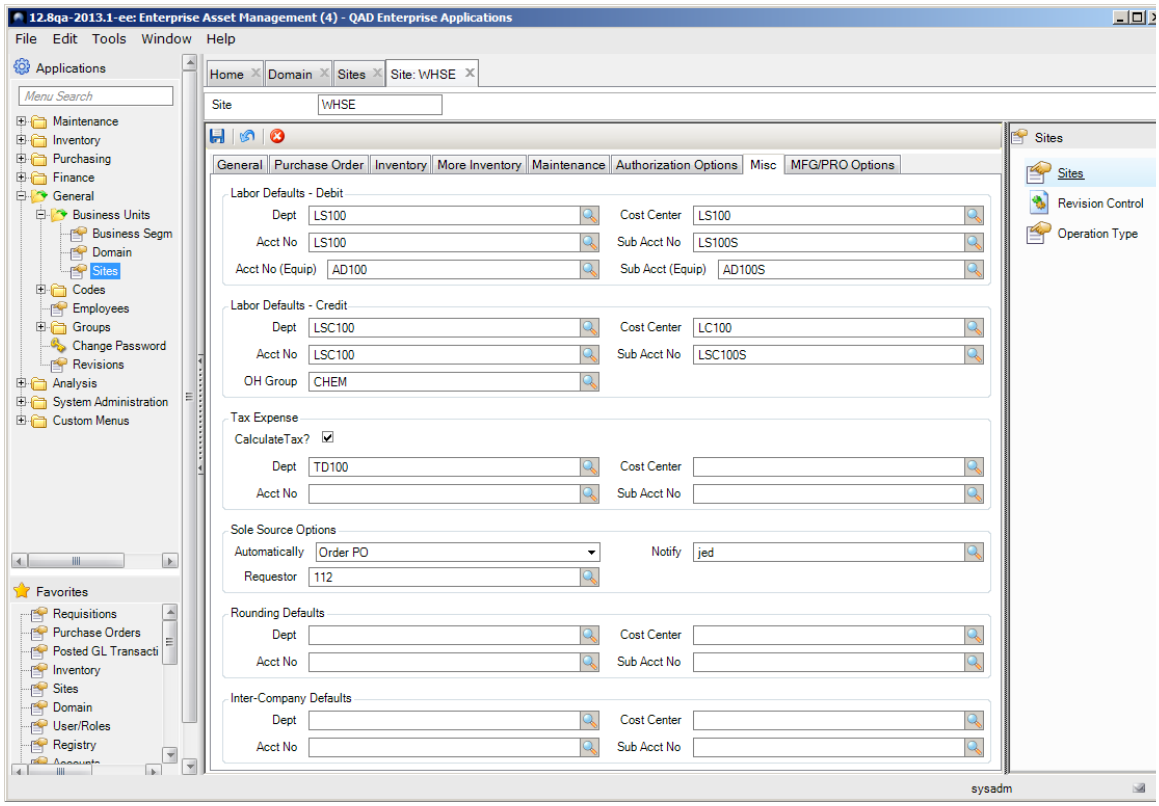
**Fig. 3.21**
Stores Approval Method




- **Acct No** Account-based routing requires that you assign a specific stores requisition approval group to a specific account number. EAM routes a stores requisition based on its account information to the group associated with the account number on the stores requisition. This information is in Finance|Accounting|Accounts.
- **Cost Center** Cost center-based routing requires that you assign a specific stores requisition group to a specific cost center number. EAM routes cost center information to the group associated with the cost center number on the stores requisition. This information is in Finance|Accounting|Cost Centers.
- **User-based** User-based routing depends on the user who initiates the routing. The user group is assigned to the user profile. When the Stores Auth? option is set to All by Group, the user is included to authorize using the Stores Requisition Approval Group specified.

Sites: Miscellaneous Tab

**Fig. 3.22**
Sites: Misc Tab




### Labor Defaults – Debit

*Dept.* Select the department against which the labor expense is reported for the debit side of the transaction. Department is not part of the GL account structure.

*Cost Center, Acct No, Sub Acct No, Acct No (Equip), and Sub Acct No (Equip).* When labor is posted to a work order, these fields serve as the default accounting structure for the debit side of the labor transaction used.

### Labor Defaults – Credit

*Dept.* Select to which department labor expense is credited. Department is not part of the GL account structure.

*Cost Center, Acct No, Sub Acct No, and OH Group.* If there is no default accounting structure defined for an employee, the default accounting structure defined in these fields is used in labor posting transactions.

### Tax Expense

*Calculate Tax?* Select this check box to have sales tax costs accompany items into inventory. By selecting this option, stock parts include sales tax as part of their inventoried cost.

***Note*** Inventory tax for stock items can only be selected if Accrue Tax? is selected. The Accrue Tax? check box is on the tax rate record in Finance|Tax|Tax Rates. If the Inventory Tax? check box is not selected on the tax rate record, sales tax is excluded from the inventoried cost of stock parts. Instead, sales tax for stock parts is expensed to the site's Tax Expense account.

*Dept.* Select the department against which tax expenses are reported. Department is not part of the GL account structure.

*Cost Center, Acct No, and Sub Acct No.* Select the accounting structure that is used when reporting tax expenses.

### Sole Source Options

*Automatically.* In Inventory Maintenance, you can flag a part as sole source, indicating that this part bypasses the normal purchasing approval process for replenishment. Since these parts are typically pre-approved under contract prices and at certain stocking levels, sole source parts can go straight from a requisition to an authorized and ordered purchase order. However, you can control exactly how far EAM automates the purchasing process for sole source parts by selecting from the following options:

- **Create Req.** If this option is selected, EAM automatically creates a requisition for any sole source part upon reaching its reorder point or safety stock levels.
- **Auth Req.** If this option is selected, EAM automatically creates a requisition that is authorized (if required) for any sole source part upon reaching its reorder point or safety stock levels.
- **Create PO.** If this option is selected, EAM automatically creates a requisition, authorizes the requisition (if required), and creates a purchase order for any sole source part upon reaching its reorder point or safety stock levels.
- **Auth PO.** If this option is selected, EAM automatically creates a requisition, authorizes the requisition (if required), creates a purchase order, and authorizes the purchase order for any sole source part upon reaching its reorder point or safety stock levels.
- **Order PO.** If this option is selected, EAM automatically creates a requisition, authorizes the requisition (if required), creates a purchase order, authorizes the purchase order (if required), and places the purchase order on order for any sole source part upon reaching its reorder point or safety stock levels.

*Notify.* The notify group or employee ID entered here is notified through e-mail when a sole source part could not be ordered through the stock replenishment routine due to an expired price schedule or incorrect data.

*Requestor.* The employee ID entered here is associated with all requisitions for sole source parts created through the stock replenishment routine.

### Rounding Defaults

*Dept.* Select the department against which the rounding is reported. Department is not part of the GL account structure.

*Cost Center, Acct No, and Sub Acct No.* Select the accounting structure that is used when rounding differences occur for a GL transaction.

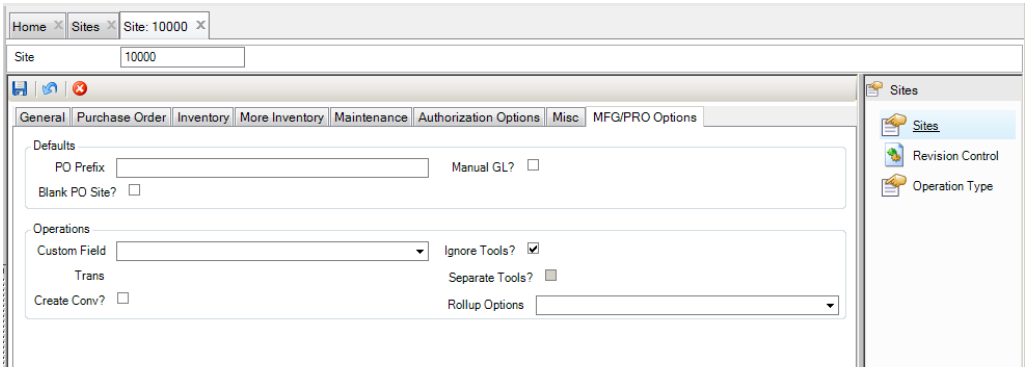
### Intercompany Defaults

*Dept.* Select the department against which the intercompany transaction is reported. Department is not part of the GL account structure.

*Cost Center, Acct No, and Sub Acct No.* When parts are transferred between sites in different entities, select the default accounting structure that is used for the intercompany transaction. This default is used if there are no From and To Site Intercompany Accounting defined. See “Intercompany Accounts” on page 414.

Sites: MFG/PRO Options Tab

**Fig. 3.23**
Sites: MFG/PRO Options Tab




### Defaults

These options are for integration with QAD Purchasing and GL.

*PO Prefix,* Specify a prefix that is appended to the EAM PO number when it is sent to QAD ERP purchasing. This prefix allows you to easily identify EAM POs in ERP.

*Manual GL?* When this check box is selected, manual GL transactions that are created in EAM’s Unposted GL Transactions are posted and sent to QAD GL when a user selects “Send ERP?=Yes.” Once the manual journal entry is created, select Post from the Action menu on the Unposted GL Transaction browse and the manual GL posts to the ERP.

***Note*** Users can override this default setting and transmit unposted GL transactions to ERP. Ensure that only qualified users have access to this functionality.

*Blank PO Site.* This field is obsolete and not used.

### Operations

These settings are used with Production driven maintenance in the Maintenance module.

*Custom Field.* Select a Custom Field using the drop-down menu. This is the ERP field that is marked as having been Read during the DUOM Load process. The fields offered on the drop-down menu are not used by standard ERP functionality. They have been provided for customized purposes. Be sure to select a field that is not being used for any other purpose in the ERP.

*Ignore Tools?* The Ignore Tools? check box controls if tools are included in the DUOM load job program. If this check box is selected, the tool code is ignored when EAM reads the ERP's shop floor operation history table (op_hist). Depending on how tool codes are used in the ERP, the tool code may not easily provide data useful in the DUOM update process. Since there are circumstances under which you do not want to include tools in the DUOM load job program, the Ignore Tools? option can be enabled. In cases where tool codes do accurately correspond to an EAM equipment record, as in the case of a die that is attached to a piece of machinery, you can update the DUOMs for two pieces of equipment, machine and tool, rather than just one or the other. To handle this, leave this setting unchecked and use the Separate Tools setting.

*Trans.* When EAM reads the shop floor operation history table (op_hist) in the ERP for the DUOM load job program, this Trans number automatically updates to reflect the most recently Read record. Then, when the process runs again, it only reads those records that have been added since the last run.

***Note*** The number displayed in the Trans field is automatically updated as of the last run of the DUOM Load Job Program. If a particular record could not be read, the number in this field indicates the number of that record. When the process runs again, it starts again with that record and proceeds from there. If the problem with the record is not resolved, the number remains the same and the process continues to start over with that transaction number.

*Separate Tools?* If the Separate Tools? check box is selected, two pieces of equipment have their DUOM records updated by the reading of a single shop floor operation history table (op_hist) record from the ERP.

***Example*** If the ERP shop floor operation history table (op_hist) record contains a machine and a tool, each can be mapped to different EAM equipment numbers. When the machine and tool both appear on a history record, the process checks for a conversion for each and updates both DUOMs if a conversion has been set up at Maintenance|Production Driven Maintenance| Equipment Mapping to ERP.

***Note*** If the Tool is mapped to a piece of equipment that is set up as a child in EAM, do not define the DUOM conversion table for the tool. If the DUOM conversion is also set up, then the Child Tool DUOM would be updated twice.

*Create Conv?* The Create Conv? setting controls one of the three ways that new records can be added to the Equip DUOM/ERP Item Conversion browse. If this check box is selected, EAM automatically adds a new conversion record in the Equip DUOM/ERP Item Conversion browse each time a new DUOM is added to a piece of equipment in the Readings submenu.

### Enable Revision Control

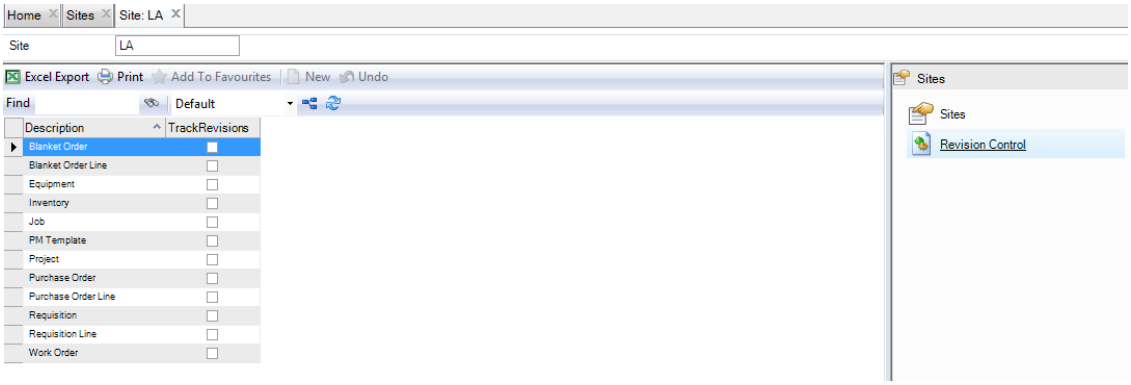
In the Revision Control submenu, you can specify that revisions are automatically created when modifications are made to any or all of the menu items listed. To turn on revision control, open the Revision Control submenu and then select the Track Revisions check box for the corresponding menu.

The revision details for changes are visible in each of the following menu items when track revisions is selected:

- Blanket Order
- Blanket Order Line
- Equipment

- Inventory
- Job
- PM Template
- Project
- Purchase Order
- Purchase Order Line
- Requisition
- Requisition Line
- Work Order

**Fig. 3.24**
Revision Control Options



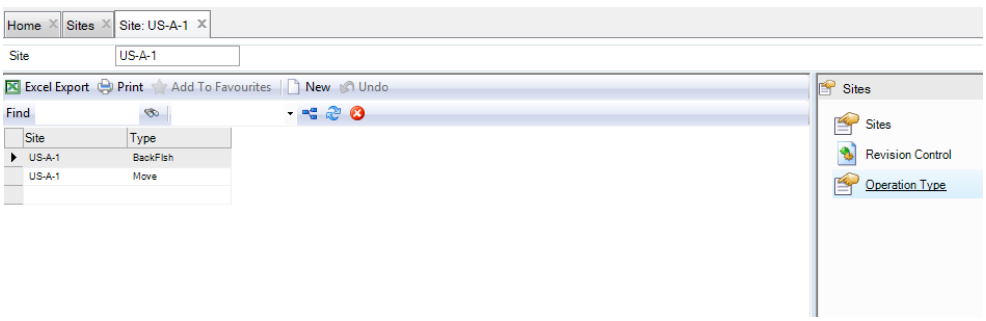

## Operation Type – Production Driven Maintenance Setup

The operation types defined here for the site are used with Production Driven Maintenance in the Maintenance module.

Enter valid operation transaction types from ERP that would represent machine, work center, or tool production rate. For a list of valid ERP operation transaction types, see the Generating Reports section in the Shop Floor Control chapter of the *QAD Manufacturing User Guide*.

These operation transaction types are read from the shop floor operation history table (op_hist) in ERP for use in the DUOM Load Job Program. Only records for those transaction types entered for the site are used for updating meter readings in EAM.

**Fig. 3.25**
Site: Operation Type Submenu



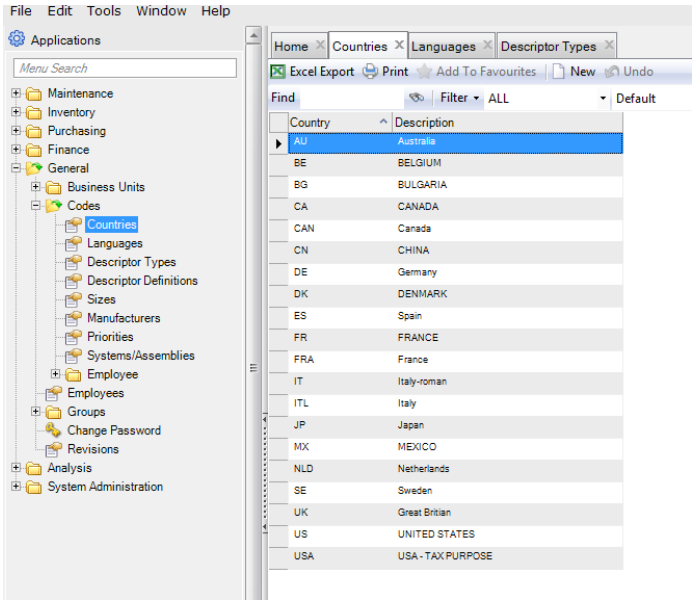
# Codes

## Country Codes

Country codes are used in Purchasing and for all sites. Enter the same codes and descriptions that are in the ERP system.

To add a country code, open the Countries browse located in General|Codes and click New. In the Country field, enter the country code. In the Description field, enter a short description. Press Enter to save.

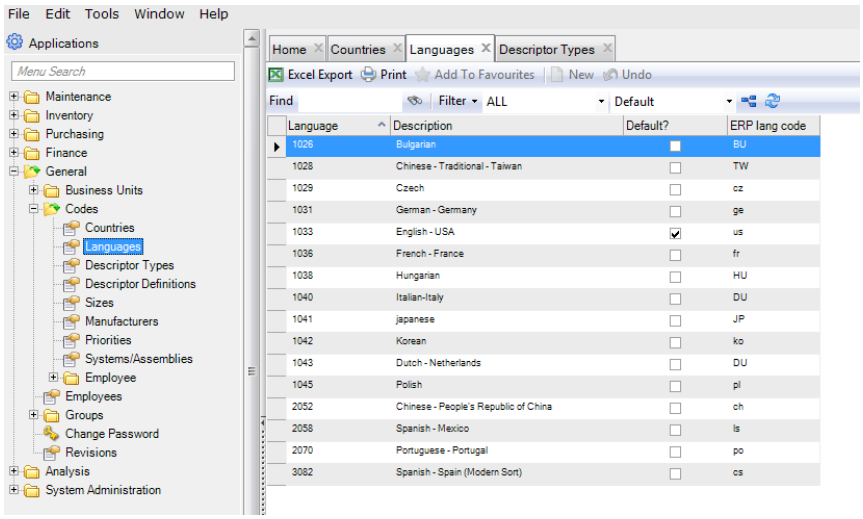
**Fig. 3.26**
Country Codes




## Language Codes

The languages listed in this browse represent all the languages that are available in EAM.

**Fig. 3.27**
Language Codes




## Descriptor Codes

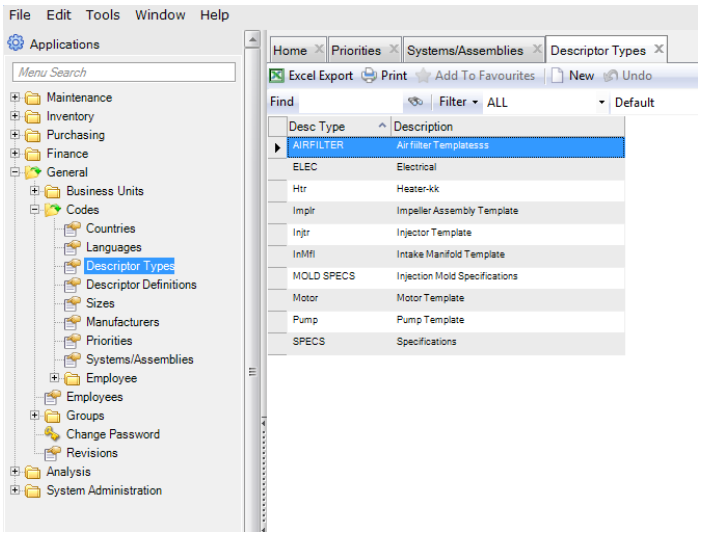
Use descriptor codes to further describe a piece of equipment or an inventory part. Descriptors are created dynamically by adding labels and field lengths.

### Descriptor Type Codes

Descriptor type codes, which are common to both equipment and inventory, are used to group descriptor definitions.

To add a descriptor type code, open the Descriptor Type browse located in General|Codes and click New. In the Desc Type field, enter the descriptor type code. In the Description field, enter a short description. Press Enter to save.

**Fig. 3.28**
Descriptor Type Codes



## Descriptor Definition Codes

Descriptor definitions or templates are used to create standard technical documentation for equipment and inventory parts. The descriptor allows you to set up a standard template for certain technical information and then associate it with a number of pieces of equipment or inventory parts. A given piece of equipment or a part can have multiple descriptors associated with it. Once the descriptor is associated with a given inventory or equipment record, you can update the information on a given field in the template.

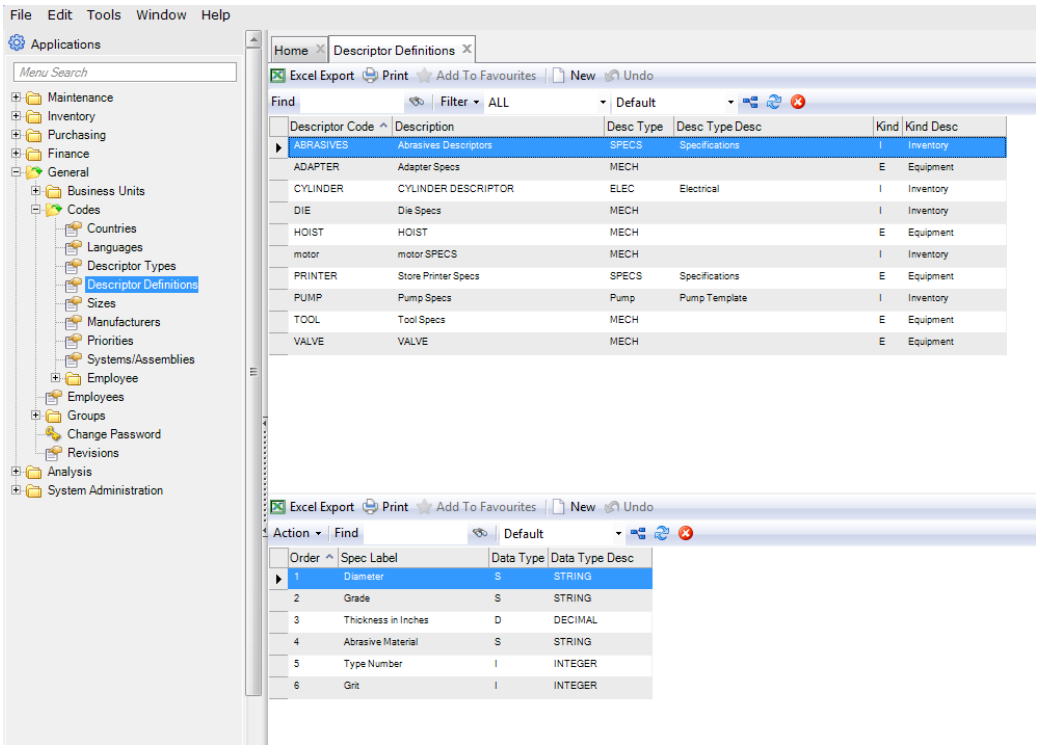
### Creating a Descriptor Definition

Follow these steps to create a descriptor definition:

1. Open the Descriptor Definition browse located in General|Codes. In the upper browse click New.
2. Enter the information in the following fields:
   - **Descriptor Code.** Enter the descriptor definition code.
   - **Description.** Enter a brief description of the descriptor definition.
   - **Descriptor Type.** Use the lookup to select the correct descriptor type.
   - **Descriptor Type Description.** This field auto-fills based on the descriptor type you select.
   - **Kind.** Enter (E) Equipment or (I) Inventory.
   - **Kind Description.** This field auto fills based on the value of Kind.
3. Press Enter to save.
4. In the Specs browse, add labels to the descriptor definition by clicking New.
5. Enter the information in the following fields:
   - **Order.** This number, which the system auto assigns, represents the sequential position in which the field displays.
   - **Spec Label.** Enter the spec label. A descriptor has a user-defined number of labels. These labels are used to describe the categories for the information being tracked.
   - **Data Type.** Select the data type:
     - **(S) String.** Virtually any combination of letters, numbers, and dates.
     - **(I) Integer.** A whole number written without a fractional or decimal component.
     - **(t) Date.** A date in the format MM/DD/YYYY.
     - **(D) Decimal.** A number with a decimal component. It can be a whole number with a decimal.
   - **Data Type Description.** This field auto-fills based on the value of the Data Type field.
6. If necessary, you can rearrange the labels by selecting the Move Up or Move Down options in the Action menu.

   ***Note*** You can change the order of the spec labels when you are adding or updating a descriptor. When you attach it to a piece of equipment or inventory part, the order cannot be changed.

**Fig. 3.29**
Descriptor Definition Codes




Editing a Descriptor Definition

***Note*** Changes made to a descriptor that is already being used on a part or piece of equipment can also affect the values in the fields of that descriptor:

To edit a descriptor definition, click in the Descriptor Code, Description, Descriptor Type, or the Kind fields and make the necessary changes. Press Enter to save.

To edit a spec label, click in the Spec Label or Data Type fields and make the necessary changes. Press Enter to save.

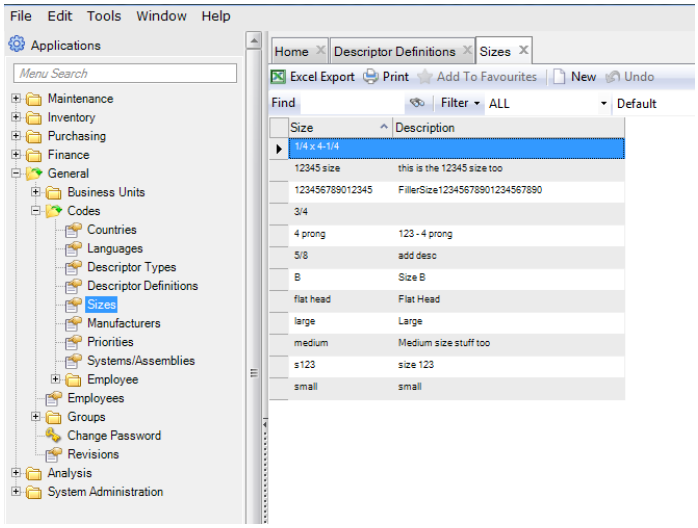
To rearrange the order or the spec labels, right-click on the label and select the Move Up or Move Down action.

## Size Codes

Size codes define the different sizes that are used to assign to parts.

To add a size code, open the Sizes browse located in General|Codes and click New. In the Size field, enter the size code and in the Description field, enter a short description. Press Enter to save.

**Fig. 3.30**
Size Codes

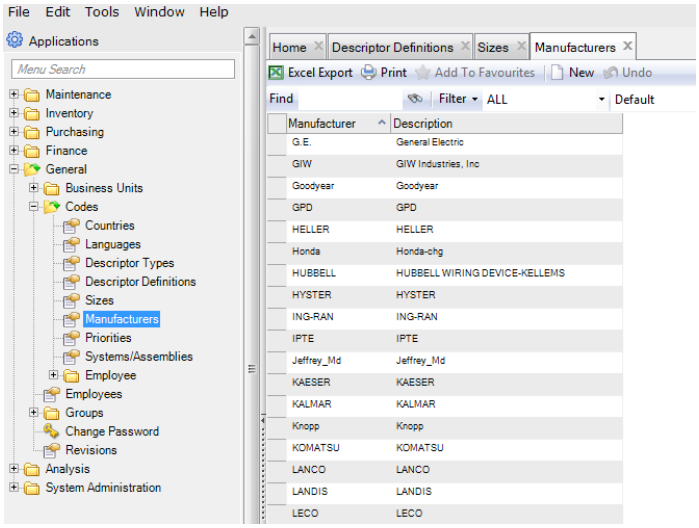



## Manufacturer Codes

Manufacturer codes are used to identify a manufacturer for parts.

To add a manufacturer code, open the Manufacturer browse located in General|Codes and click New. In the Manufacturer field, enter the manufacturer code and in the Description field, enter a short description. Press Enter to save.

**Fig. 3.31**
Manufacturer Codes




## Priority Codes

Follow these steps to add a priority code:

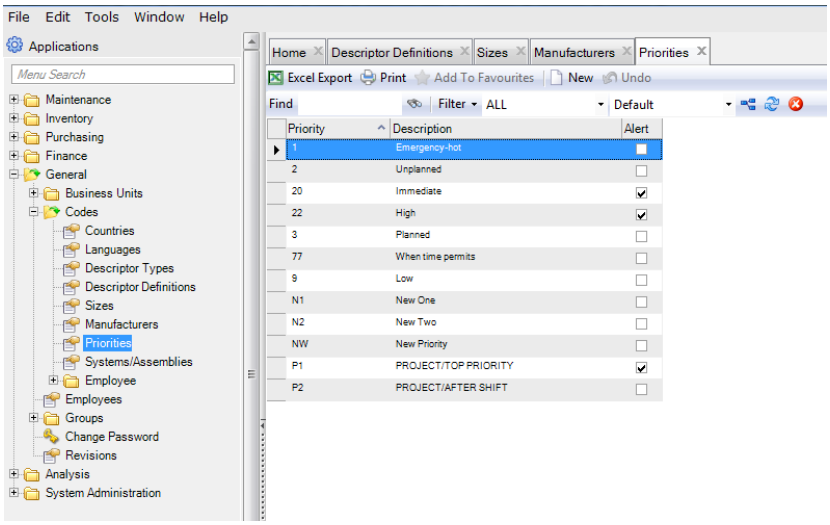
1 Open the Priorities browse located in General|Codes and click New.

2 Enter the information in the following fields:

- **Priority.** Enter the Priority code
- **Description.** Enter a short description.
- **Alert.** Select the Alert check box if you want the associated user group to receive a page or text message when this code is entered on a service request or a work order. An alert conveys limited information, such as the department code and requestor for a service request or the equipment number and problem description for a work order.

3 Press Enter to save.

**Fig. 3.32**
Priority Codes




## Systems/Assemblies Codes

Follow these steps to add a System/Assembly code:

1 Open the System/Assemblies browse located in General|Codes. In the upper browse, click New.

2 In the System field, enter the System code and, in the Description field, enter a short description.

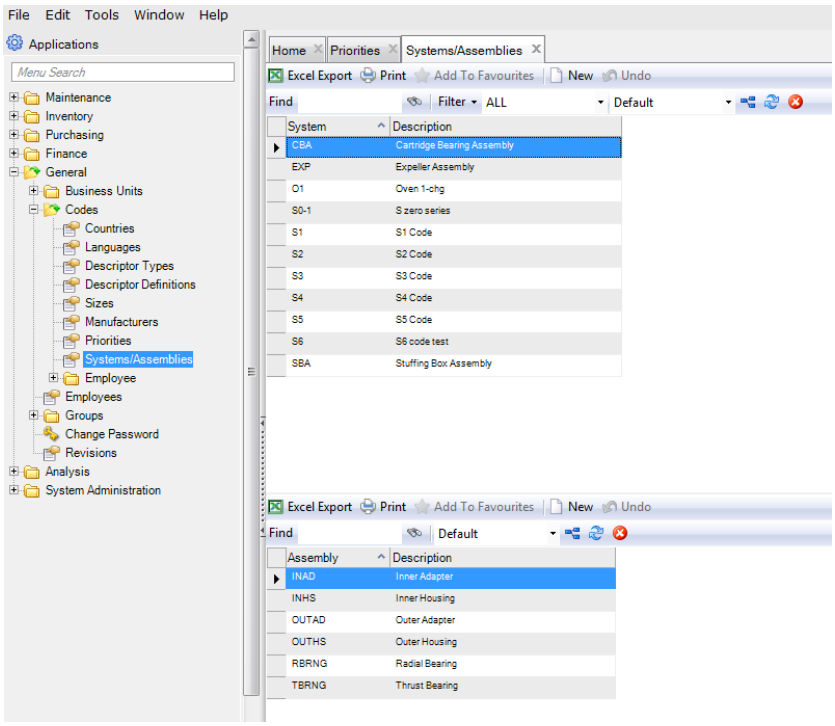
3 Press Enter to save.

4 In the lower browse, enter the assemblies that make up the system by clicking New.

5 Enter the Assembly code in the Assembly field and then a short description in the Description field.

6 Press Enter to save.

**Fig. 3.33**
System/Assembly Codes




# Employees

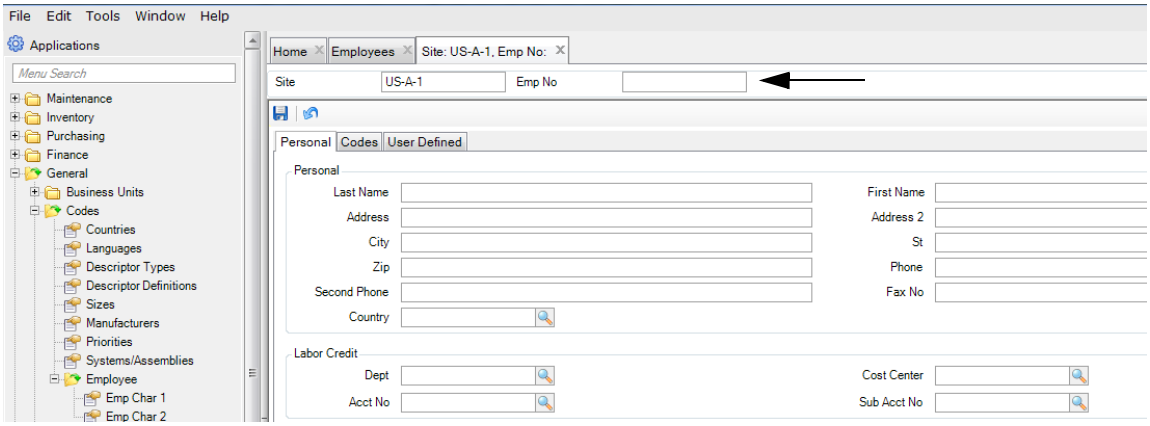
## Creating an Employee Record

Follow these steps to create an employee record:

1 Open the Employees browse located in the General module and click New. A blank employee record opens.

2 Enter the employee number in the Emp No field.

**Fig. 3.34**
Enter Employee Number



3 Enter the relevant information in the Personal, Codes, and User Defined tabs. See “Filling Out an Employee Record” on page 70.

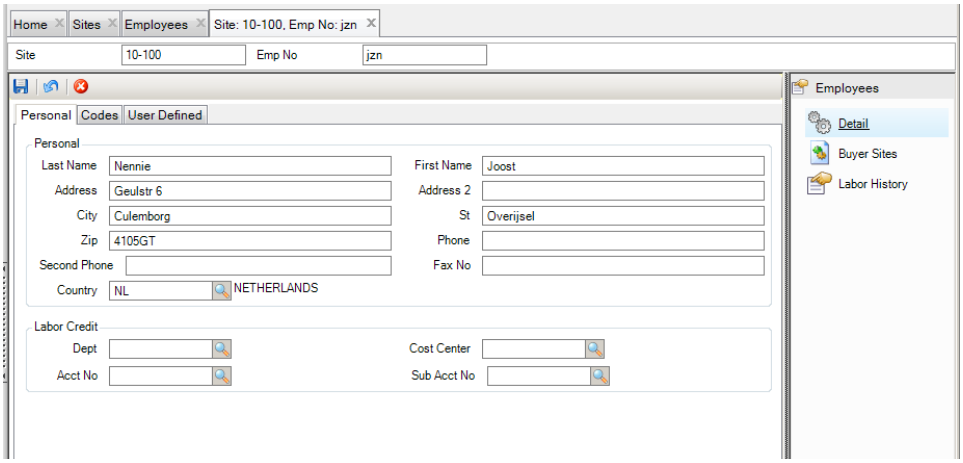
4 Once all the information has been entered, click Save.

## Filling Out an Employee Record

Enter the relevant information in the Personal, Codes, and User Defined tabs.

### Employee: Personal Tab

**Fig. 3.35**
Employee: Personal Tab




**Personal**

*Last Name, First Name, Address, Address 2, City, St, Zip, Phone, Second Phone, Fax No, Country.* In these fields, enter the employee name and contact information.

**Labor Credit**

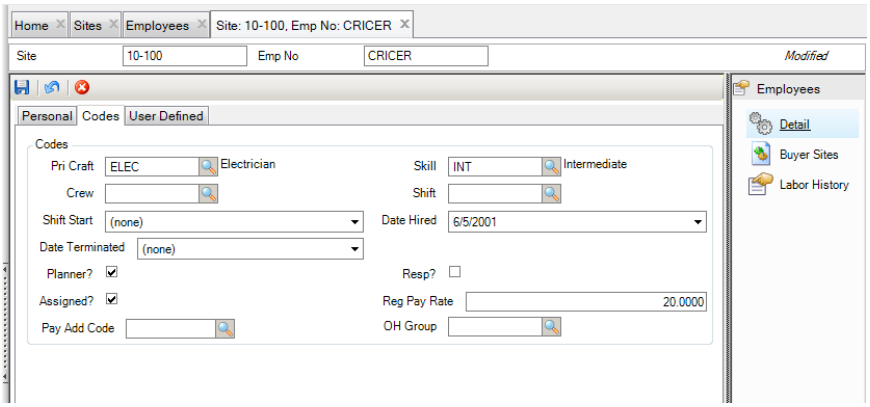
*Dept.* When this employee posts labor to a work order, select the department to which the labor is credited. Department is not part of the GL accounting structure.

*Cost Center, Acct No, Sub Acct No .* In these fields, enter the labor credit accounting defaults. When this employee posts labor to a work order, these accounting defaults are used for the labor credit transaction.

### Employee: Codes Tab

The fields in the Codes tab determine which technicians should be scheduled for work orders.

**Fig. 3.36**
Employee: Codes Tab




## Codes

*Primary Craft.* Use the lookup to select the primary craft for the employee.

*Skill.* Use the lookup to select the employee's skill level.

*Crew.* Use the lookup to select the crew for which the employee works.

*Shift.* Use the lookup to select which shift the employee works.

*Shift Start.* Select the date the employee's shift started.

*Date Hired.* Select the employee's hire date.

*Date Terminated.* Select the employee's termination date.

*Planner?* Select this check box if the employee is an inventory or equipment planner. When this option is selected, employee names or numbers are listed in the Planner lookup so that they can be selected as planners for a work order.

*Responsible?* Select this check box if the employee is responsible for equipment. When this option is selected, employees' names or numbers are listed in Resp lookup, where you can select an employee as the person responsible for a work order.

*Assigned?* Select this check box if the employee can be assigned to a work order.

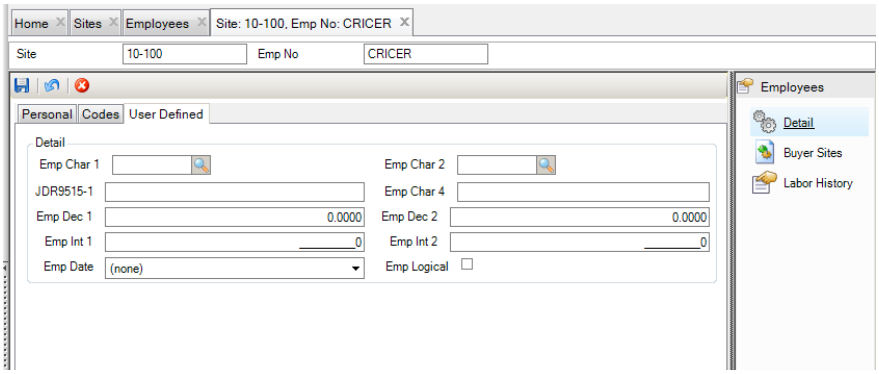
*Reg Pay Rate.* Enter the employee's regular pay rate.

*Pay Add Code.* Use the lookup to select the pay add code for the employee.

*OH Group.* Use the lookup to select an OH group for this employee. When this option is selected, the OH rate is applied for the OH Group and is included in labor transactions for this employee.

### Employee: User Defined Tab

**Fig. 3.37**
Employee: User Defined Tab




**Detail**

*Emp Char 1-4.* User-defined character fields, validated against tables that you add.

*Emp Dec 1-2.* User-defined decimal fields for employees.

*Emp Int 1-2.* User-defined integer fields for employees.

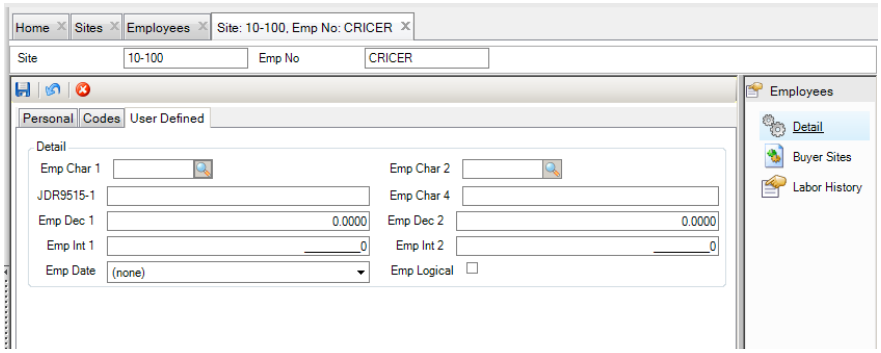
*Emp Date.* Enter a date type field here.

*Emp Logical.* User-defined check box.

## Define a Buyer's Sites and Approval Groups

In the Buyer Sites submenu, you can define the employee as a buyer at one or more sites with related approval groups.

**Fig. 3.38**
Buyer Sites Submenu




Follow these steps to define a buyer's sites and approval groups:

1 Open the employee's record and select the Buyer Sites submenu.

2 Click New and then enter the following information:

- **Emp No.** The system auto-fills this field with the employee's number.
- **Site.** Use the lookup to select the site in which the buyer works.

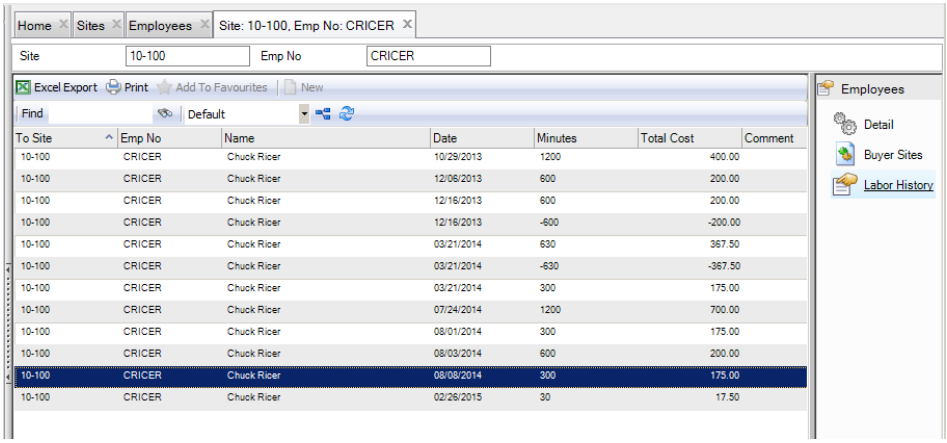
- **PO Approval Group.** Use the lookup to select the PO approval group that is used for this buyer.
- **BO Approval Group.** Use the lookup to select the BO approval group that is used for this buyer.
- **Zero Cost Email.** Select this check box to notify this buyer by e-mail each time a new requisition is created with cost of 0. The notification prompts the buyer to make changes to the requisition before approval.

3 Press Enter to save.

### View the Employee's Labor History

A labor record can be posted, reversed, modified, and posted again, and the system preserves a history showing the piece of equipment, work order, project, or other chargeable item against which the labor was originally expensed. The Labor History submenu displays the labor history for this employee. In a work order, you see all the labor history for that WO, which may include many employees who worked on the order.

**Fig. 3.39**
Employee: Labor History Submenu




# Groups

The mail and owner groups can be used as selections in the Notify and Owner lookups on equipment and PM template records.

### Mail Group

Mail Groups can be selected in the Notify field for equipment and PM template records.

Follow these steps to create a mail group:

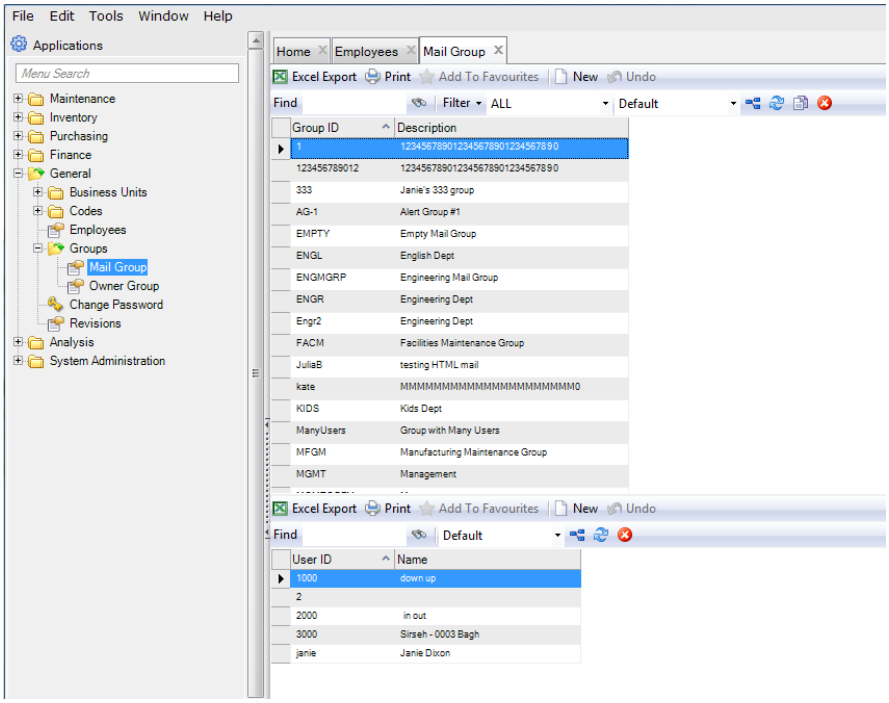
1 Open the Mail Groups browse located in General|Groups. In the upper browse, click New.

2 Enter the group name in the Group ID field and a short description in the Description field. Press Enter to save.

3 Add users to the mail group by clicking New in the lower browse.

4 Use the lookup in the User ID field to select the user that you want to add to the mail group. Press Enter to save.

**Fig. 3.40**
Mail Group




## Owner Group

Owner groups can be selected in the Owner field in equipment, PM template, and master instruction list records.

Follow these steps to create an owner group:

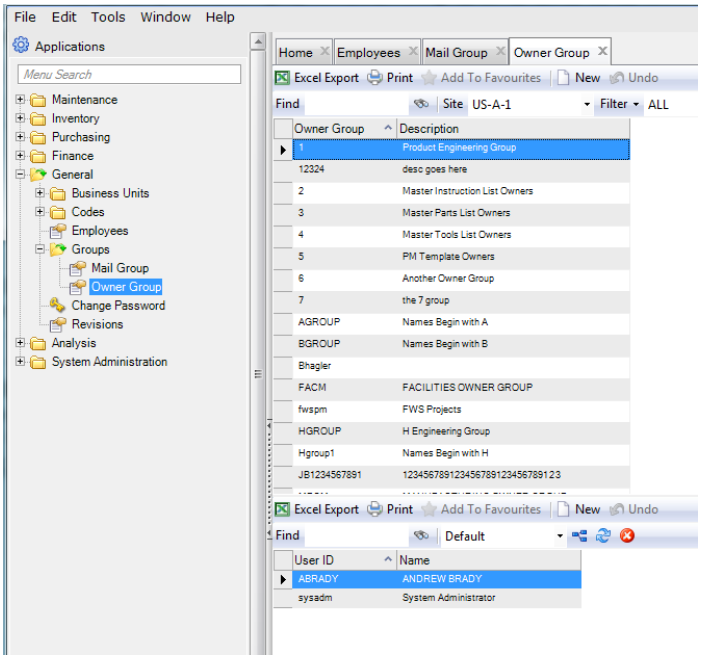
1 Open the Owner Groups browse located in General|Groups. In the upper browse, click New.

2 Enter the group name in the Owner Group field and a short description in the Description field. Press Enter to save.

3 Add users to the owner group by clicking New in the lower browse.

4 Use the lookup in the User ID field to select the user that you want to add to the owner group. Press Enter to save.

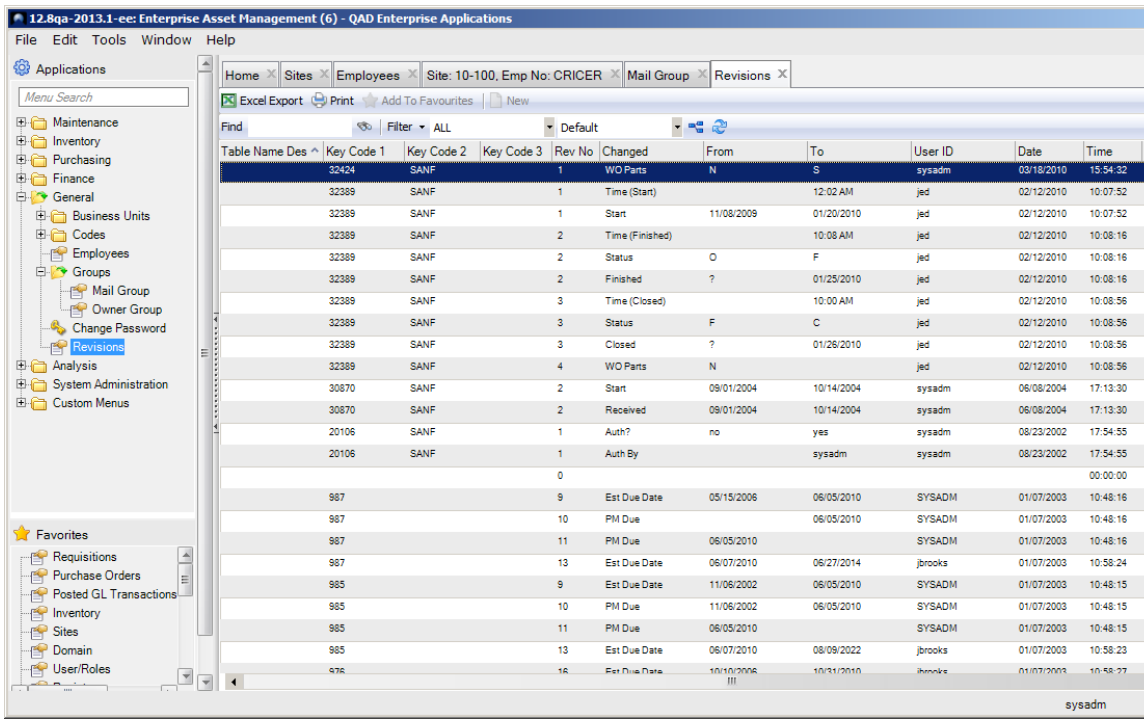
**Fig. 3.41**
Owner Group




# Revisions

The Revisions browse displays the full revision history for all changes selected for recording. This browse can be filtered to look at subsets of the history.

**Fig. 3.42**
Revisions Browse



Chapter 4

# Maintenance

Use the Maintenance module to manage your organization’s plant and asset maintenance activities in support of overall equipment effectiveness objectives. This section discusses the following Maintenance module topics:

***Overview 78***

***Maintenance Setup 79***

***Master Lists 114***

***Equipment 124***

***Tool Management 164***

***Preventive Maintenance (PM) 181***

***Production Driven Maintenance 204***

***Work Orders 216***

***Service Requests 260***

# Overview

Use the Maintenance module to maximize equipment utilization and minimize repair costs.

The Maintenance module drives work order functionality for maintenance and repair operations. This encompasses all Preventive Maintenance as well as planned and unplanned work necessary to keep equipment operating at capacity. The capabilities that help move the maintenance function into a maintenance process include, but are not limited to:

- **Information Integration.** Entered information is automatically integrated with related Project, Equipment, Preventive Maintenance, Employee, Inventory, Purchasing, and Budget modules so pertinent details are consistent across the system.
- **Defined Equipment Structure.** Equipment can be linked together for work order and cost history analysis by defined equipment or related equipment group; for example, production machines, tooling/dies, facility (building), fleet equipment, and portable equipment.
- **PM Maintenance.** You can schedule proactive attention for equipment by calendar date (established average usage) or actual use (captured through production history tables) to reduce unplanned downtime.
- **Work Orders.** Two types of work orders can be issued:
  - **PM (Preventive Maintenance).** The PM/PdM module generates WOs using standard templates.
  - **CM (Corrective Maintenance)**. Users create WOs manually for planned/unplanned events.

The Maintenance module includes the following functionality:

- Master Instruction List
- Parts List
- Tools List
- Equipment
- Tool Management
- Preventive Maintenance (PM)
- Production Driven Maintenance
- Work Orders
- Service Requests

## Measuring Maintenance Activity Using QAD Business Intelligence

The QAD BI product contains several EAM dashboards with KPIs to measure maintenance activities:

**Table 4.1**
EAM BI Dashboard and KPIs

| EAM BI Dashboard | KPIs |
|---|---|
| PM Compliance | • Overall PM Compliance<br>• PM vs CM Work Orders<br>• Planned vs Unplanned WO<br>• Planned vs Unplanned Labor<br>• Current WO Backlog Count all Sites |
| Equipment Availability | • Top Reasons by Downtime<br>• Top Equipment by Average MTBF<br>• Top Equipment by Average MTBF by Site |
| Maintenance Cost | • Maintenance Cost All Sites<br>• Maintenance Cost Details All Sites<br>• Top 10 Equipment by Cost all Sites<br>• Top 10 Equipment by Cost for Site |
| Maintenance Work Orders | • Failures by WO Count<br>• Priorities by WO Count<br>• Service Request Count |
| Maintenance Backlog | • Current WO Backlog Count<br>• WO Backlog Count<br>• WO Backlog Labor<br>• WO Backlog Average Days Open |
| Maintenance for Departments | • Work Order Count by Priority<br>• Work Order Backlog Count<br>• Work Order Backlog Labor<br>• Work Order Backlog Average Days Open |

# Maintenance Setup

## System Administration Module Setup

The system setup for the Maintenance module consists of MIL revision control. To enable MIL revision control, select the Mstr List Rev? check box in System Administration|System Control on the Detail tab. See “System Control: Detail Tab” on page 688.

## General Module Setup

There are various setup options in the General module in the domain and site records.

### Domain Setup

The domain setup for the Maintenance module consists of setup options for equipment, work orders, service requests, and PM labor scheduling. To access the domain setup options, select the Maintenance tab in General|Business Units|Domain. See “Domain: Maintenance Tab” on page 33.

## Site Setup

The site setup options include settings for equipment, service requests, work order revision control, and labor accounting. Additionally, there are settings available for use with production driven maintenance on the MFG/PRO Options tab if you are using the ERP operations history transactions for production driven maintenance.

### Setup Options for Equipment and Service Requests

To access the site setup options for equipment and service requests, open the Maintenance tab in General|Business Units|Site. See “Sites: Maintenance Tab” on page 51.

### Work Order Revision Control

Activate revision control for work orders in the Revision Control submenu on the Site record. See “Enable Revision Control” on page 61.

### Labor Accounting

When labor is posted or credited to a work order, the labor accounting setup options determine the accounting structure for the labor debit and credit expenses. To access the labor accounting setup options, open the Miscellaneous tab in General|Business Units|Site. See “Sites: Miscellaneous Tab” on page 58.

### Setup Options for Production Driven Maintenance

If you are using the ERP operations history transactions for production driven maintenance, there are settings available for use with production driven maintenance on the MFG/PRO Options tab. See “Sites: MFG/PRO Options Tab” on page 60.

## Codes

The following codes can be set up for use in the Maintenance module:

- **Descriptor Codes.** Used to further describe a piece of equipment or an inventory part. See “Descriptor Codes” on page 64.
- **Descriptor Definitions.** Used to create standard technical documentation for equipment and inventory parts. See “Descriptor Definition Codes” on page 65.
- **Manufacturer Codes.** Used to identify a manufacturer for parts. See “Manufacturer Codes” on page 67.
- **System/Assemblies.** See “Systems/Assemblies Codes” on page 68.

## Groups

You can use mail and owner groups as selections in the Notify and Owner lookups on equipment and PM template records. See “Groups” on page 73.

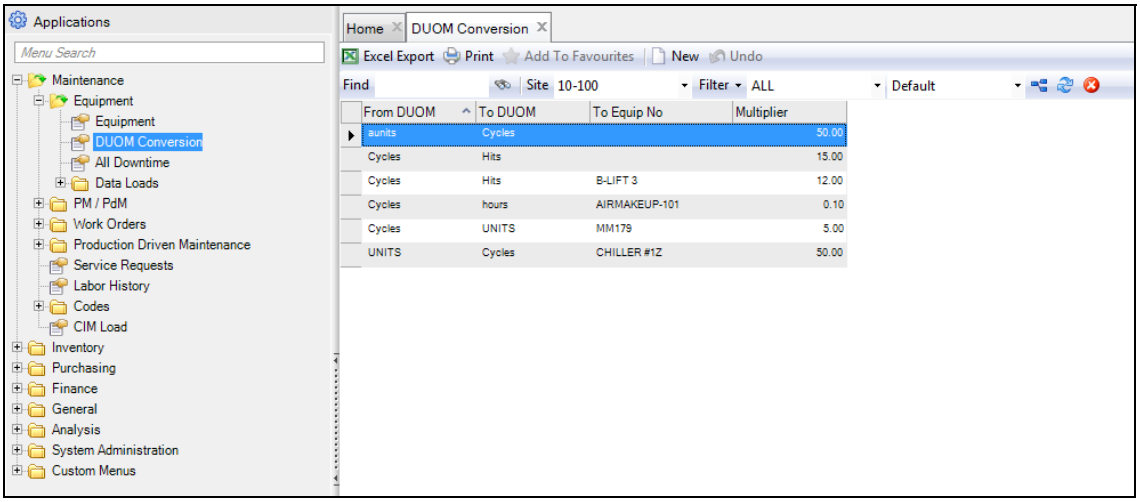
## DUOM Conversion

You can use the DUOM Conversion browse, located in Maintenance|Equipment, to update the driving units of measure (DUOM) for subordinate (child) equipment based on the parent equipment DUOM update. Set up a record to establish the equation to convert one DUOM type to another DUOM type.

***Example*** One stroke by parent equipment drives five rotations on the child. Use a multiplier of 5 to define the relationship of the From DUOM (strokes) and the To DUOM (rotations). If this exact relationship is unique to a particular child DUOM, then specify that child as the To Equipment No.

***Note*** In the Codes tab of the parent equipment record, select the Upd Children? check box to use these conversions. Select Current Reading for the equipment's DUOM to automatically update the DUOMs for subordinate equipment. See "Equipment: Codes Tab" on page 127. The conversions defined here are used in production driven maintenance.

**Fig. 4.1**
Equipment DUOM Conversion




## Maintenance Module Setup – Codes

In the Maintenance module, maintenance codes are user-defined codes that are used in a variety of areas, including equipment, master lists, PM templates, work orders, and service requests. Depending on your permissions, you can add or edit existing records. Maintenance codes are located in Maintenance|Codes.

The following codes can be defined in the Maintenance module:

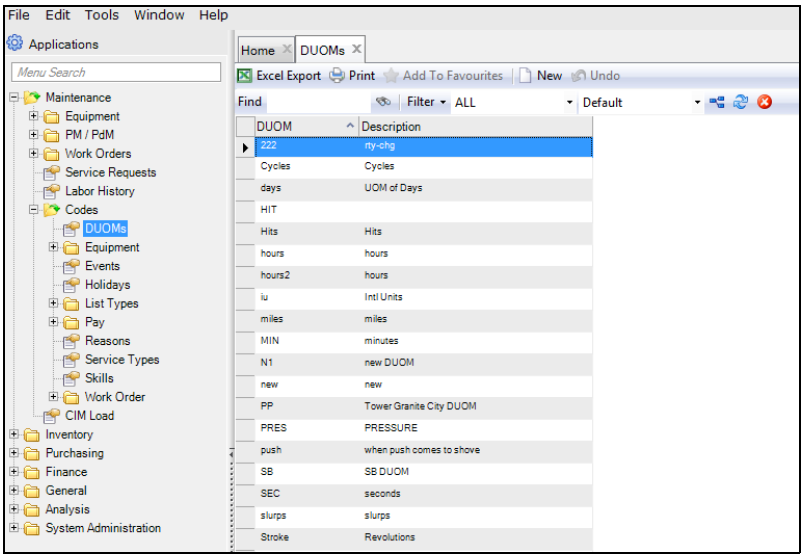
- DUOM Codes
- Event Codes
- List Type Codes
- Reason Codes
- Skills Codes
- Tool Codes
- Equipment Codes
- Holiday Codes
- Pay Codes
- Service Type Codes
- Work Order Codes

## DUOM Codes

DUOM codes are user-defined codes used in the PM/PdM module to represent the driving unit of measure for equipment and tools. DUOM codes are located in Maintenance|Codes|Equipment|DUOM.

To add a DUOM code, open the DUOM browse and click New. Enter the code in the DUOM field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.2**
Maintenance Codes: DUOMs




## Equipment Codes

Equipment codes are user-defined codes for BOM Types, Catalogs, Categories, Failure Types, Locations, Products, Statuses, Types, Character 1, and Character 2. Access equipment codes in Maintenance|Codes|Equipment.

### BOM Type Codes

BOM Type codes are only associated with pieces of equipment. Equipment with a BOM Type receives a structure of systems and assemblies under systems associated with that specific equipment. Any type of transaction such as material issuances, labor distribution, or purchases can not only be made against the equipment name, but also to a specific system code or an assembly code attached to the equipment.

BOM Type codes, which are located in Maintenance|Codes|Equipment|BOM Types, enable the system to generate a more detailed analysis of where repairs were made on a piece of equipment. You can use a BOM Type code to set up the default or standard system and assembly structure for a piece of equipment.

Follow these steps to add a BOM Type code:

1. Open the BOM Type browse and click New.
2. Enter the code in the BOM Type field and a brief description in the Description field.

3 Press Enter to Save.

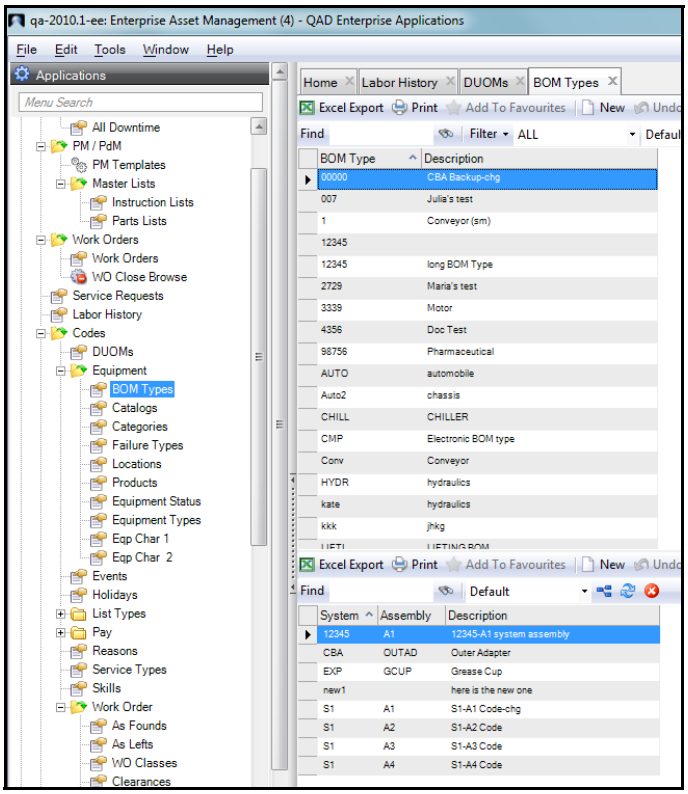
4 Add systems and assemblies to the BOM Type that you created. Select the BOM Type and click New in the lower browse.

5 Use the lookups in the System and Assembly fields to add an assembly and system to BOM Type code.

6 Press Enter to Save.

7 Continue to add systems and assemblies to the BOM Type code as necessary.

**Fig. 4.3**
Equipment Codes: BOM Type

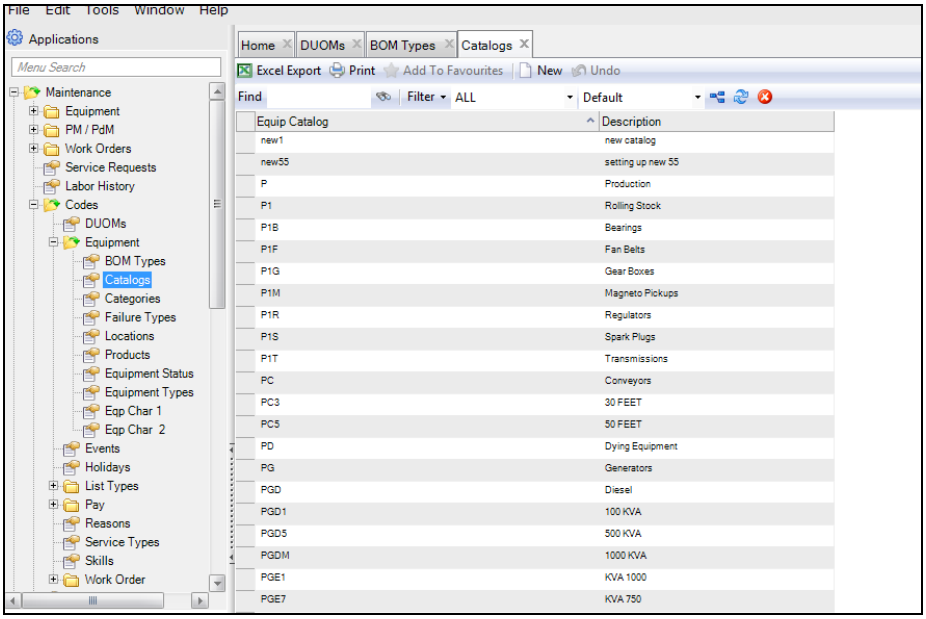



## Catalog Codes

Catalog codes are used to group common equipment under a single code, for better reporting and filtering capabilities. The Catalog codes are located in Maintenance|Codes|Equipment|Catalogs.

To add a Catalog code, open the Catalog browse and click New. Enter the code in the Equipment Catalog field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.4**
Equipment Codes: Catalogs

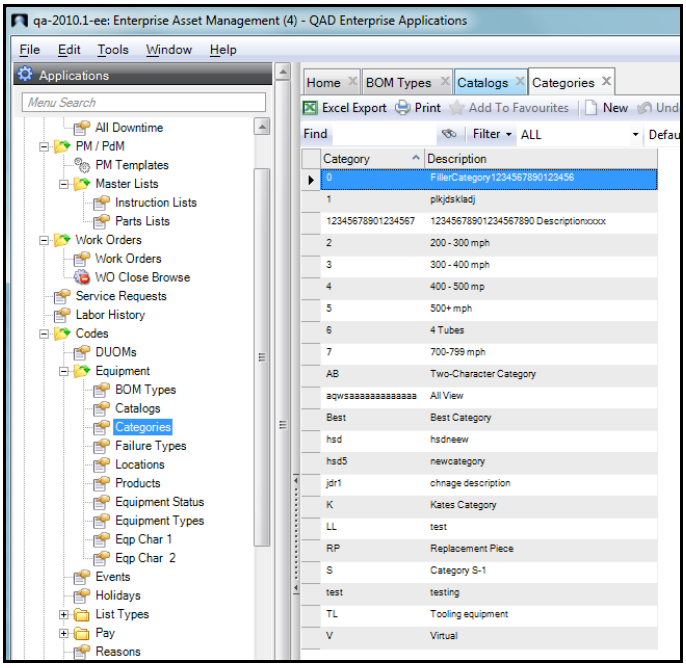



## Category Codes

The Category codes are used to group equipment in broad categories or types. This code is a double-digit alphanumeric value for reporting and filtering equipment. The Category codes are located in Maintenance|Codes|Equipment|Categories.

To add a Category code, open the Category browse and click New. Enter the code in the Category field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.5**
Equipment Codes: Categories



## Equipment Failure Types

The Failure Type codes are used to group failure codes based on an equipment type. For example, “mechanical” is a failure type, and “motor burn out” is a failure code. These codes allow you to track equipment failures on work orders to analyze a PM program’s effectiveness. If PMs are designed to prevent a certain type of failure, but it is occurring before the PM issue-by date, then modify the PM to come due more frequently.

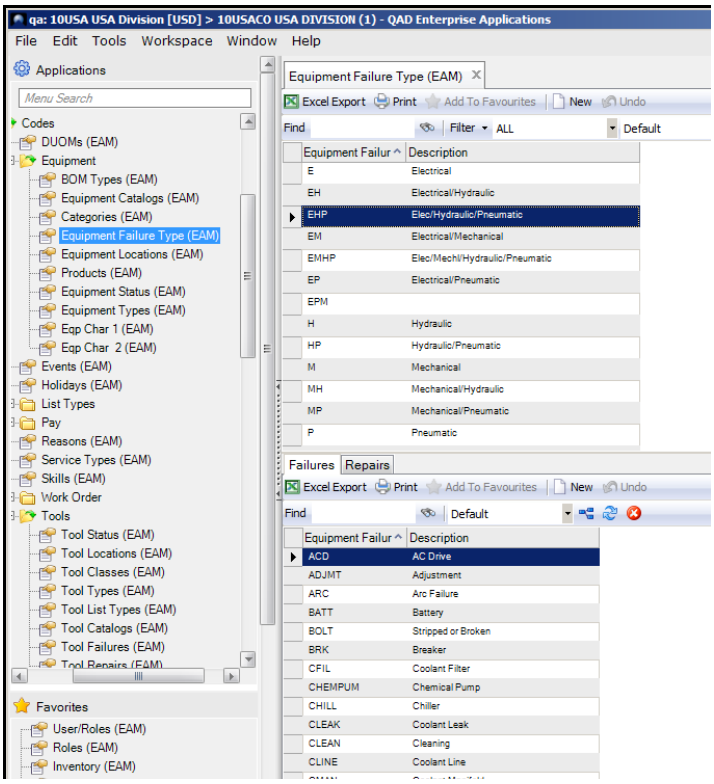
***Note*** EAM e-mails warnings about PMs whose failure frequency exceeds PM frequency.

If there is not a PM work order to prevent a frequent equipment failure, then create a PM work order.

Follow these steps to add an Equipment Failure Type code:

1. Open the Equipment Failure Type code browse and click New.
2. Enter the failure type code in the Equipment Failure Type field and a short description in the Description field.
3. Press Enter to save.
4. Add failure and repair codes to the failure type code that you created. Select the Equipment Failure Type and click New in the lower browse.
5. Use the lookups in the Failure and Repair fields to add failure and repair codes to Equipment Failure Type code.
6. Press Enter to Save.
7. Continue to add failure and repair codes to the Equipment Failure Type code as necessary.

**Fig. 4.6**
Equipment Codes: Equipment Failure Types

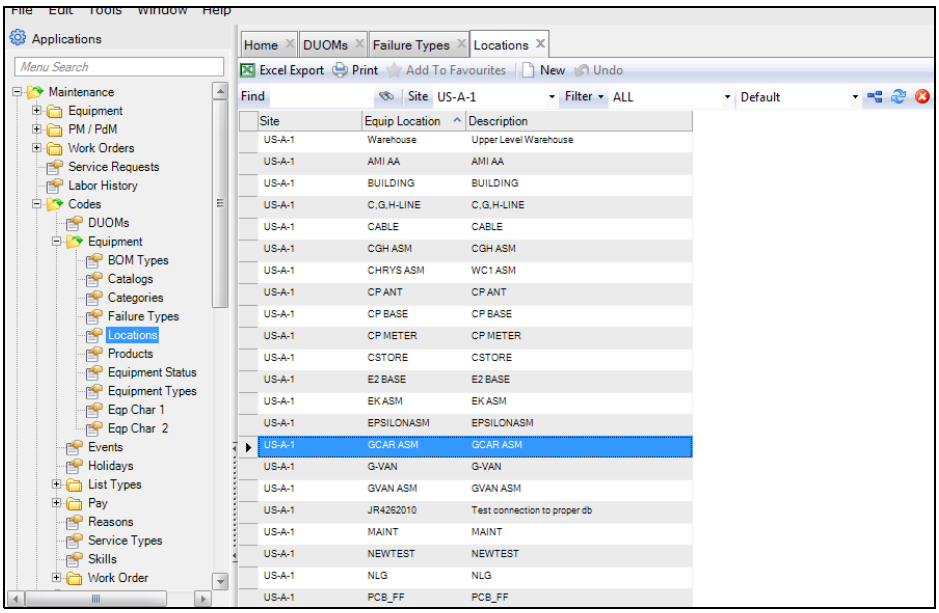



## Equipment Location Codes

Equipment Location codes are user-defined codes used to describe the physical locations of pieces of equipment. These codes, which are useful for reporting and filtering purposes, are used in equipment records, work orders, and PM templates. Equipment Locations are located in Maintenance|Codes|Equipment|Equipment Locations.

To add a Location, open the Locations browse and click New. Enter the equipment location in the Equipment Location field and a short description in the Description field. Press Enter to save.

**Fig. 4.7**
Equipment Codes: Locations




## Product Number Codes

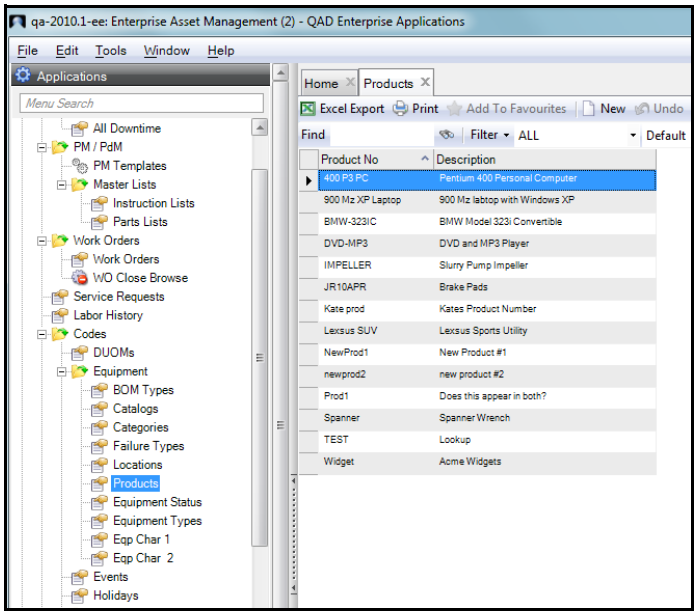
Product Number codes are user-defined codes used to represent the products produced by a piece of equipment established in EAM; for example, a die used in a press. Product Number codes allow you to:

- Associate the Product codes with the equipment record.
- Specify what was being produced on work orders for equipment with associated products.
- Run management reports on the product the piece of equipment produces.

Product Number codes are located in Maintenance|Codes|Equipment|Products.

To add a Product Number code, open the Products browse and click New. Enter the product number in the Product Number field and a short description in the Description field. Press Enter to save.

**Fig. 4.8**
Equipment Codes: Product Numbers

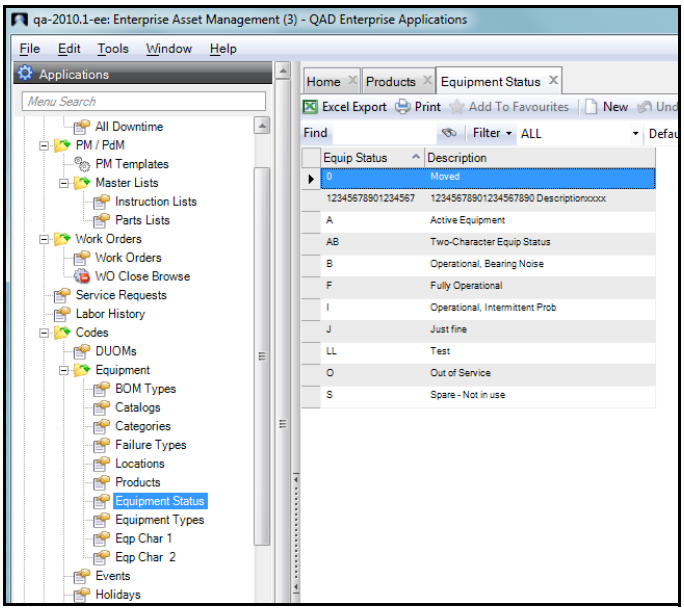



## Equipment Status Codes

Equipment Status codes are user-defined codes used to describe the status of a piece of equipment. These codes are used for reporting and filtering equipment. The Equipment Status codes are located in Maintenance|Codes|Equipment|Equipment Status.

To add an Equipment Status code, open the Equipment Status browse and click New. Enter the equipment status in the Equipment Status field and a short description in the Description field. Press Enter to save.

**Fig. 4.9**
Equipment Codes: Equipment Status



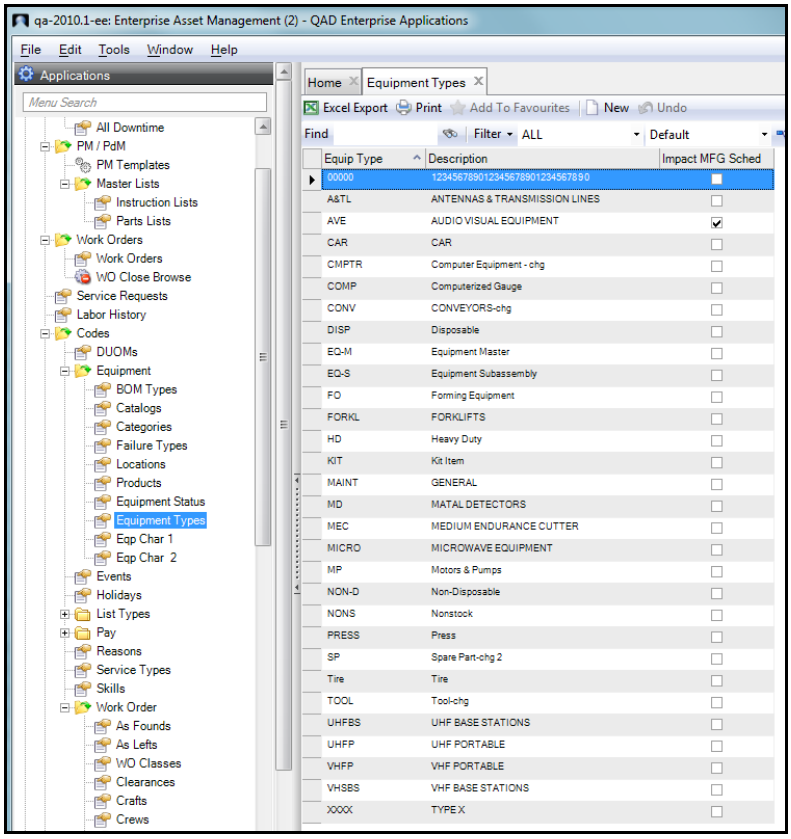
## Equipment Type Codes

Equipment Type codes are user-defined codes used as general classifications or types of equipment that can be used for reporting and filtering purposes. The Equipment Type codes are located in Maintenance|Codes|Equipment|Equipment Types.

Follow these steps to add an Equipment Type code:

1. Open the Equipment Type browse in Maintenance|Codes|Equipment|Equipment Types and click New.
2. Enter the equipment type in the Equipment Type field and a short description in the Description field.
3. Select the Impact MFG Sched check box if you use Production Scheduling Workbenches integration with EAM.
4. Press Enter to save.

**Fig. 4.10**
Equipment Codes: Equipment Types



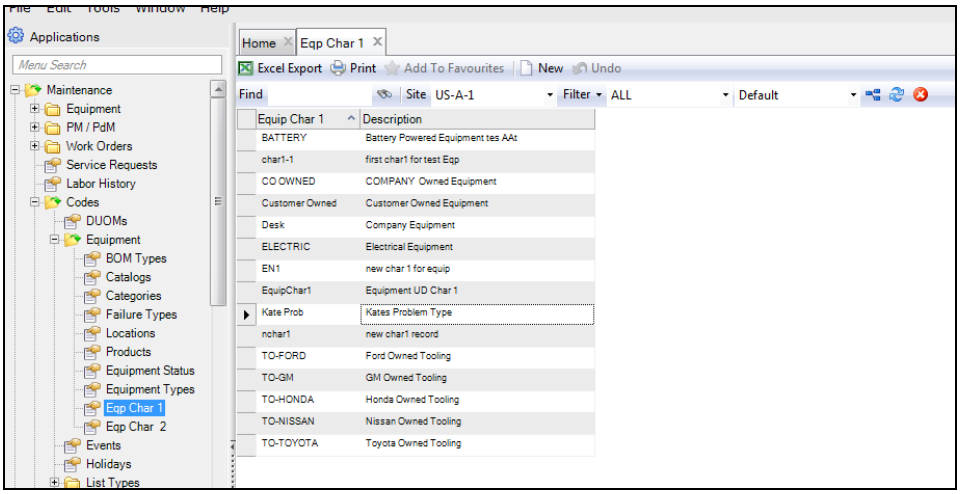

## Equipment Character 1 Codes

Equipment character 1 codes are validation tables that are used with the Equip Char 1 user-defined fields. For example, if you click in the Equip Char 1 User-Defined field, the lookup allows you to select one of the items in the equipment character 1 table. For more information about using user-defined fields, see “User-Defined Fields” on page 701. The equipment character 1 codes are

located in Maintenance|Codes|Equipment|Eqp Char 1.

To add an equipment character 1 code, open the Equipment Character 1 browse and click New. Enter the code in the Equip Char 1 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.11**
Equipment Codes: Equipment Character 1

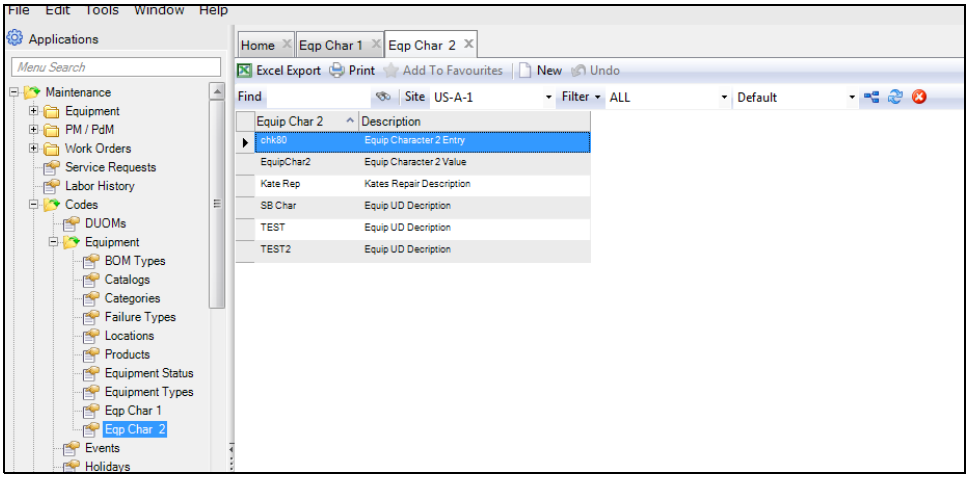



## Equipment Character 2 Codes

Equipment character 2 codes are validation tables that are used with the Equip Char 2 user-defined fields. For example, if you click in the Equip Char 2 user-defined field, the lookup allows you to select one of the items in the equipment character 2 table. For more information about using user-defined fields, see “User-Defined Fields” on page 701. The equipment character 2 codes are located in Maintenance|Codes|Equipment|Eqp Char 2.

To add an equipment character 2 code, open the Equipment Character 2 browse and click New. Enter the code in the Equip Char 2 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.12**
Equipment Codes: Equipment Character 2



## Event Codes

Event codes are user-defined codes used to create on-demand PM work orders for specific events. The Event table lookup lists these codes. You can associate an event with a date range. PM work orders associated with an event automatically schedule based on the date range, or when you request PMs for a specific event such as a seasonal shut-down. The Event codes are located in Maintenance|Codes|Events.

Follow these steps to add an event code:

1 Open the Events browse and click New.

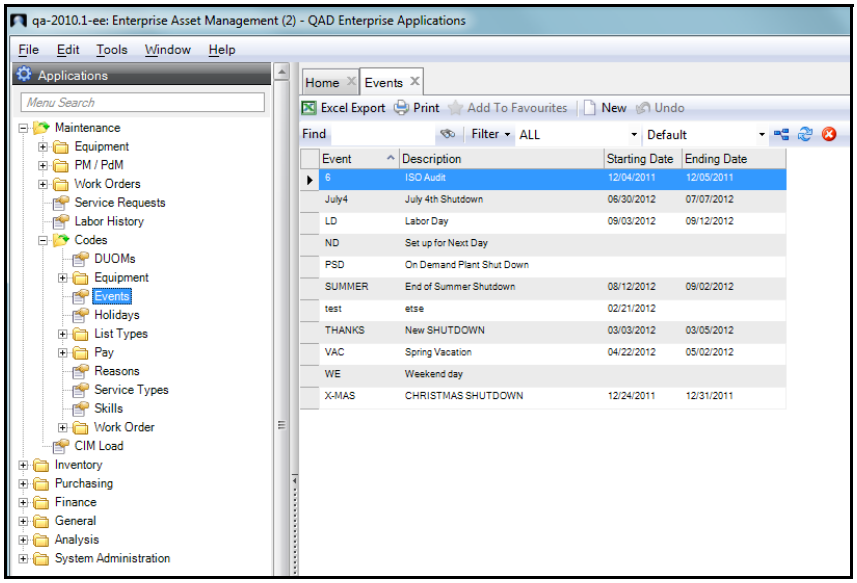
2 Enter the code in the Event field and a brief description of the code in the Description field.

3 Use the lookups to set the starting and ending dates for the event.

***Note*** When a PM work order is associated with an Event code, the PM is automatically scheduled during this date range.

4 Press Enter to save.

**Fig. 4.13**
Events Codes

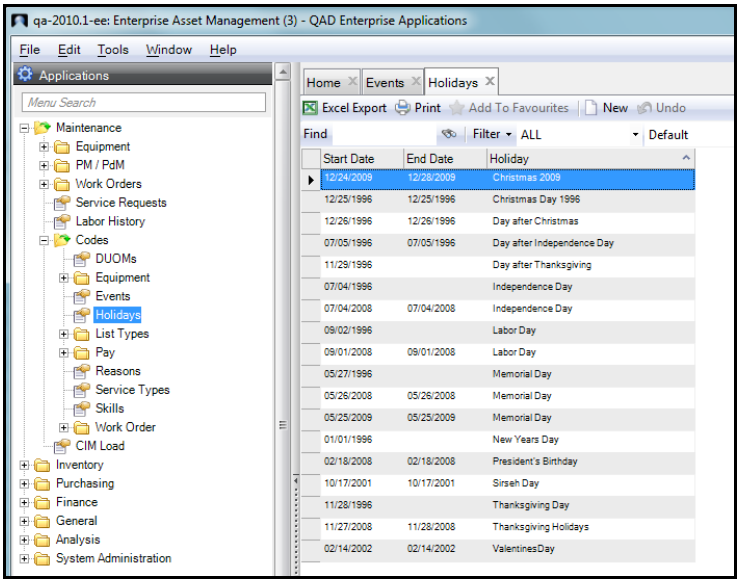



## Holiday Codes

Holiday codes are user-defined codes used to set up specific days during the year when the company is closed for a designated holiday. The Work Order module uses this information when scheduling and assigning employees to work orders. When a work order is scheduled, EAM verifies the date against employee availability and company holidays. The Holiday codes are located in Maintenance|Codes|Holidays.

To add a Holiday code, open the Holiday browse and click New. Use the lookups to select the starting and ending dates. Enter the name of the holiday in the Holiday field. Press Enter to save.

**Fig. 4.14**
Holiday Codes




## List Type Codes

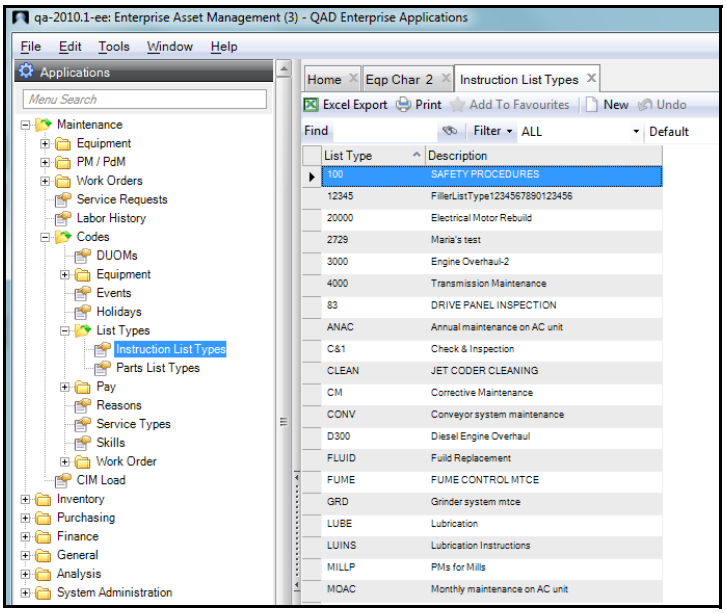
The list type codes are user-defined codes that include the instruction list type and parts type codes.

### Instruction List Type Codes

Instruction list type codes are user-defined codes that are used to group common types of master instruction lists (MILs) for better sorting and filtering. When you create an MIL, you associate an instruction list type code to that MIL. For example, you can create list type codes for common instructions for PMs, repairs, and rebuild type classifications. You can apply those codes to MILs and then group and sort the MILs by those list type codes. The instruction list type codes are located in Maintenance|Codes|List Types|Instruction List Types.

To add an instruction list type code, open the Instruction List Types browse and click New. Enter the instruction list type code in the List Type field and a short description in the Description field. Press Enter to save.

**Fig. 4.15**
List Type Codes: Instruction List Types

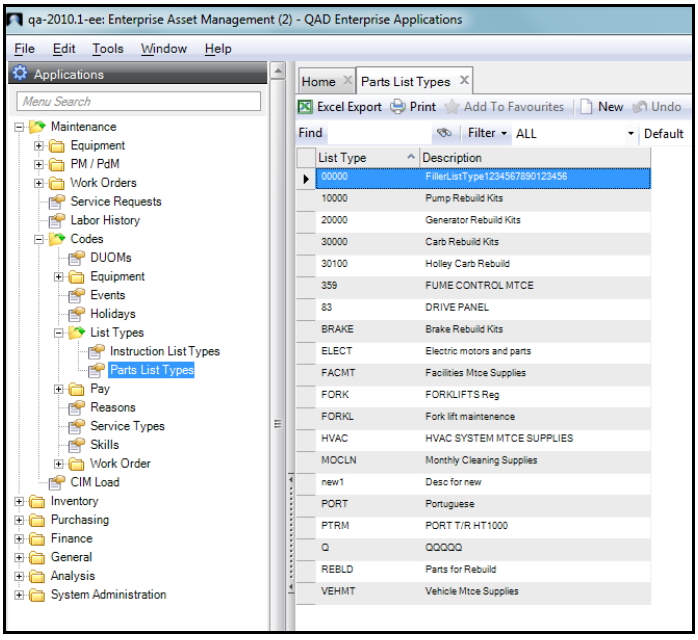



## Parts List Type Codes

Parts list type codes are user-defined codes used to group master part lists (MPLs) together by common types for better sorting and filtering. Parts list type codes are applied when creating master parts lists and work order parts lists. Parts list type codes are located in Maintenance|Codes|List Types|Parts List Types.

To add a parts list type code, open the Parts List Types browse and click New. Enter the parts list type code in the List Type field and a short description in the Description field. Press Enter to save.

**Fig. 4.16**
List Type Codes: Parts List Type



## Pay Codes

Pay codes are user-defined codes that include additive codes and multiplier codes.

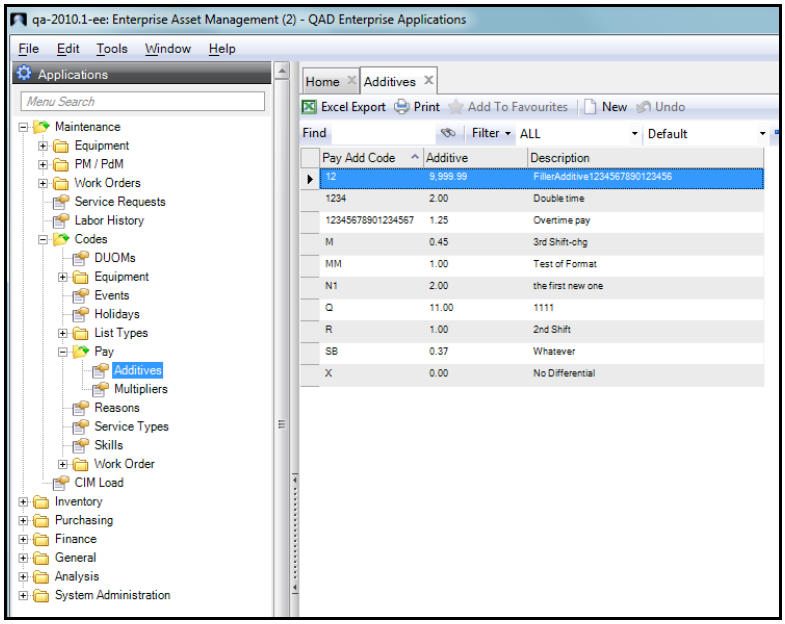
### Pay Additive Codes

Pay additive codes are user-defined codes that are used to add a specific amount to the standard hourly rate when posting labor. These codes can be associated with an employee ID. The Post Labor action in Work Orders and Projects uses this code in the Labor Cost calculation. The pay additive codes are located in Maintenance|Codes|Pay| Additives.

***Example*** If an employee has an hourly rate of $10/hour, and is associated with a pay additive code for 50 more cents, then the hourly rate becomes $10.50. Sometimes, companies use the pay additive code for weekend shifts or third shifts as an incentive for employees to work in the off-times.

To add a pay additive code, open the Additives browse and click New. Enter the additive code in the Pay Add Code field. Enter the additive amount in the Additive field. Enter a short description in the Description field. Press Enter to save.

**Fig. 4.17**
Pay Codes: Pay Additive




### Pay Multiplier Code

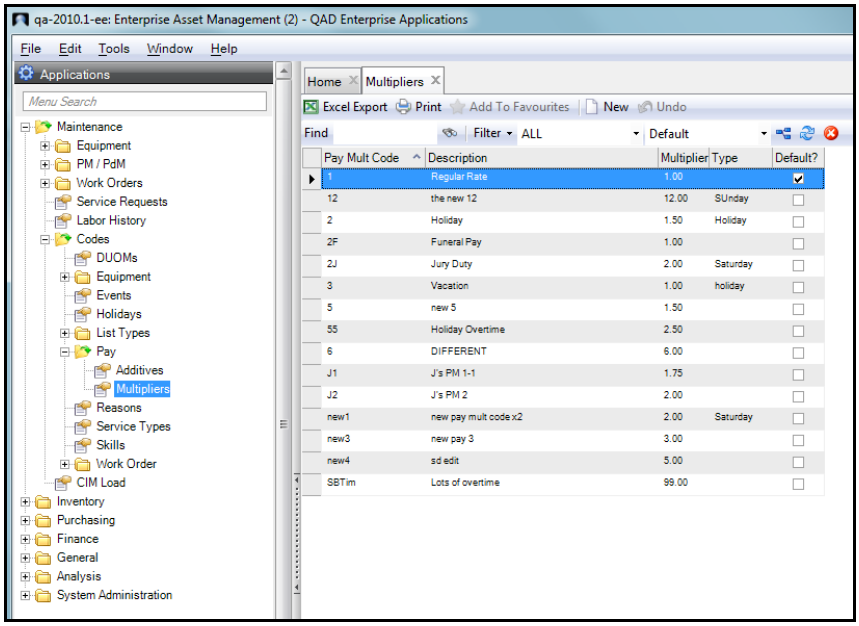
The pay multiplier code is applied to the regular pay rate to determine the total labor cost for an employee when posting labor. Use a pay multiplier as part of a formula to calculate the total labor cost. The pay multiplier multiplies against the standard hourly rate in the employee record.

The pay multiplier codes are located in Maintenance|Codes|Pay|Multipliers.

Follow these steps to add a multiplier code:

1. Open the Multipliers browse and click New.
2. Enter the multiplier code in the Pay Multiplier Code field and a short description in the Description field.
3. Enter the multiplier amount in the Multiplier field. The amount entered in this field is multiplied by the standard hourly rate in the employee's record.
4. Enter the multiplier type in the Type field. In this field, you can enter Saturday, Sunday, Holiday, or you can leave it blank.
5. Select the Default? check box to set that pay multiplier as the default. When you are posting labor, the default pay multiplier code is displayed in the Pay Multiplier Code field.
6. Press Enter to save.

**Fig. 4.18**
Pay Codes: Pay Multiplier

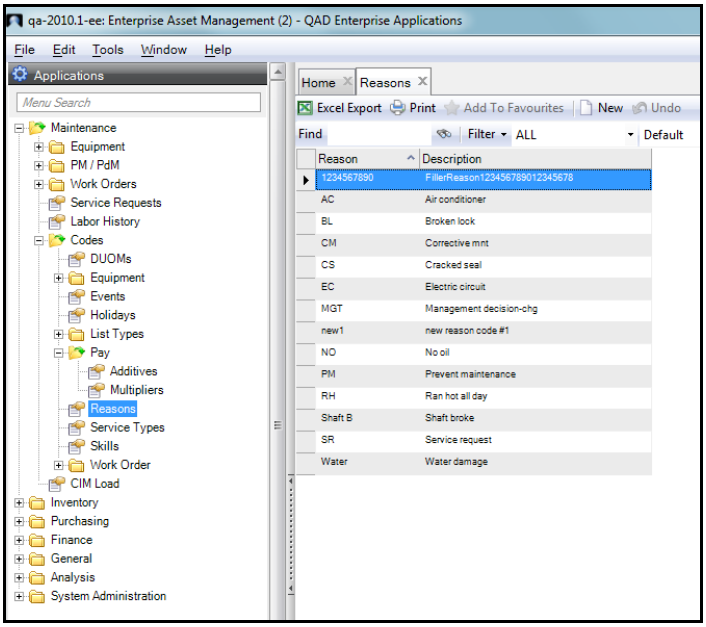



## Reason Codes

The reason code is used in the Maintenance module to give a short description of downtime. This code is used for reporting and filtering purposes within a work order. The reason codes are located in Maintenance|Codes|Reasons.

To add a reason code, open the Reasons browse and click New. Enter the reason code in the Reason field and a short description in the Description field. Press Enter to save.

**Fig. 4.19**
Reason Codes

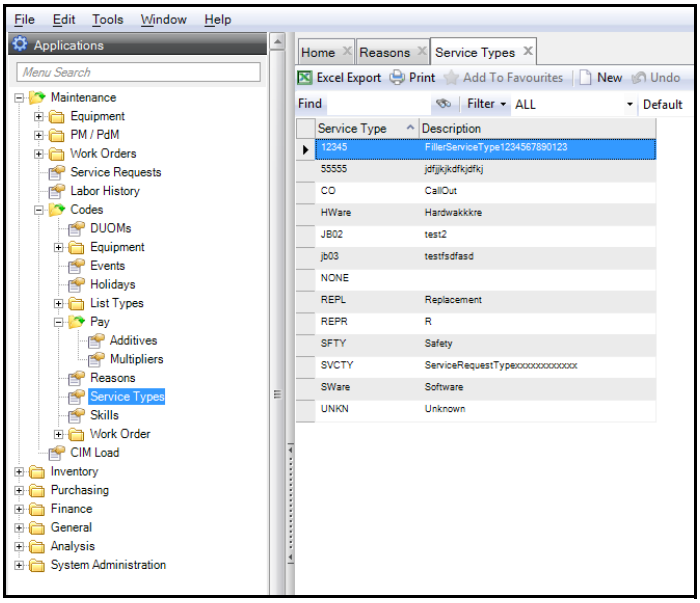



## Service Type Codes

Service type codes are used to designate the types of service requests. Use these codes when managing SRs for sorting or filtering. Service type codes are located in Maintenance|Codes| Service Types.

To add a service type code, open the Service Types browse and click New. Enter the service type code in the Service Type field and a short description in the Description field. Press Enter to save.

**Fig. 4.20**
Service Type Codes



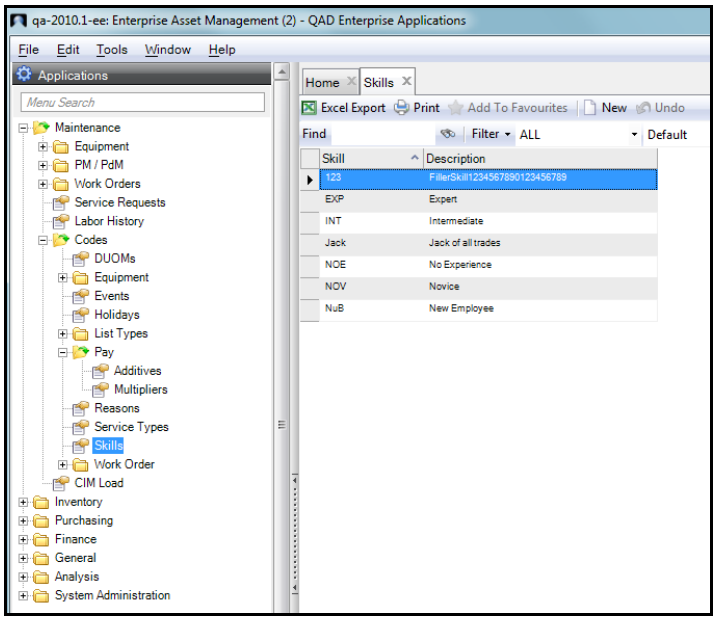
## Skills Codes

The skill codes are used to describe an employee's capabilities within a craft. For example, if an employee's craft code is mechanic, enter an Expert skill level. You can associate the skill code with a master parts list with a craft code followed by a skill code, or to a work order's instruction list.

The skill codes are located in Maintenance|Codes|Skills.

To add a skill code, open the Skills browse and click New. Enter the skill code in the Skill field and a short description in the Description field. Press Enter to save.

**Fig. 4.21**
Skills Codes




## Work Order Codes

Work order codes are user-defined codes that include the following:

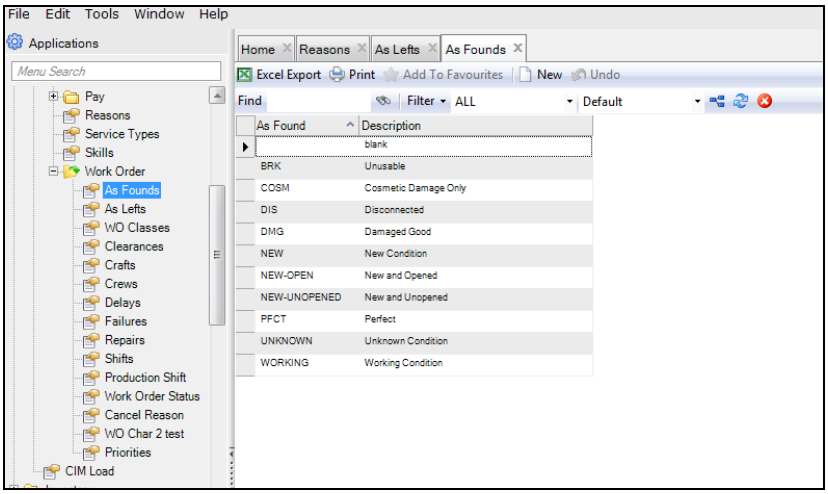
- As Found Codes
- As Left Codes
- WO Class Codes
- Clearance Codes
- Craft Codes
- Crew Codes
- Delay Codes
- Failure Codes
- Repair Codes
- Shift Codes
- Production Shift Codes
- Work Order Status Codes
- WO Character 1 Codes
- WO Character 2 Codes

### As Found Codes

Technicians use the as-found codes to specify the condition of the equipment as repairs begin. As-found codes are located in Maintenance|Codes|Work Order|As Founds.

To add an as-found code, open the As Founds browse and click New. Enter the as-found code in the As Found field and a short description in the Description field. Press Enter to save.

**Fig. 4.22**
Work Order Codes: As Founds




## As Left Codes

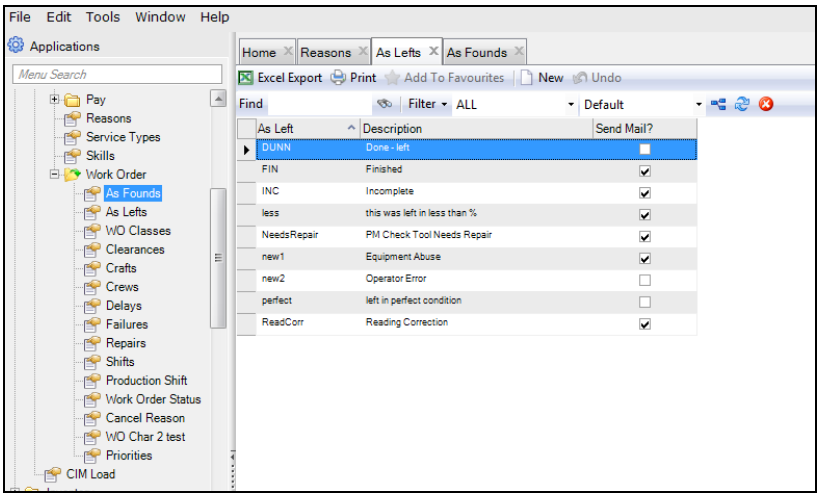
Technicians use the as-left codes to specify the condition of the equipment after repairs are finished. If desired, you can set an as-left code to trigger an e-mail anytime it is used. For example, if a work order uses an as-left code that specifies e-mail notification, EAM e-mails the user or group specified in the Notify field in the work order and notifies them that something more needs to be done.

As-left codes are located in Maintenance|Codes|Work Order|As Lefts.

Follow these steps to add an as-left code:

1. Open the As Lefts browse and click New.
2. Enter the as-left code in the As Left field and a short description in the Description field.
3. Select the Send Mail? check box if EAM should automatically send an e-mail anytime this code is used. The e-mail is sent to the user or group that is specified in the Notify field in the work order.
4. Press Enter to save.

**Fig. 4.23**
Work Order Codes: As Lefts

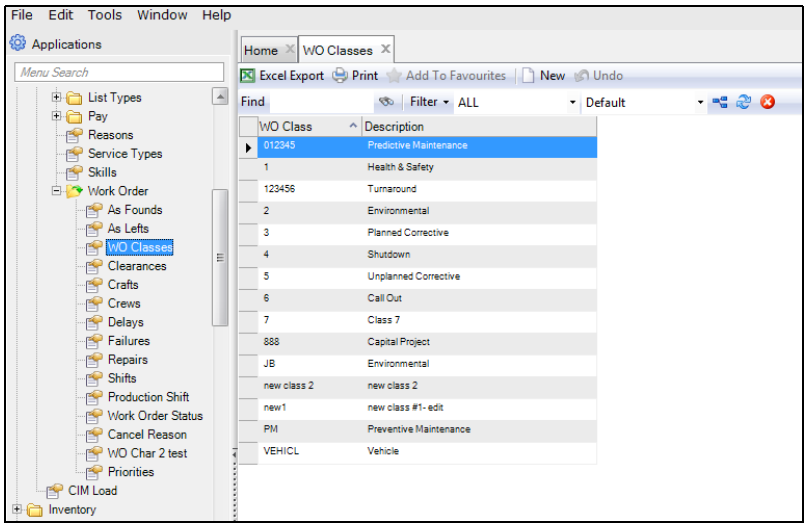



## WO Class Codes

WO class codes are user-defined codes used to describe the type of work order that is created. WO class codes are located in Maintenance|Codes|Work Order|WO Classes.

To add a WO class code, open the WO Classes browse and click New. Enter the WO classes code in the WO Class field and a short description in the Description field. Press Enter to save.

**Fig. 4.24**
Work Order Codes: WO Classes




## Clearance Codes

Clearance codes, which are user-defined codes used in preventive maintenance and work orders, specify the type of clearance that is required to perform work on a piece of equipment.

***Example*** Clearance codes used to provide an additional level of safety could include the following statements:

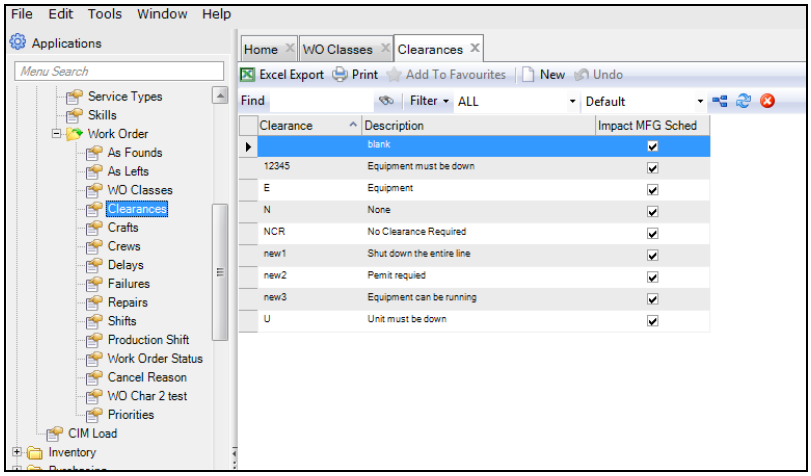
- You can run machinery while performing this type of work.
- Shut down the machinery.
- Shut down the entire line.

Clearance codes are located in Maintenance|Codes|Work Order|Clearances.

Follow these steps to add a clearance code:

1. Open the Clearances browse and click New.
2. Enter the clearance code in the Clearance field and a short description in the Description field.
3. Select the Impact MFG Sched check box if you use Production Scheduling Workbenches integration with EAM. For more information, see *QAD Planning and Scheduling Workbenches User Guide*.
4. Press Enter to save.

**Fig. 4.25**
Work Order Codes: Clearances

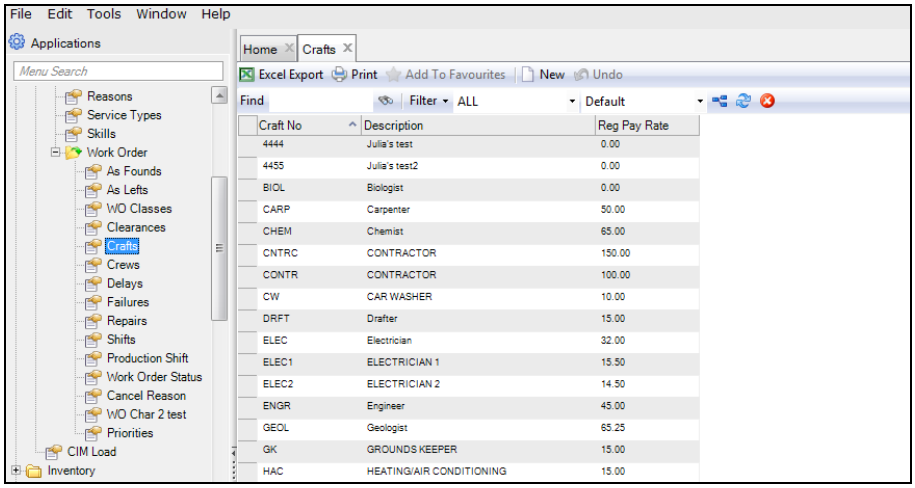



## Craft Codes

Craft codes, which are associated with a regular pay rate, are user-defined codes used to assign and post labor in EAM. The craft code's pay rate is used to calculate the planned cost on WO instruction lists and in MILs. Craft codes are located in Maintenance|Codes|Work Order|Crafts.

To add a craft code, open the Craft browse and click New. Enter the craft code in the Craft field and a short description in the Description field. Enter the pay rate in the Regular Pay Rate field. Press Enter to save.

**Fig. 4.26**
Work Order Codes: Crafts

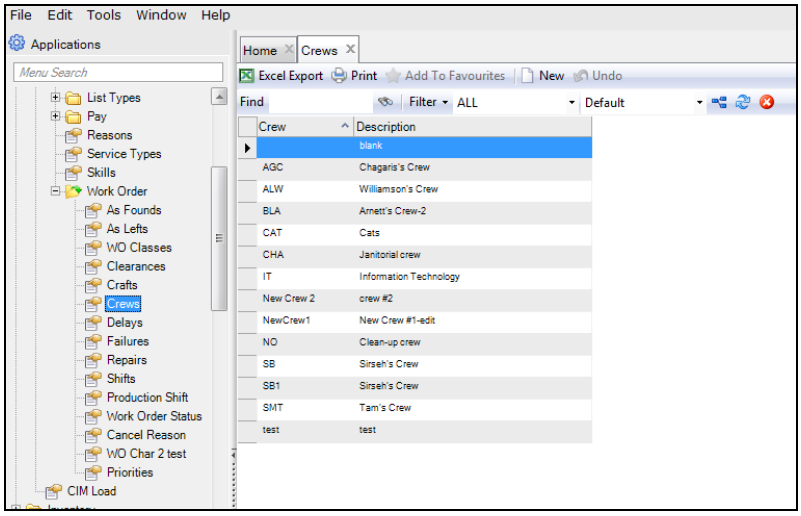



## Crew Codes

Crew codes are user-defined codes used on work orders or PM templates to name the job crew in which the technician works. Crew codes are located in Maintenance|Codes|Work Order|Crews.

To add a crew code, open the Crews browse and click New. Enter the crew code in the Crew field and a short description in the Description field. Press Enter to save.

**Fig. 4.27**
Work Order Codes: Crews

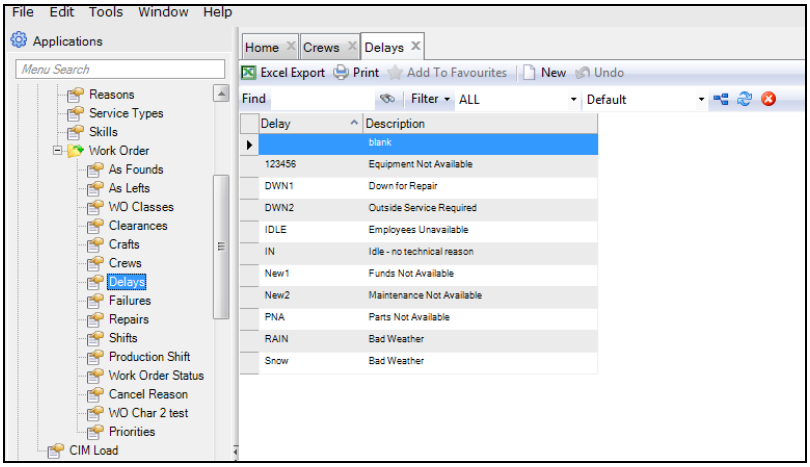



## Delay Codes

Delay codes are user-defined codes used to describe why work has been delayed. Delay codes are located in Maintenance|Codes|Work Order|Delays.

To add a delay code, open the Delays browse and click New. Enter the delay code in the Delay field and a short description in the Description field. Press Enter to save.

**Fig. 4.28**
Work Order Codes: Delays

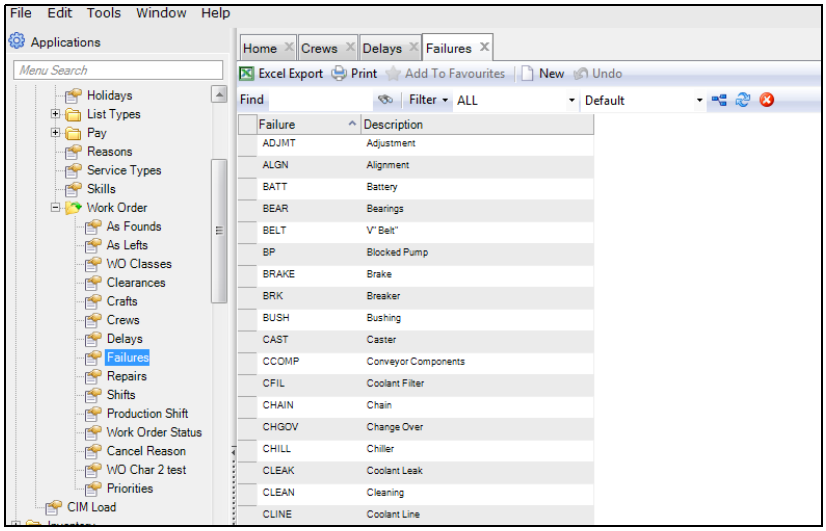



## Failure Codes

Failure codes are user-defined codes used to describe the cause of a failure or breakdown. The code usually indicates the part or component that failed. Failure codes are located in Maintenance|Codes|Work Order|Failures.

To add a failure code, open the Failures browse and click New. Enter the failure code in the Failure field and a short description in the Description field. Press Enter to save.

**Fig. 4.29**
Work Order Codes: Failures

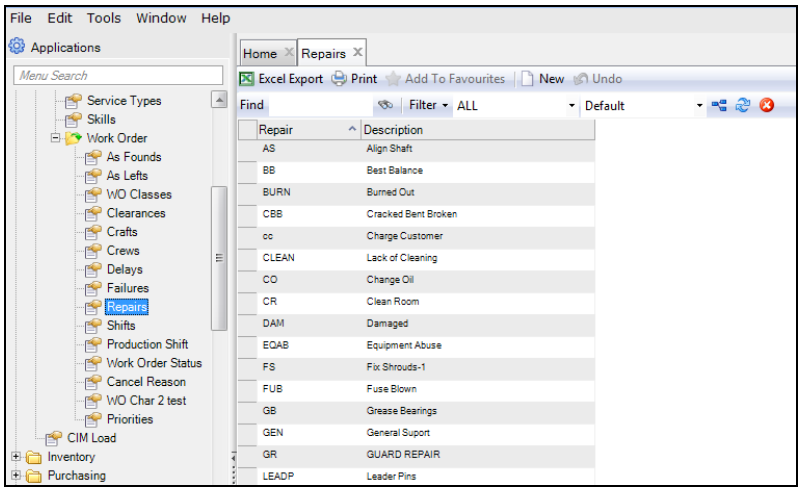



## Repair Codes

Repair codes, used in equipment failure analysis, are user-defined codes used to classify the type of repair required to fix the existing problem on the equipment. Repair codes are located in Maintenance|Codes|Work Order|Repairs.

To add a repair code, open the Repairs browse and click New. Enter the repair code in the Repair field and a short description in the Description field. Press Enter to save.

**Fig. 4.30**
Work Order Codes: Repairs

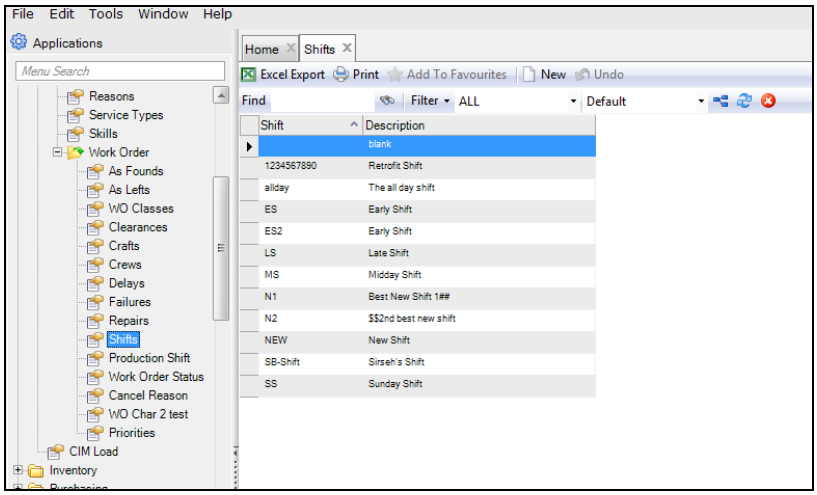



## Shift Codes

Shift codes, which are used in PM templates and work orders, are user-defined codes used to determine when an employee is available to be scheduled for work. Shift codes are located in Maintenance|Codes|Work Order|Shifts.

To add a shift code, open the Shifts browse and click New. Enter the shift code in the Shift field and a short description in the Description field. Press Enter to save.

**Fig. 4.31**
Work Order Codes: Shifts

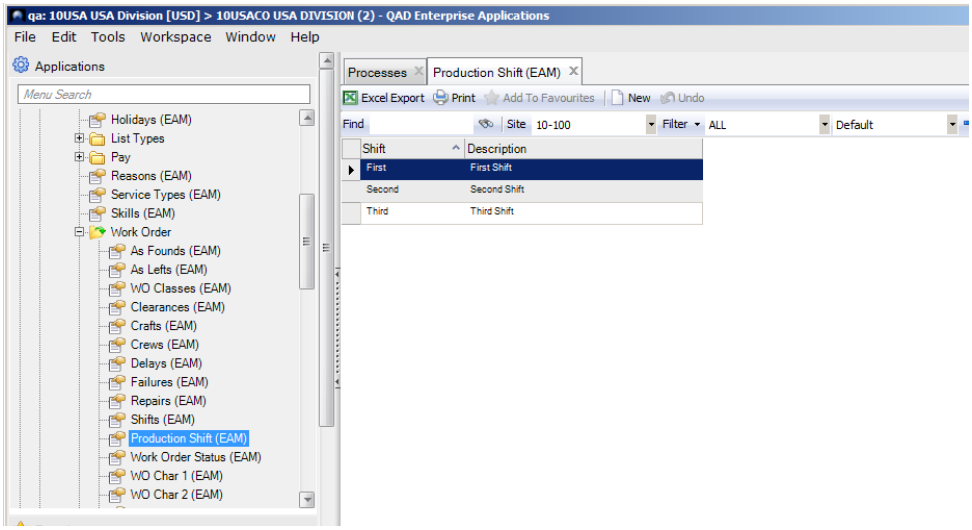



## Production Shift Codes

Production shift codes are used in equipment downtime. These codes populate the Production Shift lookup on the Equipment Down Time submenu. Production shift codes are located in Maintenance|Codes|Work Order|Production Shift.

To add a production shift code, open the Production Shift browse and click New. Enter the production shift code in the Shift field and a short description in the Description field. Press Enter to save.

**Fig. 4.32**
Work Order Codes: Production Shift




## Work Order Status Codes

Work order status codes are user-defined codes that describe the status of a work order. Closed, Finished, and Canceled are permanent default work order statuses that cannot be deleted. You can create WO status codes that contain specific functionality. For example, you can:

- Indicate the default status when creating a service request, CM, or PM work order.
- Specify that the C or F status for a PM work order triggers the update of the associated sliding PM template.
- Allow EAM to automatically send an e-mail to the WO notify person anytime a work order changes to that status.

Work order status codes are located in Maintenance|Codes|Work Order|Work Order Status.

Follow these steps to add a work order status code:

1. Open the Work Order Status browse and click New.
2. Enter the work order status code in the Status field and a short description in the Description field.
3. Select the appropriate check box if this status should be the default status for CM, PM, Service, or sliding PM work orders.
   - **CM Default?** Select this check box if you want this status to be the default status for new CM work orders.
   - **PM Default?** Select this check box if you want this status to be the default status for new PM work orders.

- **Service Default?** Select this check box if you want this status to be the default status for new Service work orders.
- **Sliding PMs?** Select this check box if you want this status to be the default status for new sliding PM work orders.

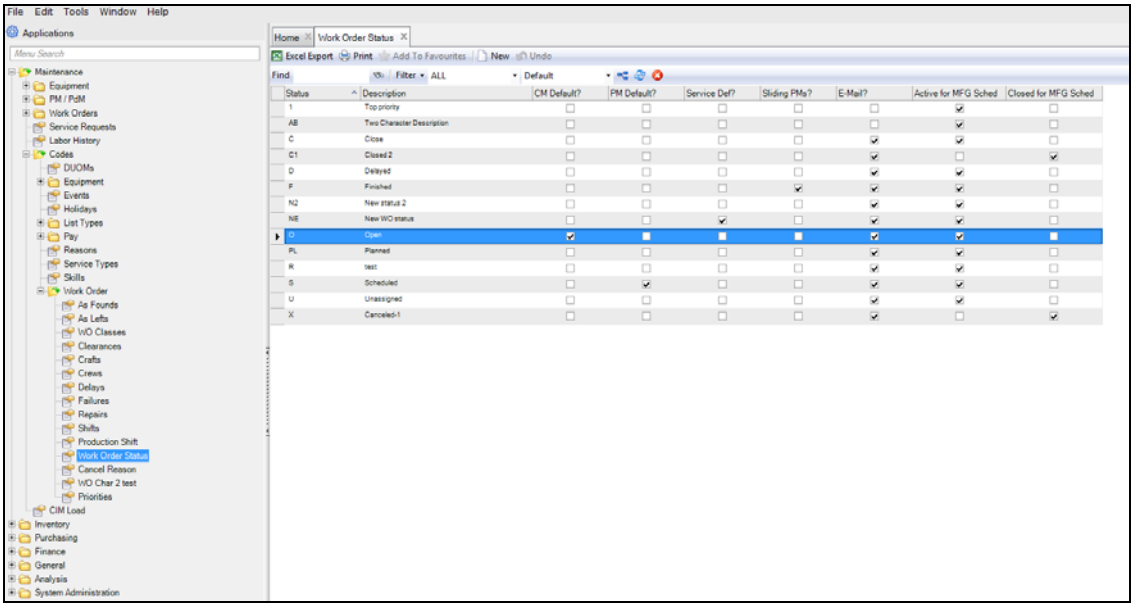
***Note*** Only one status can be selected as the default for each of these settings. For example, you cannot select two different statuses as the CM default.

4 Select the E-Mail? check box to have EAM automatically send an e-mail to the WO notify person anytime a work order changes to that status.

5 Define if the work order status is pulled into the QAD ERP workbenches by selecting either the Active for MFG Sched or Closed for MFG Sched check boxes. The system displays only those work orders that have a status indicating Manufacturing Scheduling Active or Manufacturing Scheduling Closed in the workbenches. For more information, see *QAD Planning and Scheduling Workbenches User Guide*.

6 Press Enter to save.

**Fig. 4.33**
Work Order Codes: Work Order Status

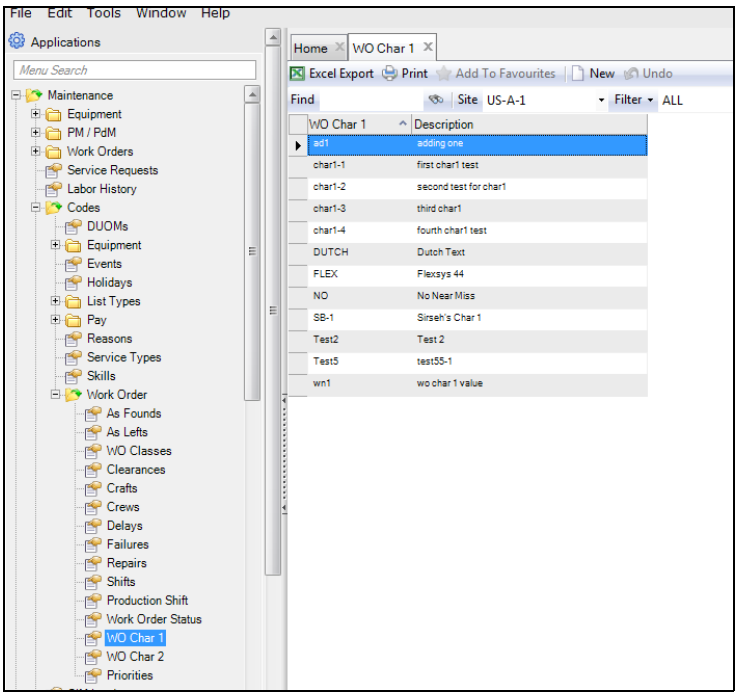



## WO Character 1 Codes

WO character 1 codes are validation tables that are used with the WO Char 1 user-defined fields. For example, if you click in the WO Char 1 User-Defined field, the lookup allows you to select one of the items in the work order character 1 table. For more information about using user-defined fields, see “User-Defined Fields” on page 701. The WO character 1 codes are located in Maintenance|Codes|Work Order|WO Char 1.

To add a WO character 1 code, open the WO Character 1 browse and click New. Enter the code in the WO Char 1 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.34**
Work Order Codes: WO Character 1

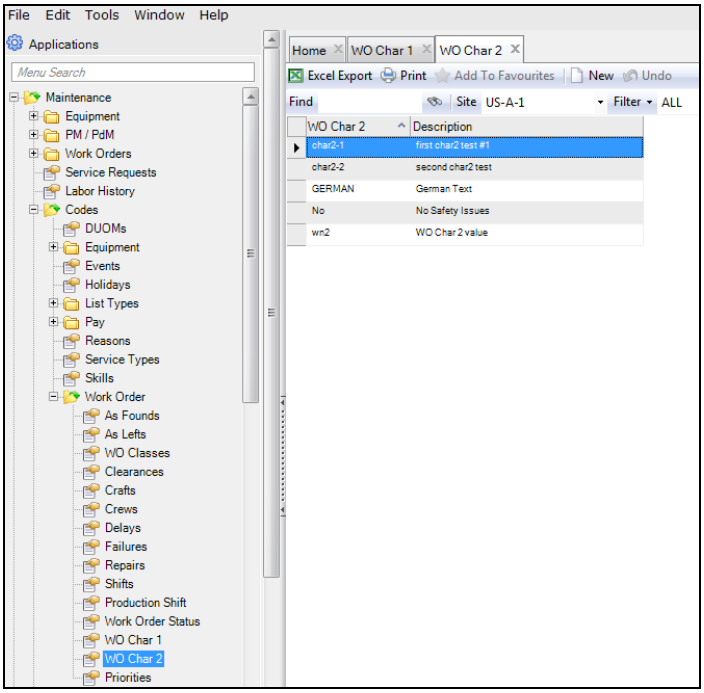



## WO Character 2 Codes

WO character 2 codes are validation tables that are used with the WO Char 2 user-defined fields. For example, if you click in the WO Char 2 user-defined field, the lookup allows you to select one of the items in the work order character 2 table. For more information about using user-defined fields, see “User-Defined Fields” on page 701. The WO character 2 codes are located in Maintenance|Codes|Work Order|WO Char 2.

To add a WO character 2 code, open the WO Character 2 browse and click New. Enter the code in the WO Char 2 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 4.35**
Work Order Codes: WO Character 2



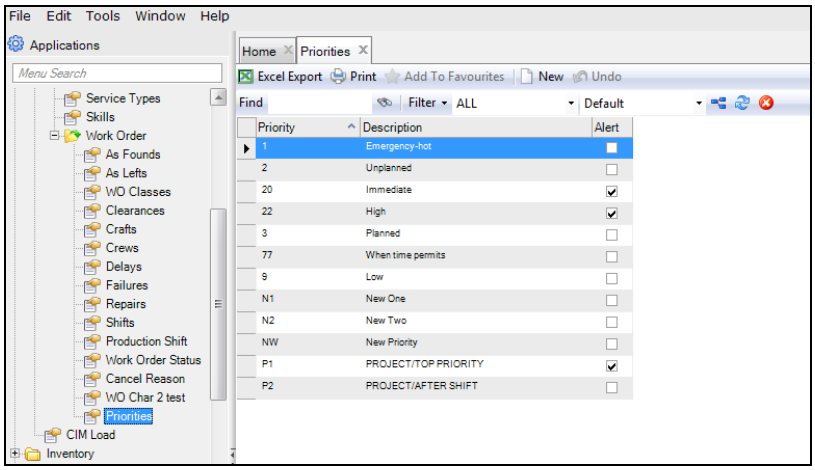

## Priority Codes

Priority codes are user-defined codes used on work orders to reflect the priority level of the work order. Priority codes are located in Maintenance|Codes|Work Order|Priorities.

Follow these steps to add a priority code:

1. Open the Priorities browse and click New.
2. Enter the priority code in the Priority field and a short description in the Description field.
3. Select the Alert check box to page the person specified in the Alert field on the service request or WO based on this priority.
4. Press Enter to save.

**Fig. 4.36**
Work Order Codes: Priorities




## Tool Codes

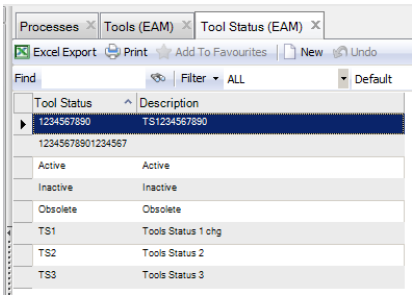
Tool codes are located in Maintenance|Codes|Tools. They are user-defined codes for:

- Tool Status
- Tool Locations
- Tool Classes
- Tool Types
- Tool List Types
- Tool Catalogs
- Tool Failures
- Tool Repairs
- Tool Failure Types
- Tool Rebuild Locations

### Tool Status

Tool Status codes are used to define a status meaningful for a tool. They are not used for inventory parts, which are defined separately. The three system-provided Tool Status codes are Active, Inactive, and Obsolete, but you can define additional statuses in the browse.

**Fig. 4.37**
Tools Codes: Tool Status



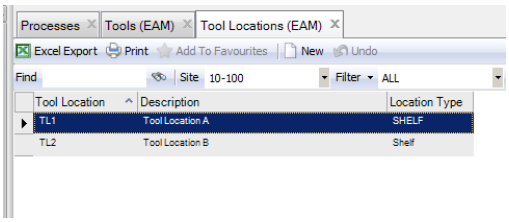

To add a Tool Status code, open the Tool Status browse and click New. Enter the code in the Tool Status field and a brief description of the code in the Description field. Press Enter to save.

***Note*** Tool management does not support a status of Inactive or Obsolete for tools. That functionality is planned as a future enhancement.

### Tool Locations

Tool Location codes are user-defined codes that define a bin or shelf in a tool room or tool crib. These definitions are different than those used for inventory parts. The location is used in the tool serial record and as a default location on the tool record.

**Fig. 4.38**
Tools Codes: Tool Locations

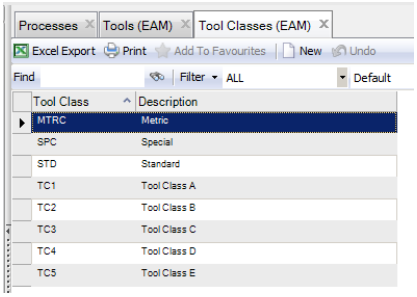



To add a Tool Location code, open the Tool Locations browse and click New. Enter the code in the Tool Location field and a brief description of the code in the Description field. Enter a physical description of the location in the Location Type field, choosing from Shelf, Inspection, and Rebuild. The default Location Type is Shelf. Press Enter to save.

### Tool Classes

Tool classes are user-defined codes that you can add to the tool definition. You can use these codes to group common tools together and for filtering and reporting purposes.

**Fig. 4.39**
Tools Codes: Tool Classes

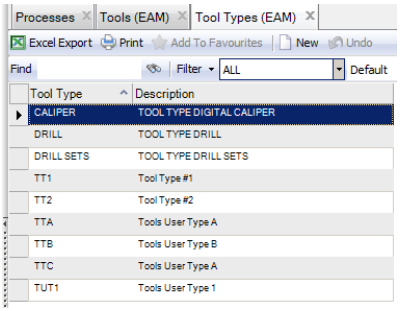



To add a Tool Class code, open the Tool Classes browse and click New. Enter the code in the Tool Class field and a brief description in the Description field. Press Enter to save.

### Tool Types

Tool Type codes are user-defined codes that you can add to the tool definition and use for filtering and for grouping common tools together.

**Fig. 4.40**
Tools Codes: Tool Types

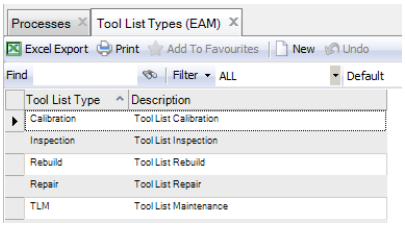



To add a Tool Type code, open the Tool Types browse and click New. Enter the code in the Tool Type field and a brief description in the Description field. Press Enter to save.

### Tool List Types

Tool List Types are user-defined codes that define the intended use of the tool. The definition is used as a lookup on the Master Tool List – Type and can be used for filtering Master Tool Lists.

**Fig. 4.41**
Tool Codes: Tool List Types

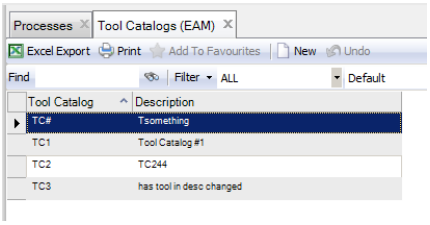



To add a Tool List Type, open the Tool List Types browse and click New. Enter the code in the Tool List Type field and a brief description in the Description field. Press Enter to save.

## Tool Catalogs

Tool Catalog codes are used to group common tools under a single code for better reporting and filtering capabilities.

**Fig. 4.42**
Tool Codes: Tool Catalogs




To add a Catalog code, open the Tool Catalog browse and click New. Enter the code in the Tool Catalog field and a brief description in the Description field. Press Enter to save.

Each catalog can have multiple subcatalogs, which are displayed in the lower browse. To add a subcatalog:

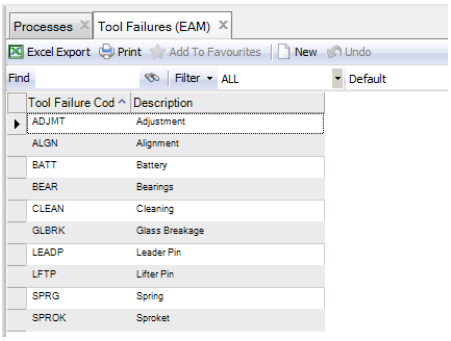
1. Highlight the parent catalog in the upper browse.
2. Click New in the lower browse.
3. Enter a subcatalog code in the Tool Sub Catalog field.
4. Enter a brief description in the Description field.
5. Press Enter to save.

## Tool Failures

Tool Failure Codes are user-defined codes used to describe the cause of a failure on a WO. The code usually indicates the part or component that failed.

To add a tool failure code, open the Tool Failures browse and click New. Enter the failure code in the Tool Failure field and a short description in the Description field. Press Enter to save.

**Fig. 4.43**
Tool Codes: Tool Failures

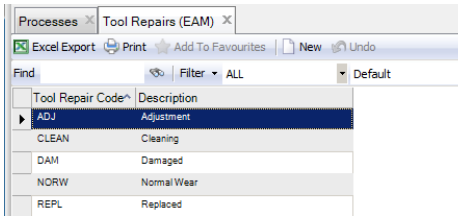


## Tool Repairs

Repair codes, used in tool failure analysis, are user-defined codes used to classify the type of repair required to fix the existing problem on a WO.

To add a repair code, open the Repairs browse and click New. Enter the repair code in the Repair field and a short description in the Description field. Press Enter to save.

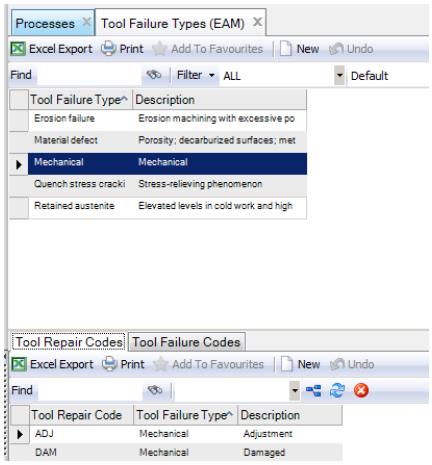
**Fig. 4.44**
Tool Codes: Tool Repairs




## Tool Failure Types

The Tool Failure Type codes are used to define failure types with associated repair and failure codes for use with tools that are entered on a WO. These codes allow you to track tool failures on work orders to analyze a PM program's effectiveness. If PMs are designed to prevent a certain type of failure, but the failure is occurring before the PM issue-by date, then modify the PM to come due more frequently.

**Fig. 4.45**
Tool Codes: Tool Failure Types




***Note*** EAM e-mails warnings about PMs whose failure frequency exceeds PM frequency. If there is not a PM work order to prevent a frequent tool failure, then create a PM work order.

Follow these steps to add a Tool Failure Type code:

1. Open the Tool Failure Type code browse and click New.
2. Enter the failure type code in the Tool Failure Type field and a short description in the Description field.
3. Press Enter to save.

4 Add failure and repair codes to the failure type code that you created. Select the Tool Failure Type and click New in the lower browse.

5 Use the lookups in the Failure and Repair fields to add failure and repair codes to Tool Failure Type code.

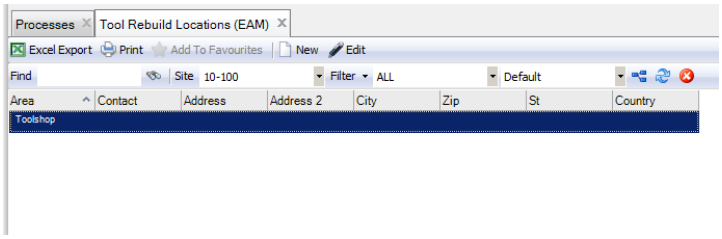
6 Press Enter to save.

7 Continue to add failure and repair codes to the Tool Failure Type code as necessary.

### Tool Rebuild Locations

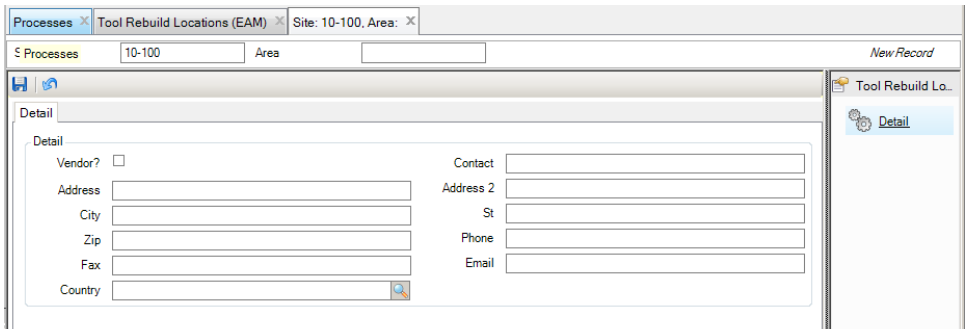
You can define Tool Rebuild Locations for use with rotable tools. Rebuild Location codes are user-defined codes used to identify areas to rebuild and work on rotable tools.

**Fig. 4.46**
Tool Codes: Tool Rebuild Locations




To add a rebuild location code, open the Rebuild Locations browse and click New.

**Fig. 4.47**
New Tool Rebuild Location




Enter the relevant information in the following fields:

*Site.* Displays the site identified with the rebuild location. When the system creates the rebuild location, the Site field is read-only.

*Area.* The rebuild location name.

*Vendor?* Select this check box to indicate a vendor rebuild location.

*Contact.* The individual to contact for information at the rebuild location.

*Address.* The street address of the rebuild location.

*Address 2.* Additional information about the rebuild location street address such as suite number.

*City.* The rebuild location city.

*St.* The rebuild location state.

*Zip.* The postal code of the rebuild location.

*Phone.* The phone number of the rebuild location.

*Fax.* The fax number for the rebuild location.

*Email.* The e-mail address for a contact at the rebuild location.

*Country.* The country of the rebuild location.

Click the disc icon to save.

# Master Lists

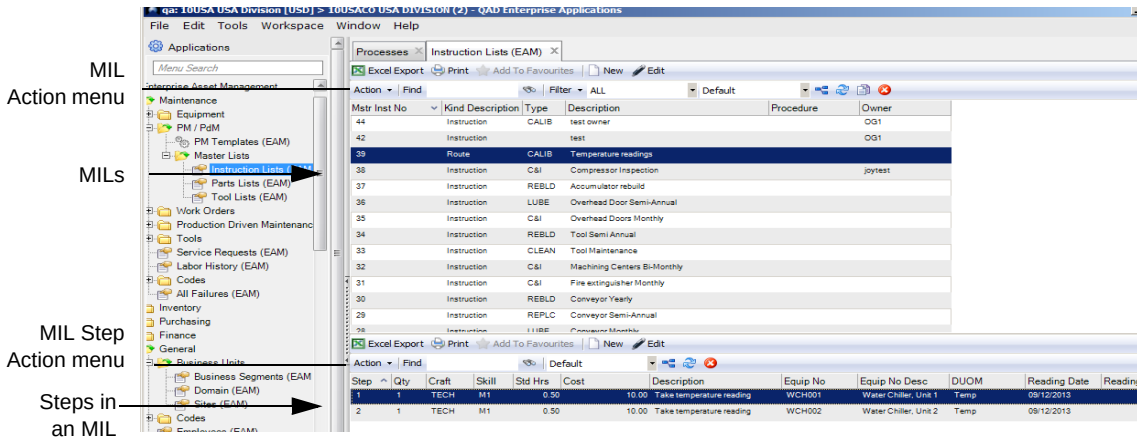
Master instruction lists (MILs) can be used to develop work procedures. Parts lists and tool lists provide reusable resource lists of required components used to maintain or fix equipment or tools. Depending on your permissions, you can add or edit existing records.

## Master Instruction List

Use MILs to develop any number of work procedures to perform on pieces of equipment or a tool. These procedures are stored in the instruction list module. You can associate one master instruction list with a number of PM templates or copy it to corrective maintenance work orders.

The MIL browse is located in Maintenance|PM/PdM|Master Lists|Instruction Lists.

**Fig. 4.48**
MIL Browse



## Creating an MIL

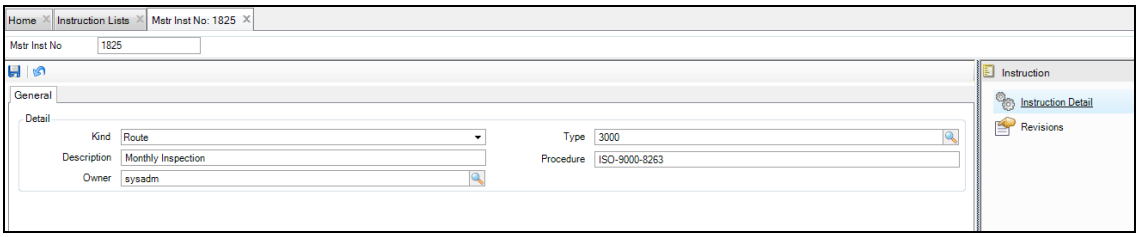
Follow these steps to create an MIL:

1 Open the MIL browse and click New in the upper browse.

A blank MIL record opens. The system automatically assigns an MIL number, which users cannot modify.

2 Enter the necessary information in the General tab.

**Fig. 4.49**
MIL Record




*Kind.* Select the kind of MIL from the drop-down list:

- **Instruction.** Used to create steps detailing maintenance activities that need to be done for WO issued from PM or directly attached to WO.
- **Route.** Used to create steps for taking DUOM readings for one or many pieces of equipment for WO issued from PM or directly attached to WO.
- **Safety.** Safety Procedures used to create steps for internal and external safety requirements that need to be assessed with possible corrective actions for WO issued from PM or directly attached to WO.

*Type.* Use the lookup to select the type of MIL. This list is a user-defined grouping of MILs, by function, such as inspect and repair or lubrication.

*Description.* Use this field to explain the purpose of the MIL.

*Procedure.* Use this field as a cross-reference to another application, such as a quality system that may identify this MIL.

*Owner.* If necessary, select the owner for this MIL. This field adds security to the MIL by limiting the users who can modify the list. If an owner is selected in this field, only that person can modify this list.

3 Once all the information has been entered, click Save.

4 Add steps to the MIL. See “Adding Steps to an MIL” on page 115.

## Adding Steps to an MIL

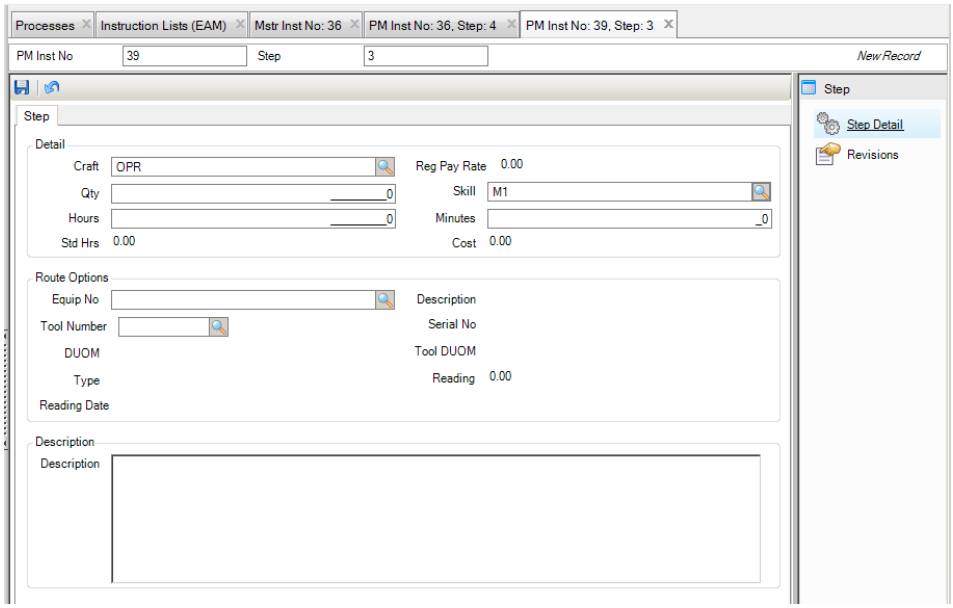
Follow this procedure to add steps to an MIL:

1 Select the MIL and click New in the lower browse.

A blank MIL step record opens. The system automatically assigns a step number. You can change the order of the steps using the Action menu in the lower browse of the instruction list. See “Move Steps Up or Down in an MIL” on page 117.

2 Enter the necessary information in the Step tab.

**Fig. 4.50**
Instruction Step Tab




## Detail

*Craft.* Select the specific craft required to complete this step from a validated table of user-defined codes.

*Reg Pay Rate.* Enter the craft's hourly rates, used in the calculation of the estimated cost for a step on a master instruction list.

*Qty.* Enter the number of craft people required to complete that step. Calculate the cost per instruction step by multiplying the quantity by the time and its craft rate.

*Skill.* Select a skill level from a validated table of user-defined codes.

*Hours.* Enter the estimated amount of time in whole hours required to complete this individual step.

*Minutes.* Enter the estimated amount of time in whole minutes required to complete this individual step.

*Std Hrs.* EAM displays the calculated amount of time in whole and fractional hours required to complete this individual step.

*Cost.* EAM displays the calculated cost to complete this individual step.

***Note*** The cost for this step represents the estimated labor cost for the WO that uses the MIL.

## Route Options

***Note*** The route fields are only enabled for Route MILs.

*Equip No.* Use the lookup to select the equipment.

*Description.* The equipment description. It defaults from the equipment record.

***Note*** You can select either Equipment No. or Tool Number. After you choose a piece of equipment or a tool and tab to the next field, the lookup you did not populate becomes inactive.

*Tool Number.* Enter the tool number or use the lookup to select a tool for this PM template.

*Serial No.* Enter the serial number or use the lookup to select a serial number for the tool you selected in Tool Number.

*DUOM.* The equipment's DUOM. It defaults from equipment record. If necessary, use the lookup to enter another DUOM defined for equipment.

*Tool DUOM.* The DUOM defaults from the tool's serial number record.

*Reading.* The current reading for the equipment or tool specified. It defaults from the Current Reading field in the Readings submenu.

*Reading Date.* The reading date for the equipment or tool specified. It defaults from the Date Read field in the Readings submenu.

The Equipment's Attachments action can also be accessed from the PM if the Equip to PM? in Attach File Options is selected for the PM site. See General|Business Unit|Site|General. This option allows files or links associated with the equipment on the PM to be accessible for reference.

*Description.* Enter text to describe the specific steps or procedures associated with this individual step.

3 Once all the information has been entered, click Save.

4 Add additional steps to the MIL as necessary.

### Move Steps Up or Down in an MIL

It is easy to change the sequence of steps in an MIL by moving steps up or down.

#### Moving a Step Up

To move a step up so that it is performed earlier in the sequence, highlight the step and select Move Up from the MIL Step Action menu.

#### Moving a Step Down

To move a step down so that it is performed later in the sequence, highlight the step and select Move Down from the MIL Step Action menu.

### View Revision History for an MIL or MIL Step

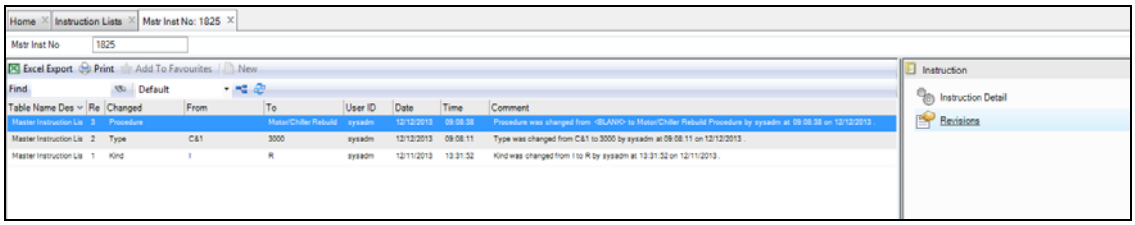
Because many quality systems call for strict record keeping about the revisions made to MILs and MIL steps, the Revisions submenu provides an audit trail of all modifications made to these records. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the MIL and MIL step.

***Note*** MIL and MIL step revision history is enabled by selecting the Mstr List Rev? check box in System Administration|System Control on the Detail tab. See “System Control: Detail Tab” on page 688.

### Revision History for an MIL

To view the revision history for an MIL, open the MIL and select the Revisions submenu.

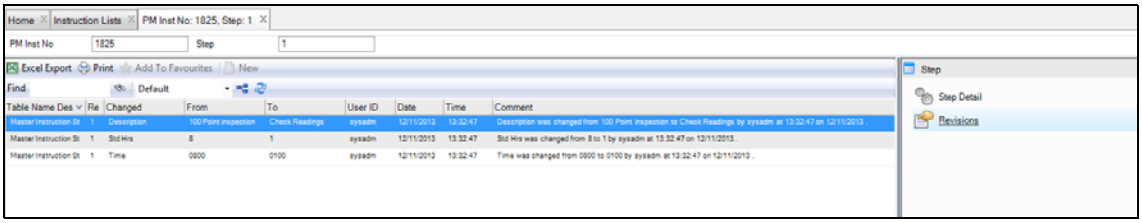
**Fig. 4.51**
Revision History for an MIL




### Revision History for an MIL Step

To view the revision history for an MIL step, open the MIL step and select the Revisions submenu.

**Fig. 4.52**
Revision History for an MIL Step

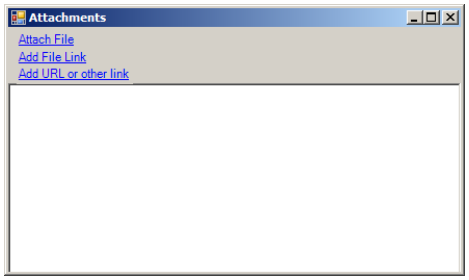



## Attaching and Linking Files to an MIL or MIL Step

EAM allows you to attach and link an unlimited number of files and to link an unlimited number of URLs to an MIL or MIL step. If you can run the file on your operating system, you can run it from EAM once it is attached or linked.

***Note*** If the Equip to MIL Step? check box is selected in the Site|General tab, files that are attached to an equipment record automatically copy to any MIL step associated with that piece of equipment.

**Fig. 4.53**
Link Files to an MIL or MIL Step



### Attach a File

To attach a file to a MIL or MIL step:

1. Select the MIL.
2. Select Attachments from the Action menu. If you are attaching a file to an MIL step, select the step and then select Attachments from the MIL Step Action menu
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the MIL.

### Link a File

Follow these steps to link a file to an MIL or MIL step:

1. Select the MIL.
2. Select Attachments from the MIL Action menu. If you are linking a file to an MIL step, select the step and then select Attachments from the MIL Step Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file and then click Open. The file is now linked to the MIL or the MIL step.

### Link a URL

To link a URL:

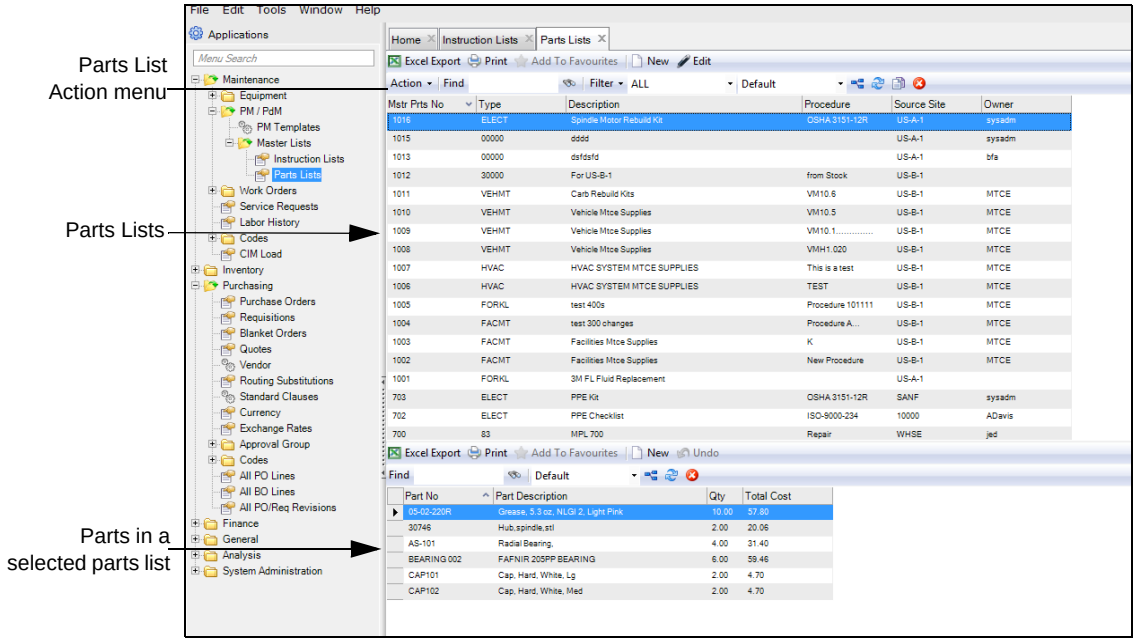
1. Select the MIL.
2. Select Attachments from the MIL Action menu. If you are linking a URL to an MIL step, select the step and then select Attachments from the MIL Step Action menu.
3. In the Attachments window, select Add URL or other link.
4. Copy and paste the URL into the field and click OK. The URL is now linked to the MIL or the MIL step.

## Parts List

The master parts lists are used to build a standard list of parts for a preventive maintenance or repair work order. You can create multiple parts lists, group them by user-defined type fields, provide descriptions, and cross-reference other quality systems procedures. You can associate one master parts list with a number of PM templates or you can copy the list to corrective maintenance work orders.

The Parts List browse is located in Maintenance|PM/PdM|Master Lists|Parts Lists.

**Fig. 4.54**
Parts List Browse




## Creating a Parts List

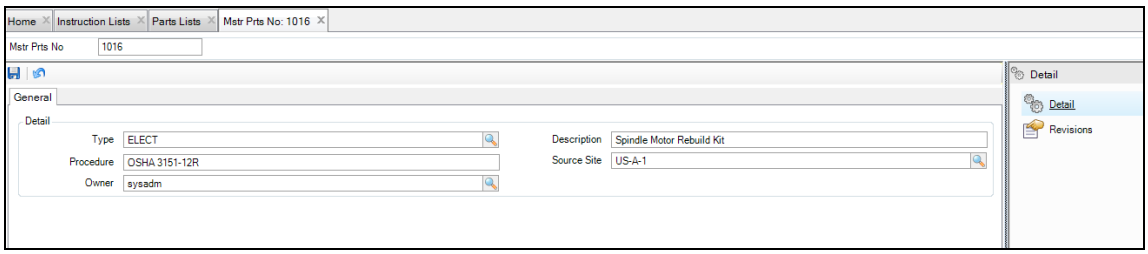
Follow these steps to create a parts list:

1 Open the Parts List browse and click New in the upper browse.

A blank parts list record opens. The system automatically assigns a parts list number, which you cannot modify.

2 Enter the necessary information in the General tab.

**Fig. 4.55**
Parts List Header General Tab




*Type.* Select from a user-defined grouping for parts lists: parts associated with specific pieces of equipment or certain types of repairs.

*Description.* Enter the purpose of the master parts list.

*Procedure.* Enter a cross-reference to another application such as a quality system to identify this master parts list.

*Source Site.* Select the site from which this master parts list sources its parts. The part lookup filters to the specified source site.

*Owner.* Select an owner from the lookup. This field limits record modification to the user or group specified here.

3 Once all the information has been entered, click Save.

4 Add parts to the parts list. See “Adding Parts to a Parts List”.

## Adding Parts to a Parts List

Follow these steps to add parts to a parts list:

1 Select the parts list and click New in the lower browse.

2 Enter the necessary information in the following fields:

*Part No.* Use the lookup to select the part to add to the list. To add a non-stock part to the parts list, enter the part number in the Part No field.

***Note*** The part lookup, which displays the part numbers from the Inventory module, is filtered to the specified source site.

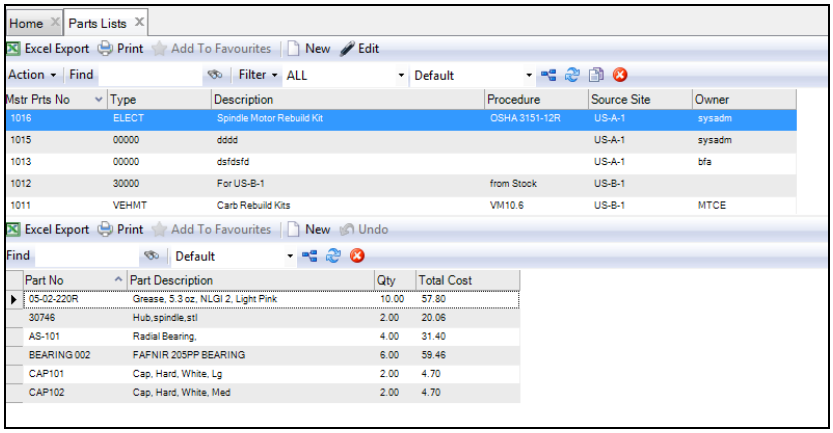
*Part Description.* Displays the part description. For non-stock parts, enter the part description in this field.

*Qty.* Enter the quantity that is required for this part.

*Total Cost.* Displays the total cost for the parts, which EAM calculates by multiplying the part’s current cost by the planned quantity in the parts list. For non-stock parts, enter the total cost for the parts in this field by multiplying the part cost by the quantity required.

3 Repeat these steps to add parts as necessary.

**Fig. 4.56**
Adding Parts to a Parts List




## Create a Parts List from an Equipment BOM

Rather than adding each part to a parts list separately, EAM allows you to create a parts list from an equipment BOM using the Copy BOM feature in the Parts List Action menu. This feature saves time and ensures data integrity.

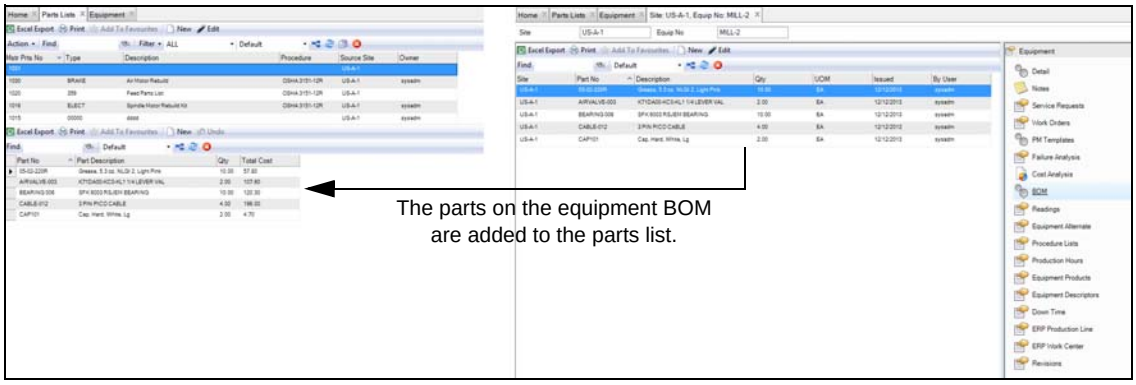
Follow these steps to create a parts list from an Equipment BOM:

1 Open the Parts List browse and select Copy BOM from the Parts List Action menu.

2 Double-click to select the equipment from the list.

The system automatically creates a blank parts list record and assigns a parts list number, which you cannot modify. Each part in the equipment BOM is added to the parts list.

**Fig. 4.57**
Create a Parts List from an Equipment BOM




3 Open the parts list record and enter the necessary information in the General tab.

*Type.* Select from a user-defined grouping for parts lists: parts associated with specific pieces of equipment or certain types of repairs.

*Description.* Enter the purpose of the master parts list.

*Procedure.* Enter a cross-reference to another application such as a quality system to identify this master parts list.

*Source Site.* Select the site from which this master parts list sources its parts. The part lookup filters to the specified source site.

*Owner.* Select an owner from the lookup. This field limits record modification to the user or group specified here.

4 Once all the information has been entered, click Save.

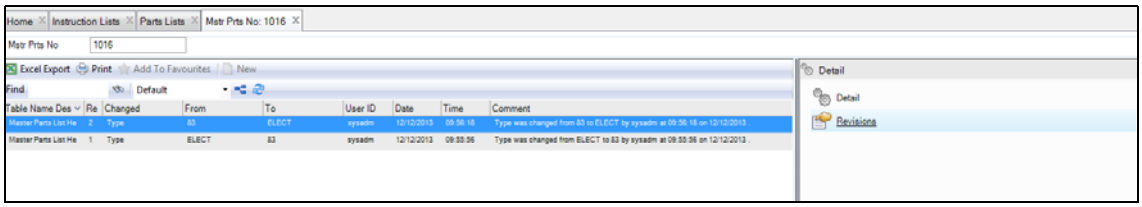
## View Revision History for a Parts List

Because many quality systems call for strict record keeping about the revisions made to parts lists, the Revisions submenu provides an audit trail of all modifications that are made to these records. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the parts list.

***Note*** Parts list revision history is enabled by selecting the Mstr List Rev? check box in System Administration|System Control on the Detail tab. See “System Control: Detail Tab” on page 688.

To view the revision history for a parts list, open the parts list and select the Revisions submenu.

**Fig. 4.58**
Revision History for a Parts List

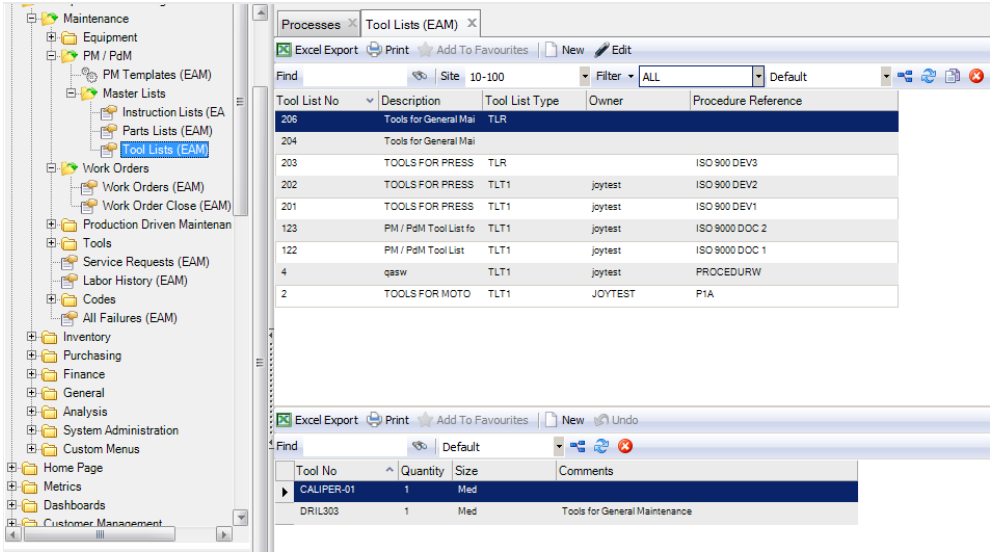



## Master Tool List

The master tool lists are used to build a standard list of tools for a preventive maintenance or repair work order. You can create multiple tool lists, group them by user-defined type fields, provide descriptions, and cross-reference other quality systems procedures. You can associate one master tool list with a number of PM templates or you can copy the list to corrective maintenance work orders.

The Tool List browse is located in Maintenance|PM/PdM|Master Lists|Tool Lists.

**Fig. 4.59**
Master Tool List




### Creating a Tool List

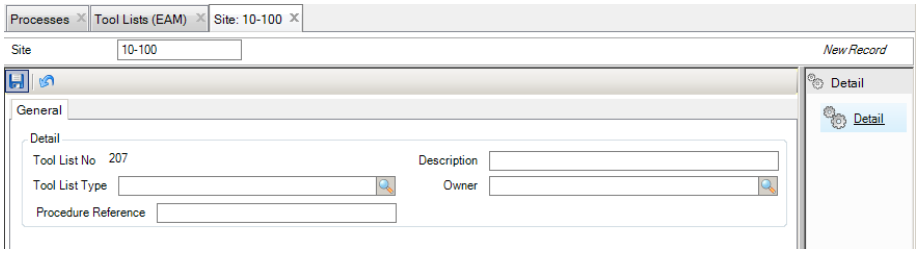
Follow these steps to create a tool list:

1 Open the Tool List browse and click New in the upper browse.

A blank tool list record opens. The system automatically assigns a tool list number, which you cannot modify.

2 Enter the necessary information in the General tab.

**Fig. 4.60**
Tool List Header General Tab




*Description.* Enter the purpose of the master tool list.

*Tool List Type.* Select from a user-defined grouping for tool lists.

*Owner.* Select an owner from the lookup. This field limits record modification to the user or group specified here.

*Procedure Reference.* Enter a cross-reference to another application such as a quality system to identify this master tool list.

3 Once all the information has been entered, click Save.

4 Add tools to the tool list. See “Adding Tools to a Tool List” on page 124.

### Adding Tools to a Tool List

Follow these steps to add tools to a tool list:

1 Select the tool list and click New in the lower browse.

2 Enter the necessary information in the following fields:

*Tool No.* Use the lookup to select the tool to add to the list.

***Note*** The tool lookup is filtered to the specified source site.

*Quantity.* Enter the number of this tool required.

*Size.* Use the lookup to select the size of the required tool.

*Comments.* Enter optional comments about this line item.

3 Repeat these steps to add tools as necessary.

## Equipment

Use Equipment to store and track the following information: cost analysis, failure analysis, bill of materials (BOM), driving units of measurement (DUOM), serialized components, tracking, and service requests. Track regularly scheduled work and breakdowns while collecting repair and maintenance cost information for each piece of equipment.

Most cumulative data in equipment records originates in:

- Work Order
- Inventory

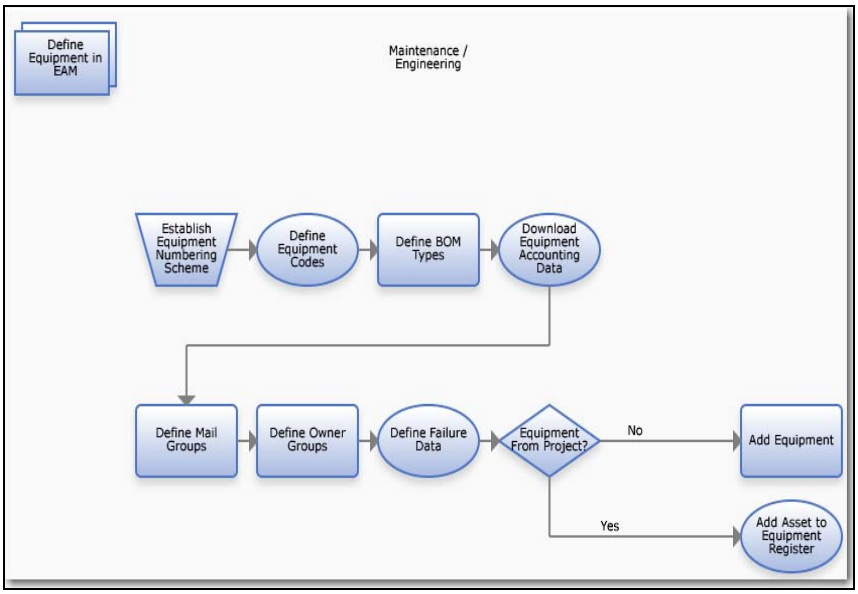
- Purchasing
- Labor
- Project/Job

System-wide information feeds back into the equipment record. Equipment reports present this stored data. Historical data also triggers preventive work orders for equipment associated with metering data and failure analysis.

Associate systems and assemblies with equipment for more detailed cost and failure analysis.

## Equipment Setup Process Flow

**Fig. 4.61**
Set Up Equipment Process Flow




1 Establish equipment numbering scheme.

2 Add equipment codes and BOM types.

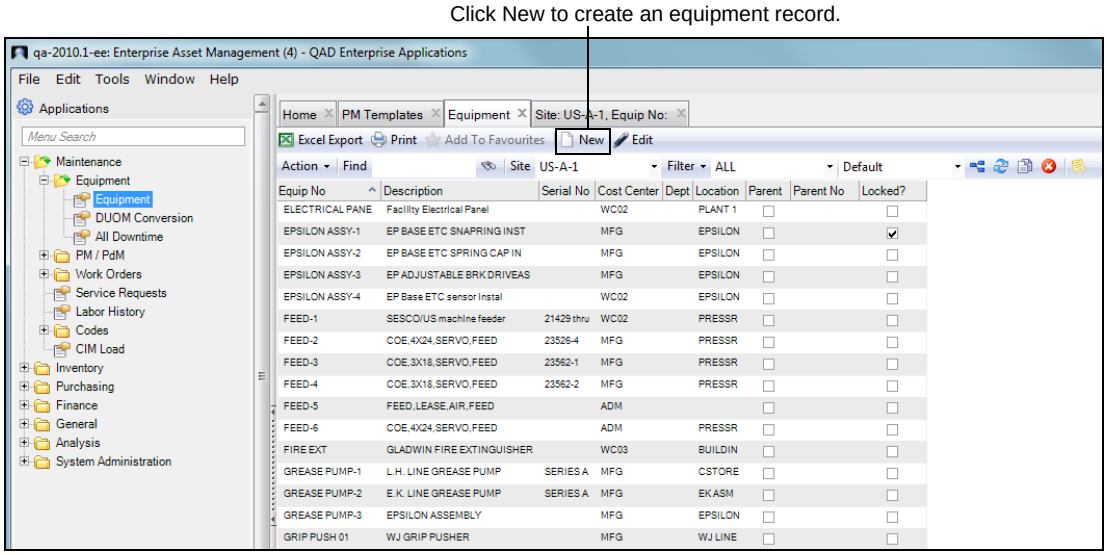
3 Download equipment accounting table from the QAD ERP application. See “ERP Interface” on page 690.

## Creating an Equipment Record

Follow these steps to create an equipment record:

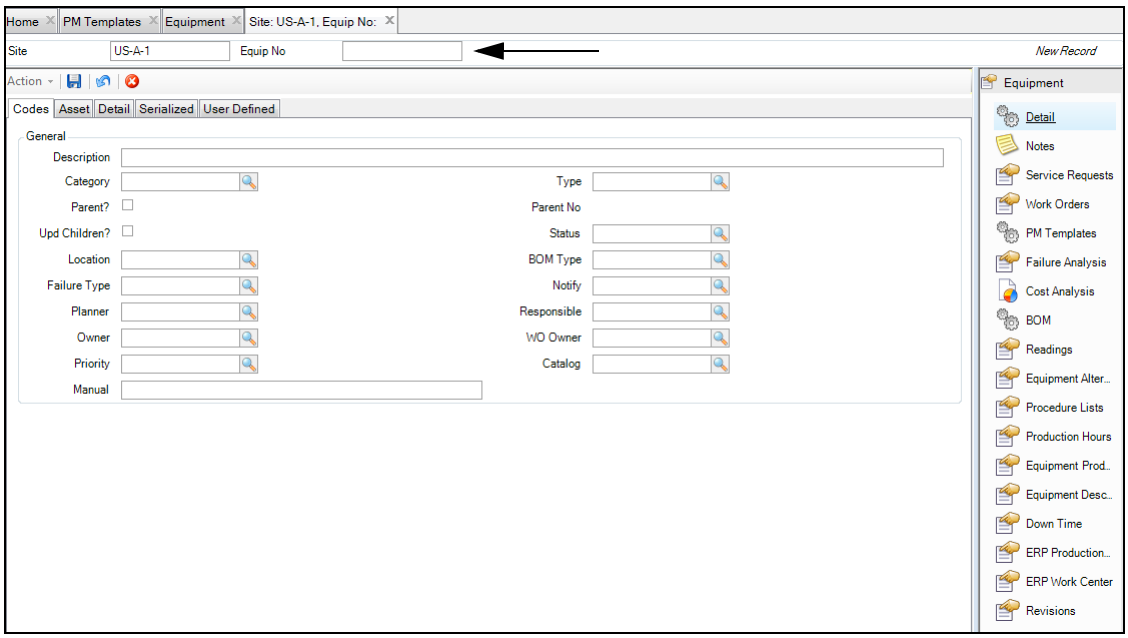
1 Open the Equipment browse in Maintenance|Equipment.

**Fig. 4.62**
Equipment Browse




2 Click New. A blank equipment record opens. In the Equipment No field, enter a unique equipment number or name.

**Fig. 4.63**
Enter the Equipment Number




3 Enter information in relevant fields on the Codes, Asset, Detail, Serialized, and User Defined tabs. See “Filling Out the Equipment Tabs” on page 127.

4 Once all the information has been entered, click Save.

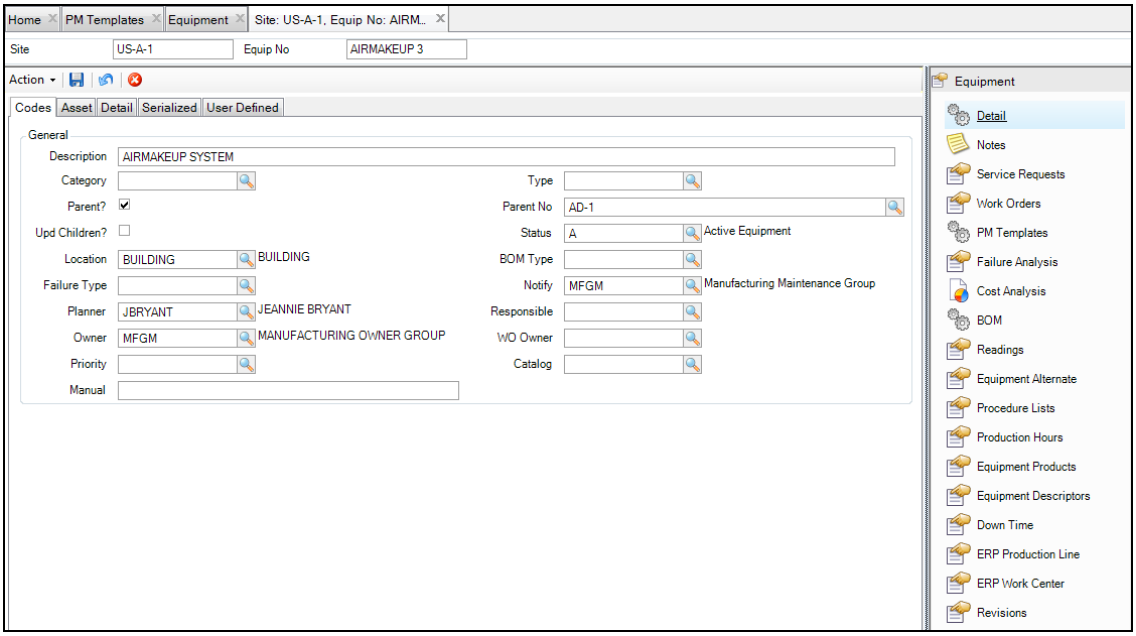
## Filling Out the Equipment Tabs

Enter information about the equipment in the Codes, Asset, Detail, Serialized, and User Defined tabs.

### Equipment: Codes Tab

The information entered in the Codes tab is used to group equipment by type or category. It includes a brief description of the equipment, individuals, or groups associated with the equipment, and parent/child data.

**Fig. 4.64**
Equipment: Codes Tab




### General

*Description.* A brief description of the equipment.

*Category.* The most general equipment code. Use it to designate ownership or virtual equipment.

*Type.* Group equipment by functional application or classification.

*Status.* The status of the equipment or machine. A code shows the current standing of equipment; for example, A – Active, I – Inactive, O – Obsolete, or M – Moved.

*Parent?* Select this check box to make this piece of equipment a child to another and attach it to a parent piece of equipment. For example:

Parent – Production line (a virtual piece of equipment)

Children – Blow mold machines, formers, labelers, ink jet printers, conveyors, palletizers, and so on.

*Parent No.* The associated parent equipment of the component.

*Upd Children?* Select this check box to update the equipment DUOM when the parent's current reading changes. Any children conversions set up in DUOM Conversion are calculated.

*Manual.* The name of the equipment manual for a specific piece of equipment. Manual is for reference purposes only.

*BOM Type.* A grouping of system and assembly codes unique to a specific type of equipment, building, or facility.

*Equipment Failure Type.* Group selected failure and repair codes for the equipment. When the failure or repair lookup runs from the Work Order Maintenance screen, the system filters to those codes linked to the failure type of the equipment.

*Location.* The physical location of a piece of equipment.

*Catalog.* The class or group structure of the equipment.

*Planner.* The employee responsible for planning the maintenance on a piece of equipment. EAM validates your selection against the list of designated planners. Planner copies to associated PM templates and work orders.

*Notify.* The user or group of users to notify with e-mail when a piece of equipment reaches its spending limits.

*Responsible.* The employee who is responsible for the equipment.

*Owner.* The user or group of users authorized to edit the equipment record. If an owner is associated with the equipment record, only the owner or owner group members can edit the equipment record. Unlike most fields that appear on the Equipment Maintenance screen, copying an equipment record does not copy the owner.

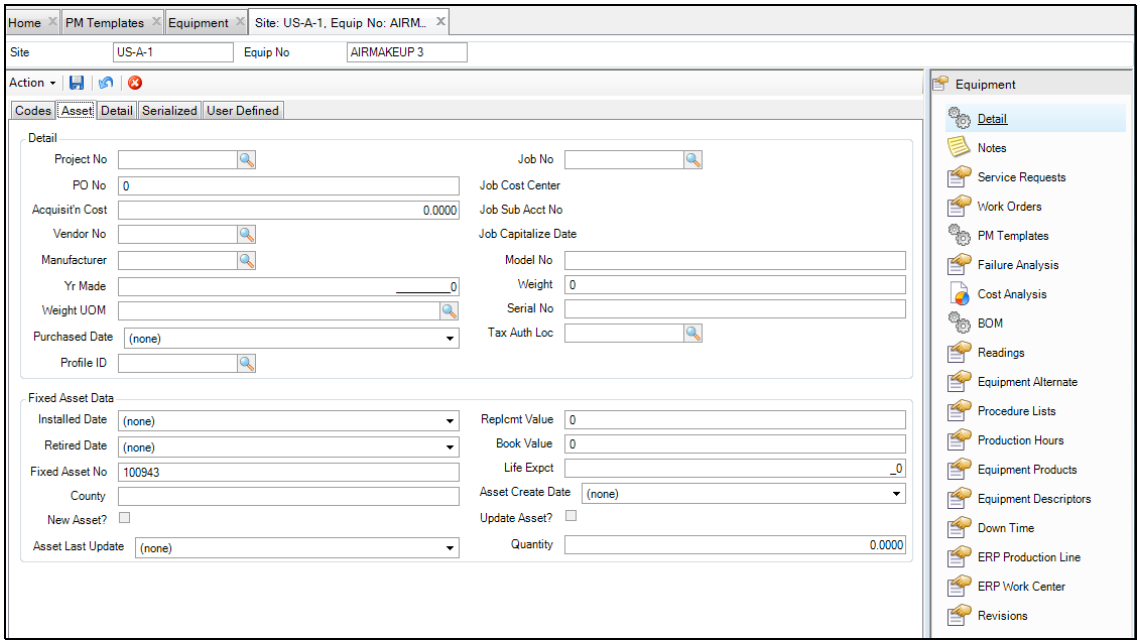
*WO Owner.* If a WO owner is added to the equipment record, only the owner or owner group members can edit any work orders for that equipment.

*Priority.* This editable code indicates the priority level for the piece of equipment. It automatically copies to service requests and work orders added for this equipment.

### Equipment: Asset Tab

Use the Asset tab for equipment that is not serialized. It includes details about the equipment acquisition and its nameplate data, the information typically found on the equipment, and fixed asset data from finance.

**Fig. 4.65**
Equipment: Asset tab




## Detail

*Project Number.* Use a project number when you purchase and install a new piece of equipment. When you enter a project number, EAM defaults the acquisition cost from the total spent in the project record.

*Job No.* Use the lookup to select a valid job number associated with the project.

*PO Number.* The original purchase order number used to purchase the equipment.

*Job Cost Center.* The default job cost center from Finance|Projects displays.

*Acquisition Cost.* The original purchase cost of the equipment.

*Job Sub Account Number.* The default job sub-account number from Finance|Projects.

*Vendor No.* The vendor from whom the equipment was purchased. EAM validates this number against the Vendor table.

*Job Capitalize Date.* The job's capitalize date from Finance|Projects. This field cannot be modified.

*Manufacturer.* The manufacturer for a piece of equipment. There is a lookup available for this field.

*Model No.* A reference field for storing the equipment or machine's model number.

*Yr Made.* The year the equipment was built.

*Weight.* The weight of the asset or equipment represented by the GVWR (Gross Vehicle Weight Rating), information widely used in the construction and fleet industry.

*Weight UOM.* The weight unit of measure. There is a lookup table available for this field.

*Serial Number.* The serial number of the equipment or machine. Serial number is for reference purposes only and has no other functionality within EAM.

*Purchased Date.* The purchase date of a piece of equipment.

*Tax Auth Loc.* The physical location where the asset resides to identify proper depreciation/tax codes in Asset Management. The lookup for this field is a validated list for Tax Authority Loc defined in Finance|Codes. Use the lookup to select a tax authorization location.

*Profile ID.* Use the lookup to select a profile ID.

**Fixed Asset Data**

*Installed Date.* Enter the date a piece of equipment was installed.

*Replacement Value.* Enter the cost of replacing this piece of equipment.

*Retired Date.* Enter the date a piece of equipment was removed from service.

*Book Value.* Enter the amount that represents the calculated worth of the equipment. Accounting can update the field and use it for insurance purposes.

*Fixed Asset No.* Enter the asset number that cross-references the equipment with the equipment fixed asset or tag number from your finance department.

*Life Expectancy.* Enter the life expectancy of a piece of equipment in years. This field is for reference purposes only.

*County.* Enter the county where the equipment resides.

***Note*** The data in the following asset fields are entered or updated based on the Asset Accounting Interface setting (Acquisition Options) in the General|Business Units|Site|Maintenance tab.

*Asset Create Date.* The default value for this field is blank. This field is system generated when the interface picks up the asset and sends it to asset accounting as a new asset. When this field is filled, clear the New Asset? check box.

*New Asset?* By default, this check box is clear. This check box is only enabled if the Asset Create Date field is blank. This field is used to determine new records to pick up in the Asset Accounting interface.

*Update Asset?* By default, this check box is clear. It is only available for update if the Asset Create Date field is populated (the asset has already been created).

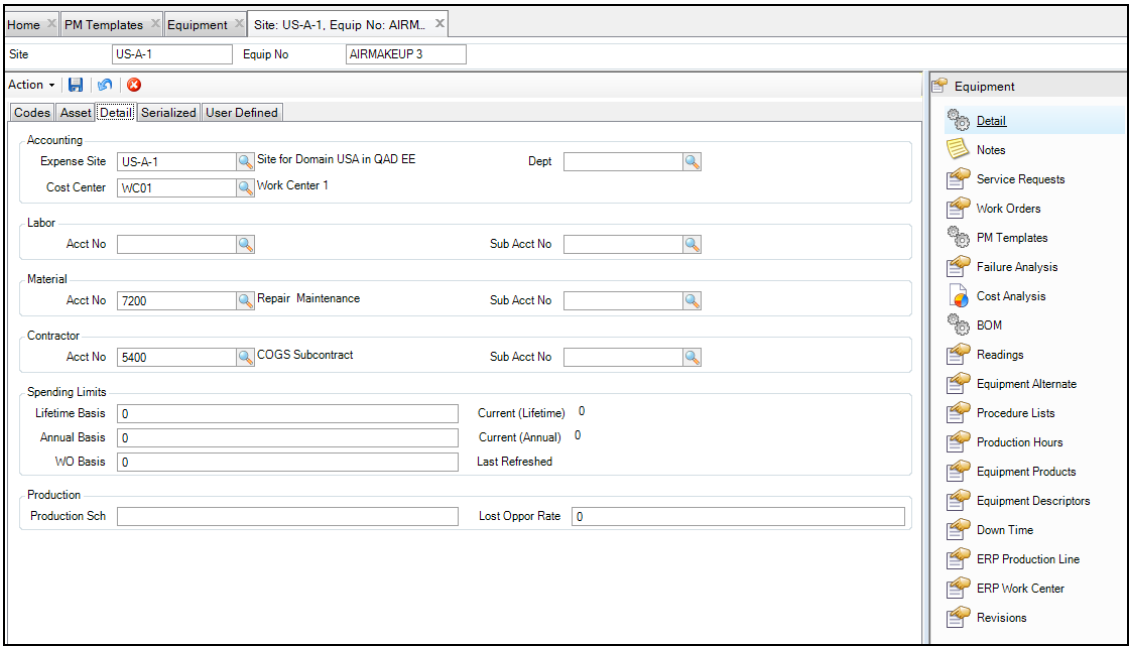
*Asset Last Update.* This field is system generated and provides the date on which the asset was last updated in Asset Accounting.

*Quantity.* Enter a quantity for this asset.

### Equipment: Detail Tab

Use the Detail tab to enter information about an equipment record.

**Fig. 4.66**
Equipment: Detail Tab




## Accounting

*Expense Site.* This field defaults to the current site, but you can charge expenses for this equipment to another site.

*Department.* Accounting does not assign department. Maintenance or Production can use this field to track expenses. It can represent legacy departments or cost centers.

*Cost Center.* Accounting assigns this piece of equipment to a cost center. All labor, material, and contractor maintenance costs are charged to this cost center.

## Labor

*Labor Acct No /Sub Acct No.* Enter the account number assigned to a piece of equipment to collect internal labor costs. The sub-account number allows for further details associated with an account number.

## Material

*Material Acct No /Sub Acct No.* Enter the account and sub-account numbers assigned to a piece of equipment to collect material costs. The sub-account number allows for further detail associated with an account number.

## Contractor

*Contractor Acct No /Sub Acct No.* Enter the account and sub-account number assigned to a piece of equipment to collect contractor costs. The sub-account number allows for further details associated with an account number.

### Spending Limits

*Lifetime Basis/Current.* These values track the expense limit and the maintenance costs charged to equipment during its lifetime. The Current value requires no setup. You can use the Initialize Limits option in Actions to record expenses predating a new equipment record. This field displays transaction costs from other areas of EAM, specifically when labor, parts, or contractor costs are charged to a piece of equipment.

*Annual Basis/Current.* These values track the expense limit and the expenses charged to equipment during the year.

For the warning messages and automatic e-mails to Notify to work properly, click Refresh periodically. If the annual basis has been exceeded, EAM displays the message, “Equipment has exceeded the Annual Limits.”

*WO Basis.* The limit on expenses charged to a piece of equipment per work order.

*Last Refreshed.* This field displays when the current (lifetime) and current (annual) fields were last refreshed.

### Production

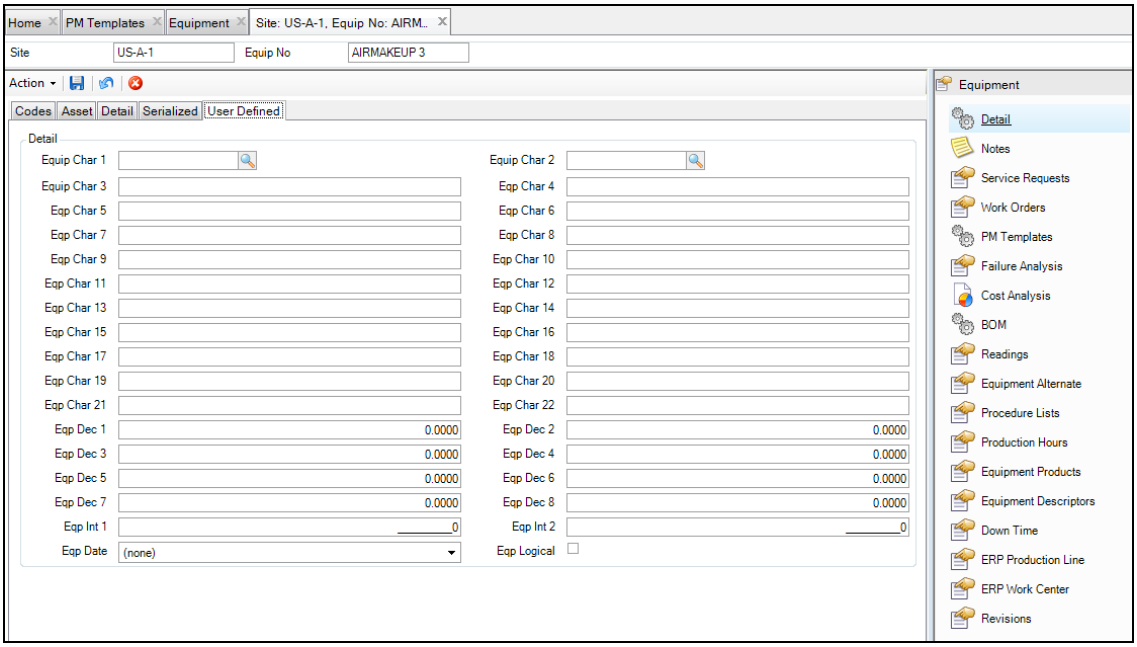
*Production Schedule.* This text field displays the code for the production schedule.

*Lost Opportunity Rate.* The per-hour cost to the company when the equipment is down.

## Equipment: User Defined Tab

Use the User Defined tab to track information against specific equipment in EAM. There are multiple user-defined fields.

**Fig. 4.67**
Equipment: User Defined Tab



**Detail**

*Character 1-2.* User-defined character fields, validated against tables that you add.

*Character 3-22.* Free-form, user-defined character fields, not validated against tables.

*Decimal 1-8.* User-defined decimal fields for equipment.

*Integer 1-2.* User-defined integer fields for equipment.

*Date.* User-defined date.

*Enable/Disable Logical.* User-defined check box.

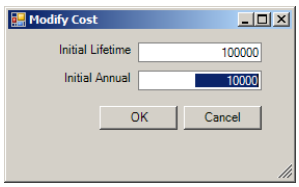
## Initialize Limits for Equipment

The Initialize Limits option allows you to enter the initial lifetime and annual maintenance costs to record expenses predating creation of a new equipment record. Entries display in the Lifetime Basis and Annual Basis fields on the Detail tab.

Follow these steps to enter the initial limits for a piece of equipment:

1. Open the equipment record.
2. Select Initialize Limits from the Equipment Action menu.
3. The Modify Cost window opens. Enter the initial lifetime and annual maintenance costs in the fields. Click OK to save.

**Fig. 4.68**
Equipment Modify Cost




***Note*** Refresh the equipment record to display changes.

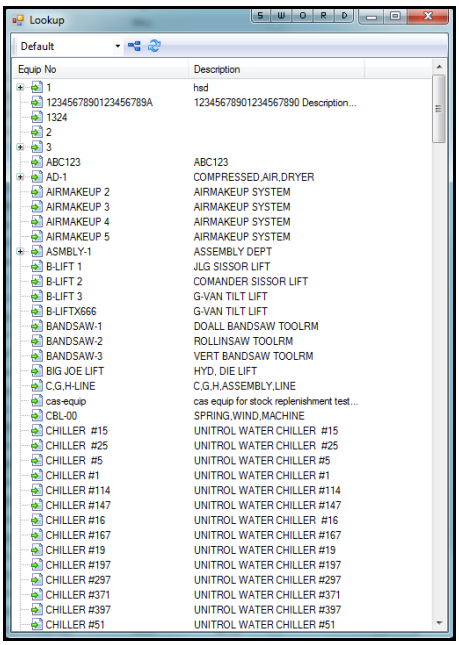
## Parent Child Equipment Lookup

The Parent Child Lookup option allows you to see which pieces of equipment are parents and which are their children.

To view the parent and child relationship for a piece of equipment, select the equipment record in the Equipment browse. Select Parent Child Lookup from the Action menu.

***Note*** When you click the Parent Child Lookup option, the parent/child tree displays regardless of the Parent Lookup setting on the System Site Maintenance screen.

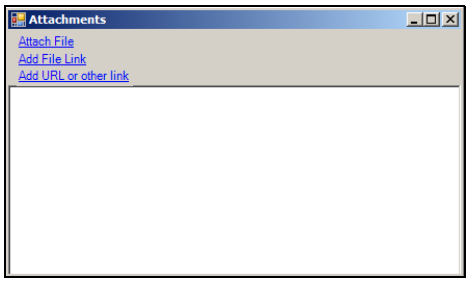
**Fig. 4.69**
Parent Child Lookup




## Attach a File to an Equipment Record

EAM gives you the option of attaching and linking an unlimited number of files and linking an unlimited number of URLs to an EAM equipment record. If you can run the file on your operating system, you can run it from EAM once it is attached or linked.

**Fig. 4.70**
Attaching or Linking a File to an Equipment Record




### Attach a File

To attach a file to an equipment record:

1. Select the equipment from the Equipment browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the equipment record.

Link a File

To link a file to an equipment record:

1. Select the equipment record from the Equipment browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and click Open. The file is now linked to the equipment record.

Link a URL

To link a URL to an equipment record:

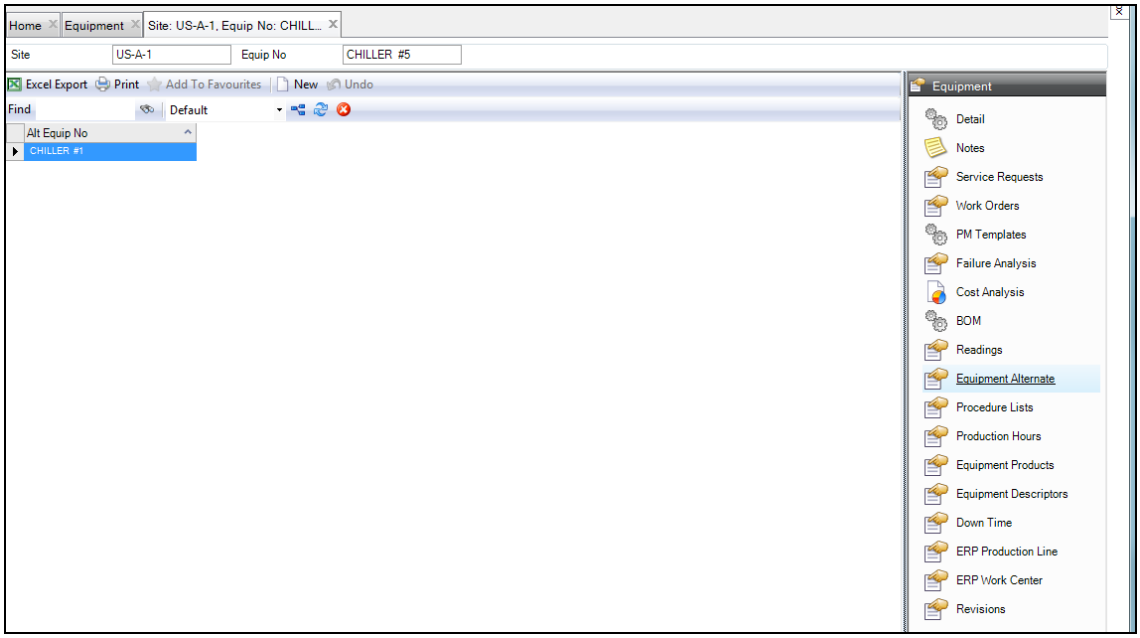
1. Select the equipment record from the Equipment browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add URL or other Link.
4. Copy and paste the link into the field and then click OK. The URL is now linked to the equipment record.

### Add an Alternate Name for Equipment

In the Equipment Alternate submenu, you can enter an alternate name for the selected piece of equipment. The system checks this alternate name during the Loads DUOM batch job, which reads a DUOM file from an outside source.

To add an alternate name for an equipment record, open the record and select the Equipment Alternative submenu. Click new and then enter the alternate name in the Alt Equip No field. Press Enter to save.

**Fig. 4.71**
Equipment Alternative Submenu

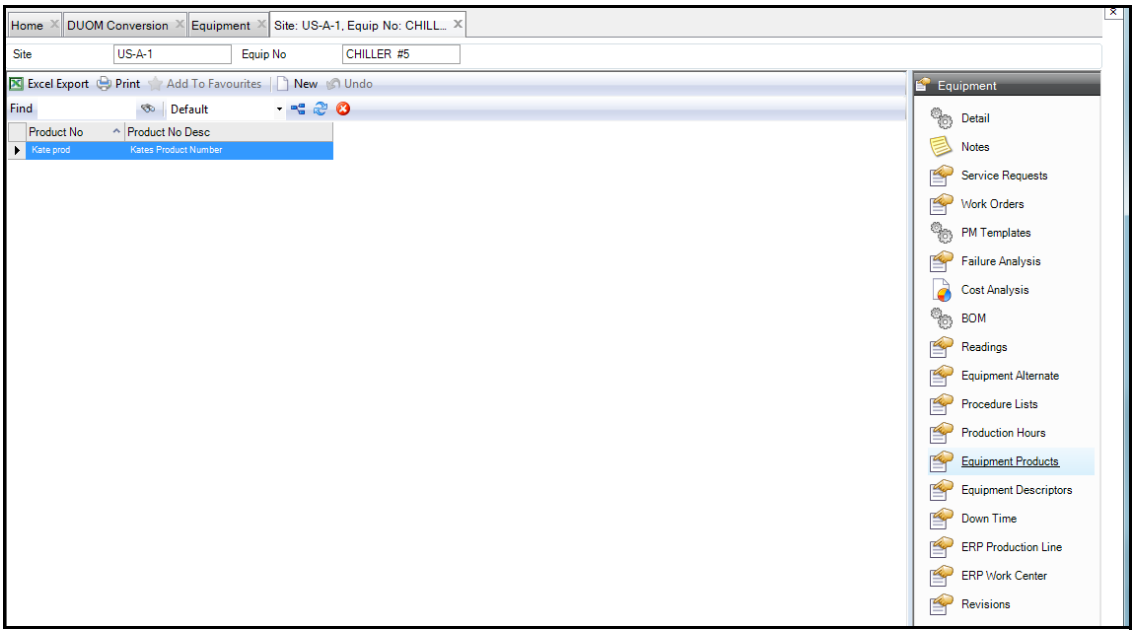



## Associate a List of Products Made by the Equipment

The Equipment Products submenu allows you to associate a list of products that a piece of equipment made. Specify the products produced on the work order when a repair is required for the equipment. You can run reports to analyze maintenance cost based on the product being produced.

To associate products with a piece of equipment, open the equipment record and select the Equipment Products submenu. Click New and use the lookup in the Product No field to select the product. Press Enter to save.

**Fig. 4.72**
Equipment Products Submenu



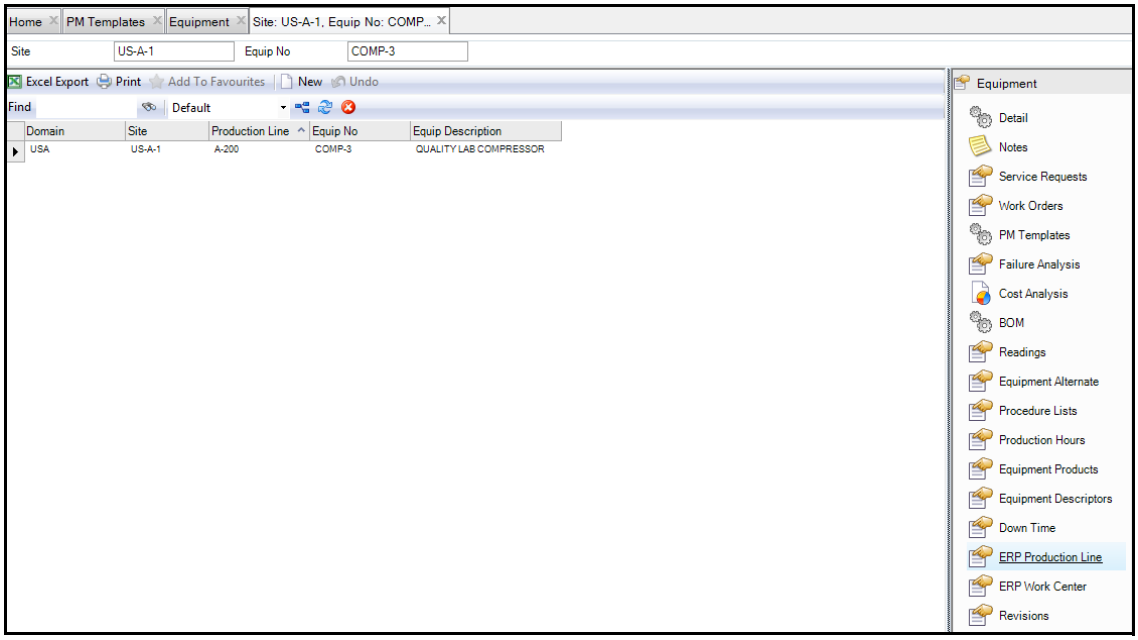

## Linking Production Lines to Equipment

EAM provides a method of linking the production lines from the ERP system directly to specific equipment records.

***Note*** You can view all production line to equipment relationships in the Production Line Mapping to ERP browse located in System Administration.

To link a production line to an equipment record, open the record and select the ERP Production Line submenu. Click New and then use the lookup in the Production Line field to select the ERP production line. Press Enter to save.

**Fig. 4.73**
Equipment ERP Production Line Submenu



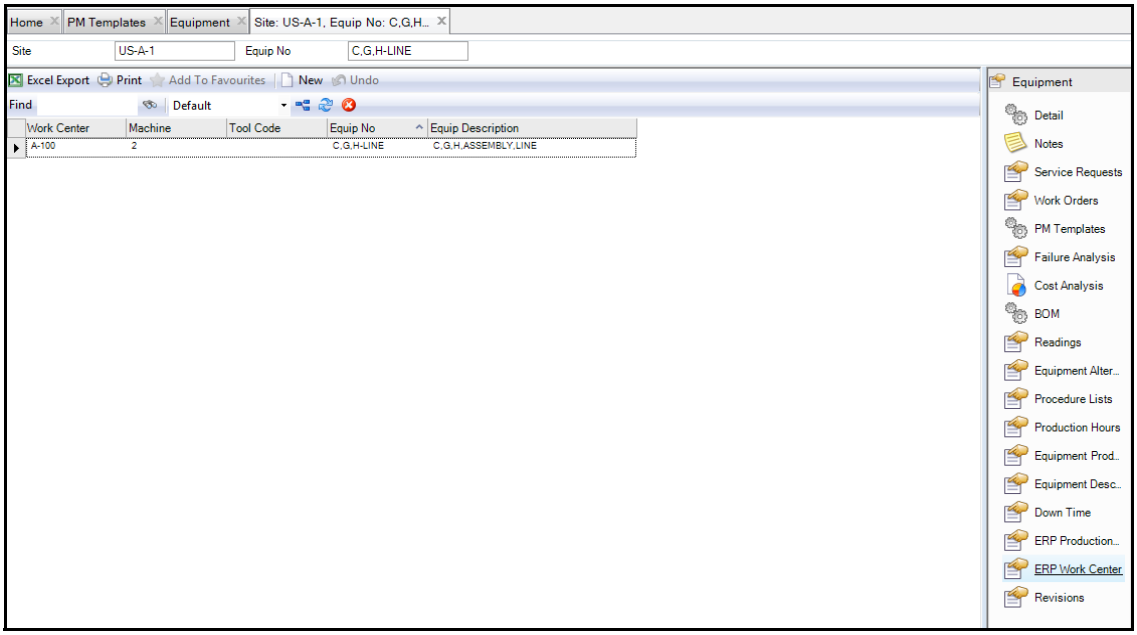

## Linking Work Centers to Equipment

EAM provides a method of linking the work centers from the ERP system directly to specific equipment records.

To link a work center to an equipment record, open the record and select the ERP Work Center submenu. Click New and then use the lookup in the Work Center field to select the ERP work center. Press Enter to save.

***Note*** You can view all work center to equipment relationships in the Equipment Mapping to ERP browse located in System Administration.

**Fig. 4.74**
Equipment ERP Work Center Submenu




## Defining the Equipment BOM

Each piece of equipment can be associated with a single-level or multi-level Bill of Materials (BOM). To create a multi-level BOM, the BOM type must be filled in on an equipment record. The BOM type is a grouping of system and assembly codes. Adding a BOM type to a piece of equipment automatically creates the multi-level BOM structure. Then when you issue parts to the equipment, you can add parts to the appropriate system and assembly for the equipment.

EAM can automatically build the BOM with parts initially issued to equipment. To use the automated functionality, the Post Equipment List? check box must be selected in the General| Business Units|Domain|Maintenance tab.

**Fig. 4.75**
Defining Equipment BOM Flowchart

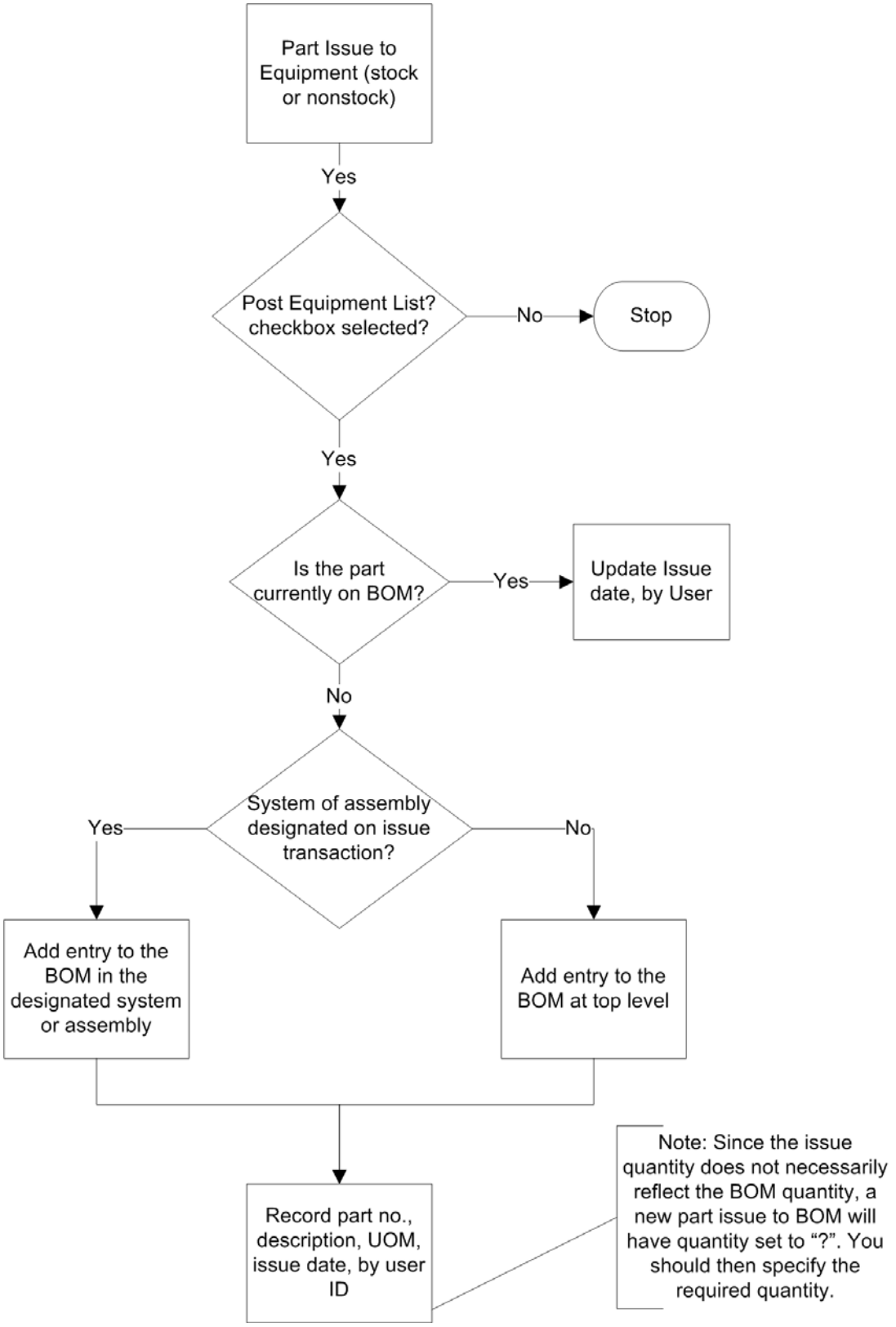
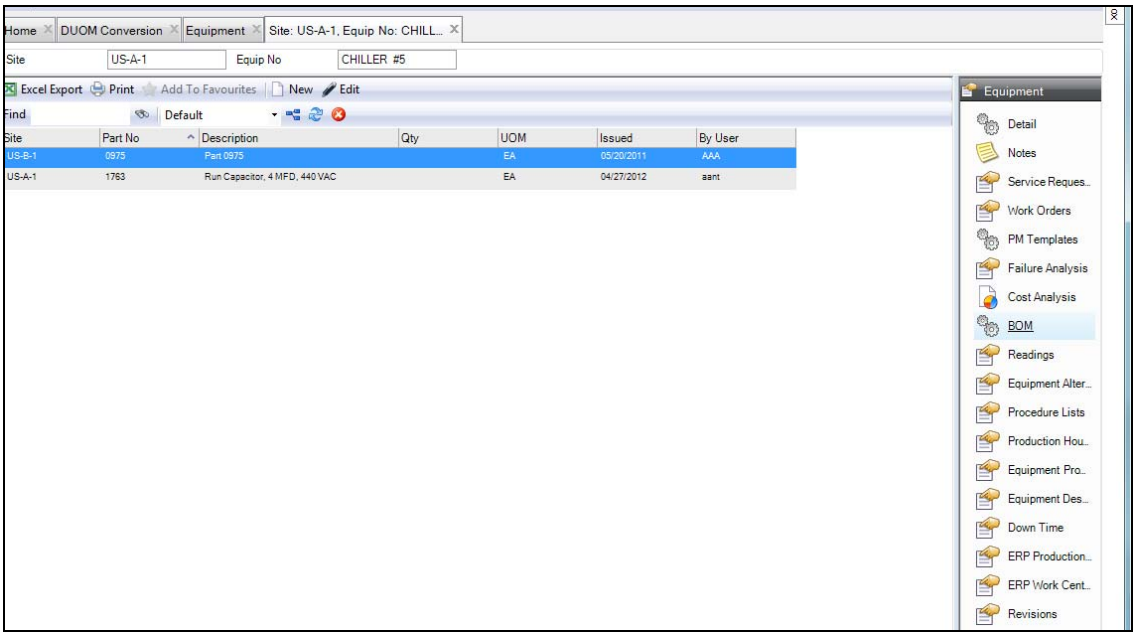


**Fig. 4.76**
Equipment: BOM Submenu



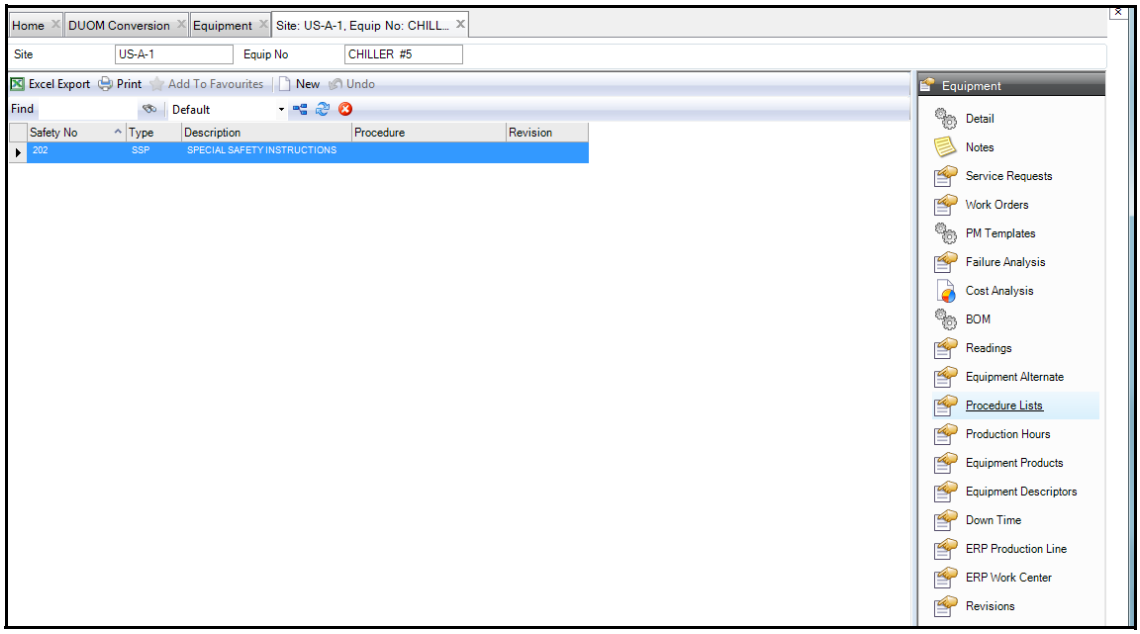

## Attach MILs to Equipment

EAM allows you to attach any number of MILs designated as safety procedures to a piece of equipment. When a work order is created for the piece of equipment, these safety procedures automatically copy to the work order.

To attach an MIL to an equipment record, open the record and select the Procedure Lists submenu. Click New and use the lookup in the Safety No field. Select the MIL and press Enter to save.

***Note*** To create an MIL, see “Creating an MIL” on page 115.

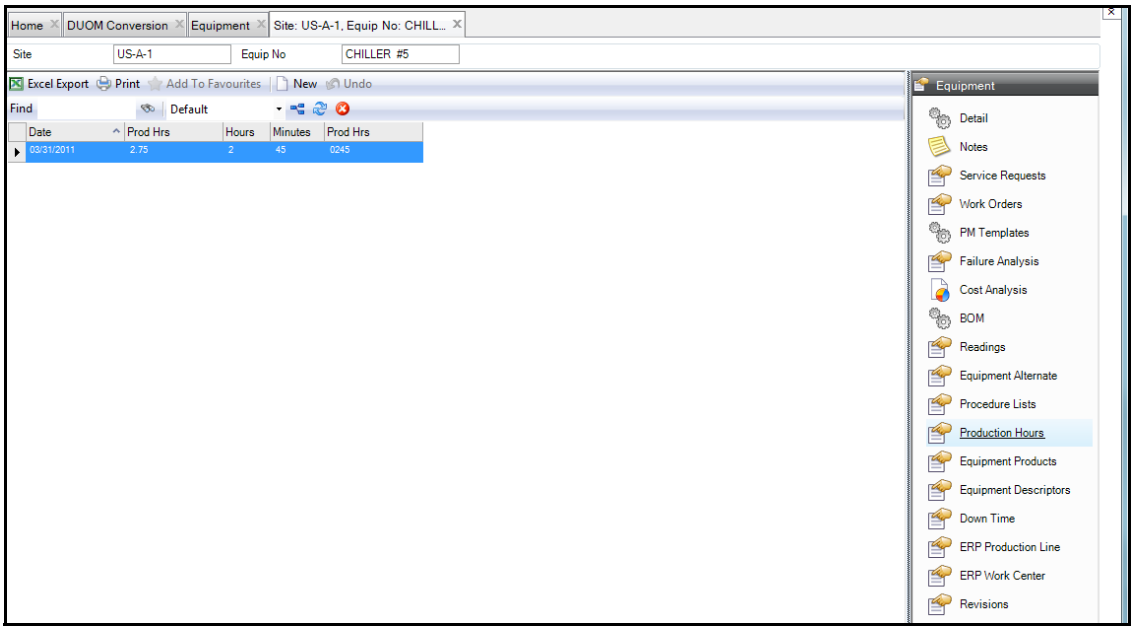
**Fig. 4.77**
Equipment Procedure Lists Submenu




## Production Hours for Equipment

You can view the production hour readings for equipment loaded from a data file using the job program Load Production Hours (prodload.p). For more information, see “Load Production Hours” on page 731.

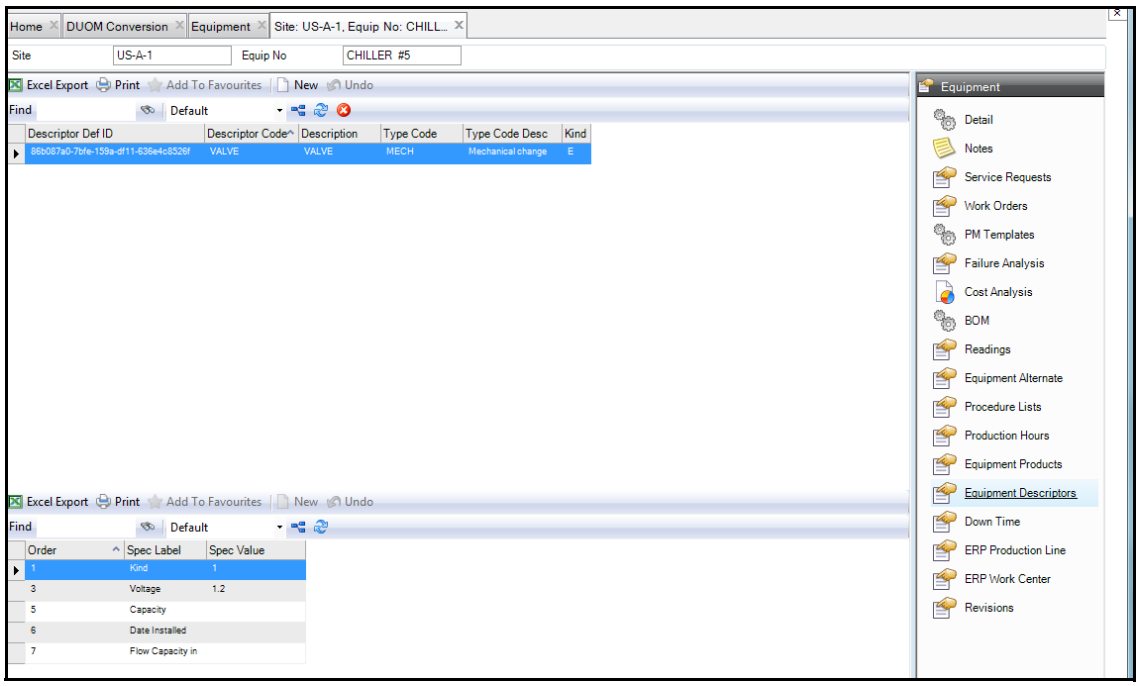
**Fig. 4.78**
Equipment Production Hours Submenu



### Defining Equipment Descriptors

Equipment descriptors allow the user to set up a standard template for certain technical information, and then these descriptors can be associated with a number of pieces of equipment. A piece of equipment can have multiple descriptors associated with it. Once the descriptor is associated with an equipment record, the user can update the information on a field.

**Fig. 4.79**
Equipment Descriptors Submenu




## Equipment—Maintenance Activity

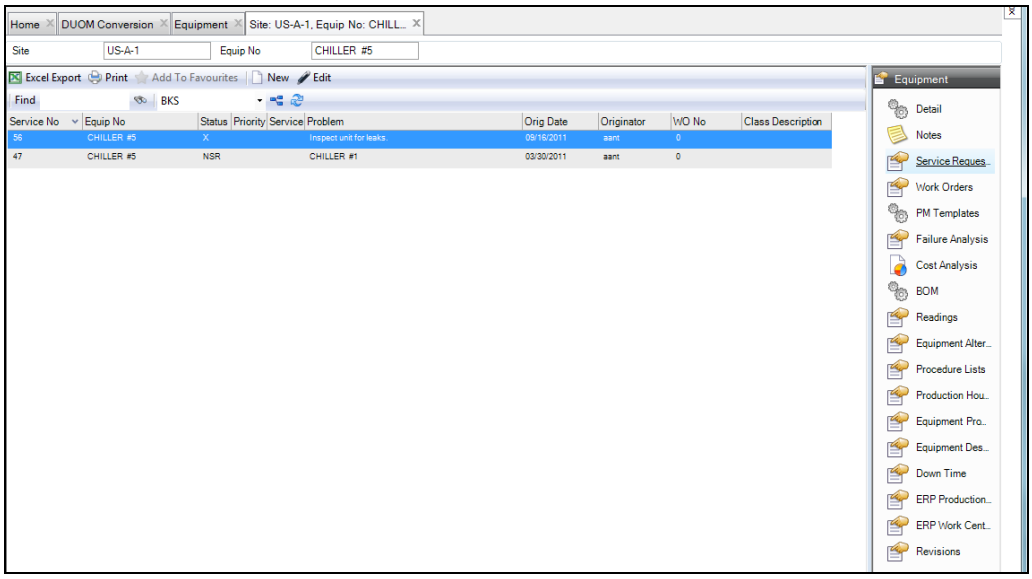
### Creating Service Requests for Equipment

EAM gives you the ability to create service requests from an equipment record. When you create a service request from an equipment record, EAM pulls in all the data from the equipment record and automatically enters it into the service request. This feature saves you time and ensures data integrity. If a service request has been created from an equipment record, the service request is directly tied to the equipment record and the associated service request numbers appear in the Service Request submenu.

To create a service request from an equipment record, open the equipment record. Select the Service Requests submenu and click New. Enter the necessary information in the service request record. See “Filling Out the Service Request” on page 262.

To view the service requests associated with a piece of equipment, open the equipment record and select the Service Requests submenu.

**Fig. 4.80**
Equipment: Service Requests Submenu



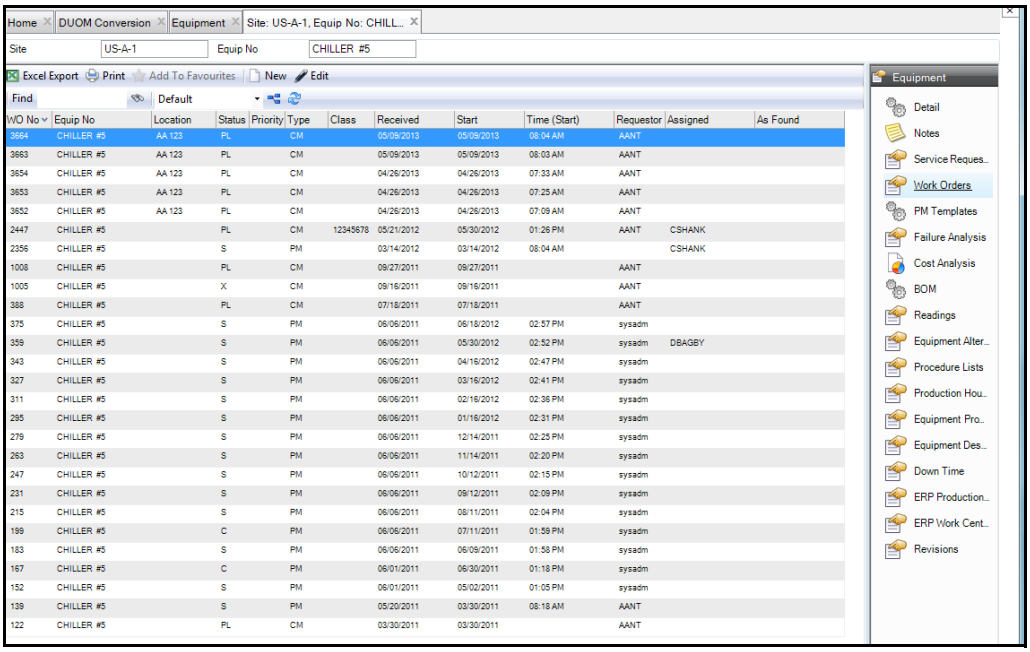

## Creating Work Orders for Equipment

EAM gives you the ability to create work orders from an equipment record. When you create a WO from an equipment record, EAM pulls in all the data from the equipment record and automatically enters it into the WO. This feature saves you time and ensures data integrity. If a WO has been created from an equipment record, the WO is directly tied to the equipment record and the associated WO numbers appear in the Work Orders submenu.

To create a WO from an equipment record, open the equipment record. Select the Work Orders submenu and click New. Enter the necessary information in the WO record. See “Filling Out the Work Order” on page 219.

To view the work orders associated with a piece of equipment, open the equipment record and select the Work Orders submenu.

**Fig. 4.81**
Equipment: Work Orders Submenu




## Entering Equipment Downtime

Downtime is considered to be the entire time a piece of equipment is not operational. EAM provides a method of tracking downtime for a specific Equipment record.

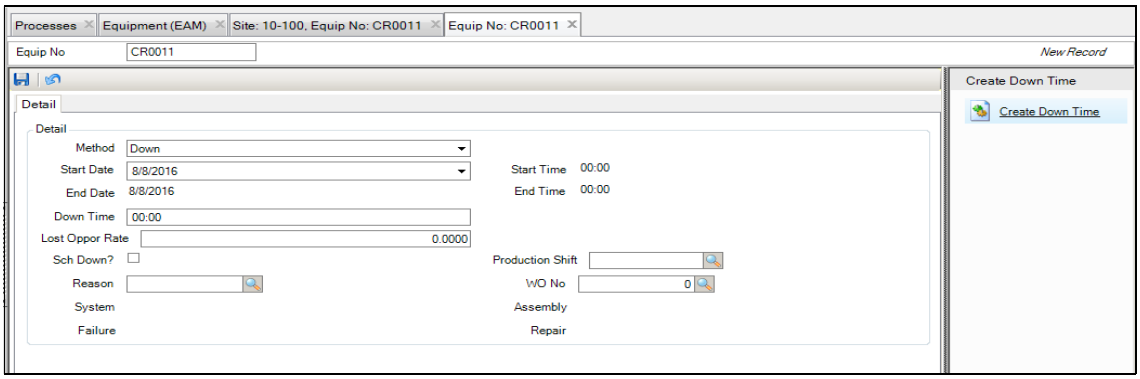
Follow these steps to enter equipment downtime:

1 Open the equipment record and select Create Downtime from the Action menu.

A blank Downtime record opens.

2 Enter the information in the fields.

**Fig. 4.82**
Equipment Downtime Record




*Method.* Select Start/End or Down from the drop-down menu. This setting determines which fields on the window are active and how downtime is calculated.

**Fig. 4.83**
Method Selection




- Start/End – EAM automatically calculates the equipment downtime based on the actual starting date and time and the actual ending date and time that you enter.
- Down – EAM defines the End Date as today and calculates the Start Date backward based on the amount of downtime you enter.

*Start Date.* Active for both Start/End and Down Methods. This date must be the same as or earlier than the End Date.

- Start/End – Select the starting date for the equipment downtime.
- Down – Select the starting date for the equipment downtime or allow EAM to automatically calculate the Start Date based on the amount of downtime you enter.

*End Date.* Active only for the Start/End Method. Defaults to today's date. This date must be the same as or later than the Start Date.

*Start Time, End Time.* Active only for the Start/End Method. Enter the starting and ending times for the equipment downtime. Enter the time in 00:00 HH:MM format.

*Down Time.* Displays the equipment downtime.

- Start/End – Auto-fills based on the information entered in the starting and ending date and time fields.
- Down – Enter the equipment downtime in the format HH:MM. EAM automatically calculates the Start Date based on a 24-hour time period.

*Lost Oppor Rate.* Enter the hourly rate for the lost opportunity due to the equipment's downtime.

*Sch Down?* Select this check box if the downtime was scheduled.

*Production Shift.* Use the lookup to select the production shift during which the downtime occurred.

*Reason.* Use the lookup to select the reason why the equipment was down.

*WO No.* Use the lookup to select the work order associated with the downtime repair.

*System, Assembly, Failure, Repair.* These fields auto-fill with the information from the work order selected in the WO No field.

3 Once all the information has been entered, click Save.

***Note*** EAM also provides a browse that displays all the downtime for all equipment. See "All Downtime Browse" on page 161.

### Defining the DUOM for Equipment Readings

The Equipment Readings submenu supports two driving unit of measure (DUOM) types:

- **Monitor.** The equipment's DUOM reading is measured, such as temperature.

Enter calibration readings and view a list of all the readings that have been recorded for a piece of equipment. This submenu allows you to:

- Set upper and lower calibration reading limits.
- Use the Update Tolerance action to set the number and frequency limits for out of tolerance (OOT) readings.
- Optionally set an e-mail alert to notify you when OOT readings occur.
- Optionally select to automatically create CM work orders when readings cause an OOT condition.

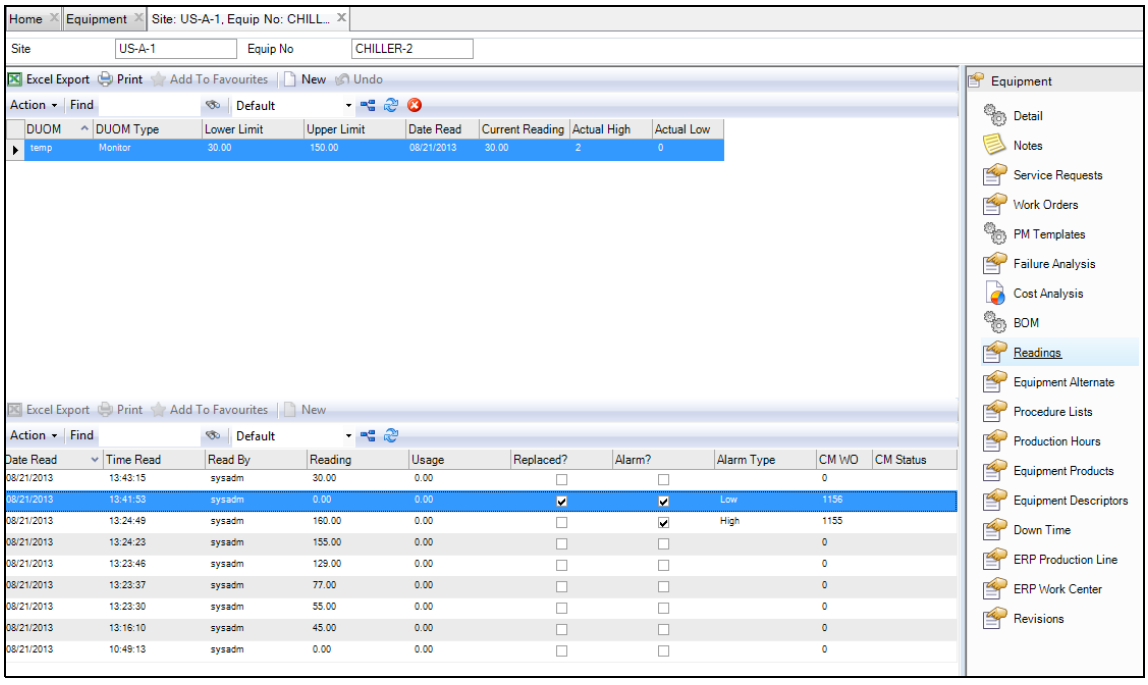
- **Meter.** The equipment's reading is a number of cycles, such as time, miles, or revolutions. The capabilities of the Meter DUOM type include:
  - **Meter Rollover.** Use the meter rollover when entering a meter reading that is less than the previous current reading. If your entry indicates that the meter has rolled over, the system automatically calculates the correct usage based on the upper and lower limits.
  - **Meter Replacement.** Use the Replace action to replace a meter. A new lower and upper limit can be entered as well as a new current reading. When this function is used, no new usage is calculated.

    **Note:** Before the meter is replaced, enter the last reading on the broken meter; otherwise, the last units used are not recorded.

### Equipment DUOM Readings Submenu

To access the Equipment DUOM Readings submenu, open the equipment record and select the Readings submenu.

**Fig. 4.84**
Equipment Readings Submenu




### Upper Browse

*DUOM.* Displays the DUOM for the piece of equipment. DUOMs are set up in Maintenance|Codes|DUOM and can be used across the system.

*DUOM Type.* Displays the following DUOM types for the piece of equipment:

- **Monitor.** DUOM reading is measured such as temperature.
- **Meter.** Reading is a number of cycles such as time, miles, or revolutions.

*Lower Limit.* Displays the lower limit for the calibration reading.

*Upper Limit.* Displays the upper limit for the calibration reading.

*Date Read.* Defaults to today's date for the first reading. The field displays the same date for subsequent readings entered, unless you change it.

*Current Reading.* Used to enter the current calibration reading.

*Actual High.* Displays the number of readings that have exceeded the high limit.

*Actual Low.* Displays the number of readings that have exceeded the low limit.

### Lower Browse

The lower browse displays the history of DUOM readings entered for the piece of equipment.

*Date Read, Time Read, Read By.* Displays the time and date the reading was entered and the user who entered the reading.

*Reading.* Displays the DUOM reading number that was entered.

*Usage.* Displays the number of cycles since the last reading was entered. For monitor DUOM types, this field displays 0.

*Replaced.* This check box indicates if a meter was replaced.

*Alarm?* The system updates this check box, which indicates if there is an OOT condition based on the calibration readings entered. If the check box is clear, the readings have not exceeded the Max or Min Occurrences measured by the Actual High or Low readings recorded. If the check box is selected, an OOT condition exists where the number of readings exceeded the Max or Min Occurrences measured by the Actual High or Low readings recorded.

*Alarm Type.* Displays if the OOT reading exceeded the Actual High or Low.

*CM WO.* If the Create CM? setting is activated, this field displays the CM work order that is created automatically when the OOT reading was entered. To activate the Create CM? setting, see "Automate CM for OOT Readings" on page 150.

*CM Status.* Displays the status of the CM work order that was created to address the OOT reading.

#### Entering the DUOM for Equipment Readings

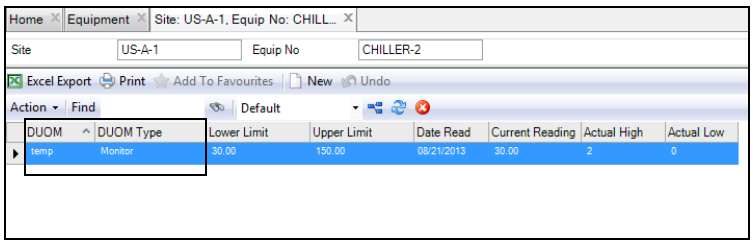
To enter the DUOM for equipment readings, open the Readings submenu. Enter the necessary information in the DUOM and DUOM Type fields. Press Enter to save.

*DUOM.* Displays the DUOM for the piece of equipment. DUOMs are set up in Maintenance|Codes|DUOM and can be used across the system.

*DUOM Type.* Displays the following DUOM types for the piece of equipment:

- **Monitor.** Reading is measured, such as temperature.
- **Meter.** Reading is a number of cycles, such as time, miles, or revolutions.

**Fig. 4.85**
Entering the DUOM for Equipment Readings




## Third-Party Computer Integrated Manufacturing (CIM) Load

The Third-Party Computer Integrated Manufacturing (CIM) Load is an alternative method to populate Equipment Readings from a third-party manufacturing system.

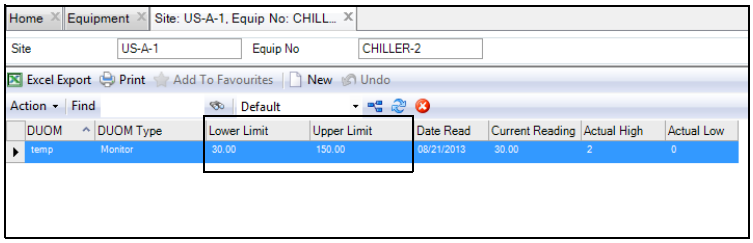
## Setting the DUOM Reading Limits

To set the DUOM reading limits, open the equipment's Readings submenu. Enter the necessary information in the Lower and Upper Limit fields. Press Enter to save.

*Lower Limit.* Enter the lower limit for a reading.

*Upper Limit.* Enter the upper limit for a reading.

**Fig. 4.86**
Setting Calibration Reading Limits



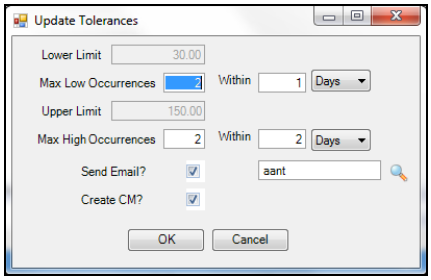

## Set the Max High and Low Occurrences for OOT Readings

To set the max high and low occurrences for OOT readings, select Update Tolerances from the Readings Action menu. Enter the necessary information in the Max Low and Max High Occurrences fields. Click OK to save.

*Max Low Occurrences.* Set the number of times that an out of tolerance (OOT) low reading can occur before the system triggers a corrective action. Specify the frequency (days, hours, or minutes) that makes the reading OOT.

*Max High Occurrences.* Set the number of times that an OOT high reading can occur before the system triggers a corrective action. Specify the frequency (days, hours, or minutes) that makes the reading OOT.

**Fig. 4.87**
Equipment Readings: DUOM Setup

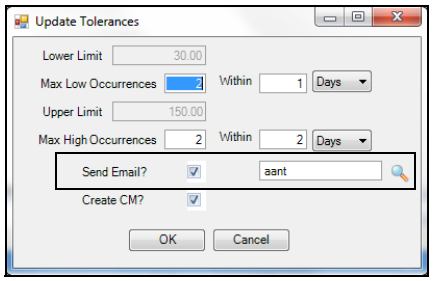



## Set E-mail Alert

When the OOT readings exceed the Max High or Low Occurrences, EAM can automatically send an alert e-mail. By default, the e-mail is sent to the notify user or group identified on the equipment record. In the Notify field next to the Send e-mail? check box, you can use the lookup to select another user or group to receive the e-mail alert.

To set the e-mail alert, select Update Tolerances from the Readings Action menu and select the Send e-mail? check box. Select the user or group to receive the e-mail using the lookup to the right of the Notify check box. Click OK to save.

**Fig. 4.88**
Equipment Readings: DUOM Setup




## Automate CM for OOT Readings

When the OOT readings exceed the Max High or Low Occurrences, EAM can automatically create a CM Work Order to address the OOT condition for the piece of equipment.

When the CM work order is created for the OOT reading, information from the MIL step and the equipment record is pulled into the work order. The problem description on the CM work order states that there is an OOT reading and that the reading is entered in a PM WO, which is referenced.

To activate the create CM work order option, select Update Tolerances from the Readings Action menu and select the Create CM? check box. Click OK to save.

### Enter Current Readings

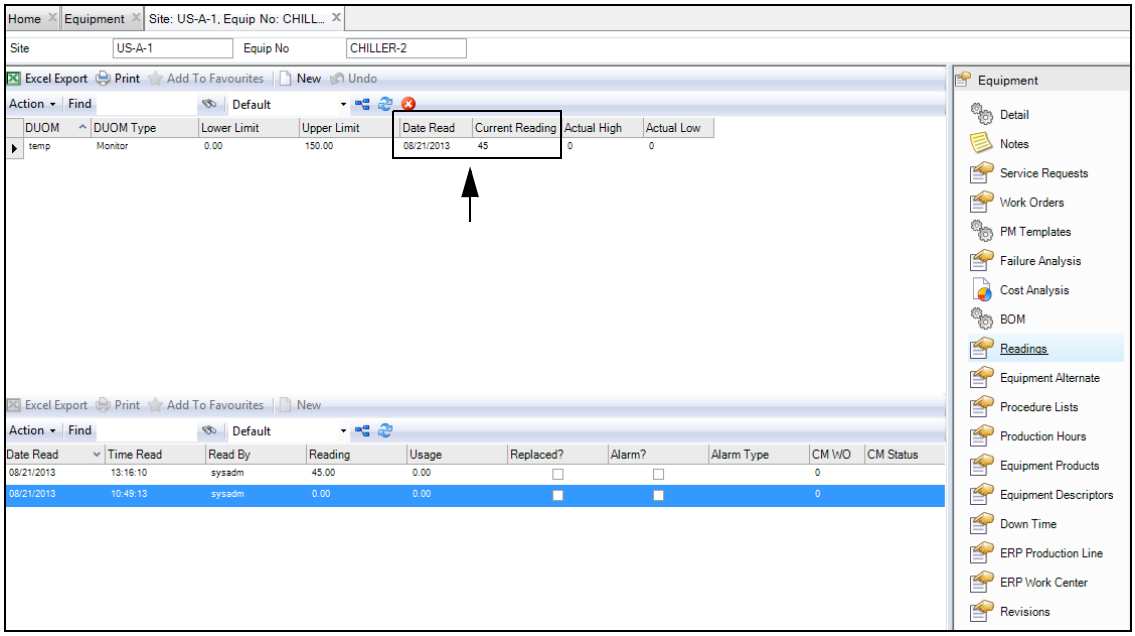
Follow these steps to enter a calibration reading:

1 Open the equipment record and select the Readings submenu.

2 In the upper browse, use the calendar lookup to select the date read.

3 Enter the current reading in the Current Reading field.

**Fig. 4.89**
Entering a Calibration Reading




4 Press Enter or tab through the line to save the reading.

***Note*** If the reading exceeded the limits, a message appears alerting you that the reading has exceeded the limits. Click OK to continue. The actual high or low is incremented when limits are exceeded.

5 A record of the reading appears in the lower browse.

## Manage and View Equipment DUOM Reading History

### Replacing a Meter

***Note*** This section only applies to equipment that is the Meter DUOM Type.

When you replace the meter in a piece of equipment, update the upper and lower limits in the Equipment Readings submenu.

Follow these steps to change the upper and lower limits for a meter on a piece of equipment:

1 Open the equipment record and select the Readings submenu.

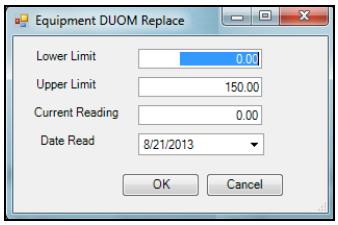
2 In the upper browse, select Replace from the Action menu.

3 Enter the new upper and lower limits in the fields.

- **Lower Limit.** Enter the starting number on the meter.
- **Upper Limit.** Enter the maximum number that the meter reaches.

4 Press OK to save.

**Fig. 4.90**
Changing the Upper and Lower Limits

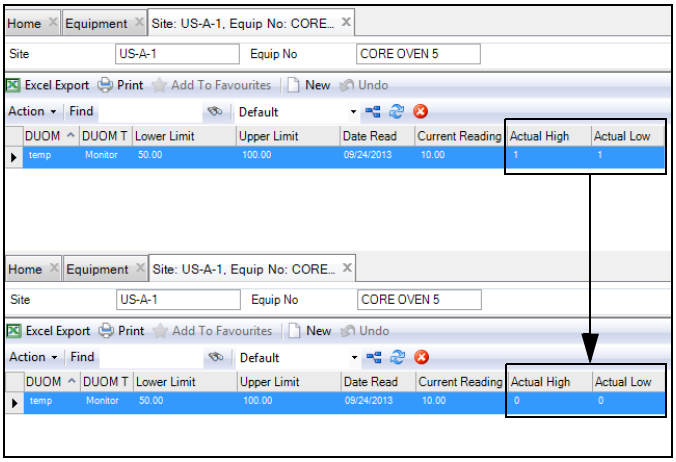



5 The lower browse displays a record of this change. The Replaced? check box on this record is selected, indicating that the limits on the record were changed.

## Reset Actuals

The Actual High and Actual Low fields display the number of times the calibration readings have exceeded the high and low limits. To reset these fields to 0, select Reset Actuals from the Readings Action menu in the upper browse.

**Fig. 4.91**
Reset Actuals

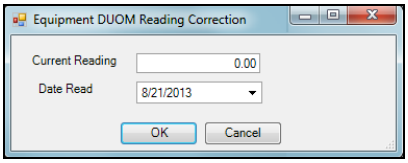



## Correcting a DUOM Reading

If a DUOM reading was incorrectly entered, select the record and then select Correct from the Action menu in the lower browse. Enter the reading in the Correct Reading field. Verify that Date Read is correct and click OK to save. The previous record that was entered incorrectly is overwritten by the new reading.

***Note*** A correction to a monitor reading can cause an OOT condition. If this occurs, the system executes the OOT actions selected for the DUOM.

**Fig. 4.92**
Correcting a DUOM Reading




## Viewing Equipment Information

### Printing Equipment Descriptors

The Print Descriptors option allows you to print an equipment descriptor, which is used to store technical information about a piece of equipment. Descriptor can be defined using the Equipment Descriptor submenu.

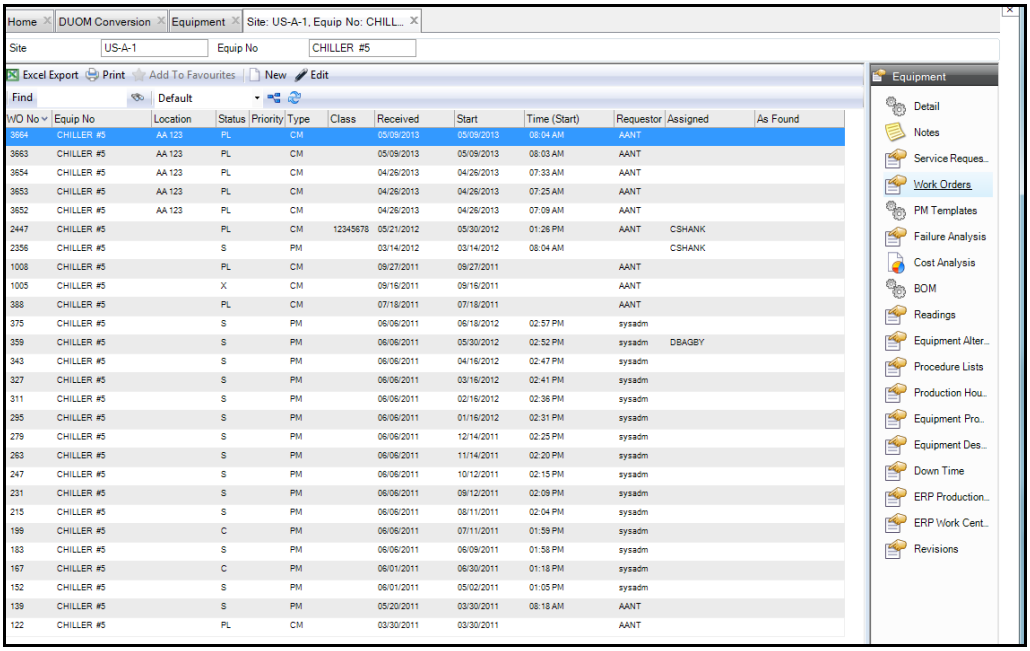
To print an equipment descriptor, open the Equipment browse and select the equipment record. Then select the Print Descriptors option from the Action menu.

To print descriptors for a group of equipment, select the equipment records. Then select Global Print Descriptors from the Action menu.

### Display the Work Orders Associated with Equipment

To view the work orders associated with a piece of equipment, open the equipment record and select the Work Order submenu. Drill into a work order by double-clicking the record.

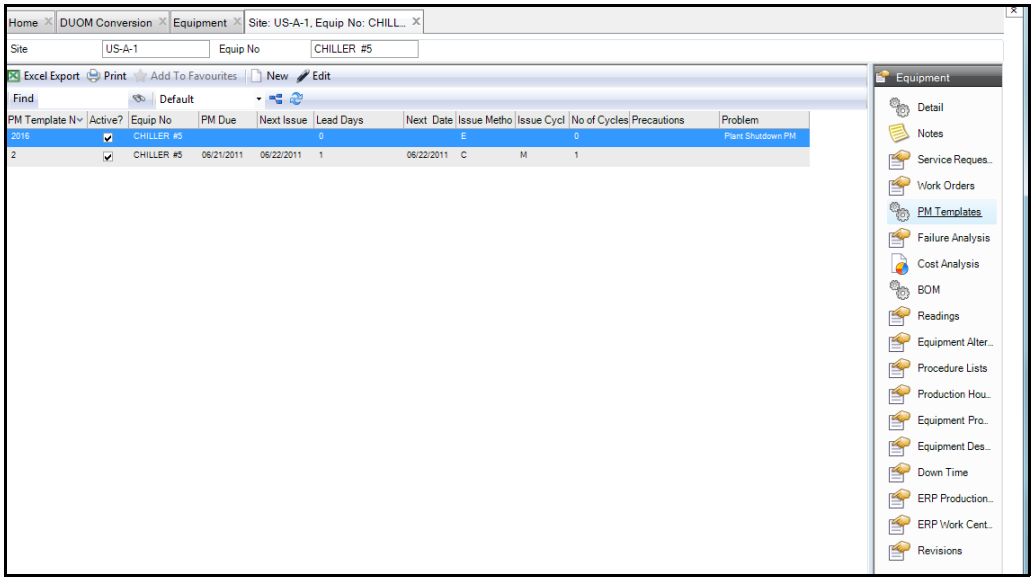
**Fig. 4.93**
Equipment: Work Orders Submenu



## Display the PM Templates Associated with an Equipment

To view the PM templates associated with an equipment record, open the record and select the PM Templates submenu. Drill into the PM template by double-clicking the record.

**Fig. 4.94**
Equipment: PM Template Submenu



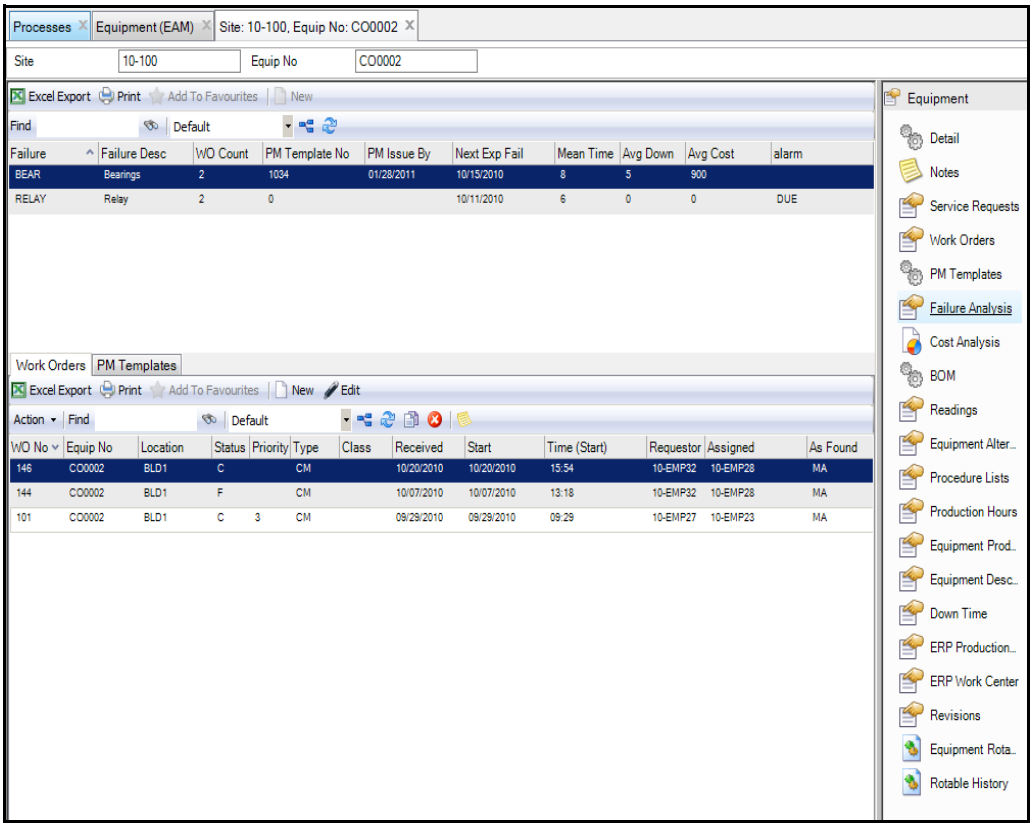

## View the Failure Analysis for Equipment

Since most manufacturing companies are concerned about the reliability of their equipment, Failure Analysis allows managers to make informed decisions about equipment and their PM programs. Equipment Failure Analysis is based on work order history and failure codes associated with a piece of equipment's work orders. It provides reliability data.

***Note*** Schedule the batch job Equipment Failure Analysis to keep this information up to date and accurate. It recalculates the mean time between failure, the average cost for downtime hours, the average time equipment is down for each failure, and the next expected failure date.

To view the failure analysis for a piece of equipment, open the equipment record and select the Failure Analysis submenu.

**Fig. 4.95**
Equipment: Failure Analysis Submenu




The Equipment Failure Analysis submenu displays the following fields:

- **Failure.** Displays a code to specify the equipment failure that is then associated with a work order.
- **Failure Description.** Displays the description of the failure code.
- **WO Count.** Displays the total number of work orders containing a specific failure code for this piece of equipment.
- **Mean Time (between failure).** Calculated as (Last date of failure - first date of failure) / (total WO count - 1)
- **Average Downtime.** Calculated as Total Downtime/Number of Times Down
- **Average Costs.** Displays the cost per hour of downtime to compare the impact of an hour of downtime between equipment.
- **Preventive PM Number.** The PM noted to prevent the failure on the piece of equipment.
- **PM Issue By.** The next date that the PM is due.
- **Next Expected Failure.** Calculated as the date of the last failure of that type + the Mean Time between failure.
- **Failure Alarm.** Determined by comparing the Expected Failure date and the next PM Issue By date.

Two tabs are on the Failure Analysis screen:

- **Work Orders.** This tab allows you to access specific work orders referencing the WO Count column. This information provides you with the ability to quickly analyze common failures on the piece of equipment.
- **PM Templates.** If a PM is designated as preventing a specific failure, you can access the PM Module, allowing you to update/change PM frequency or procedures.

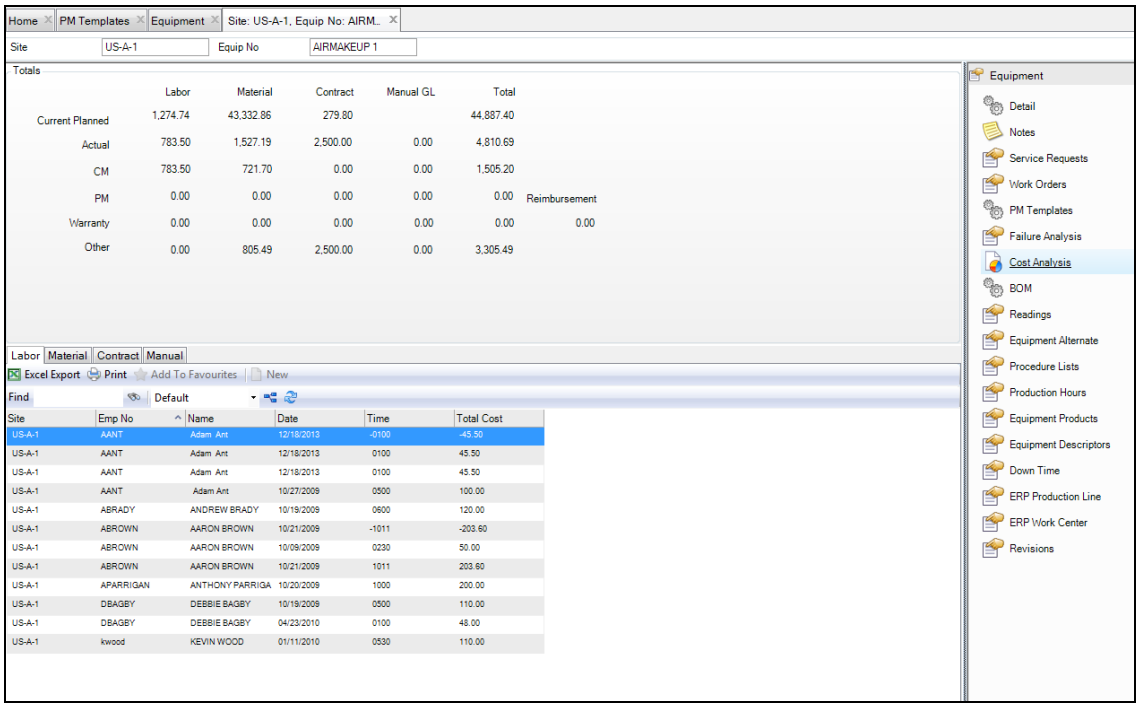
## View the Cost Analysis for Equipment

The Cost Analysis submenu allows you to view summary and detailed cost analysis for a piece of equipment. At a glance, you can see equipment cost totals for planned and actual, or for CM and PM work orders for the equipment. By selecting the Labor, Material, Contract, and Manual tabs in the lower browse, you can review cost details associated with labor postings, part issues, outside contractor charges, and manual GL transactions.

***Note*** The Cost Analysis Manual tab displays GL transactions that reference an equipment number and were created by a manual EAM general ledger entry in Unposted GL Transactions. You must post these transactions to add them to the equipment cost analysis.

***Note*** Warranty/reimbursement functionality is planned for a future release.

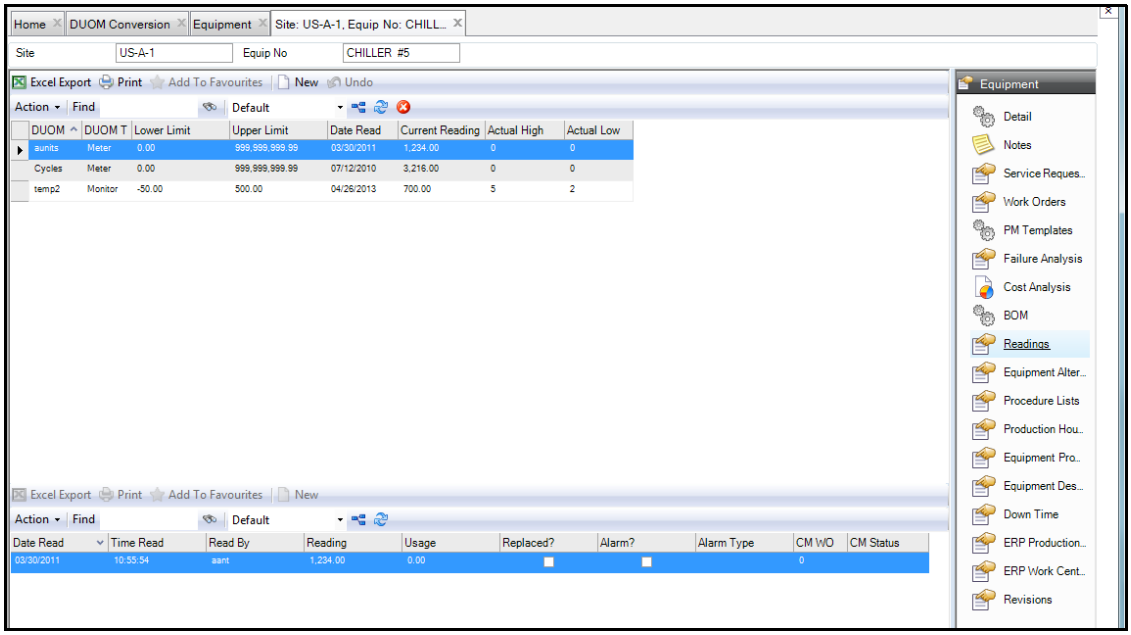
**Fig. 4.96**
Equipment: Cost Analysis Submenu




## View Equipment DUOM Readings and History

To view the equipment DUOM readings and history, open the equipment record and select the Readings submenu.

**Fig. 4.97**
Equipment: Readings Submenu

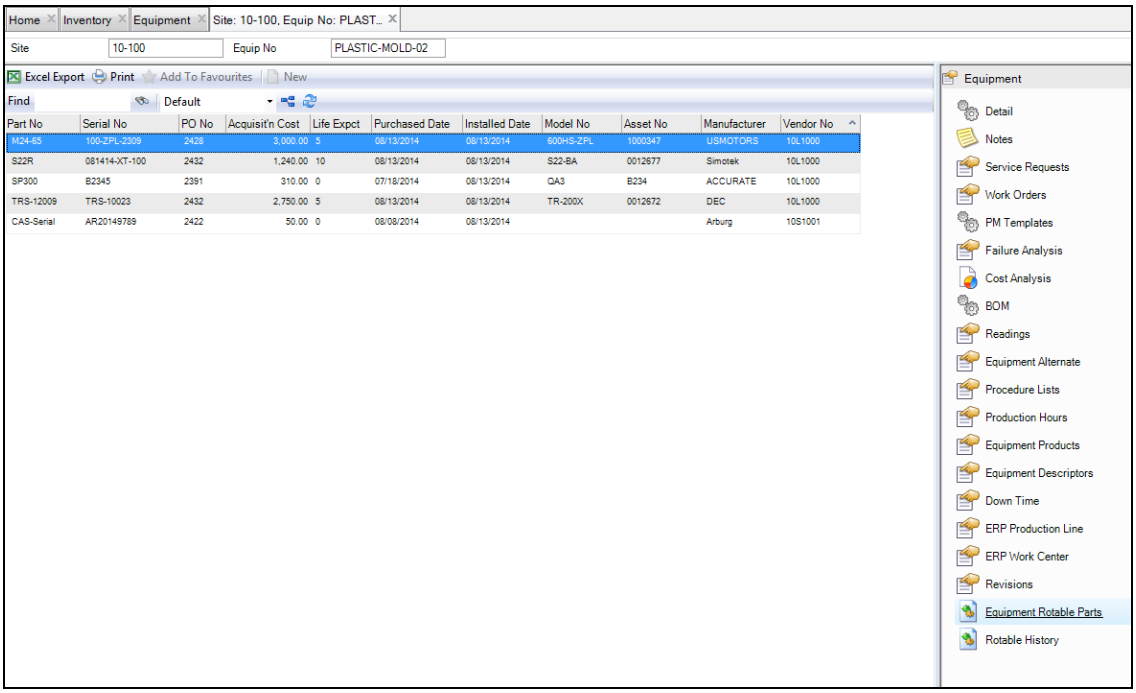



## View the Rotable Parts on a Piece of Equipment

If rotable parts have been issued to a piece of equipment, the equipment record is a virtual record that represents the location of the rotable part. A parent is also associated with the equipment number to indicate where the rotable part has been placed.

To view the rotable parts that have been issued to a piece of equipment, open the equipment record and select the Equipment Rotable Parts submenu. Multiple rotable parts can be issued to a piece of equipment. To issue rotable parts to a piece of equipment, see “Issue a Rotable Part to a Piece of Equipment” on page 332.

**Fig. 4.98**
Equipment: Rotable Parts Submenu

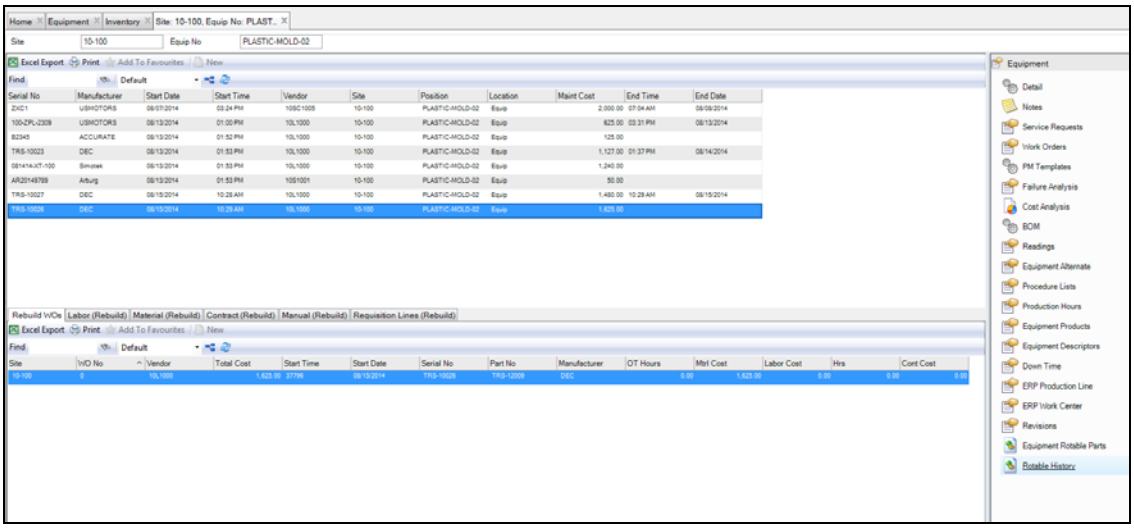



## View Rotable Part History on a Piece of Equipment

The Rotable History submenu displays all serial-numbered parts that have been issued to the selected equipment. The upper browse displays when a component was issued to the equipment and when it was removed. It also displays the manufacturer that supplied the part and the total cost of maintaining the component while on the equipment.

The lower browse displays cost analysis information about the selected rotable part. In this browse, you can view detailed information about expenses charged to an individual serialized part and any work orders, labor postings, material issues, and contractor expenses that reference the rotable part.

**Fig. 4.99**
Equipment: Rotable History Submenu



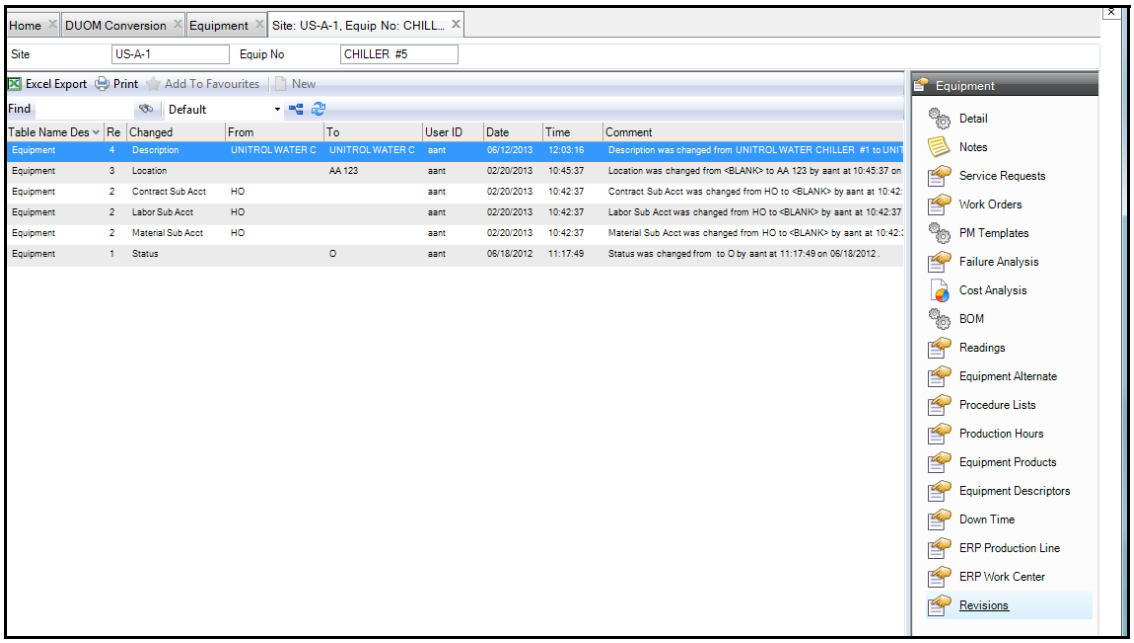

## View the Revision History for an Equipment Record

Because many quality systems call for strict record keeping about the revisions made to equipment records, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the equipment record.

To view the revision history for an equipment record, open the equipment record and select the Revisions submenu.

***Note*** Revision control is activated in the Purchasing|General|Business Units|Sites menu. See “Enable Revision Control” on page 61.

**Fig. 4.100**
Equipment Revisions Submenu



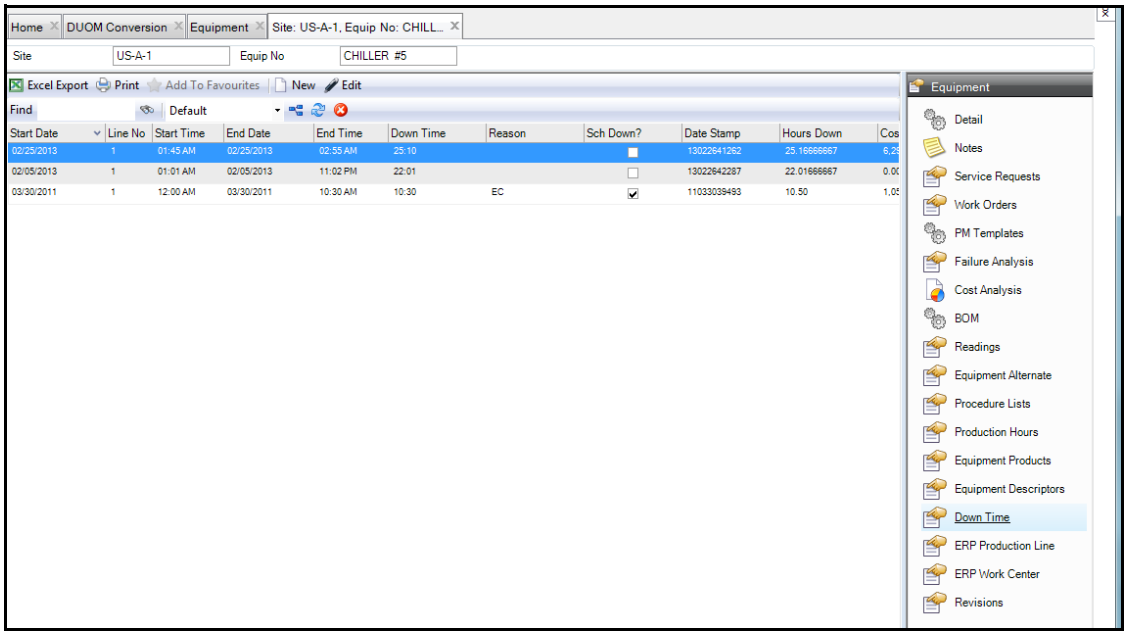

## View Downtime Records for Equipment

EAM provides a method of tracking downtime directly to a specific equipment record. Downtime may or may not be associated with a maintenance work order. Each downtime record is associated with an equipment record and, potentially, codes for system, assembly, reason down, and failure.

To view the equipment downtime records, open the equipment record and select the Down Time submenu. Drill into the downtime record by double-clicking the record.

***Note*** EAM also provides a browse that displays all the downtime for all equipment. See “All Downtime Browse” on page 161.

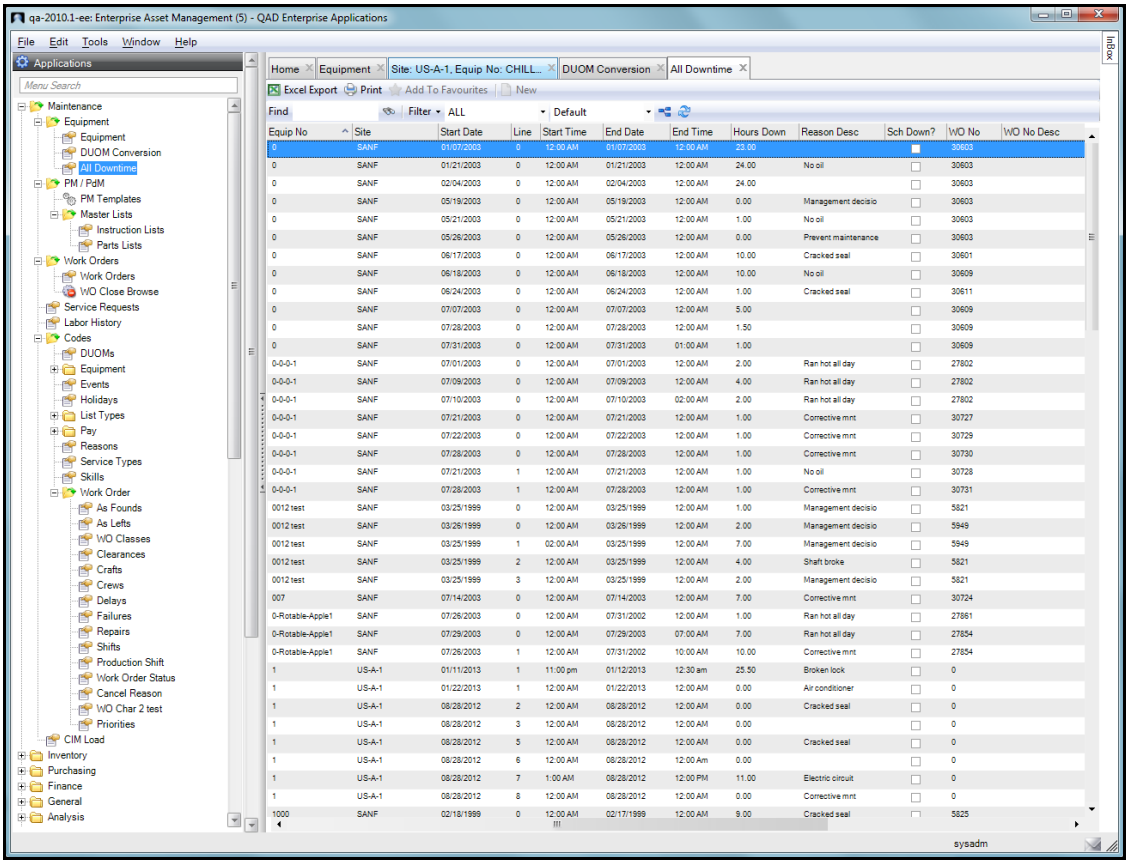
**Fig. 4.101**
Equipment Downtime Submenu




## All Downtime Browse

The All Downtime browse, located in Maintenance|Equipment, displays a list of all downtime records for all equipment.

**Fig. 4.102**
Equipment: All Downtime




## Editing an Equipment Record

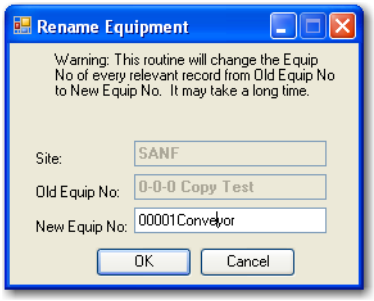
To edit an equipment record, open the equipment record and make the necessary changes. For information regarding the equipment record tabs, see “Filling Out the Equipment Tabs” on page 127.

### Renaming Equipment

The Rename Equipment action allows you to assign a new name to a piece of equipment. EAM updates all records that include this equipment, retaining the history.

To rename an equipment record, select the record in the Equipment browse. Select Rename Equipment from the Action menu. Verify that Site and Old Equip No are correct. Enter New Equip No and click OK.

**Fig. 4.103**
Rename Equipment




## Lock/Unlock an Equipment Record

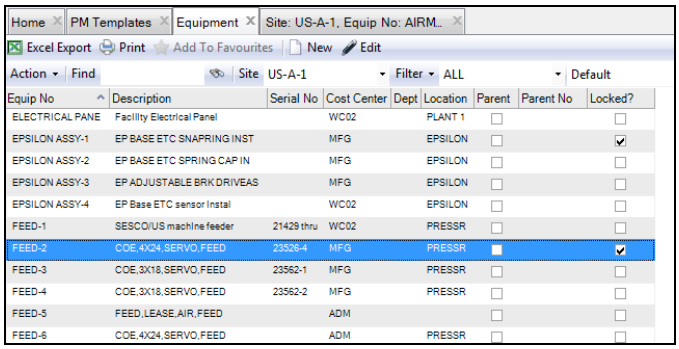
As equipment ages and goes out of service, you can prevent any additional charges, such as inventory issues and labor distribution, against the equipment ID by locking it.

To lock a piece of equipment, open the equipment record and select Lock/Unlock from the Equipment Action menu.

***Note*** When an equipment record is locked, the Locked? check box on the Equipment browse is selected.

To unlock an equipment record, open the equipment record and select Lock/Unlock from the Equipment Action menu.

**Fig. 4.104**
Equipment Locked




## Refresh Equipment Costs

The Refresh action updates an equipment record so that it displays the most recent equipment cost figures on the Detail tab.

To refresh an equipment record, select the record in the Equipment browse and select Refresh from the Action menu.

To refresh a group of equipment, select all the equipment records you want to refresh and then select Global Refresh from the Action menu.

As an alternative, you can schedule a batch job to run that refreshes equipment automatically (Equipment Refresh) on a periodic basis. See “Job Program” on page 706.

### Copy Equipment

The copy function allows you to copy data from one piece of equipment and use it as a template for a new piece of equipment.

The copy button copies the following:

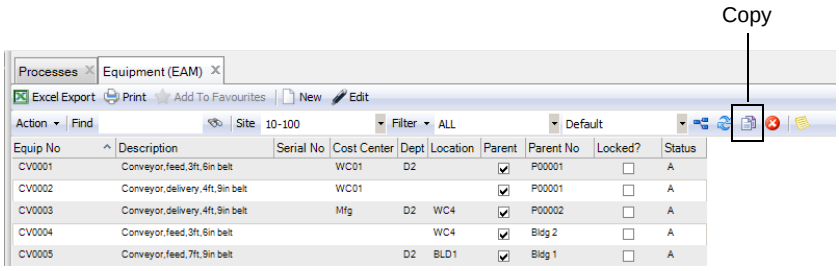
- PM templates
- BOM content
- DUOM
- DUOM type
- Lower and upper tolerance limits

Follow these steps to copy equipment:

1 Open the Equipment browse and highlight the piece of equipment that you want to copy.

2 Click the copy icon in the menu bar, as shown in Figure 4.105.

**Fig. 4.105**
Copy Equipment




A new equipment record opens with fields on all tabs populated with copied information.

3 Enter a new equipment number in the Equip No field.

4 Update fields for the new piece of equipment as necessary and enter additional information as needed. Click the disc icon to save.

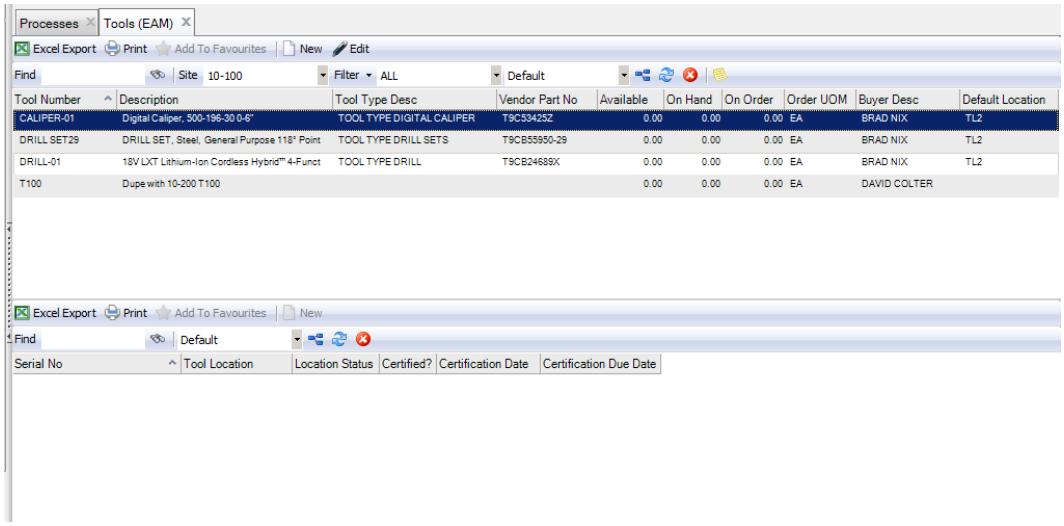
## Tool Management

Use the Tools module to manage certifications, track movement of tools, and schedule maintenance on tools using PM templates, ensuring that only certified tools are used. Tools are items that are used for a task, such as torque wrenches, hoists, and jacks, and are not consumed or expendable as part of a WO. Tools are not the same as tooling, such as dies, jigs, or molds that are part of a machine.

The upper browse of the Tools window displays a list of tools and associated descriptions while the lower browse contains the serialized numbers assigned to each tool.

***Note*** EAM currently does not contain support for tracking tools in the purchasing process and tool costs are not counted unless they are rebuilt or are part of a CM WO.

**Fig. 4.106**
Tools




*Tool Number.* The tool's ID number, defined when the tool record was created.

*Description.* A short description of the tool defined on the General tab.

*Tool Type Desc.* The description associated with the tool type, defined on the Codes tab.

*Vendor Part No.* The part number the vendor uses to identify this tool, defined on the General tab.

*Available.* Displays the total quantity on hand at all locations within a site, minus the quantity on reserve.

*On Hand.* The quantity (in Issue UOM) of this tool currently in all tool locations for this site.

*On Order.* Reserved for future development.

*Order UOM.* The unit of measure used when ordering the tool.

*Buyer Desc.* The description associated with the Buyer defined on the General tab.

*Default Location.* The location where the tool is stored.

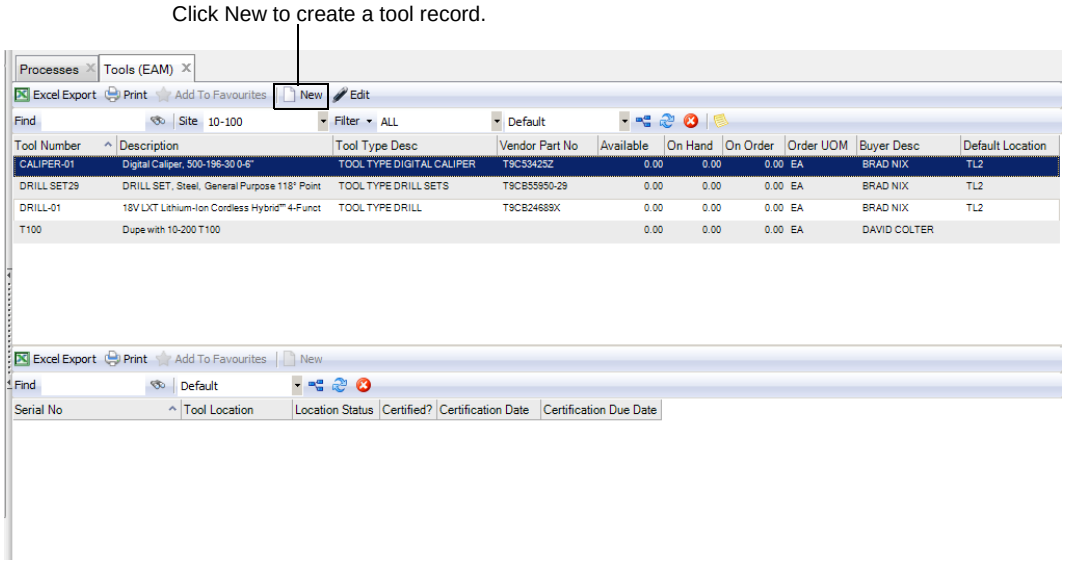
You can view the tool's serial number and related information in the lower browse.

## Creating a Tool Record

Follow these steps to create a tool record:

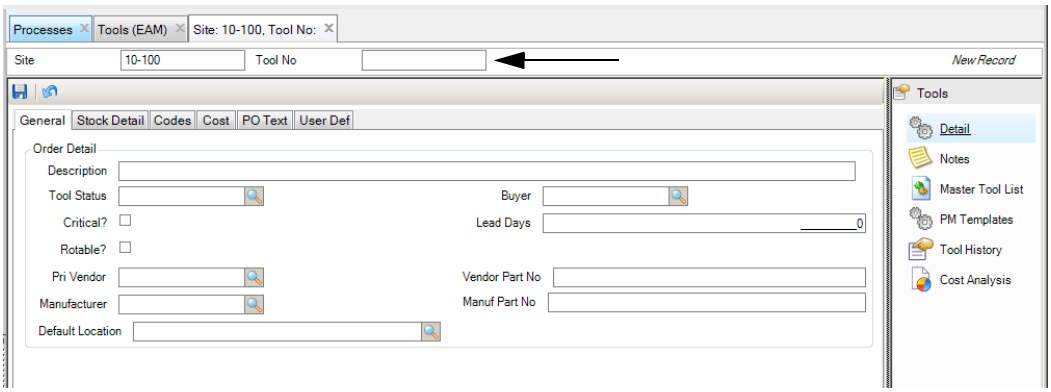
1 Open the Tools browse in Maintenance|Tools.

**Fig. 4.107**
Tools Browse




2 Click New. A blank Tool Number record opens. In the Tool Number field, enter a tool number or name. This ID must be unique for the site.

**Fig. 4.108**
Enter the Tool Number




3 Enter information in the relevant fields on the General, Stock Detail, Codes, Cost, PO Text, and User Defined tabs. See “Filling Out the Tools Tabs” on page 166.

4 Once you have entered the information, click Save.

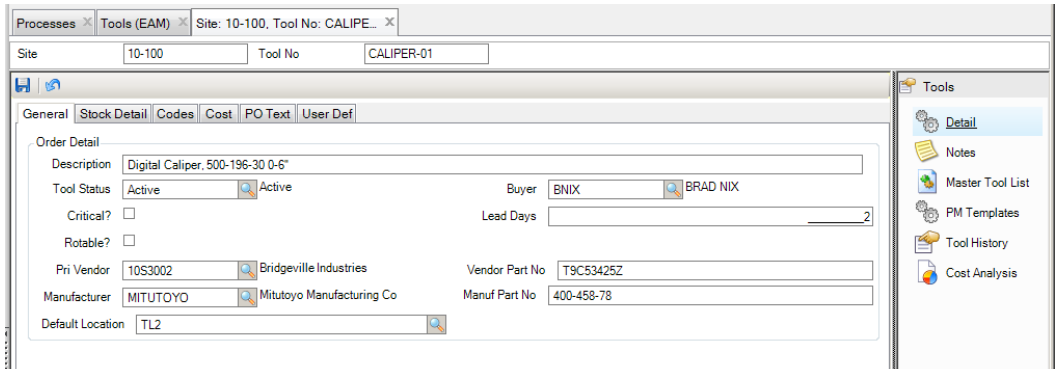
### Filling Out the Tools Tabs

Enter information on the General, Stock Detail, Codes, Cost, PO Text, and User Defined tabs.

## Tools: General Tab

The General tab is used to record tool order information.

**Fig. 4.109**
Tools: General Tab




*Description.* Enter the tool's primary description.

*Tool Status.* Enter or select the status from the lookup.

*Buyer.* Use the lookup to select the buyer's employee ID. Buyer is defined by site. You must select a buyer before you can save the record.

*Critical?* Select this check box if the tool is critical. This setting enables sort and filter.

*Lead Days.* Enter the number of days a vendor requires to deliver an ordered tool.

*Rotable?* Select this check box to identify this tool as reusable. For more information, see "Managing Rotable Parts" on page 327.

*Pri Vendor.* Select a primary vendor to default into requisitions. Vendors are shared across the system.

*Vendor Part No.* The part number the vendor uses to identify this tool.

*Manufacturer.* Select the manufacturer of the tool, identified when the tool is received. Manufacturers are shared across the system.

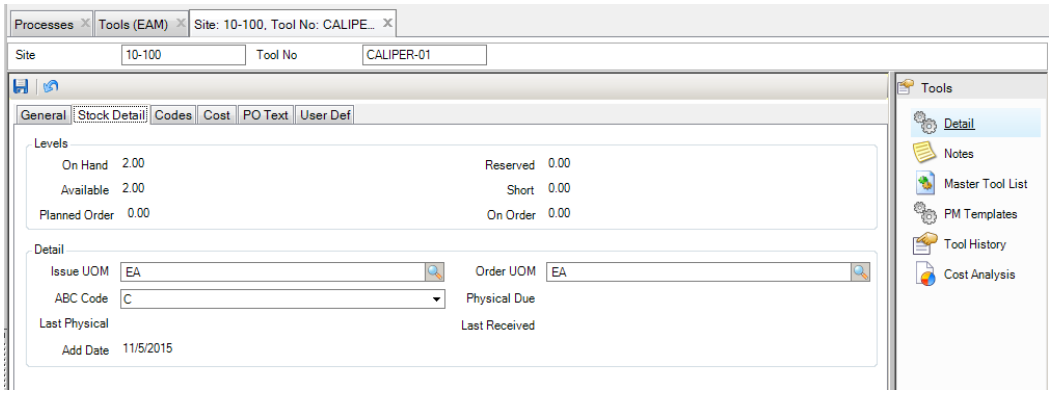
*Manuf Part No.* The number the manufacturer uses to identify this tool.

*Default Location.* The location where the tool is stored. This field must be populated before you can save the record.

## Tools: Stock Detail Tab

The Stock Detail tab displays stocking information for a tool.

**Fig. 4.110**
Tools: Stock Detail Tab




## Levels

*On Hand.* The quantity (in Issue UOM) of this tool currently in all tool locations for this site.

*Reserved.* Reserved for future development.

*Available.* Displays the total quantity on hand at all locations within a site, minus the quantity on reserve. This quantity represents the tools available to be issued. This field is not updateable by the user.

*Short.* Reserved for future development.

*Planned Order.* Reserved for future development.

*On Order.* reserved for future development.

## Detail

*Issue UOM.* The unit of measure, such as each, used when issuing a tool from the tool crib. When you purchase tools and receive them into your tool location, the purchasing unit of measure is automatically converted to the issuing unit of measure. When you view tools on the Tools browse, the quantity is always listed in the issuing unit of measure.

*Order UOM.* Select the unit of measure to use when ordering the tool. For example, if your organization stocks the tool by each but you purchase the tool in boxes, then boxes would be Order UOM.

*ABC Code.* Classify each tool as A, B, or C, based on its relative value used for cycle count planning.

*Physical Due.* Reserved for future development.

*Last Physical.* Reserved for future development.

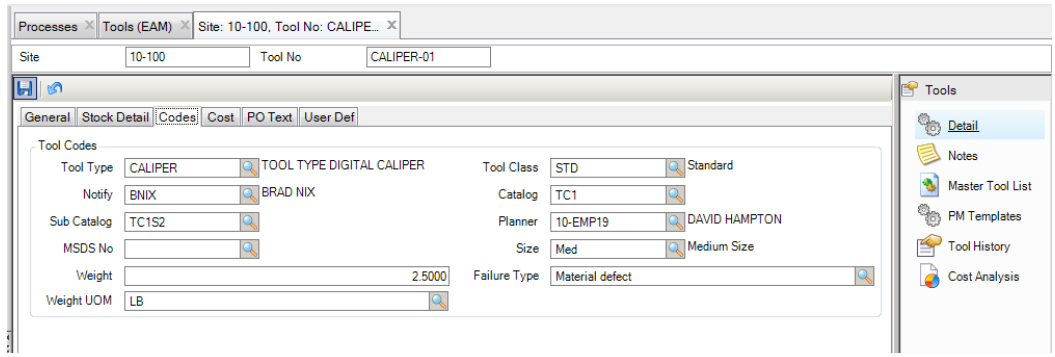
*Last Received.* Reserved for future development.

*Add Date.* The date this tool record was created.

## Tools: Codes Tab

The Codes tab is used to enter code information for a tool. All codes you enter in the lookups must match codes already available in the system or you receive an error and cannot proceed past this screen.

**Fig. 4.111**
Tools: Codes Tab




*Tool Type.* Use the tool type for filtering purposes for tools only.

*Tool Class.* Use the tool class for filtering for tools only.

*Notify.* Notify this user ID or group by e-mail when the tool is moved.

*Catalog.* The tool is hierarchical. The higher level, catalog, can be a broad grouping of tools to use in filtering.

*Sub Catalog.* This lower level consists of types in the catalog, used for grouping within the catalog.

*Planner.* The system displays the employee name or code for the planner and populates the name field. This information defaults into the WO.

*MSDS No.* Use the lookup to select a code that is tied to descriptions of the MSDS (Material Safety Data Sheet).

***Note*** MSDS sheets may be stored elsewhere in the organization. EAM cross-references these sheets.

*Size.* Use the lookup to select the size of the tool; for example, large, medium, or small. This value is not unique to Tools.

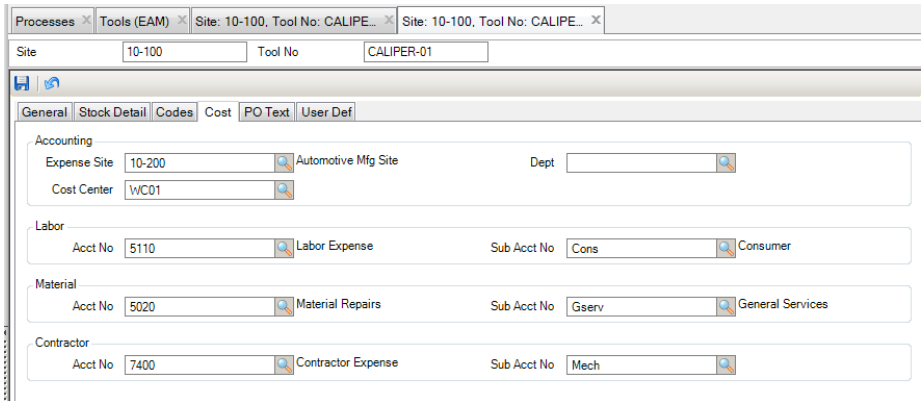
*Weight.* The weight of the tool.

*Weight UOM.* The weight unit of measure for this tool; for example, pounds or kilograms.

## Tools: Cost Tab

The Cost tab contains accounting information for the tool.

**Fig. 4.112**
Tools: Cost Tab




### Accounting

*Expense Site.* Enter or select from the lookup the accounting expense site for this tool.

*Dept.* Enter or select from the lookup the accounting department for this tool.

*Cost Center.* Enter or select from the lookup the accounting cost center for this tool

### Labor

*Acct No.* Enter or select from the lookup the account number to use for labor expenses.

*Sub Acct No.* Enter or select from the lookup the sub-account number for labor expenses.

### Material

*Acct No.* Enter or select from the lookup the account number for material expenses.

*Sub Acct No.* Enter or select from the lookup the sub-account number for material expenses.

### Contractor

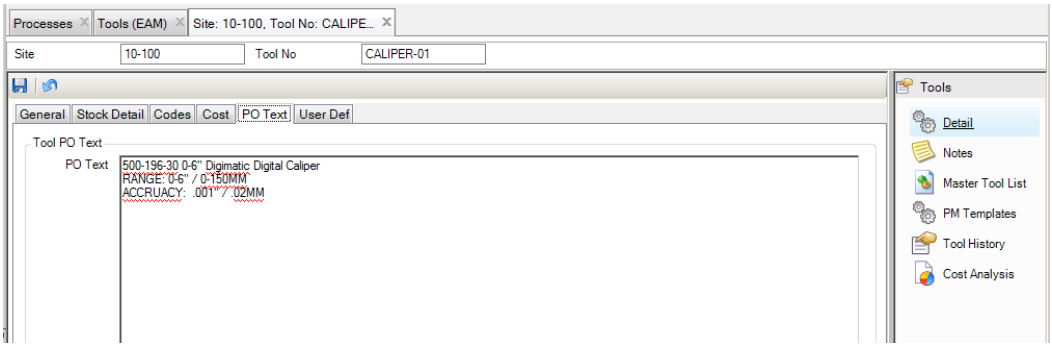
*Acct No.* Enter or select from the lookup the account number for contractor expenses.

*Sub Acct No.* Enter or select from the lookup the sub-account number for contractor expenses.

## Tools: PO Text Tab

The PO Text tab is used to add an expanded definition of the tool.

**Fig. 4.113**
Tools: PO Text Tab

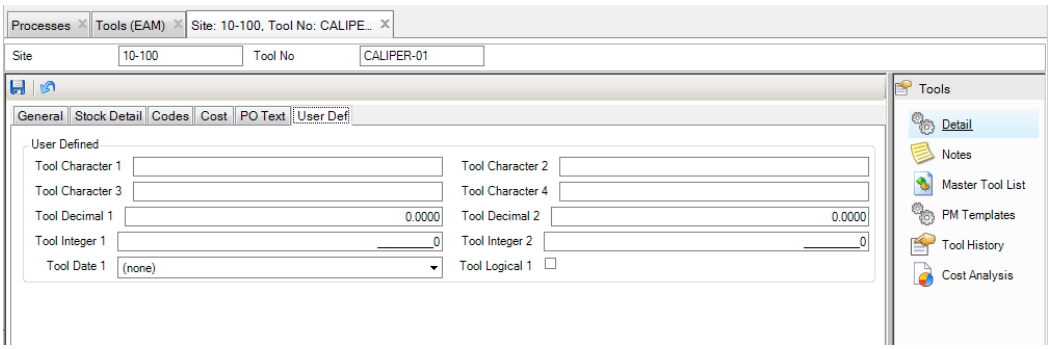



*PO Text.* Enter an expanded description, specifications, or other data for you and the supplier to identify the tool. This information is used on requisitions and POs for the tool.

Tools: User Defined Tab

The User Defined tab is used to track information against a specific tool in EAM. There are ten user-defined fields.

**Fig. 4.114**
Tools: User Defined Tab




*Tool Character 1/2/3/4.* Free-form user-defined character fields, not validated against tables.

*Tool Decimal 1/2.* User-defined decimal fields for tools.

*Tool Integer 1/2.* User-defined integer fields for tools.

*Tool Date 1.* A user-defined date field for tools.

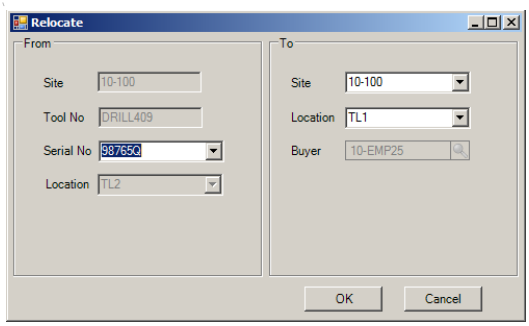
*Tool Logical 1.* A user-defined logical field for tools.

## Tools Actions

### Relocate

You can move a tool from one location to another within the same site or from one site to another using the Relocate action in the Tools Action menu. If the tool is not defined in the new site, then the tool is automatically created for the site. Tool relocation includes moving a tool between a shelf and your user-defined locations or to an Inspection location status.

**Fig. 4.115**
Tools Action: Relocate




1 Highlight the tool you want to move.

2 Select Relocate from the Action menu. The Relocate pop-up appears.

3 In the From area, select a serial number for the tool.

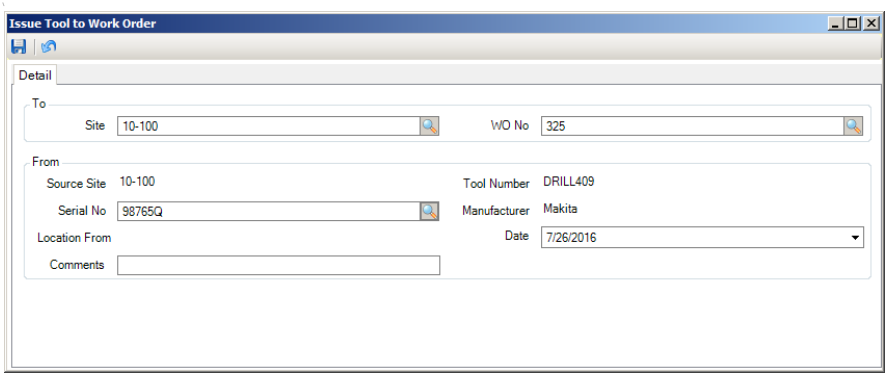
4 In the To area, select a site and location, or select only a location if you are moving the tool within a site.

5 Click OK to save and relocate the tool. Tool History will display the From and To location movement for the tool serial number you relocated.

## Issue to Work Order

You can issue a tool to a WO directly from the Tools main browse.

**Fig. 4.116**
Tools Action: Issue to Work Order




1 Highlight the tool you want to issue to a WO.

2 Enter or select from the lookups the site and associated WO number.

3 Select the serial number of the tool to issue. The manufacturer and Location From information default from the selected serial number.

***Note*** You cannot issue a serialized tool number that has a Location Status of Inspection or one that is entered on an open PM or CM WO.

4 Enter the date to issue the tool to the WO. Date defaults to today's date.

5 Enter any comments, then click Save. Tool History will display the From and To location movement for the tool serial number that was issued.

## Tool Submenus

You can find tool data in the Tools submenu. Each tool number has the following submenu options.

### Details

The information you entered when you created the tool.

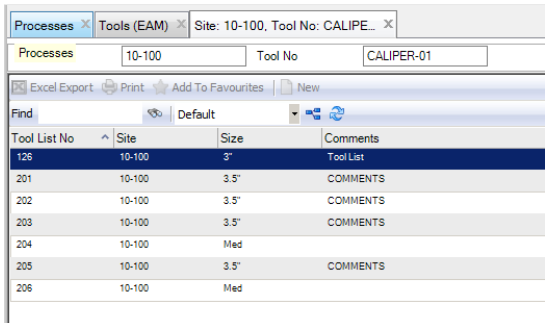
### Notes

A free-form text box for notes that are for internal use only. These notes are not printed on any documents.

### Master Tool List

The master tool lists display the lists to which this tool is assigned.

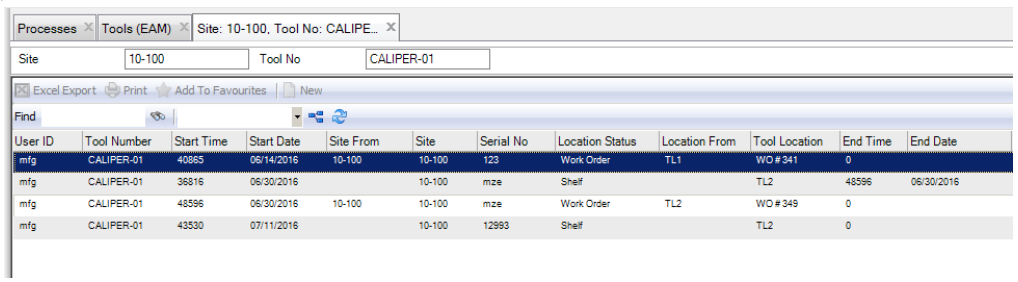
**Fig. 4.117**
Tools: Master Tool List




### Tool History

Tool History provides movement tracking for a tool. This view includes all serialized tools for this tool number. When tools are issued to WOs, the To Location and Location Status are updated for the start date and time and the previous From Location and Location Status are updated for the end date and time. EAM also captures the user who moved the serialized tool.

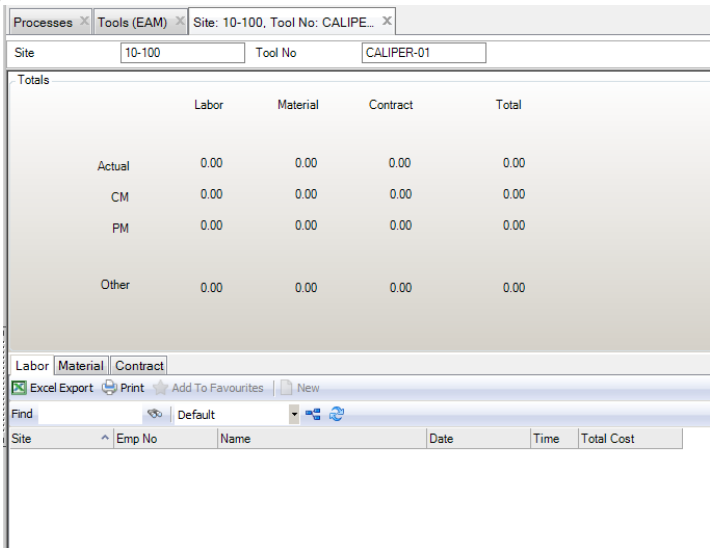
**Fig. 4.118**
Tools: Tool History



### Cost Analysis

The Cost Analysis submenu provides a summary of the cost of ownership to keep the tool in working order through repairs or rebuild for CM and PM WOs. You can view tool cost details by selecting the Labor, Material, and Contract tabs in the lower browse, for labor postings, part issues, and outside contractor charges.

**Fig. 4.119**
Tools: Cost Analysis

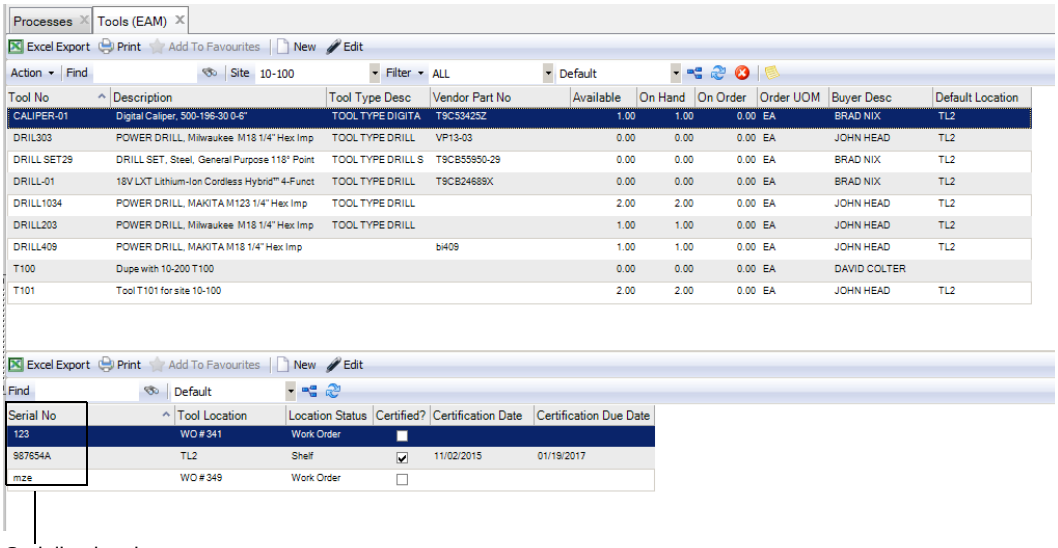



## Linking Serialized Tools to a Tool Number

After you create a Tool definition, you can link your physical tools to that definition using their serial numbers.

In Figure 4.120, you see that three digital calipers are linked to the CALIPER-01Tool Number.

**Fig. 4.120**
Tools: Lower Browse



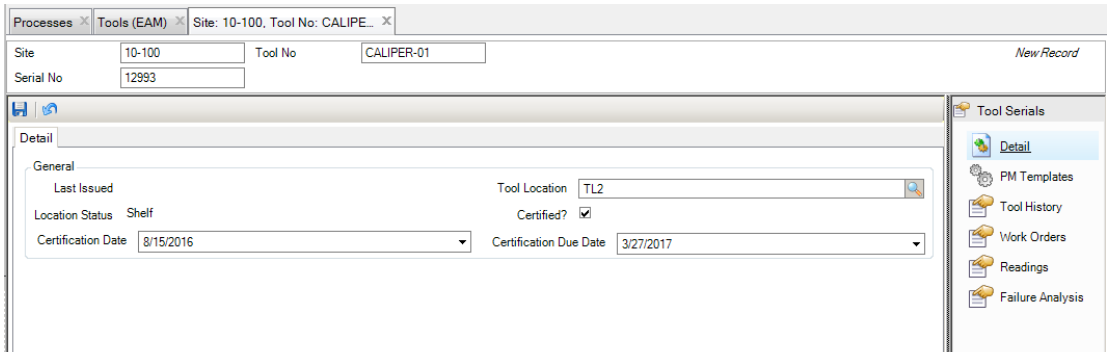

Serialized tools linked to CALIPER-01.

To link a serialized tool to a tool number and description, follow these steps:

1 Highlight a Tool Number in the upper browse.

2 Click New in the lower browse. Fill in the fields in the Detail tab for the new serialized tool.

**Fig. 4.121**
Tools: New Serialized Tool




*Serial Number.* Updated when the tool is received from a PO or if the tool is directly entered into Tool Maintenance. Tool ID and serial number are unique identifiers as a combination for the site.

*Last Issued.* The date this tool was last issued from one tool location to another. This field is not updateable by the user.

*Tool Location.* The physical location of the tool as it is entered into the system. Default value is the Tool Number location.

*Location Status.* A system-defined value of Inspection, Rebuild, or user defined.

*Certified.* Select or clear the check box for use in filtering.

*Certification Date.* Updated when the tool is returned to its default location from the rebuild area or when the most recent calibration is complete.

*Certification Due Date.* The next date that this tool is due to be certified.

3 Click the save icon after you have entered all necessary information. The new tool is now linked to a Tool Number and is visible in the lower browse of Tools when that Tool Number is highlighted.

### Tool Certification

Tool certification ensures that tools are in proper working order when they are used. Certification Date is an effective date, and is automatically updated when you use PM WO for a tool. When you issue a tool to a WO for use in a repair, the system validates the certification date. If the certification has expired, EAM does not allow you to issue the tool and sends a notification to the Notify user/group that the tool's certification date has expired.

***Note*** No validations are required for the certification date when a tool is entered on a PM template, CM WO, or Route PM WO.

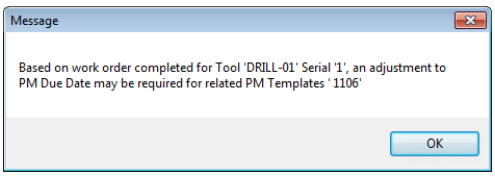
Once a PM WO or Route PM WO is issued for a tool, the work is completed, and the WO status is Closed, the tool's Certification Date is updated to the new PM Issue By date and the Tool Serial Certified flag is automatically selected.

***Note*** You can update the Certification Due Date manually by changing the PM Issue By date on the PM template.

You can secure access to the Certification Due Date by assigning an owner to the PM template.

The certification date for a tool entered on CM or Rebuild WO is not automatically updated when the WO status is changed to closed. An informational message similar to the following is provided when the status changes to Closed:

**Fig. 4.122**
Certification Date Message




## Tool Serials Submenus

You can find tool data in the Tool Serials submenu. Each serialized tool has the following submenu options:

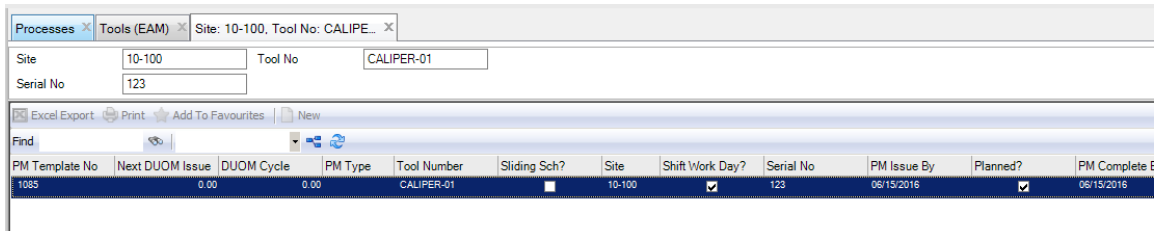
### Detail

A read-only version of the information you entered when you created the serialized tool.

## PM Templates

The PM templates on which this serialized tool is entered.

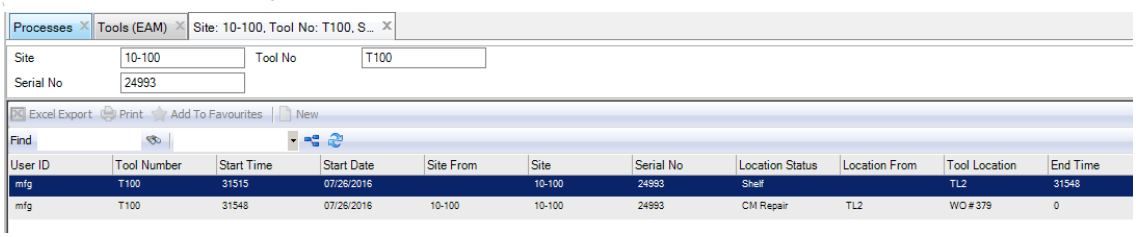
**Fig. 4.123**
Serialized Tool: PM Templates Submenu




## Tool History

Tool History provides movement tracking for a specific tool serial number. This view includes all serialized tools for this tool number. When tools are issued to WOs, entered on a CM WO for repair or rebuild, or relocated to another site or location within a site, the To Location and Location Status are updated for the start date and time and the previous From Location and Location Status are updated for the end date and time. EAM also captures the user who moved the serialized tool.

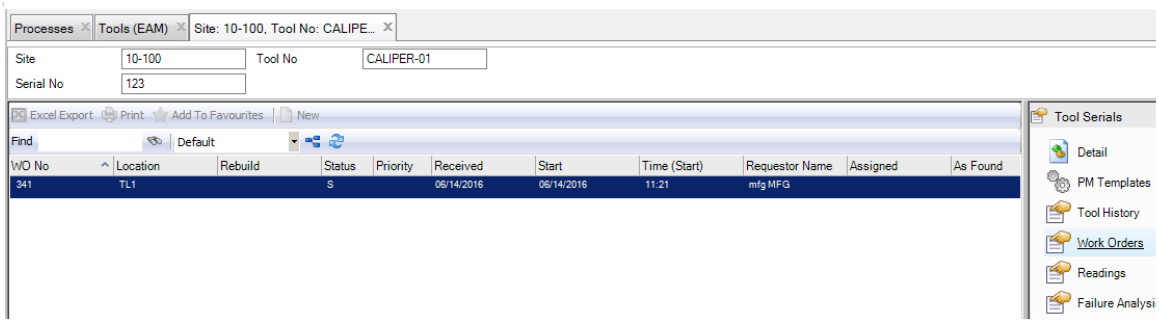
**Fig. 4.124**
Serialized Tool: Tool History Submenu




## Work Orders

The Work Orders submenu displays the CM and PM WOs on which the serialized tool is entered.

**Fig. 4.125**
Serialized Tool: Work Orders Submenu




## Readings

The Tool Readings submenu supports two driving unit of measure (DUOM) types:

- **Monitor.** The tool's DUOM reading is measured.

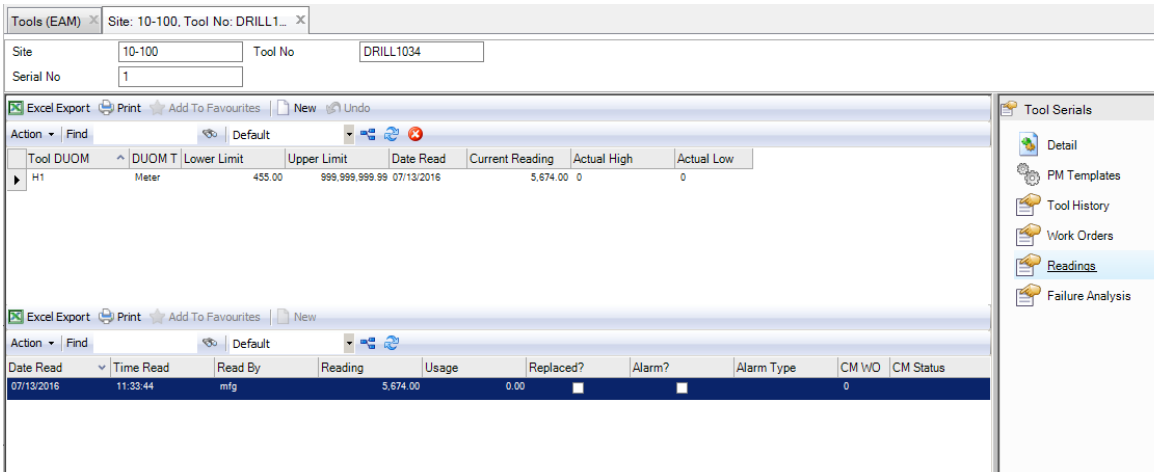
Enter calibration readings and view a list of all the readings that have been recorded for a tool. This submenu allows you to:

- Set upper and lower calibration reading limits.
- Use the Update Tolerance action to set the number and frequency limits for out of tolerance (OOT) readings.
- Optionally set an e-mail alert to notify you when OOT readings occur.
- Optionally select to automatically create CM work orders when readings cause an OOT condition.

- **Meter.** The tool's reading is a number of cycles, such as time, miles, or revolutions. The capabilities of the Meter DUOM type include:
  - **Meter Rollover.** Use the meter rollover when entering a meter reading that is less than the previous current reading. If your entry indicates that the meter has rolled over, the system automatically calculates the correct usage based on the upper and lower limits.
  - **Meter Replacement.** Use the Replace action to replace a meter. A new lower and upper limit can be entered as well as a new current reading. When this function is used, no new usage is calculated.

    **Note:** Before the meter is replaced, enter the last reading on the broken meter; otherwise, the last units used are not recorded.

**Fig. 4.126**
Tools: Readings Submenu




## Upper Browse

*Tool DUOM.* Displays the DUOM for the tool. DUOMs are set up in Maintenance|Codes|DUOM and can be used across the system.

*DUOM Type.* Displays the following DUOM types for the tool:

- **Monitor.** DUOM reading is measured such as temperature.
- **Meter.** Reading is a number of cycles such as time, miles, or revolutions.

*Lower Limit.* Displays the lower limit for the calibration reading.

*Upper Limit.* Displays the upper limit for the calibration reading.

*Date Read.* Defaults to today's date for the first reading. The field displays the same date for subsequent readings entered, unless you change it.

*Current Reading.* Used to enter the current calibration reading.

*Actual High.* Displays the number of readings that have exceeded the high limit.

*Actual Low.* Displays the number of readings that have exceeded the low limit.

**Lower Browse**

The lower browse displays the history of DUOM readings entered for the tool.

*Date Read, Time Read, Read By.* Displays the time and date the reading was entered and the user who entered the reading.

*Reading.* Displays the DUOM reading number that was entered.

*Usage.* Displays the number of cycles since the last reading was entered. For monitor DUOM types, this field displays 0.

*Replaced.* This check box indicates if a meter was replaced.

*Alarm?* The system updates this check box, which indicates if there is an OOT condition based on the calibration readings entered. If the check box is clear, the readings have not exceeded the Max or Min Occurrences measured by the Actual High or Low readings recorded. If the check box is selected, an OOT condition exists where the number of readings exceeded the Max or Min Occurrences measured by the Actual High or Low readings recorded.

*Alarm Type.* Displays if the OOT reading exceeded the Actual High or Low.

*CM WO.* If the Create CM? setting is activated, this field displays the CM work order that is created automatically when the OOT reading was entered. To activate the Create CM? setting, see "Automate CM for OOT Readings" on page 180.

*CM Status.* Displays the status of the CM work order that was created to address the OOT reading.

### Set the Max High and Low Occurrences for OOT Readings

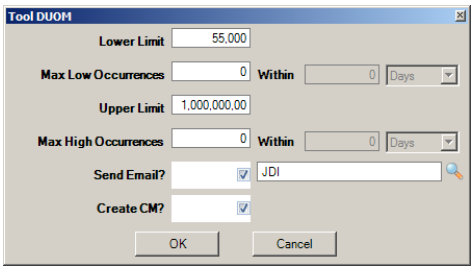
To set the max high and low occurrences for OOT readings, select Update Tolerances from the Readings Action menu. Enter the necessary information in the Max Low and Max High Occurrences fields. Click OK to save.

***Note*** The DUOM type must be set to Monitor for the Update Tolerances action to be active.

*Max Low Occurrences.* Set the number of times that an out of tolerance (OOT) low reading can occur before the system triggers a corrective action. Specify the frequency (days, hours, or minutes) that makes the reading OOT.

*Max High Occurrences.* Set the number of times that an OOT high reading can occur before the system triggers a corrective action. Specify the frequency (days, hours, or minutes) that makes the reading OOT.

**Fig. 4.127**
Tool Readings: DUOM Setup




### Set E-mail Alert

When the OOT readings exceed the Max High or Low Occurrences, EAM can automatically send an alert e-mail. By default, the e-mail is sent to the notify user or group identified on the tool record. In the Notify field next to the Send e-mail? check box, you can use the lookup to select another user or group to receive the e-mail alert.

To set the e-mail alert, select Update Tolerances from the Readings Action menu and select the Send e-mail? check box. Select the user or group to receive the e-mail using the lookup to the right of the Notify check box. Click OK to save.

### Automate CM for OOT Readings

When the OOT readings exceed the Max High or Low Occurrences, EAM can automatically create a CM Work Order to address the OOT condition for the tool.

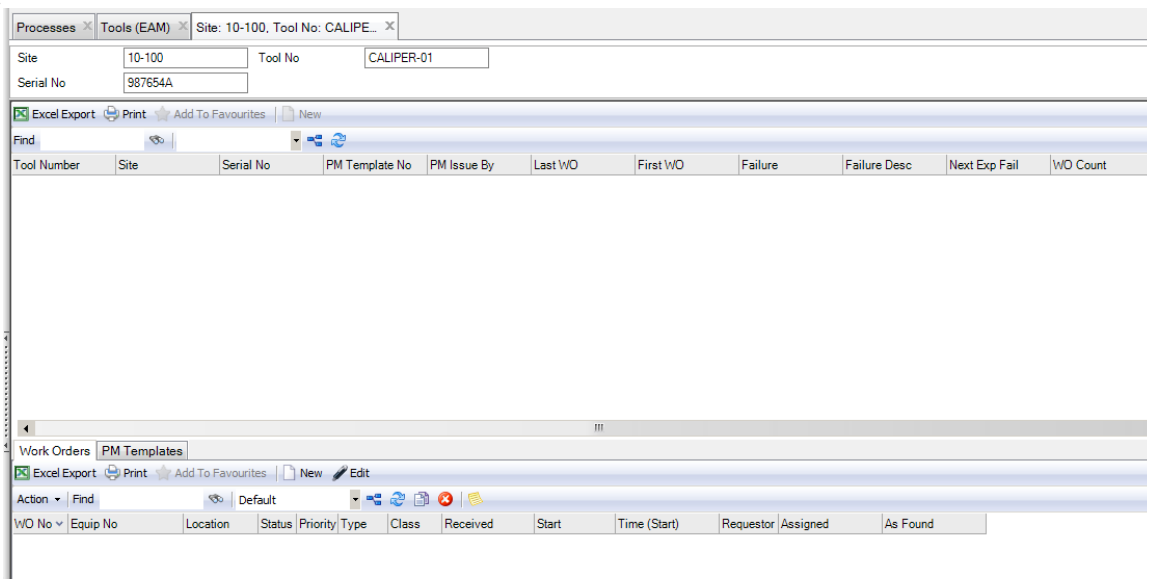
When the CM work order is created for the OOT reading, information from the MIL step and the tool record is pulled into the work order. The problem description on the CM work order states that there is an OOT reading and that the reading is entered in a PM WO, which is referenced.

To activate the create CM work order option, select Update Tolerances from the Readings Action menu and select the Create CM? check box. Click OK to save.The out of tolerance limits for the tool and the actual readings, by date, of the DUOM being measured.

## Failure Analysis

This submenu is updated by the Failure Analysis batch job that is used for Equipment. It displays the CM and PM WOs on which this serialized tool is entered.

**Fig. 4.128**
Serialized Tool: Failure Analysis Submenu




# Preventive Maintenance (PM)

Use Preventive Maintenance (PM) templates to produce work orders, based on a number of scheduling methods. A PM template addresses several methods including calendar frequency, equipment meter DUOM, special events, and a combination of calendar and equipment DUOM.

PM templates can specify the piece of equipment or serialized tool to work on. The PM module stores many different operations. Add, copy, and edit a PM template with one or more instructions or parts lists. Associate safety procedures and drawings with the PM template. When generating a PM work order from a template, all of the instructions, parts, tools, safety procedures, and attached files associated with the PM are copied to the work order issued.

The PM template can link to the following:

- Various responsible people or departments
- Specific labor, material, and contract
- Accounts and sub-accounts
- Cost centers
- Projects to charge

## Business Use Cases

### Preventive Maintenance (PM)

PM templates are used to establish and schedule routine equipment and plant preventive maintenance based on calendars or DUOMs. This allows moving from reactive corrective maintenance to a planned preventive maintenance organization that continually improves uptime.

## PM Safety Procedures

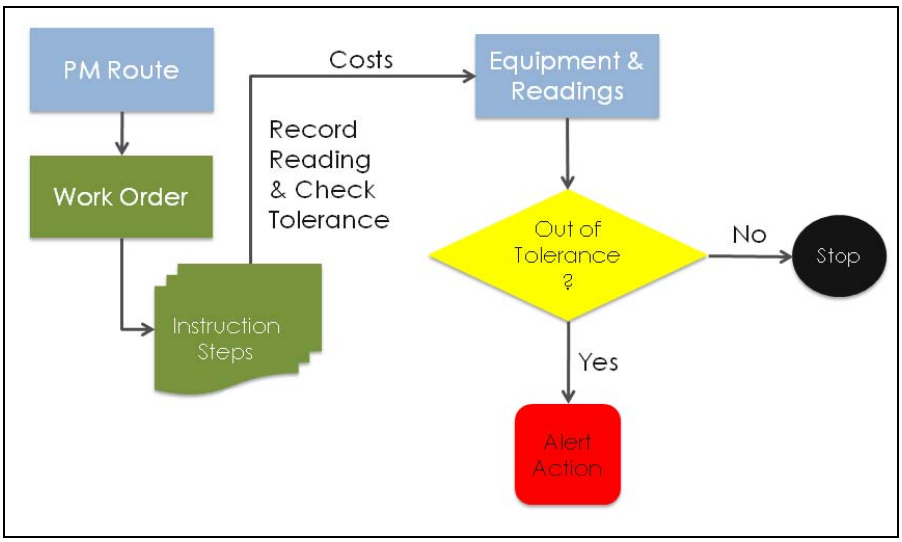
PM templates can be used for compliance activities, providing a reference to the procedure and steps that outline the process to be reviewed or validated.

## PM Routes

The PM route workflow consists of defining PM routes for use to record equipment calibration readings.

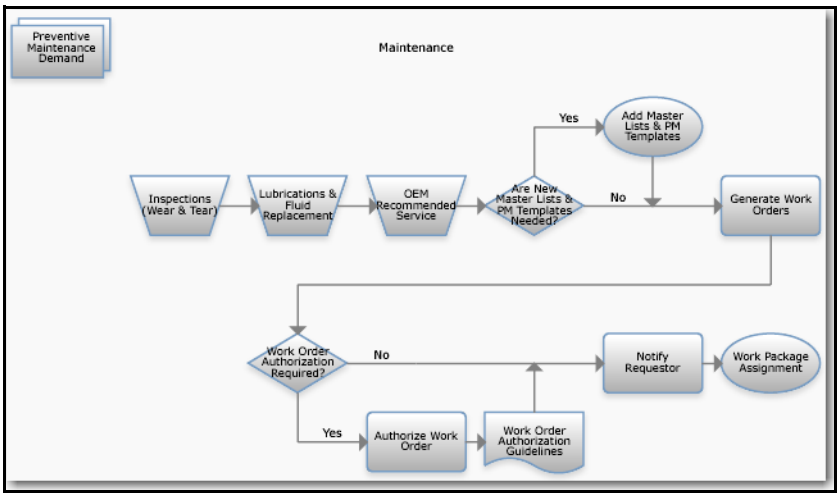
You can add multiple pieces of equipment to a single PM work order or planned CM work order using route kind instruction lists. On the route instruction list, you can add a different piece of equipment with its DUOM to each step. This makes it possible to inspect and record readings for the equipment's DUOMs with a single work order. Providing PM routes enables maintenance planners to more efficiently schedule a PM work order or a planned CM work order where the same task, such as inspection and take reading, can be performed on multiple pieces of equipment.

**Fig. 4.129**
PM Route Workflow for Equipment



## PM Process Flow

**Fig. 4.130**
Preventive Maintenance Process Flow



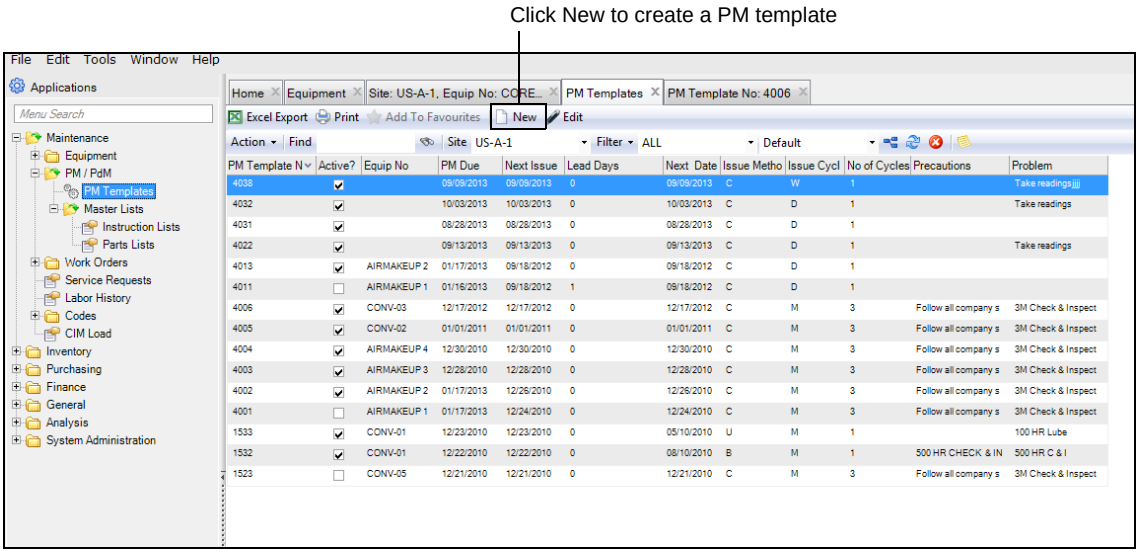

- Define instructions or safety lists and PM templates with instructions.
- Generate work orders. Click the node to open Maintenance|Work Orders|Work Order.
- Authorize work orders if necessary.
- Notify requestors when work orders are authorized.
- Perform inspections and take calibration readings.
- Lubricate equipment and replace fluids.
- Perform manufacturer-recommended service.
- Perform safety inspections.

## Creating a PM Template Record

Follow these steps to create a PM template record:

1 Open the PM Template browse in Maintenance|PM/PdM|PM Templates and click New.

**Fig. 4.131**
PM Templates Browse




A blank PM template record opens. The system automatically assigns a PM template number, which you cannot modify.

2 Enter the necessary information in the Equipment, Issue Method, Codes, Detail, and User Defined tabs. See “Filling Out the PM Template”.

3 When all the information has been entered, click Save.

### Filling Out the PM Template

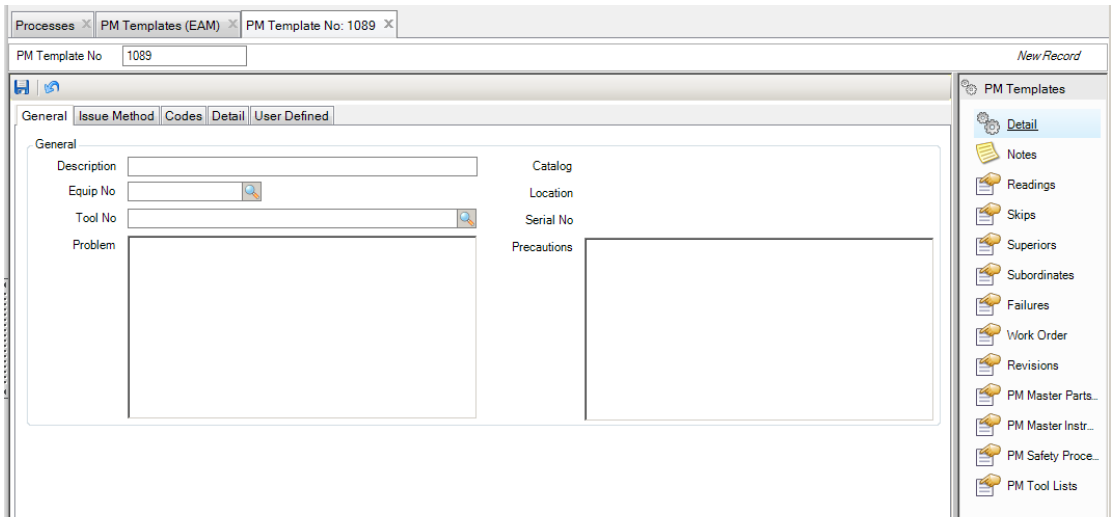
PM templates contain five tabs: General, Issue Method, Codes, Detail, and User Defined.

#### PM: General Tab

Use the PM General tab to review default information about the record you selected from the PM template browse. If you are creating a PM template, use the lookup feature to find the correct piece of equipment or tool. Select a piece of equipment or a tool to copy record data such as the location and catalog fields.

***Note*** A blank PM template displays a lookup for both Equipment and Tool. Once you select either Equipment or Tool, the other option is disabled.

**Fig. 4.132**
PM: General Tab




## General

*Description.* This field contains a brief description of what the PM is, such as: “Monthly ball bearing replacement.”

*Catalog.* EAM copies catalog data from the equipment or tool record. Use cataloging to report differences in operating characteristics, such as cost and failures.

*Equip No.* Equipment originates in the Maintenance|Equipment module. The field must contain a valid equipment number in the current site. If the equipment is locked, EAM displays a warning message. This field is disabled if a route instruction list is attached to the PM.

***Note*** If a Route Instruction list is attached to the PM, the Equip No is blank

*Location.* Location indicates the geographic location of the piece of equipment or tool. EAM copies location data from the equipment or tool record.

*Tool No.* A valid tool number in the current site.

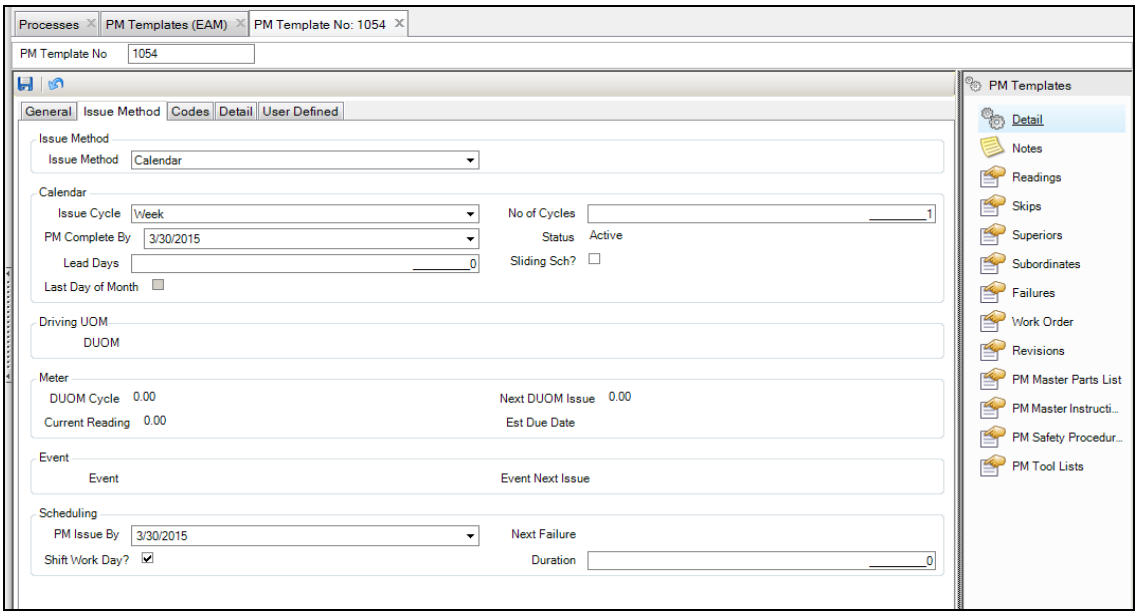
*Serial No.* The serial number identifying a particular tool.

*Problem.* This field contains a detailed description of issues with the equipment, such as “Be sure no knives are on the conveyor before starting the line.” This field also contains general information, such as “Monthly PM, perform all tasks on the attached work orders.” Data in this field prints on the PM work order document.

*Precautions.* Indicate any special precautions to take while maintaining this piece of equipment, such as “Let this conveyor belt sit idle for 20 minutes before touching the motor, as it is hot.”

PM: Issue Method Tab

**Fig. 4.133**
PM: Issue Method Tab




## Issue Method

*Issue Method.* There are four different ways to schedule PMs. Select from the following:

- **Calendar (C).** Calendar-based PMs depend on issue cycle and number of cycles. The issue cycle is one of the following: day, week, month, or year. The issue cycle, combined with the number of cycles, determines the number of days between due PMs.
- **DUOM (U).** Meters accumulate measurements, such as hours or miles. Define these measurements on Maintenance|Codes|DUOMs and establish them on relevant equipment records. The term for defined metering is driving unit of measurement (DUOM). Select one from a list of valid DUOMs for the equipment. The DUOM cycle equals the number of cycles between PM Issue By dates. Link DUOMs (count, hours, hits, and so on) to the equipment record before it is available in the PM template.

  You are only required to set the starting point for this PM template. Once the readings start, it resets incrementally based on the DUOM cycle.

  The current reading field is read-only. It displays the current reading for the selected equipment. EAM calculates an estimated due date after there is data from two readings.
- **Both (B) Calendar and DUOM.** With issue method *Both*, establish a PM template to issue based either on calendar or meter DUOM, whichever comes first.
- **Event (E).** Events are on-demand PM work orders. This PM occurs on a specific event date established under event maintenance. Events can be annual, such as an annual plant shutdown, which may not always fall on the same date. Events can represent opportunities to perform maintenance on equipment. For example, if production brings down a line or piece of equipment, maintenance can use unscheduled downtime to perform predefined preventive maintenance that is not dated.

**Calendar**

*Issue Cycle.* Select Day, Week, Month, or Year to use for calendar-based PMs only.

*No of Cycles.* Displays the number of cycles between PMs.

For example, if you selected a daily issue cycle and you want to perform the PM every day, enter 1 as the number of cycles. If you want the PM to be due every six months, select a monthly issue cycle and enter 6 in this field.

*PM Complete By.* Displays the next scheduled issue date. If you do not enter a date, EAM defaults to today's date. EAM calculates the PM Issue By date based on the issue cycle and the number of cycles.

***Note*** The value changes to Last Issue date when Sliding Sch? is selected and an open WO references the PM number.

*Status.* Displays Active or Inactive, depending on the setting from the Detail tab. If you select Sliding Sch?, and there is an open work order from this PM template, then status is open.

*Lead Days.* Displays the number of lead days before the actual due date. Enter the number of lead days to calculate a PM Issue By date before the PM is due. EAM backs up the PM Issue By date by the number of days entered here. This field is used for planning purposes. It is active only when the issue method is calendar or both.

*Sliding Sch?* Determines the PM Complete By date. Select if you want the calculation of the PM Complete By date based upon the closing of the previously generated work order for that PM. Leave the setting unselected if you want the PM to be issued routinely, even when there is already an open work order for the same PM.

*Last Day of Month.* If the last issue falls on the last day of the month, select this check box so that subsequent PMs also occur on the last day of the month.

**Driving UOM**

*DUOM.* When issue method is DUOM or both, indicate the DUOM. Enter a valid DUOM for the equipment. This must be a type of meter if issue method is set to both. If you change the issue method and DUOM type is meter, it defaults to the current reading.

**Meter**

*DUOM Cycle.* Indicate the number of cycles or units between PMs; used only for meter-based PMs.

*Next DUOM Issue.* A PM is due when the meter reaches the reading value in this field. Enter it when you create the PM. EAM generates it automatically for subsequent PMs based on the DUOM cycle.

*Current Reading.* Displays the current DUOM reading for the equipment.

*Est Due Date.* EAM calculates the estimated due date with this formula: Today + ([next DUOM cycle - current reading]/average unit per day usage).

**Event**

*Event.* This option displays the selected event.

*Event Next Issue.* This read-only field displays the next issue date if the issue method is event.

### Scheduling

*PM Issue By.* EAM calculates this value with this formula: PM complete by – lead days.

*Next Failure.* This read-only field displays the next statistical failure date for a defined failure code associated with the current PM template. EAM predicts a future failure date.

***Note*** If multiple failure codes associated with this PM have different failure dates, this field displays the closest date or the next date available.

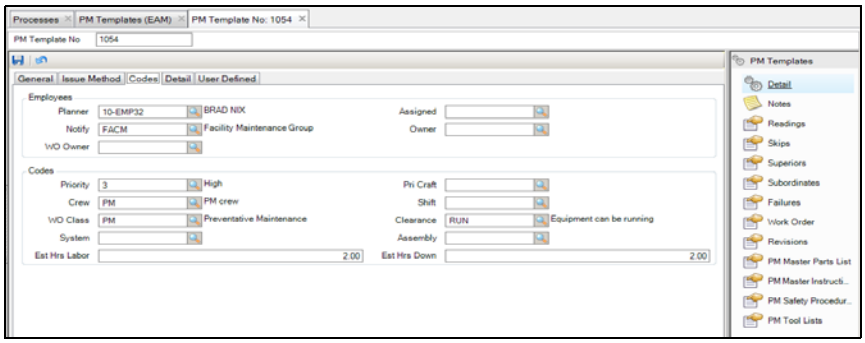
*Shift Work Day?* You can create a maintenance department workday calendar. If a PM is due on a non-work day and you select the check box, then EAM adjusts the Requested Start Date to the next available work day. If this field is not selected, then EAM issues the PM work order based on the PM Complete By date.

*Duration.* Enter the estimated duration for this work.

## PM: Codes Tab

Use this tab to work with employees, users, and codes.

**Fig. 4.134**
PM: Codes Tab




### Employees

*Planner.* The assigned planner's name. A lookup filters planners at the current site.

*Assigned.* The person responsible for the PM. A lookup filters eligible employees at the current site.

*Notify.* The user or group to notify with e-mail when this PM is due. A lookup filters users in the user and mail groups.

*Owner.* Select a user or group using the lookup filtered to user and owner groups. Only the user or group specified in this field can make changes to the PM. This can be used when change control for PM is needed to meet internal or external compliance requirements.

*WO Owner.* Select a user or group using the lookup filtered to user and owner groups. When the PM template issues, the owner is copied to the WO. Only the user or group specified in this field can make changes to the WO.

### Codes

*Priority.* Priority displays a valid priority from the standard priorities defined for your system.

*Pri Craft.* A valid craft from the standard craft codes defined for your system.

*Crew.* Identify a group of technicians by a crew code. The crew code is associated with the PM template. When the PM is issued and a work order is created, that crew number or crew code is copied to the designated work order.

*Shift.* A valid shift from the standard shifts defined for your system. A lookup is available for this field.

*Class.* A valid work order class from the standard classes defined for your system. A lookup is available for this field.

*Clearance.* A valid clearance level from the standard clearances defined for your system. A lookup is available for this field.

*System.* A valid system code from the standards defined for your system. A lookup is available for this field. If the equipment has a BOM type, the lookup filters by the equipment's BOM type system codes.

*Assembly.* A valid assembly code from the standards defined for your system. A lookup is available for this field. If the equipment has a BOM type, the lookup filters by the equipment's BOM type system codes.

*Est Hrs Labor.* The estimated hours of labor required to perform this PM. This value is automatically populated and updated with the total number of estimated hours entered on all MIL steps attached to the PM.

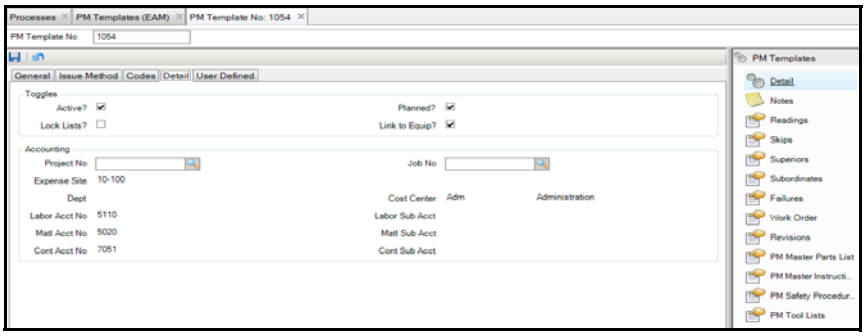
***Note*** If you manually change this value at any time, EAM no longer updates the estimated hours automatically.

*Est Hrs Down.* The estimated hours of equipment downtime required to perform this PM.

## PM: Detail Tab

Use this tab to apply expense information from the equipment record to the PM template and to work orders created from this template.

**Fig. 4.135**
PM: Details Tab




### Toggles

*Active?* Select this check box to indicate that the PM is currently active. Clear the check box to set Status on the Issue Method tab to Inactive.

*Planned?* This setting is copied to the work order at issue. Planners use it to track the amount of planned and unplanned work.

*Lock Lists?* There is no functionality for this field at this time.

*Link to Equip?* Linking to equipment populates these fields: expense site, department, cost center, labor account number, labor sub-account, material account, sub-account, contractor account, and sub-account associated with the equipment record.

**Accounting**

*Project No.* Enter a project number to use for WOs issued from the template.

*Job No.* Enter a job number for the project entered. Use job numbers to break down large jobs into component parts for better cost analysis. All jobs in a PM template copy to corresponding work orders.

If the Link to Equip? check box is cleared, the user can enter account numbers, sub-accounts, cost center, and department to use for PM activity. When the work order is generated, accounting from the PM template is copied to the work order.

*Expense Site.* This field defaults to the current site, but you can charge expenses for this PM template to another site.

*Dept.* The expense site department for the PM.

*Cost Center.* Charges for materials, internal labor, or outside contractor cost use this cost center.

*Labor Account No.* Account to charge the labor.

*Labor Sub Account.* Sub-account number to charge labor.

*Matl Acct No.* Account number to charge material cost.

*Matl Sub Acct.* Sub-account number to charge material cost.

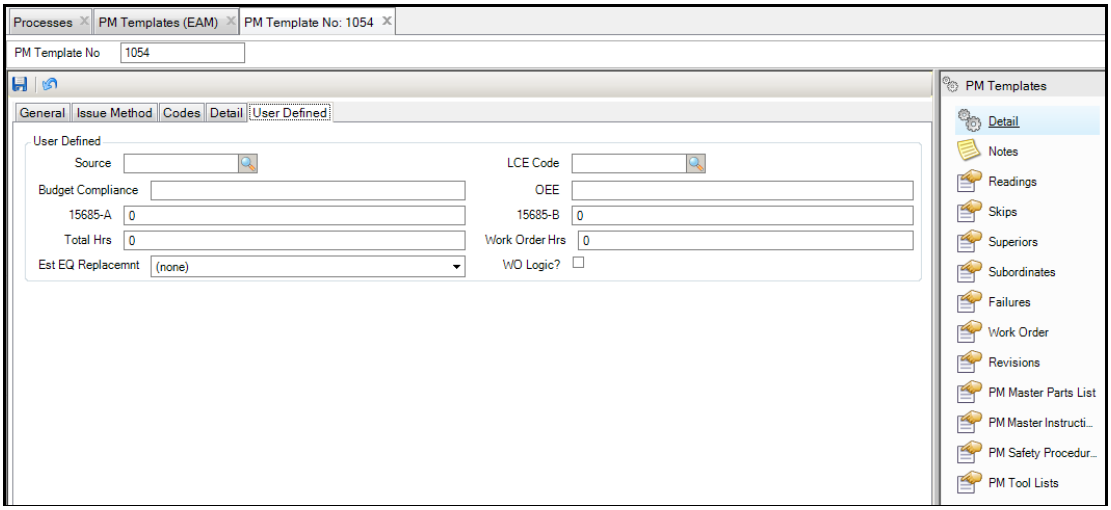
*Contractor Acct No.* Account number to charge contractor cost.

*Contractor Sub Acct.* Sub-account number to charge contractor cost.

### PM: User Defined Tab

Use this tab to track information against specific PM templates or work orders in EAM. There are ten user-defined fields. If you add any user-defined data to a PM template, it copies to its work orders.

**Fig. 4.136**
PM: User Defined Tab




### User Defined

*Character 1/2.* User-defined character fields, validated against tables that you add.

*Character 3/4.* Free-form user-defined character fields, not validated against tables.

*Decimal 1/2.* User-defined decimal fields for PM templates or work orders.

*Integer 1/2.* User-defined integer fields for PM templates or work orders.

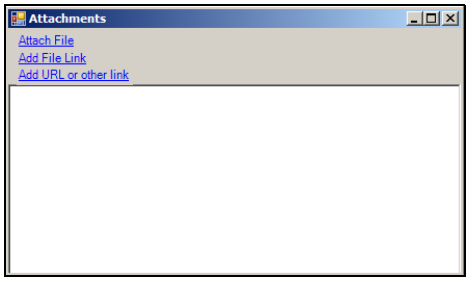
*WO Date.* User-defined date field for PM templates or work orders.

*Logic for WO.* Select this check box to add a logical field to the PM templates or work orders.

## Attach or Link Files to a PM Template

EAM gives you the option of attaching or linking an unlimited number of files or URLs to a PM template record. If you can run the file on your operating system, you can run it from EAM once it is linked.

**Fig. 4.137**
Attach or Link a File to a PM Template



### Attach a File

To attach a file to a PM template:

1. Select the PM template from the PM Templates browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the PM template.

### Link a File

To link a file to a PM template:

1. Select the PM template from the PM Template browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and click Open. The file is now linked to the PM template.

### Link a URL

To link a URL to a PM template:

1. Select the PM template from the PM Template browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add URL or other Link.
4. Copy and paste the link into the field and then click OK. The URL is now linked to the PM template.

***Note*** To make Equipment Attachments available in PM templates for a site, select the Equip to PM? check box in the General|Business Unit|Site|General tab. This option allows files or links associated with the equipment entered on the PM template to be accessible. The links are available for all equipment associated with the PM.

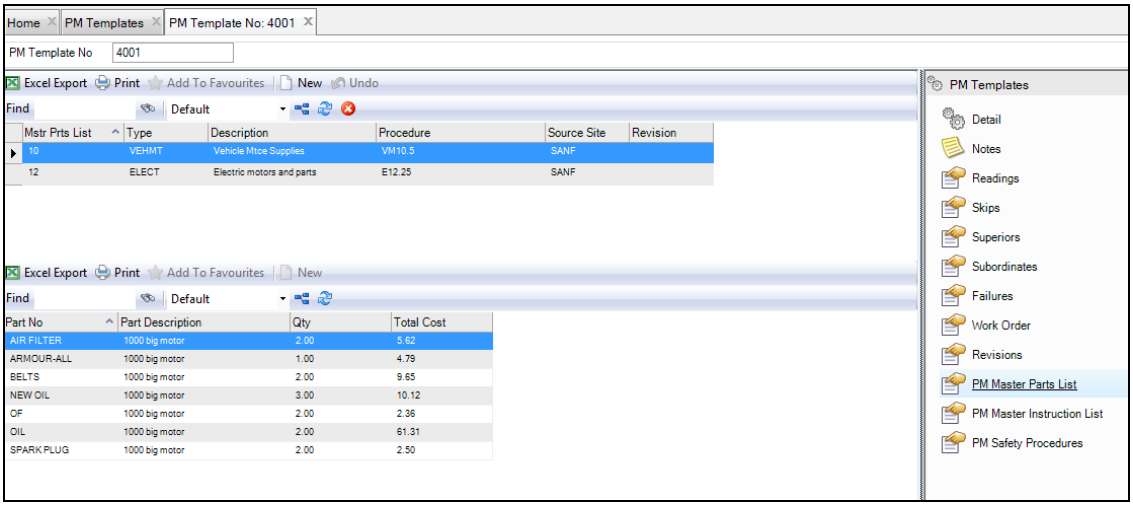
## Adding Master Parts Lists to a PM Template

A master parts list (MPL) allows you to easily attach a standard list of parts required for a PM instead of entering the same parts for every PM that uses them. One or more master parts lists can be added to a PM template. The same MPL can then be added to multiple PM templates. The quantity and cost from the MPL represent the planned cost for the eventual WO created from the PM.

To add an MPL to a PM template, click New in the upper browse. Use the lookup in the Master Parts List field and select the parts list. Press Enter to save.

***Note*** For instructions for creating a parts list, see “Creating a Parts List” on page 120.

**Fig. 4.138**
Adding Master Parts Lists to a PM Template




## Adding Tool Lists to a PM Template

A tool list allows you to easily attach a standard list of tools to a PM that is required for a PM instead of entering the same tools for every PM that uses them. One or more tool lists can be added to a PM template. The same tool list can then be added to multiple PM templates.

To add a tool list to a PM:

1. Open the PM template to which you want to attach the tool list.
2. Select the PM Tool Lists submenu.
3. Click the New button in the upper browse.
4. Enter or select from the lookup the Tool List No. Tab to populate the Tool List Type, Site, and Procedure Reference fields. Update the Description field as necessary. Press Enter to save.

   The lower browse displays the tools that are part of the new tool list.

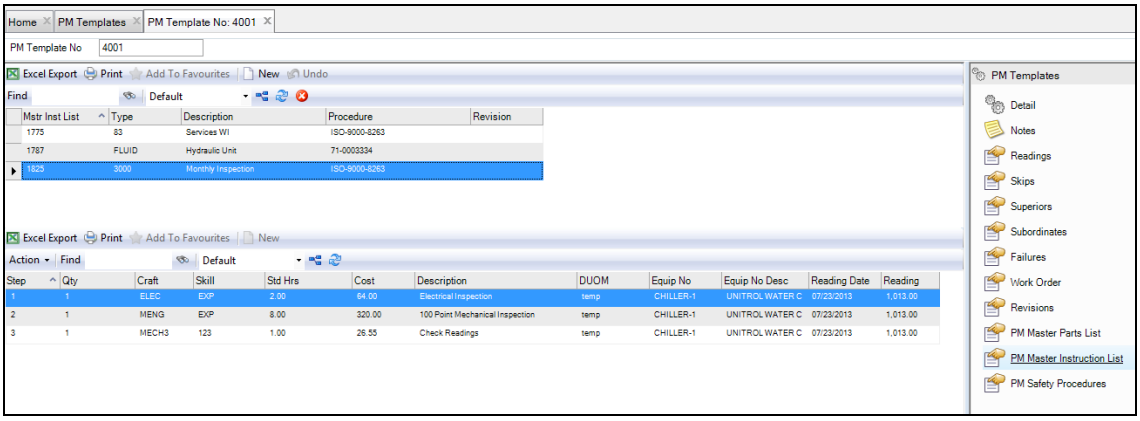
## Adding MILs to a PM Template

An MIL displays the steps necessary to complete a task. Each step includes a craft and skill code, as well as time and cost involved. Route steps include equipment or serialized tool, DUOM, current reading, and date. For instructions for creating an MIL, see “Creating an MIL” on page 115.

To add an MIL to a PM template, click New in the upper browse. Use the lookup in the Master Instruction List field and select the Instruction and/or Route kinds of MIL required for the PM. Press Enter to save.

***Note*** When a PM Route MIL for DUOM Readings is attached, each step of the MIL has a piece of equipment or serialized tool specified with its DUOM. This is used on PM templates and work orders to facilitate recording equipment or serialized tool DUOM readings.

**Fig. 4.139**
Adding MILs to a PM Template

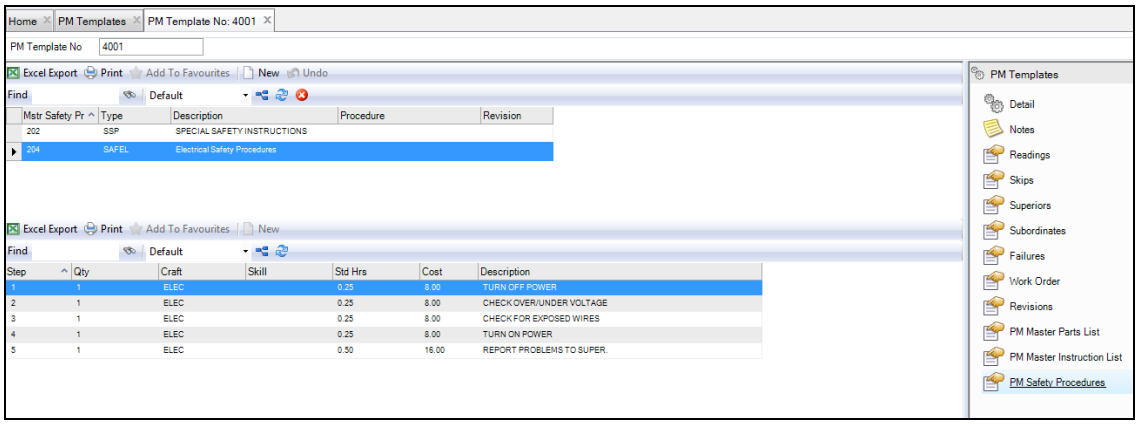



## Add Master Safety Procedures to a PM Template

Select a master safety procedure (MSP) to identify all safety instructions that are required for a PM using the PM Safety Instruction submenu.

To add an MSP to a PM template, click New in the upper browse. Use the lookup in the Master Safety Procedure field and select the MSP. Press Enter to save.

**Fig. 4.140**
Adding MSPs to a PM Template




## View DUOM Readings in PM Template

To view the DUOM readings for a piece of equipment or serialized tool, open the PM template and select the Readings submenu.

***Note*** You cannot enter DUOM readings in this submenu when a route MIL is attached to the PM template.

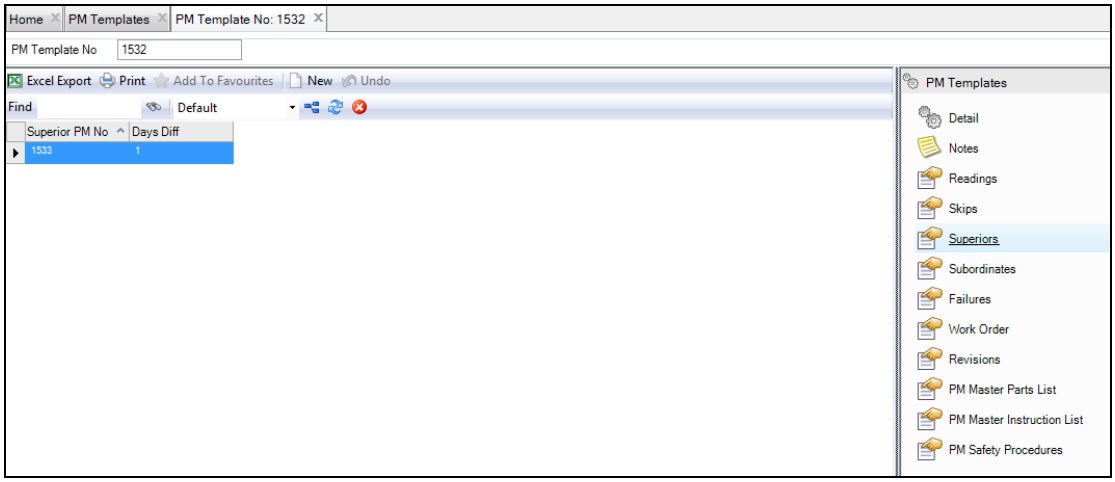
## Link PMs Together

By establishing subordinate and superior PMs, you prevent performing duplicate work for both PMs. Certain PMs can include other PMs. For example, if you have an annual PM and it includes all of the work of a quarterly PM, you would not want to perform the quarterly within a few days of the annual PM. In this case, the annual PM would be the superior and the quarterly PM would be the subordinate.

### Link to Superior PMs

Superiors prevent excessive maintenance by linking multiple levels of PMs. This option displays PMs superior to the current record.

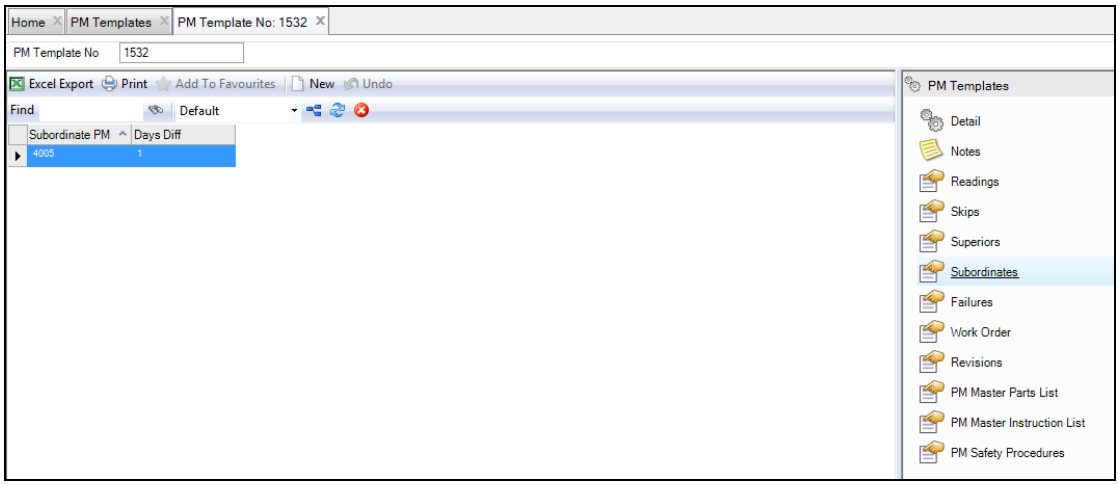
**Fig. 4.141**
Linking to Superior PMs




### Link to Subordinate PMs

Subordinates (subs) link multiple levels of PMs together. This option displays PMs subordinate to the current record.

**Fig. 4.142**
Linking to Subordinate PMs



## Associate Failure Codes with a PM Template

The failure code represents what the PM is designed to prevent. The Failure Analysis batch job reviews PMs that are designed to prevent that failure on that piece of equipment. If such a PM is found, the Next Failure date is updated on the PM template based on the mean time between failures. It also triggers the system to send an e-mail to the Notify person or group on the PM.

For example, if a PM is created to prevent oil from leaking from a piece of machinery and the PM is performed every six months, you can associate the failure code (leaking oil) to this PM. You then can check the next schedule date for the PM and compare it with the statistical next failure date for leaking oil.

If a CM work order with the failure code for leaking oil is created for the piece of equipment prior to the PM's complete-by date, then a failure alarm is flagged to signal the Notify person on the PM to issue the PM ahead of schedule. It can also lead to increasing the frequency of the PM or to changing the parts or procedures that are used on the PM.

Follow these steps to associate failure codes with a PM template:

1. Open the PM template and select the Failures submenu.
2. Click New and enter the following information:

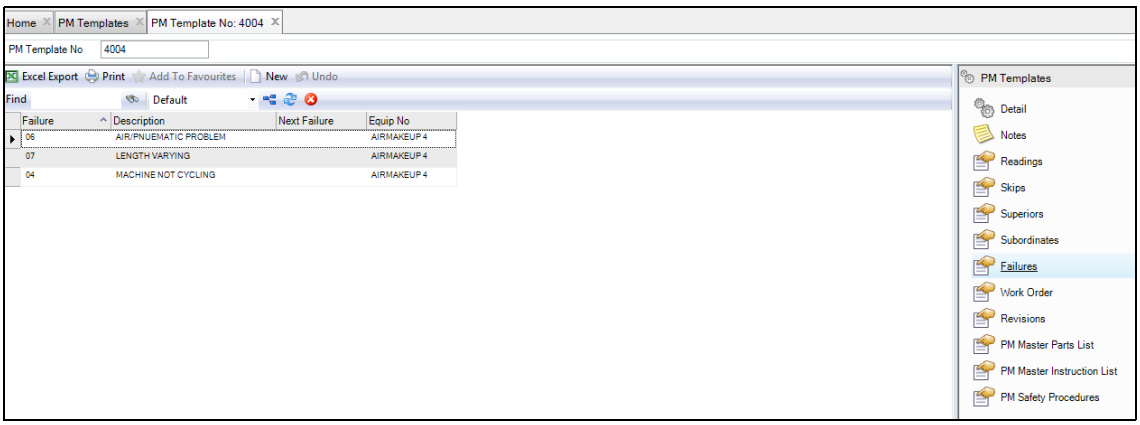
   *Failure.* Use the lookup and select the failure code from the list.

   *Description.* Autofills with the failure description.

   *Next Failure.* The Failure Analysis batch job populates this date based on PM Failure codes and MTBF calculation.

   *Equip Number.* Autofills with the equipment associated with the PM template.
3. Press Enter to save.

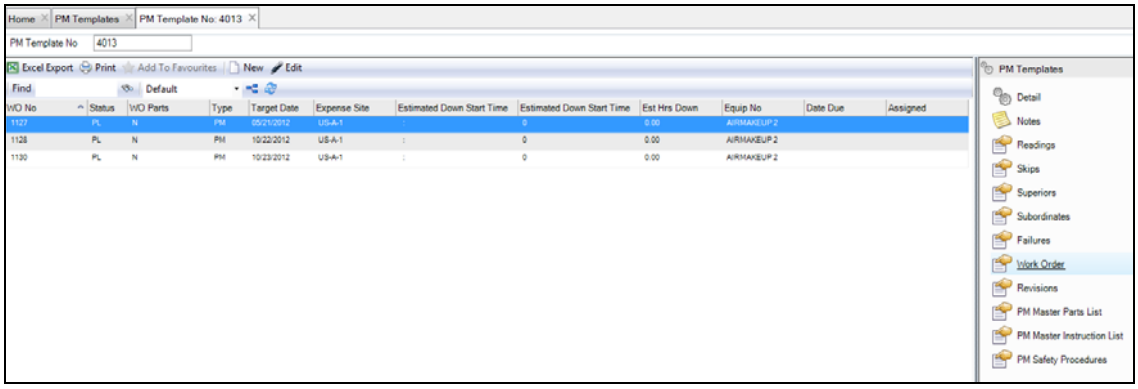
**Fig. 4.143**
Associate Failure Codes with a PM Template




## View Work Orders Created from a PM Template

To view the work orders created from a PM template, open the PM template and select the Work Orders submenu.

**Fig. 4.144**
View Work Orders Created from a PM Template




## Set Dates to Skip the PM

EAM gives you the ability to skip a PM during a set range of dates. During this time, that PM is inactive and EAM does not create work orders for it.

Follow these steps to skip a PM:

1 Open the PM template and select the Skips submenu.

2 Click New and enter the following information:

*Start Date.* Use the calendar lookup to select the first day the PM is inactive.

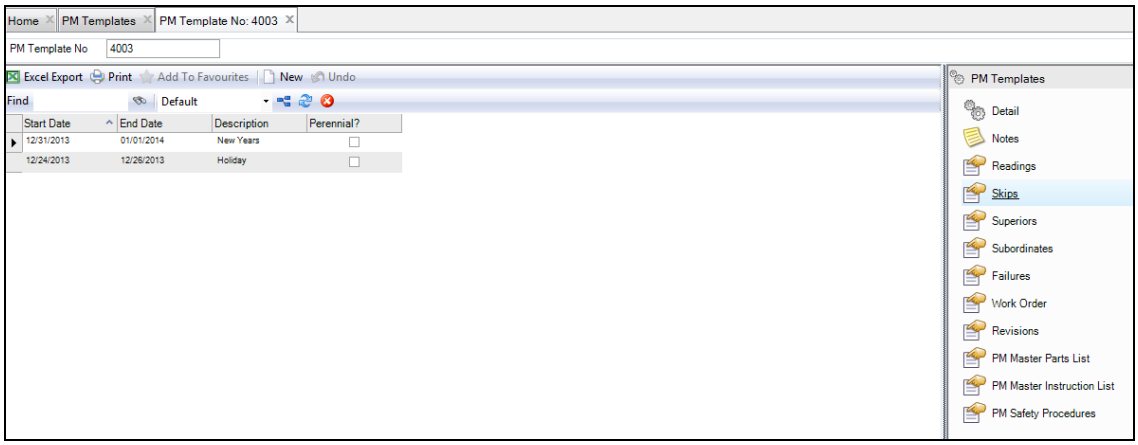
*End Date.* Use the calendar lookup to select the last day the PM is inactive.

*Description.* Enter a short description why the PM is being skipped during these dates.

*Perennial?* Select this check box if the PM should be skipped every year during this time.

3 Press Enter to save.

**Fig. 4.145**
Set Dates to Skip the PM



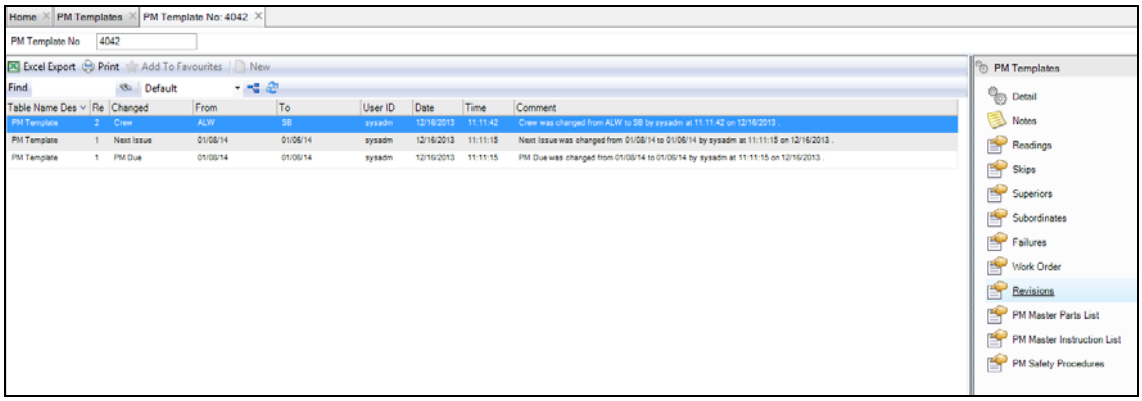
### View the Revision History for a PM Template

Because many quality systems call for strict record keeping about the revisions made to PM templates, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the PM template.

To view the revision history for an equipment record, open the PM and select the Revisions submenu.

***Note*** Revision control is activated in the General|Business Units|Sites menu. See “Enable Revision Control” on page 61.

**Fig. 4.146**
PM Template Revisions Submenu




## Copy PM Template to Equipment

If you have multiple pieces of equipment and you need to create similar PM templates for each of them, you can duplicate a PM template and associate it with multiple pieces of equipment. This action, called Copy to Equipment, saves you time and ensures data integrity.

Follow these steps to duplicate a PM template and associate it to another piece of equipment:

1. Open the PM template browse.
2. Highlight the PM template and select Copy to Equipment from the PM Template Action menu.
3. A lookup window opens. Double-click to select the piece of equipment.
4. The new PM template is created.
5. If necessary, open the PM template and add any additional information. See “Filling Out the PM Template” on page 184.

## Copy PM Templates Across Sites

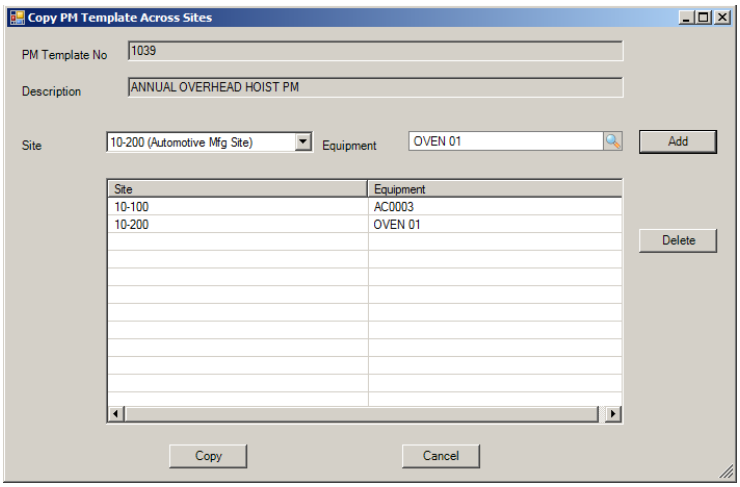
EAM allows you to copy a PM template across multiple sites.

Follow these steps to copy a PM template to other sites:

1 Open the PM templates browse.

2 Highlight the PM template you want to copy and select Copy PM Template Across Sites from the Action menu.

**Fig. 4.147**
Copy PM Template Across Sites



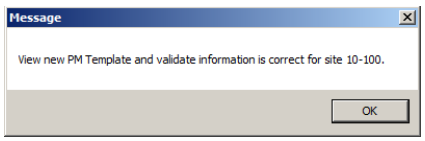

3 Select the site for the copied template from the drop-down menu.

4 Select the equipment to copy from the drop-down menu.

5 Click Add. You can only add one copied template per site.

6 Click Copy. EAM reminds you to view and validate the information in the new templates for each site.

**Fig. 4.148**
Copy Successful




7 Click the Refresh button to see the new PM in the PM Templates browse.

## Create Work Orders from PM Templates

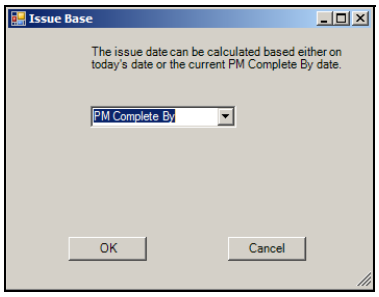
EAM gives you the ability to create a single work order or multiple work orders from PM templates. When you create a WO from a PM template, EAM pulls in all the data from the PM template and automatically enters it into the WO. This feature saves you time and ensures data integrity. If a WO has been created from a PM template, the WO is directly tied to the PM template and the associated WO numbers appear in the PM template submenu.

### Create a Single WO from a PM Template

Follow these steps to create a single WO from a PM template:

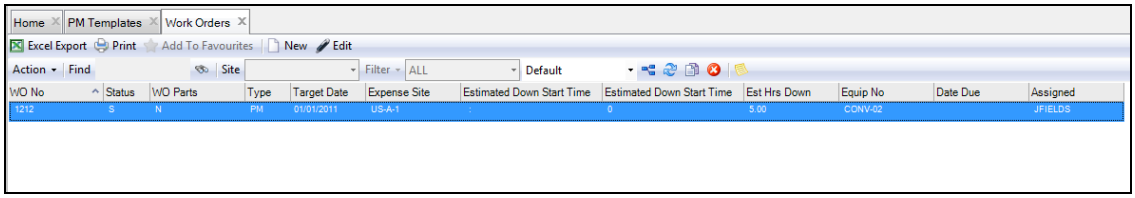
1. Open the PM Template browse in Maintenance|PM/PdM|PM Templates.
2. Highlight the PM template and select Issue from the PM Template Action menu. The Issue Base window opens.
3. Select the issue date from the drop-down menu and then click OK.
   - **PM Complete By.** WO is issued on the PM template's PM Complete By date. The PM Complete By date is located on the Issue Method tab.
   - **Today.** WO is issued today.

**Fig. 4.149**
Create WO from PM Template




4. The WO browse opens. If necessary, open the WO and enter any addition information. See "Filling Out the Work Order" on page 219.

**Fig. 4.150**
Filling Out the WO




### Create Multiple WOs from PM Templates

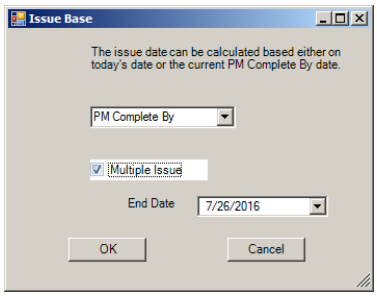
Use Global Issue to create multiple work orders. Select a single PM template for multiple issues or multiple PM templates. Select multiples manually or by filtering. If you select multiple PMs, use this option to schedule them for issue. Issue multiples from a PM template up to the end date.

Follow these steps to create multiple WOs from PM templates:

1. Open the PM Template browse in Maintenance|PM/PdM|PM Templates.
2. Highlight the PM templates and select Global Issue from the PM Template Action menu. The Issue Base window opens.
3. Select the issue date from the drop-down menu.
   - **PM Complete By.** WO is issued on the PM template's PM Complete By date. The PM Complete By date is located on the Issue Method tab.

- **Today.** WO is issued today.

**Fig. 4.151**
Create WOs from PM Templates



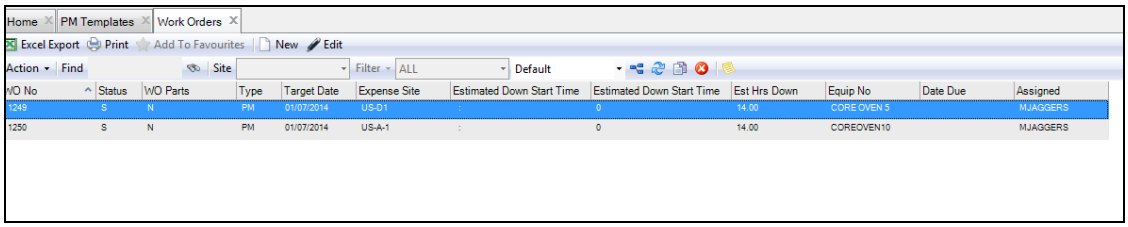

4 If the issue cycle is less than the end specified, select the Multiple Issue check box to issue multiple WOs per PM. This allows a planner to issue daily PMs for each day of the week without going in each day and issuing them.

***Note*** If the Multiple Issue check box is not selected, a single WO is issued for the selected PM templates.

5 If the Multiple Issue check box is selected, specify the End Date to limit the date range when the WO is issued.

6 Click OK. The WO browse opens. The WOs that were created are displayed. If necessary, open the WOs and enter any addition information. See “Filling Out the Work Order” on page 219.

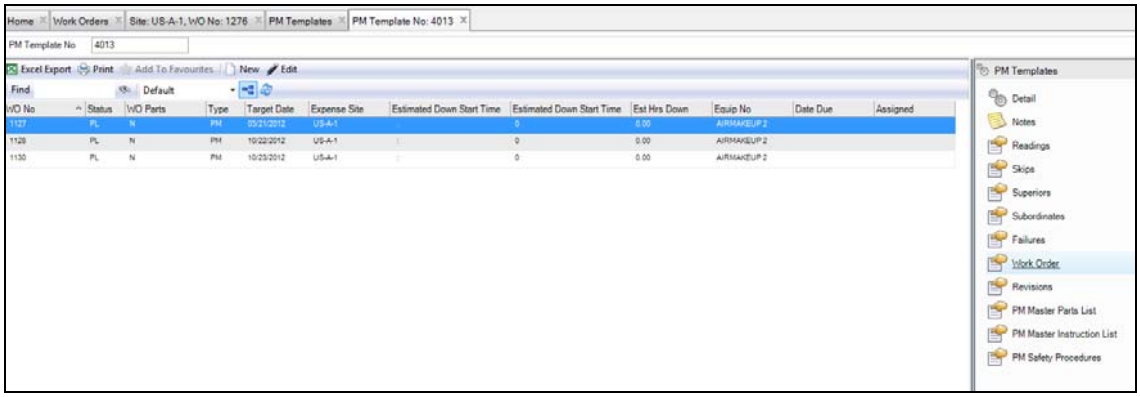
**Fig. 4.152**
Filling Out the WO




## Creating a WO from the Work Order Submenu

You can also create a work order from a PM template in the Work Orders submenu. To create a work order, open the PM template and select the Work Orders submenu. Click New and a blank WO record opens. Fill out the work order record with the necessary information. See “Filling Out the Work Order” on page 219.

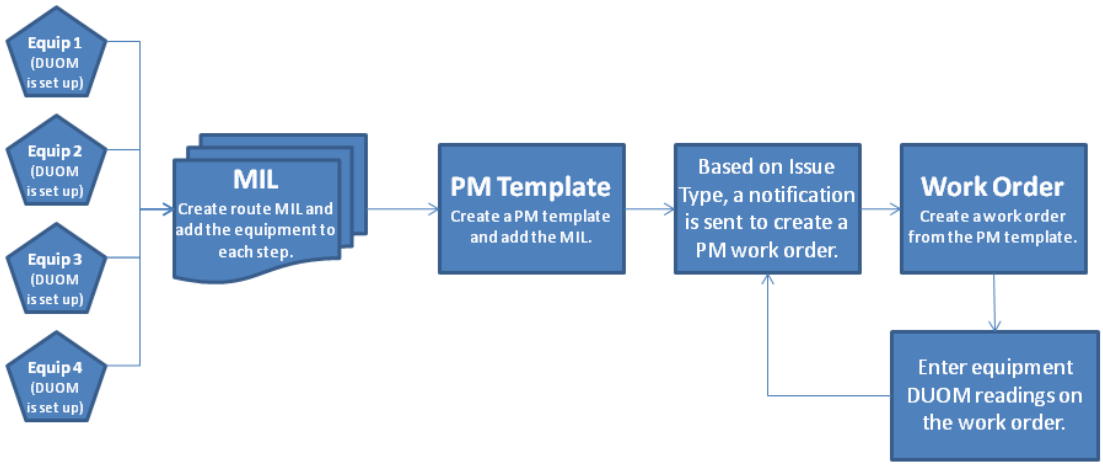
**Fig. 4.153**
Filling Out the WO




## PM Route Workflow Procedure Using PM Templates

The following procedure shows how to enter DUOM readings for multiple pieces of equipment using work orders with a route MIL issued from a PM template.

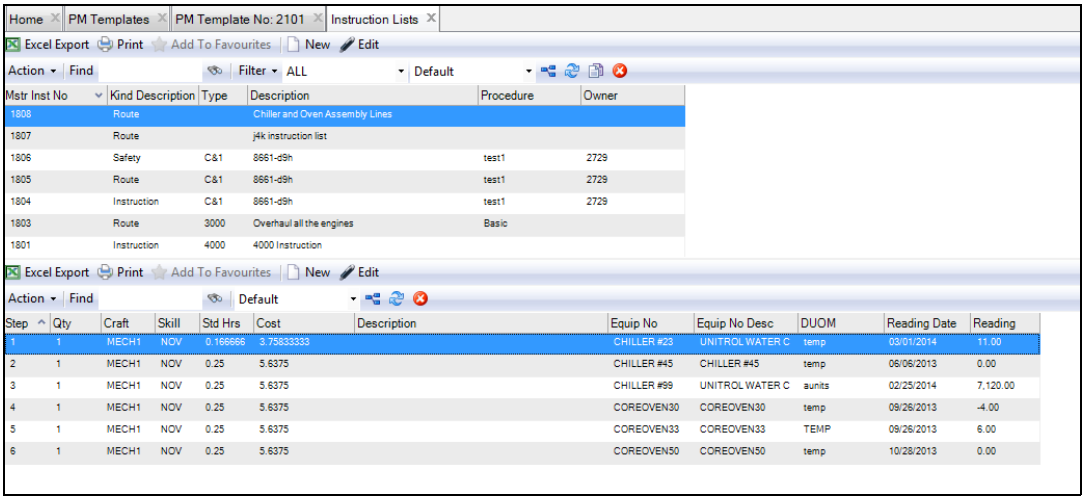
**Fig. 4.154**
PM Route Workflow Procedure Using PM Templates




1 Create a route MIL and add steps to the MIL. On each step, attach a piece of equipment. See “Creating an MIL” on page 115.

***Note*** Each piece of equipment must have the DUOM set up. See “Defining the DUOM for Equipment Readings” on page 146.

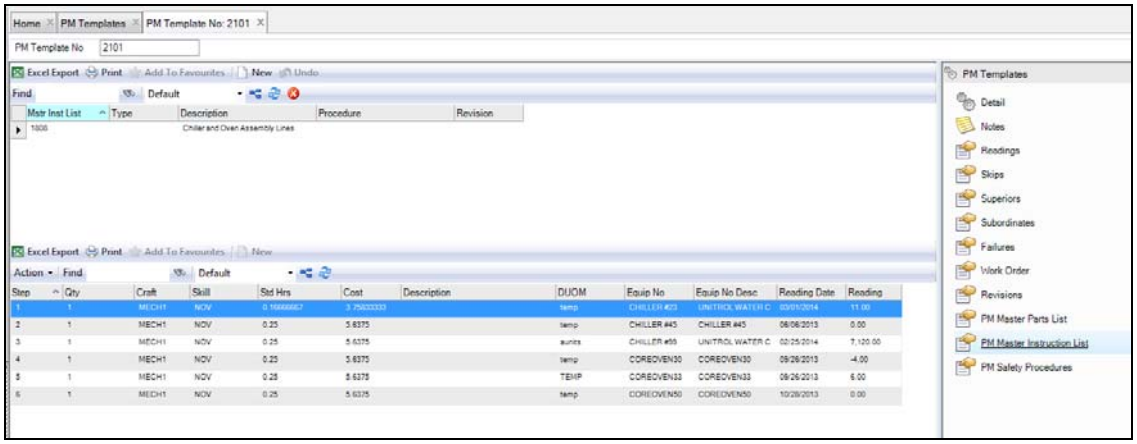
**Fig. 4.155**
Create a Route MIL




2 Create a PM template and set the Issue Method to DUOM, Calendar, Both, or Event. See “Creating a PM Template Record” on page 184.

3 Attach the MIL, which was created for the pieces of equipment, to the PM template. See “Adding MILs to a PM Template” on page 193.

**Fig. 4.156**
Attach the MIL to the PM Template

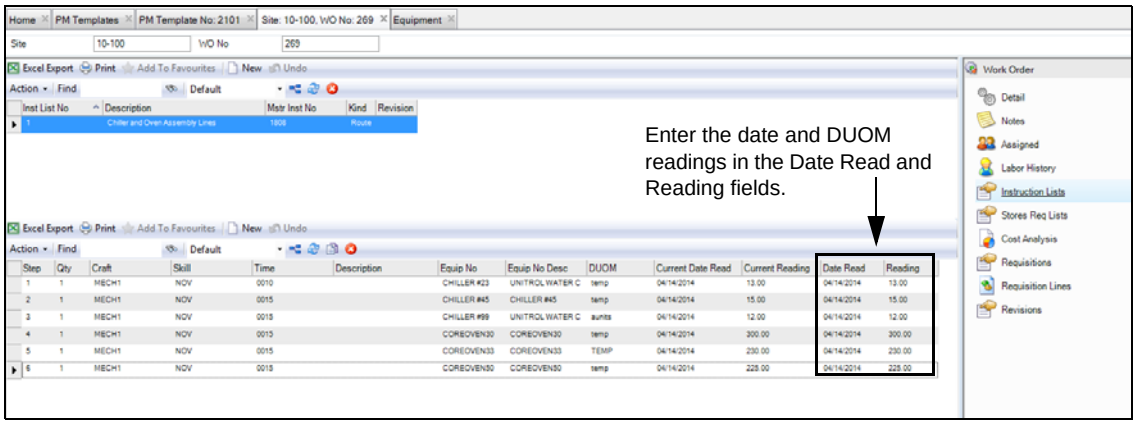



4 Create a work order from the PM template. The MIL that was attached to the PM template is automatically added to the work order. See “Create Work Orders from PM Templates” on page 199.

5 To enter the readings, open the work order and select the Instruction List submenu. Enter the date and the readings for each piece of equipment.

***Note*** If there are any out-of-tolerance readings, see “Defining the DUOM for Equipment Readings” on page 146.

**Fig. 4.157**
Entering Equipment Readings




6 When the next PM is due, as determined by the PM template's Issue Type, create another work order from the PM template and enter the equipment readings for each machine.

# Production Driven Maintenance

## Overview

PM scheduling can be based on calendars, events, DUOM, or a combination of the three. Equipment DUOM readings can be manually entered as described in this user guide. See "Defining the DUOM for Equipment Readings" on page 146.

Production driven maintenance lets you align PM scheduling based on actual equipment usage or production hours. You can use production driven maintenance in the following ways:

- Create mappings between EAM equipment and ERP production work centers, machines, and tooling, or between EAM equipment and ERP items. Equipment mapping allows ERP shop floor operation activity to automatically update the equipment DUOM.
- Automatically load production hours directly into equipment from a data file.
- Load data into equipment DUOM based on a third-party source for operational data, CIM Load.

If you use any of these approaches to load equipment DUOM data, equipment usage drives PM schedule frequency. This method of maintenance scheduling minimizes the potential for unplanned and costly downtime, and greatly reduces the effort required to manually enter DUOM readings in equipment used for PM scheduling.

## Setup

To use production driven maintenance, the following equipment data must already be set up:

- **Create Equipment Records.** For information about creating equipment records, see "Creating an Equipment Record" on page 126.
- **Add DUOMs to EAM.** For information about adding DUOMs to EAM, see "DUOM Codes" on page 82.

- **Add DUOMs to Equipment Records.** For information about adding the DUOMs to equipment records, see “Defining the DUOM for Equipment Readings” on page 146.

If you use parent-child relationships for equipment:

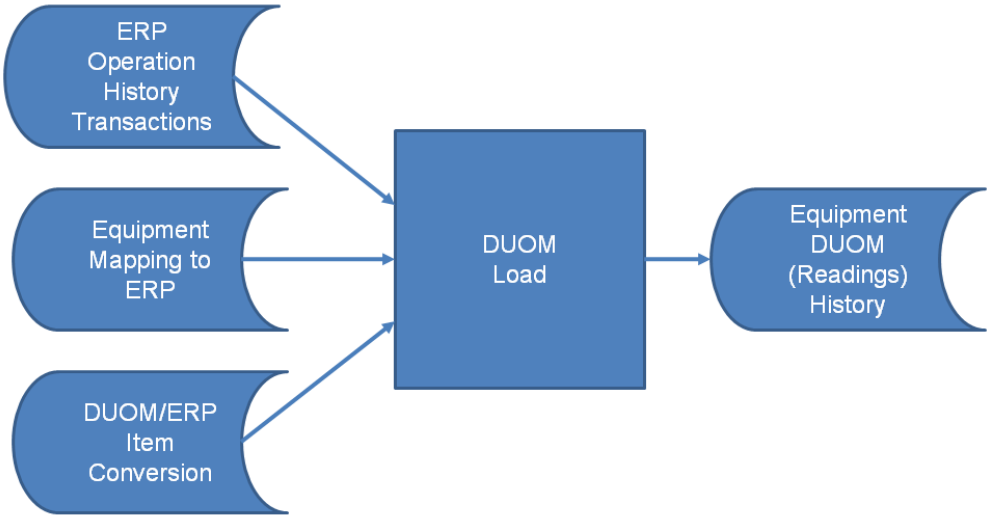
- **Build Parent-Child Structure.** If necessary, set up the equipment hierarchy (parent-child relationships) using the Parent? and Parent No fields on the Codes tab on the Equipment record. See “Equipment: Codes Tab” on page 127.

## Integration with ERP Shop Floor Operations

Production driven maintenance provides tools to establish mappings between EAM equipment and ERP operational data and items, so that the system can automatically update the equipment DUOM.

When production driven maintenance is incorporated, EAM reads a file in ERP on a regular schedule and then updates equipment usage data in EAM. Production driven maintenance automatically converts information to match work centers, machines, and tool IDs in ERP to corresponding EAM equipment records. EAM maps the ERP product ID to a specific EAM DUOM. EAM reads the ERP production history table and determines which records need to be updated with the correct usage. Then PM work orders can be generated based on updated equipment meter readings from the downloaded ERP data. Each op_hist record represents work that has been done on the shop floor and allows machine and tool usage tracking, either in terms of the number of items produced or the amount of time for each process.

**Fig. 4.158**
Flowchart: Production Driven Maintenance Integration with ERP Shop Floor Operations




### Setup – Integration with ERP Shop Floor Operations

If you are using the ERP operational transaction history to update equipment DUOM records, you must set up the following operations fields on the MFG/PRO Options tab on the site record:

- Customer Field
- Trans (system updated)
- Create Conv?

- Ignore Tools?
- Separate Tools?

See “Sites: MFG/PRO Options Tab” on page 60.

In the Operation submenu on the Site record, you must specify the ERP operation history transaction types that are from the ERP op_hist table. These operation types provide the work center, machine, or tool with its production usage that maps to the EAM equipment and updates its DUOM reading. See “Operation Type – Production Driven Maintenance Setup” on page 62.

### Create Conversions for Equipment to ERP Operation Data

The following conversion tables, located in Maintenance|Production Driven Maintenance, are used for the DUOM load process:

- Equipment Mapping to ERP
- Equip DUOM/ERP Item Conversion

Both tables must contain the EAM equipment number if you want at least one DUOM for that piece of equipment to be updated. When set up properly, these tables can identify the correct EAM equipment number to update and the multiplier to use to calculate the DUOM reading based on ERP operation transaction history data.

***Note*** If a tool code in ERP is mapped to a piece of EAM equipment in the Equipment Mapping to ERP browse and that equipment is set up as a child in EAM, do not use the Equipment DUOM/ERP Item Conversion. In this scenario, you must use one or the other. If the tool is used in both, the DUOM for the EAM child equipment updates twice.

#### Equipment Mapping to ERP

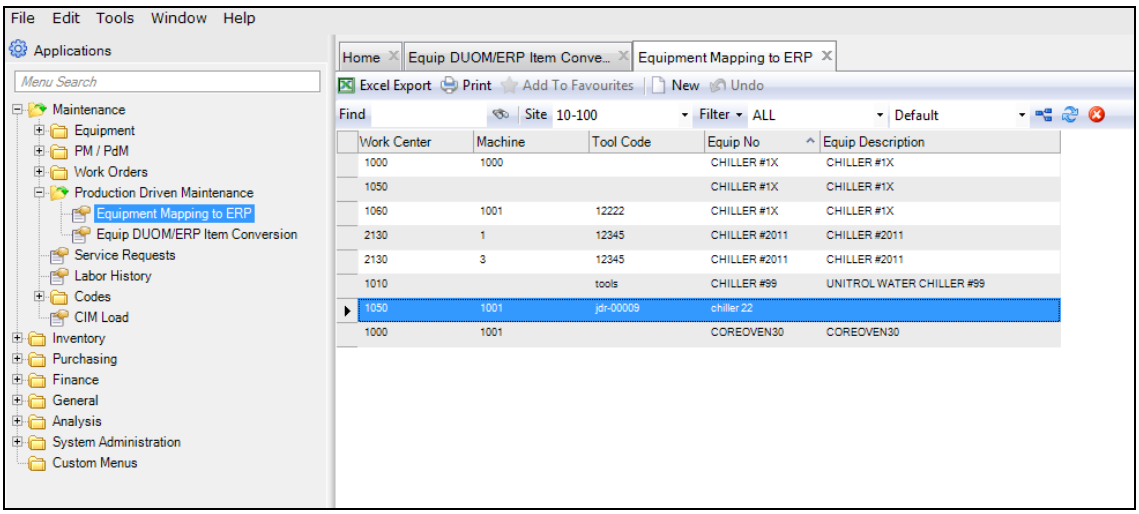
The Equipment Mapping to ERP browse displays records that identify EAM equipment numbers and how they relate to the work center, machine, and tool codes in ERP.

To set up this table properly, it is essential to understand how the work center, machine, and tool codes are used in ERP and how they relate to EAM equipment in your organization.

Follow these steps to add a record to the Equipment Mapping to ERP browse:

1 Open the Equipment Mapping to ERP browse located in Maintenance|Production Driven Maintenance|Equipment Mapping to ERP.

**Fig. 4.159**
Equipment Mapping to ERP Browse




2 Click New. Enter the relevant information in the following fields:

*Work Center.* Select the work center using the lookup. The lookup displays all the work centers from the domain in ERP.

*Machine.* Select the machine using the lookup, which displays only the machines linked to the selected work center.

*Tool Code.* If Tools are used in ERP, a tool can be mapped to an equipment number. Enter the Tool code exactly as it appears in ERP, and then select the Equipment No that corresponds to that tool. In cases where tool codes accurately correspond to an EAM equipment record, as in the case of a die that is attached to a piece of machinery, you can update the DUOMs for two pieces of equipment, the machine and the tool, instead of just one or the other. To do this, select the Separate Tools? check box on the MFG/Pro Options tab in General|Business Units|Sites.

*Equip No.* Select the equipment number using the lookup. The Equip No lookup only displays equipment that is specific to your current site.

***Note*** This translation table is not site specific. The equipment mapping for all sites is displayed and managed here.

*Equip Description.* Displays the equipment description for the piece of equipment selected in the Equip No field.

3 Press Enter to save.

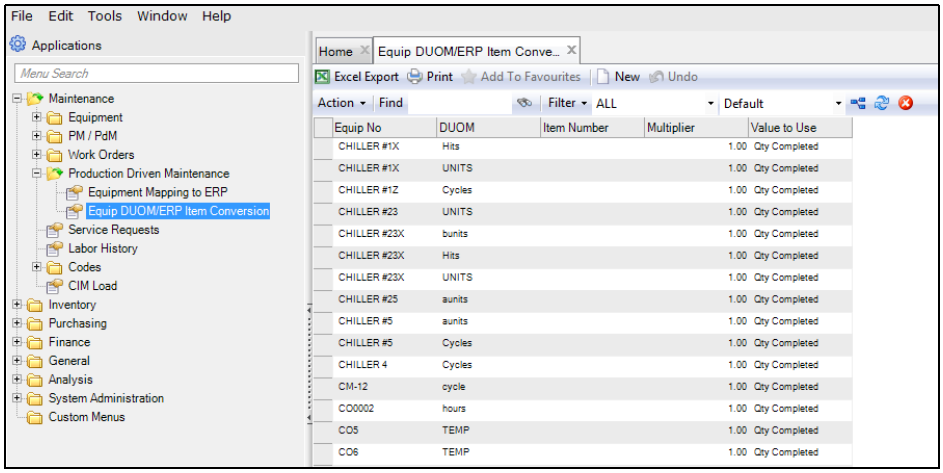
4 Once the work center or work center and machine combination is mapped to an EAM equipment number, EAM can recognize which equipment's DUOM record to update based on the work center on the ERP's Shop Floor Operation History record being read.

***Note*** If an equipment number in EAM has not been added to the Equipment Mapping to ERP table, EAM does not attempt to update any equipment DUOMs for that piece of equipment.

## Equip DUOM/ERP Item Conversion

The content for the Equipment DUOM/ERP Item Conversion browse can be manually defined or automatically created using the Create ERP Conversion Records action.

**Fig. 4.160**
Equip DUOM/ERP Item Conversion Browse




### Manually Add Records to the Equip DUOM/ERP Item Conversion Browse

Follow these steps to manually add a record to the Equipment DUOM/ERP Item Conversion browse:

1. Open the Equipment DUOM/ERP Item Conversion browse located in Maintenance| Production Driven Maintenance|Equip DUOM/ERP Item Conversion.

2. Click New. Enter the relevant information in the following fields:

   *Equip No.* Select the equipment number using the lookup. The Equip No lookup only displays equipment that is specific to your current site.

   ***Note*** This translation table is not site specific. The equipment mapping for all sites is displayed and managed here.

   *DUOM.* Select the DUOM using the lookup. The lookup only displays DUOMs linked to the selected equipment number.

   *Item Number.* Enter the item number code from ERP for the item or part that is manufactured in your plant on the EAM equipment specified.

   *Multiplier.* Enter a multiplier in this field. The number entered in this field establishes the conversion between the number of parts processed and the DUOM or the amount of time and the DUOM.

   ***Example*** If five parts are processed per stroke (the DUOM), set the multiplier to 0.2 (1 stroke/5 parts = 0.2 multiplier).

*Value to Use.* The system populates this field with a value that represents whether the conversion is from time to DUOM (Act Run or Std Run) or from units made to DUOM (Qty Completed). Qty Completed is the typical entry.

- **Act Run.** Actual run time per DUOM.
- **Std Run.** Standard run time per DUOM.
- **Qty Completed.** Quantity of units made per DUOM.

3 Press Enter to save.

The Equipment DUOM/ERP Item Conversion browse displays pieces of equipment and how the equipment's DUOM relates to the ERP item and its production activity.

### Create Records Using the ERP Conversion Records Action

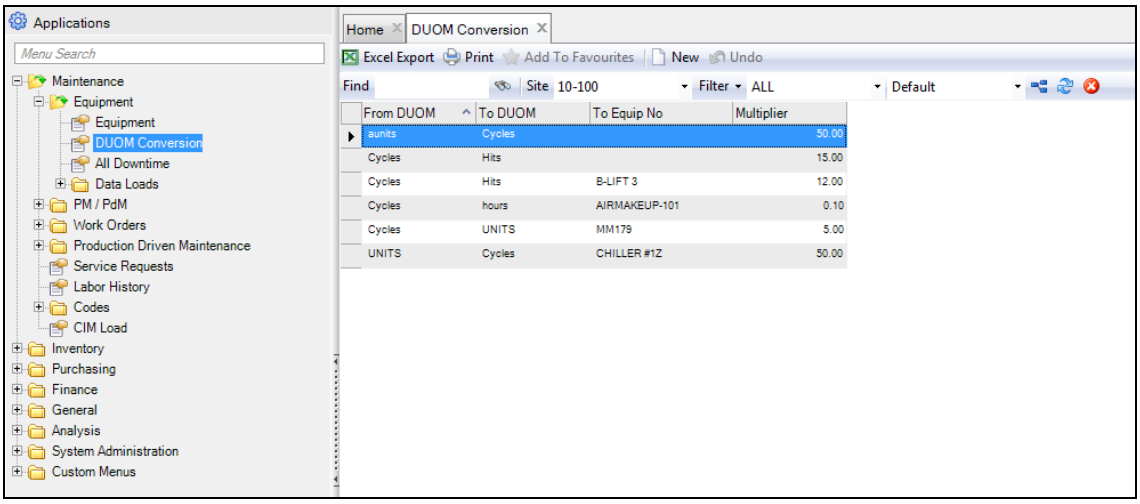
The ERP Conversion Records action automatically populates the EAM Equip DUOM/ERP Item Conversion browse with all the current EAM equipment numbers and their DUOMs. It provides a way to create basic Equipment DUOM/ERP Item Conversion records for every piece of equipment in the EAM database. Once the action has been run, you can then open the Equip DUOM/ERP Item Conversion browse and modify the records as needed.

If the Create Conv? setting on the Site record is enabled, when a new DUOM is added to a piece of equipment in the Readings submenu and then the ERP Conversion Records action is run, the equipment and its new DUOM are added to this browse.

### DUOM Conversion for Parent-Child

The DUOM conversions for parent-child equipment are only used if the Upd Children? setting is enabled on the parent's equipment record. When this field is enabled and a current reading is updated for the equipment's DUOM, EAM updates the DUOMs for all of the equipment's children based on the DUOM conversions set up in this browse. For information about the Upd Children? setting, see "Equipment: Codes Tab" on page 127.

**Fig. 4.161**
DUOM Conversion Browse



Follow these steps to add a DUOM conversion record for parent-child equipment:

1. Add the DUOM for the subordinate (child) piece of equipment, making sure that it is based on the parent equipment's DUOM. See "Defining the DUOM for Equipment Readings" on page 146.
2. Open the DUOM Conversion browse located in Maintenance|Equipment|DUOM Conversion.
3. Click New. Enter the required information in the following fields:

   *From DUOM.* The DUOM for the parent equipment.

   *To DUOM.* The DUOM for the child equipment.

   *To Equip No.* If this relationship is unique to one child DUOM, then specify that child as the To Equipment No. If this relationship occurs many times in the equipment parent/child hierarchy, leave the To Equipment No field blank.

   *Multiplier.* The multiplier that is used to convert one equipment's DUOM to another equipment's DUOM. For example, if one stroke by a parent equipment drives five rotations on the child, then use a multiplier of 5 to define the relationship. In this example, the From DUOM would be strokes, the To DUOM would be rotations, and the multiplier would be 5.
4. Press Enter to save.

## ERP Shop Floor Operations

To enable the DUOM Load Job to update the Equipment DUOM, the site's operation transaction types defined in EAM are used to select the ERP operation history transactions along with the operation data related to the EAM Equipment Mapping to ERP and Equipment DUOM/ERP Items Conversions.

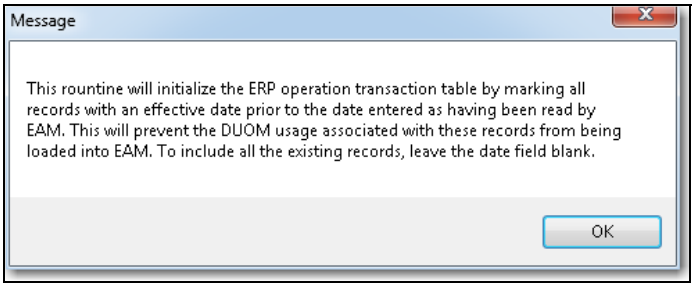
### Initialize ERP Operation

The Initialize ERP Operation action initializes the ERP operation transaction table by marking all records with an effective date before the date entered as having been read by EAM. This action prevents the DUOM usage associated with these records from being loaded into EAM. To include all existing records, leave the date field blank.

Follow these steps to run the Initialize ERP Operation utility:

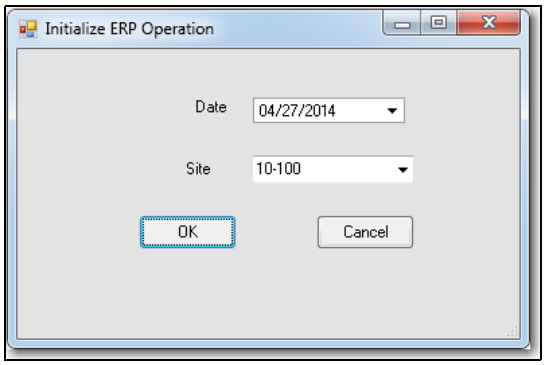
1. Open the Equip DUOM/ERP Item Conversion browse located in Maintenance|Production Driven Maintenance|Equip DUOM/ERP Item Conversion.
2. Select Initialize ERP Operation from the Action menu. This action runs the Initialize ERP Operations utility, which limits those records that are included during the DUOM Load process.
3. The following message is displayed. Click OK.

**Fig. 4.162**
Initialize ERP Operations Message




4 The Initialize ERP Operation window opens.

**Fig. 4.163**
Initialize ERP Operations Window




5 Using the calendar lookup, select the date to convert the ERP manufacturing records into EAM DUOM readings. To include all existing records, leave the date field blank.

6 Using the drop-down list, select the site in which the ERP manufacturing records will be converted into EAM DUOM readings.

7 Click OK.

## DUOM Load – Batch Job Program

Use the DUOM Load Job Program to automatically update equipment DUOMs based on the operation transaction types defined in EAM for the site. EAM uses the site to select the ERP operation history transactions, the operation data related to the EAM Equipment Mapping to ERP, and the Equipment DUOM/ERP Items conversions.

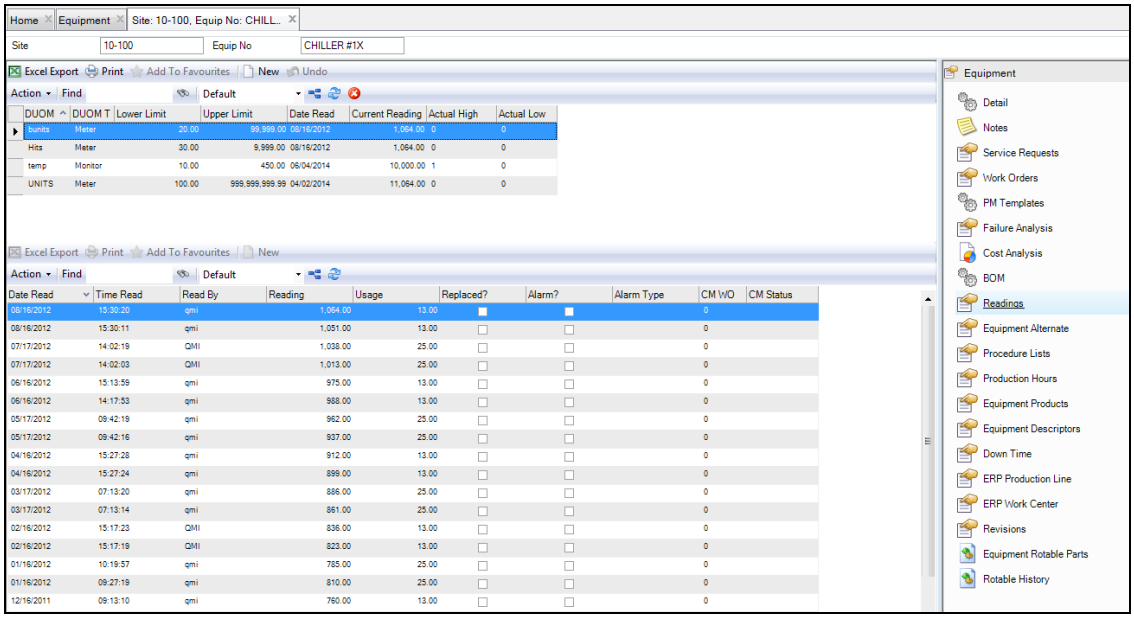
Follow these steps to run the DUOM Load Job program:

1 Open the Job Program browse located in System Administration|Job Control|Job Program.

2 Run the DUOM Load job (duomload.p). For more information about running jobs, see “Job Control Application” on page 703.

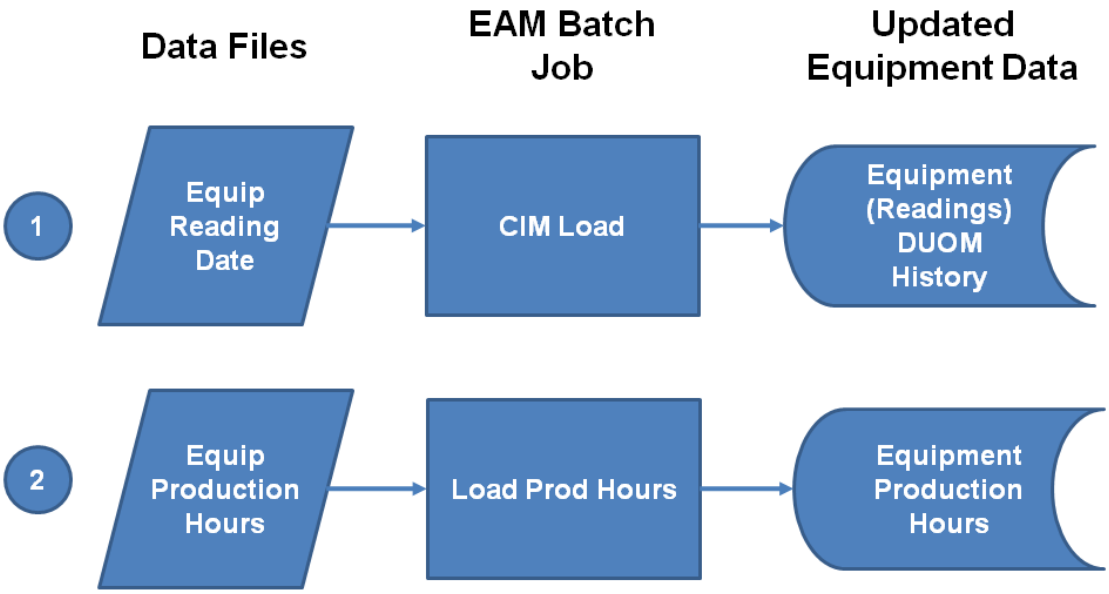
3 After the DUOM Load job runs, the equipment DUOM is updated with readings that you can view in the Equipment Readings submenu. The readings can be used to determine the PM Issue for the equipment.

**Fig. 4.164**
Updated Equipment DUOM Readings




## Operational Direct Data File Load

**Fig. 4.165**
Flowchart: Operational Direct Data File Load




### Computer Integrated Manufacturing (CIM) Load

The Computer Integrated Manufacturing (CIM) module is used to automatically load equipment DUOM readings into EAM and reduce the number of manual entries necessary. The file containing the DUOM readings tied to the piece of equipment originates from another application,

outside of EAM. An EAM batch job reads the file and pulls those readings into EAM. These readings are then used the same as if they were entered manually in Equipment DUOM Maintenance.

## CIM Load Setup

### Create the Data File

To use the CIM functionality, you must write a routine that generates a simple text file for EAM to read.

The setting of the CIM Load field on the Maintenance tab of the site record controls whether the system expects the file to include the equipment usage or the equipment reading. For more information on the CIM Load field setting, see “Sites: Maintenance Tab” on page 51.

- **Equipment Usage.** The accumulated usage for the time frame being reviewed. If you are using equipment usage, the text file needs the following data in the following order:
  - Equip No
  - DUOM
  - Usage
  - Date
  - Time
  - User ID

  ***Example*** The simple text file that contains equipment usage would have the following data:

  ```
  EB107 222 800 5/1/2012 10:10:09 aant
  EB110 222 796 5/1/2012 10:10:09 aant
  EB111 222 801 5/1/2012 10:10:09 aant
  ```

  ***Note*** The time value can be entered in the HH:MM:SS format or as an integer (seconds since midnight 0 to 86400). In the previous example, if you enter the time as an integer, the simple text file would have the following data:

  ```
  EB107 222 800 5/1/2014 36609 aant
  EB110 222 796 5/1/2014 36609 aant
  EB111 222 801 5/1/2014 36609 aant
  ```

- **Equipment Reading.** The current meter reading for the DUOM. If you are using equipment readings, the text file needs the following data in the following order:
  - Equip No
  - DUOM
  - Reading
  - Date
  - Time
  - User ID

***Example*** The simple text file that contains equipment readings would have the following data:

```
PM117 210 505 7/12/2014 10:10:09 eefn
PM120 210 500 7/12/2014 10:10:09 eefn
PM121 210 501 7/12/2014 10:10:09 eefn
```

***Note*** The time value can be entered in the HH:MM:SS format or as an integer (seconds since midnight 0 to 86400). In the previous example, if you enter the time as an integer, the simple text file would have the following data:

```
PM117 210 505 7/12/2014 36609 eefn
PM120 210 500 7/12/2014 36609 eefn
PM121 210 501 7/12/2014 36609 eefn
```

***Note*** Make sure that the data file is tab delimited, not comma delimited. Additionally, a return character is required at the end of each line to ensure that the History browse under Equipment DUOM browse is updated.

### Define Equipment Alternate

It is possible that the data file containing the DUOM reading does not reference the piece of equipment by the same name or code used in EAM. In some cases, various codes can be used to refer to the same piece of equipment. To avoid the need to standardize readings sources to match EAM, EAM provides the Equipment Alternate submenu, which allows you to specify all alternate equipment numbers and descriptions that reference a piece of equipment. When EAM pulls in the readings, the alternate equipment numbers are checked and recognized, allowing EAM to match the readings to the correct equipment record. For more information about the Equipment Alternate submenu, see “Add an Alternate Name for Equipment” on page 135.

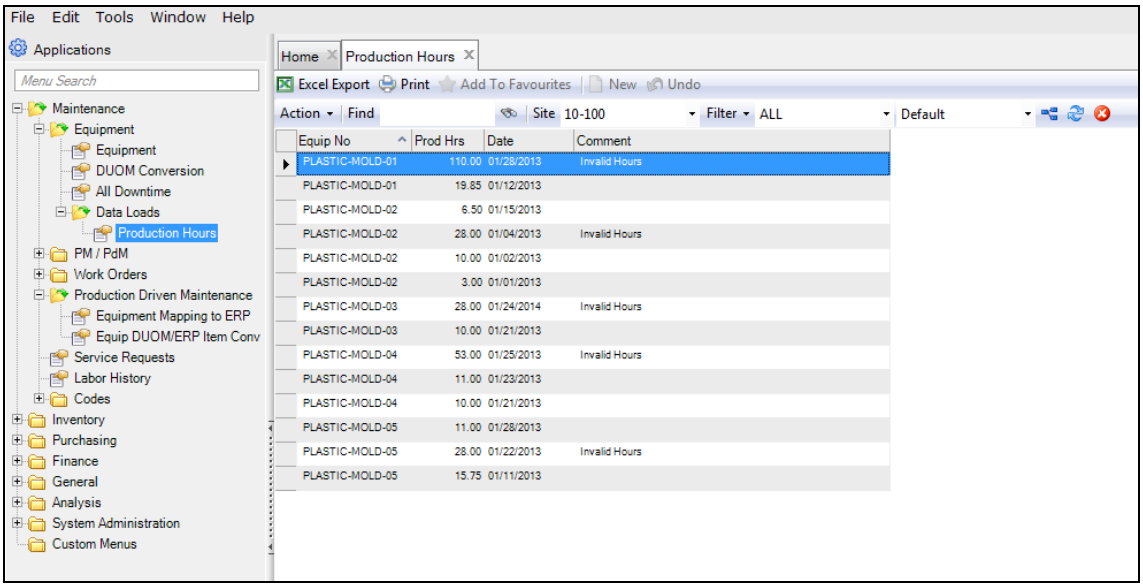
## Load Production Hours

The Load Production Hours job program loads the data from a predefined data file into EAM Equipment. All records, whether they have errors or are error free, are loaded into the Production Hours browse, which is located in Maintenance|Equipment|Data Loads|Production Hours. The records that are error-free are also loaded into the Production Hours submenu in the equipment record. If the record contains an error, a description of the error is displayed in the Comments field in the Production Hours browse. For more information, see “Load Production Hours” on page 731

### Production Hours Browse

The Production Hours browse, located in Maintenance|Equipment|Data Loads, displays the equipment production readings that the Load Production Hours Job program loaded.

**Fig. 4.166**
Equipment Data Load – Production Hours




The Production Hours browse contains the following fields:

*Equip No.* Displays the equipment number for which an equipment production reading has been recorded.

*Prod Hours.* Displays the production hours for the piece of equipment.

*Date.* Displays the date of the equipment production reading.

*Comment.* Displays a system-generated comment that identifies why the equipment production reading could not be loaded. The following is a list of error messages and problems:

| Comment | Problem |
|---|---|
| Invalid Date | Date is not formatted as a date |
| Invalid Hours | Hours is not formatted as a number or is greater than 24 |
| Invalid Equip No | EAM cannot find a match for the Equip No either in the equipment table itself or the alternate table |

### Fixing Errors and Reloading the Records

After fixing the records that contain errors, select Load from the Production Hours Action menu. When the Load action is performed, EAM reloads the records and adds the production hours to the equipment records. If any records still contain errors, EAM displays the new error message in the Comment field. Continue to fix the errors and reload the records until all the records have been loaded into the equipment records.

# Work Orders

Use the Maintenance module to create and store work order records. A work order outlines upcoming maintenance. After the work is complete, update the work order with summary information. When the work order is closed, the work order contains valuable data for historical reporting and analysis.

Work orders can contain the following information: the equipment or tool ID/serial number, a statement of work to be done, any precautions, the employees responsible for doing the labor, the scheduling information, the expense accounting structure, and the recipient of the expense. Also, you can attach instruction lists, stores requisition lists, and safety procedures.

When the work is complete, technicians can record the type of failure that caused the event and the type of repair made. They can associate it with specific systems or assemblies on the piece of equipment for clearer definitions of where the problem occurred. They can record the amount of downtime associated with this event and the amount of labor required to repair the problems.

Charge parts from stores against this work order, and attach purchase requisitions to perform work. With this information, all the costs associated with this event combine in one work order, giving management a better understanding of the cost for this or similar past events.

Create work orders:

- From PM templates
- From service requests
- For corrective maintenance (CM) work orders

Issue PM templates manually or globally to create work orders. You can convert a service request to a CM work order. Add corrective maintenance work orders directly in the Work Order module.

Use the Work Order module to manage special types of work orders, such as fabricated inventory orders. Fabricated work orders replenish inventory items sourced from an internal shop instead of purchased from a vendor. When the part falls below the reorder point, EAM creates a work order instead of a purchase requisition. Once the parts are fabricated, inventory can receive them.

## Business Use Cases–Work Orders

### PM Equipment or Tool DUOM Readings

With PM Maintenance, you can:

- Use route kind instruction lists for PM work orders and planned CM work orders that allow you to directly enter equipment readings to verify that the equipment is running within the defined engineering tolerances.
- Create route kind instruction lists where each instruction step denotes a different equipment ID with its DUOM and current reading for reference.
- Add route instruction lists to PM templates so that the route instructions are available on the WO issued for PM.
- Enter equipment or tool calibration readings directly on PM work order’s route instruction list step for equipment.
- Evaluate out-of-tolerance conditions when the reading is entered for the step on the WO.

If an out-of-tolerance condition occurs, the system is configured to automatically send an e-mail notification to a person or group and, if needed, to automatically create a CM work order to address the out-of-tolerance condition.

Calibration Maintenance ensures that production equipment and tools are running or used within designed specifications, which reduces the amount of production scrap, rework, and downtime.

### Planned Corrective Maintenance WO

The Preventive Maintenance module generates PM work orders using PM templates. A PM template can be based on the following issue methods:

- Calendar frequency
- Driving Unit of Measure (DUOM)
- Special events
- A combination of both calendar and DUOM

PM work orders are pre-planned work orders with much of the relevant information filled in.

### Unplanned CM WO and Service Requests

A CM work order is a work order that is entered directly into the system by a user. A CM work order can be for emergency repairs, breakdowns, rebuild, or installs. CM work orders can be added as needed, copied from an existing CM work order, or created from a service request.

### Maintenance Projects

Work orders can be created from within a project.

## Work Order Setup

### Work Order Codes

Work order codes add supportive data to lookup tables in the work orders. See “Work Order Codes” on page 97.

### Labor Accounting

When labor is posted or credited to a work order, the labor accounting setup options determine the accounting structure for the labor debit and credit expenses. To access the labor accounting setup options, open the Miscellaneous tab in General|Business Units|Site. See “Sites: Miscellaneous Tab” on page 58.

### Work Order Setup in the Domain Record

In the domain record, you can specify whether work orders can be reopened and if work order authorization is required before any parts, labor, or receipts against the PO can be initiated. See “Domain: Maintenance Tab” on page 33.

### Work Order Revision History

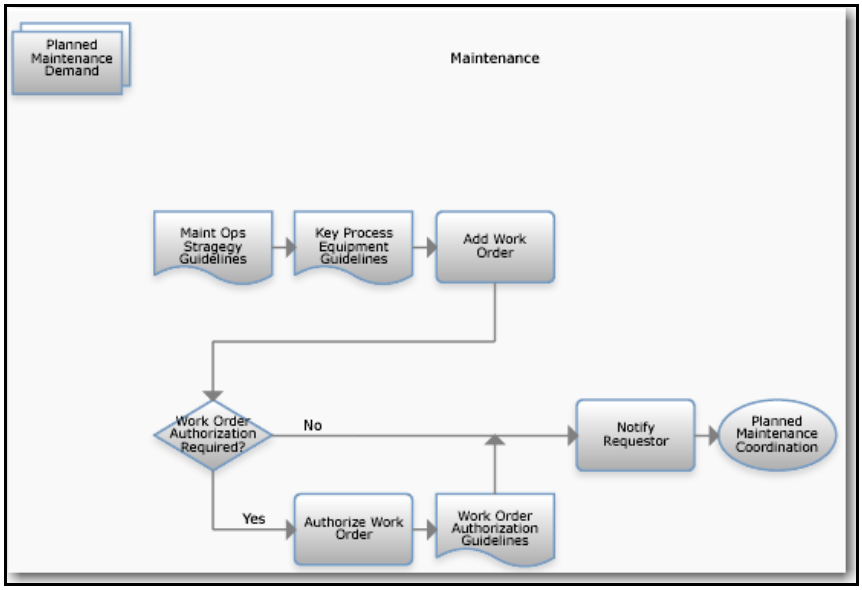
Activate revision control for work orders in the Revision Control submenu on the Site record. See “Enable Revision Control” on page 61.

### Work Order Scheduling Using MS Project

EAM allows you to schedule work orders using MS Project. See “Schedule Work Orders in MS Project” on page 236.

## Performing Planned Maintenance

**Fig. 4.167**
Planned Maintenance Process Flow



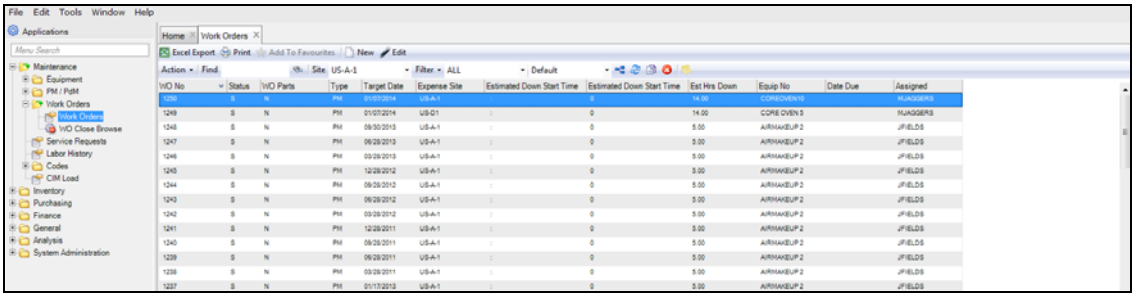

1. Review the maintenance strategy and key process equipment guidelines.
2. Add a work order. Click the node to open Maintenance|Work Orders|Work Order.
3. Authorize the work order if necessary.
4. Notify the requestor.
5. Coordinate planned maintenance.

## Creating a Work Order

Follow these steps to create a work order:

1 Open the Work Order browse in Maintenance|Work Orders|Work Orders.

**Fig. 4.168**
Work Orders Browse




2 Click New. A blank WO record opens.

The system automatically assigns a WO number, which you cannot modify.

3 Enter information in the relevant fields on the General, Codes, Text, Detail, and User Defined tabs. See “Filling Out the Work Order”.

4 Once all the information has been entered, click Save.

### Filling Out the Work Order

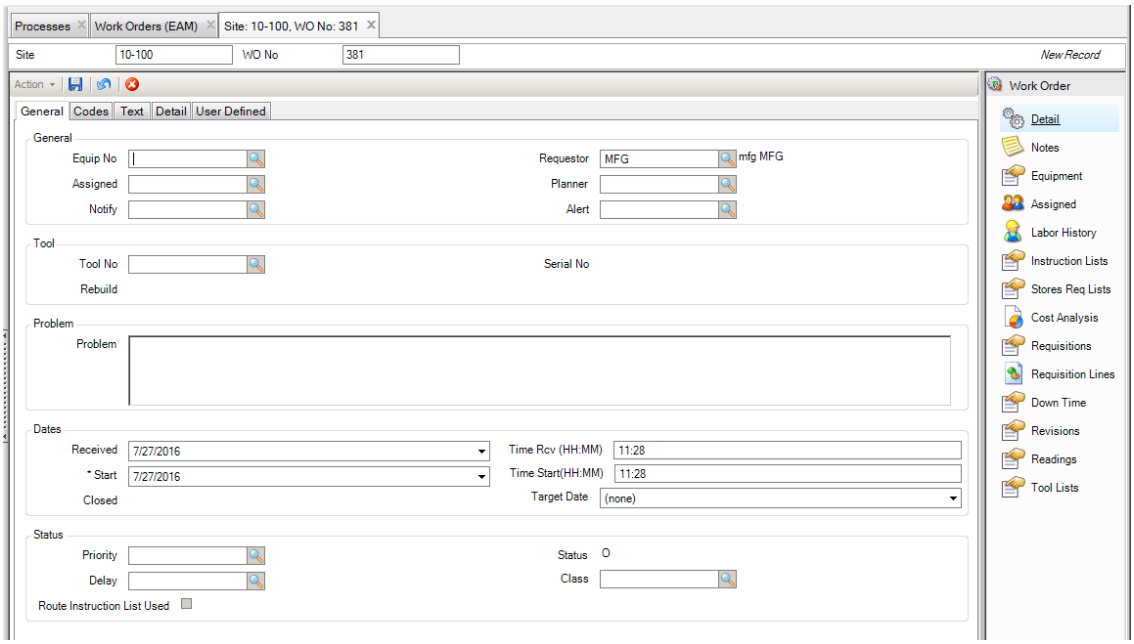
Work Orders contain five tabs: General, Codes, Text, Detail, and User Defined.

#### Work Orders: General Tab

Use the General tab to review default information about the record you selected from the Work Order browse. To assign equipment or a tool to the work order, use the lookup feature to find the correct equipment or tool.

***Note*** You must assign either a piece of equipment or a tool to a WO, but you cannot assign both. Once you select an equipment number or a tool number, the other option becomes inactive.

**Fig. 4.169**
Work Orders: General Tab




## General

*Equip No.* All equipment has a unique alphanumeric identifier. If a piece of equipment is selected on the work order, the equipment's default cost center's department accounts and sub-accounts display in the WO accounting fields.

*Requestor.* The individual who is requesting work to be performed.

*Assigned.* Select an employee to assign to the work order. The lookup displays employees designated as assignable in Employee Maintenance. If a number of employees have been assigned through the Scheduling module, the first employee in the list displays in this field.

EAM sends an e-mail to the assigned employee when the WO is created and also sends an e-mail any time the Assigned field is updated. Both the employee newly assigned to the WO and the employee removed from the WO receive an e-mail.

*Planner.* Select a planner from the lookup or use the default planner from the equipment record.

*Notify.* Use the lookup to select a person or group. The person or mail group that is selected in the Notify field receives e-mail associated with an event on the work order. Several events on a work order can trigger EAM to send an e-mail, for example; a work order status change, the use of an as-left code, or a part status change (parts on-order, due date changes, and part receipts).

*Alert.* Use the lookup to select a user ID to receive pager text messages about this work order. This field is also set when a WO is created from a service request.

## Tool

*Tool No.* Each tool has a unique alphanumeric identifier. Use the lookup to select the correct tool.

*Serial No.* Use the lookup to select the serial number for the specific tool for this WO.

*Rebuild.* Optionally select the tool rebuild area if this tool is rotable.

**Problem**

*Problem.* Use this text input area to describe the problem the work order addresses.

When manually adding a work order, you can enter free-form text in this box. When service requests convert into work orders, some information from the service request automatically copies to the problem field, which you can edit. The PO Text for a fabricated part also defaults in this field.

**Dates**

*Received.* The date and time the work order was created on the system. Changes to the received date or time create work order revisions, if applicable. On both add and copy, the date defaults to the current date. You can update the date.

*Start.* The date the requestor or planner wants the work to be performed:

- On a CM work order, the start date defaults to today's date when the work order is first created.
- On a PM work order, the start date depends upon which Issue Date calculation method is selected when the PM is issued.

The start date can be overwritten. The start date is not used in the work order scheduling; however, it can be used to designate a proposed date for work to begin.

*Closed.* The date when the work order status was changed to C for Closed, an indication that all work is complete and no further charges or changes should be made.

*Target Date.* Select a date when the work order is targeted to start.

**Status**

*Priority.* Priority denotes the rank or importance of the work order. Use it to sort or filter records.

If the equipment number is specified when adding a work order, EAM defaults the work order's priority from the equipment. If the equipment number changes on an existing work order, EAM prompts the user with the question "Pull in equipment defaults?" If yes, EAM defaults the priority from the equipment. If no, the priority does not change. In edit mode, you can change the priority on the work order.

*Status.* The work order status. In general, the work order statuses are user-defined except for (F)inished, (C)losed, or (X) canceled. Any other status can be changed, deleted, or added; however, these three are updated based on specific functionality for the WO life cycle.

In Work Order Status, you also can decide the default status for CM and PM work orders. For example, you can configure EAM so that the initial status of new CM work orders is Requested or Planning and new PM work orders is Scheduled. See "Work Order Status Codes" on page 104.

When technicians have completed the work, the work order changes to a Finished status where the work order waits for a supervisor's approval.

***Note*** You cannot make changes or modifications to a closed work order. You cannot charge against or modify a canceled work order.

*Delay.* Use the lookup to select user-defined codes to indicate why a work order has remained open for a given period of time. For example, the reason could be the unavailability of parts or skilled labor needed for the repair, the lack of a permit/authorization to perform the job, or the equipment is not available.

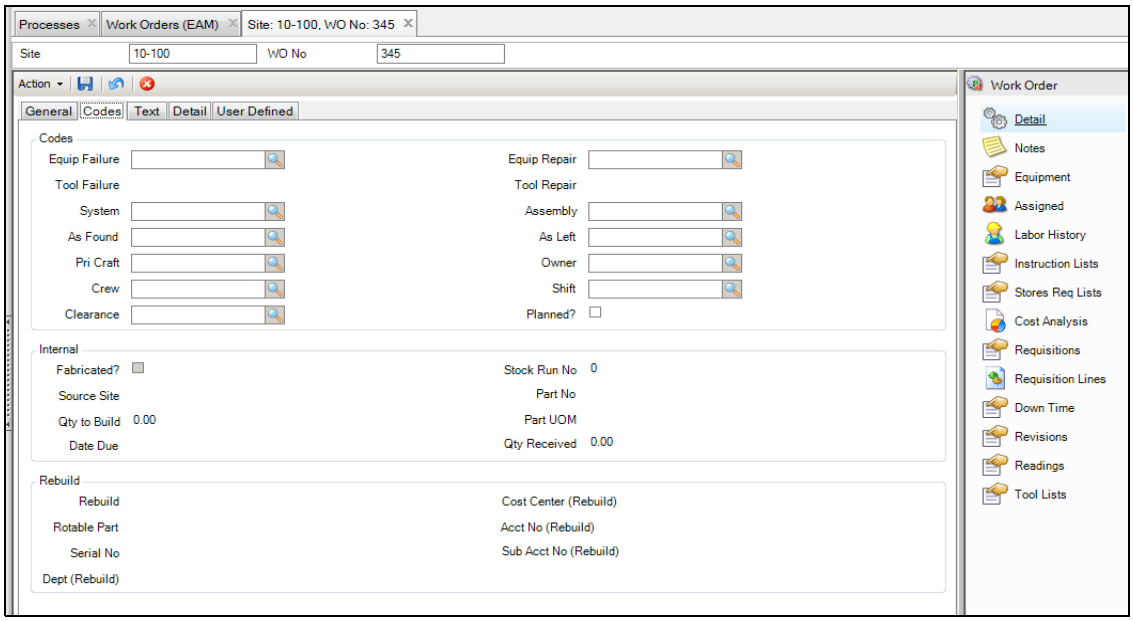
*Class.* Use the lookup to select user-defined classes that are used to group common types of work orders together, which are useful for filtering. Sample class codes are unplanned corrective, planned corrective, breakdown, safety/health, and preventive maintenance.

*Route Instruction List Used.* This check box indicates if a route type MIL is attached to the work order. When you attach a route type MIL to a work order, this check box is automatically selected. If this check box is not selected, a route type MIL is not attached to the work order.

## Work Orders: Codes Tab

Use this tab to group work orders by type or classification.

**Fig. 4.170**
Work Orders: Codes Tab




### Codes

*Equip Failure.* Use the lookup for user-defined codes to select a code that indicates the failure that the word order addresses. See “Failure Codes” on page 102.

Failure codes, when used consistently on CM work orders, reflect PM opportunities based on the Failure Analysis updates associated with the equipment. Failure codes can be associated with PM templates to indicate the type of failure the PM should prevent from occurring. EAM uses this data to predict when the next failure will occur.

*Equip Repair.* Use the lookup of user-defined codes and select a code for the type of repair made to the equipment. Use it to further analyze specific types of repairs made against specific types of failures. If a failure type is associated with the piece of equipment on the work order, EAM only offers repair codes associated with the specific failure type.

*Tool Failure.* Use the lookup for user-defined codes to select a code that indicates the failure that the work order addresses. See “Tool Failures” on page 111. EAM only supports failure codes associated with the tool-specific failure type.

*Tool Repair.* Use the lookup of user-defined codes and select a code for the type of repair made to the tool. See “Tool Repairs” on page 112. EAM only supports repair codes associated with the tool-specific repair type.

*System.* System codes denote a specific area or component of the equipment. System codes are assigned to the equipment record through the BOM Type group. If a work order is associated with a piece of equipment with specific system codes assigned to it and you look up the system code in a work order, only valid system codes for that piece of equipment are displayed. All costs charged to the work order, such as parts, labor, contractors, and downtime, are denoted to the equipment and the system code identified on the work order. This functionality provides more detailed reporting and analysis. If a piece of equipment is not denoted on the work order, then no system codes are available.

*Assembly.* The Assembly code is associated with the system code and to the specific piece of equipment that is associated with the work order. Since specific assembly codes are created for each system code, only assemblies associated with a given system code are displayed in the selection lookup. By associating an assembly code with a system code; all cost, labor, parts, issuing, and purchase orders are associated with the equipment and assembly linked to the work order, where cost is directly charged to a work order.

*As Found.* Use the lookup to identify the equipment condition as part of the work order history before performing the work.

Use the As Found code with the As Left code. Together, these codes address mechanical integrity issues, such as the condition in which you found and left the piece of equipment.

*As Left.* Use the lookup to identify the condition the equipment was in as part of the work order history at the completion of the work order. An as-left code notes additional work to perform. The maintenance manager or supervisor then knows to create a WO to repair an additional problem identified during the last work order. You can configure an as-left code to send e-mail to the equipment’s notify person or mail group.

Use the As Left code with the As Found code. Together, they address mechanical integrity issues such as the condition in which you found and left a piece of equipment.

*Primary Craft.* The primary craft is a user-defined lookup to indicate skills required to perform this work. PM templates with an associated primary craft include that information by default on generated work orders.

*Owner.* This field adds security to each work order. In add and modify mode, you can modify the owner field. The lookup data comes from the user and owner group tables. The copy option does not copy the owner. Once an owner is populated, only that owner can modify the WO.

*Crew.* The crew defines a group of technicians who can be assigned to a work order.

*Shift.* The time at which the work order is planned.

*Clearance.* Specify the type of safety clearance required when performing the prescribed work. You can identify which equipment to shut down before performing maintenance.

*Planned.* Use this check box to track the number of planned work orders versus unplanned work orders.

**Internal**

***Note*** If the work order is a request for fabricated parts, the Internal portion is enabled for data to be added.

*Fabricated.* Indicate whether the work order is for an internally sourced fabricated part. The check box is not selected by default. Use the Create Requests action in Stock Replenishment to automatically create work orders for fabricated or internally sourced parts.

*Stock Run No.* The stock run number for the fabricated part. It displays on the work order for planning. To better determine if the work order proceeds, the planner tracks the status of the fabricated parts with this number.

*Source Site.* You can source the part from one site and expense it to another, creating an intercompany part. For example, when parts built for one site expense against another, this field indicates the inventory site for which the part is being made. The source site's inventory sub-account is credited and the expense sub-account in the work order's expense site is debited when the fabricated part enters inventory from the work order.

*Part No.* The fabricated part number.

*Qty to Build.* The quantity of parts to fabricate.

*Part UOM.* The unit of measure in which fabricated parts are typically issued.

*Date Due.* The following formula calculates the estimated due date: Today + Lead Days.

*Qty Received.* The quantity of fabricated parts received into inventory. The planner uses this data to know when all the parts are built and received.

**Rebuild**

If the work order is created to repair a rotable part, enter information regarding the rebuild location, the rotable part, and the expense accounts in these fields.

*Rebuild.* Select the rebuild location using the lookup.

*Rotable Part.* Use the lookup to select the rotable part. This lookup only displays the rotable parts that are available in the selected rebuild location.

*Serial No.* Use the lookup to select the serial number of the rotable part. This lookup only displays the serial numbers that are available for the selected rotable part.

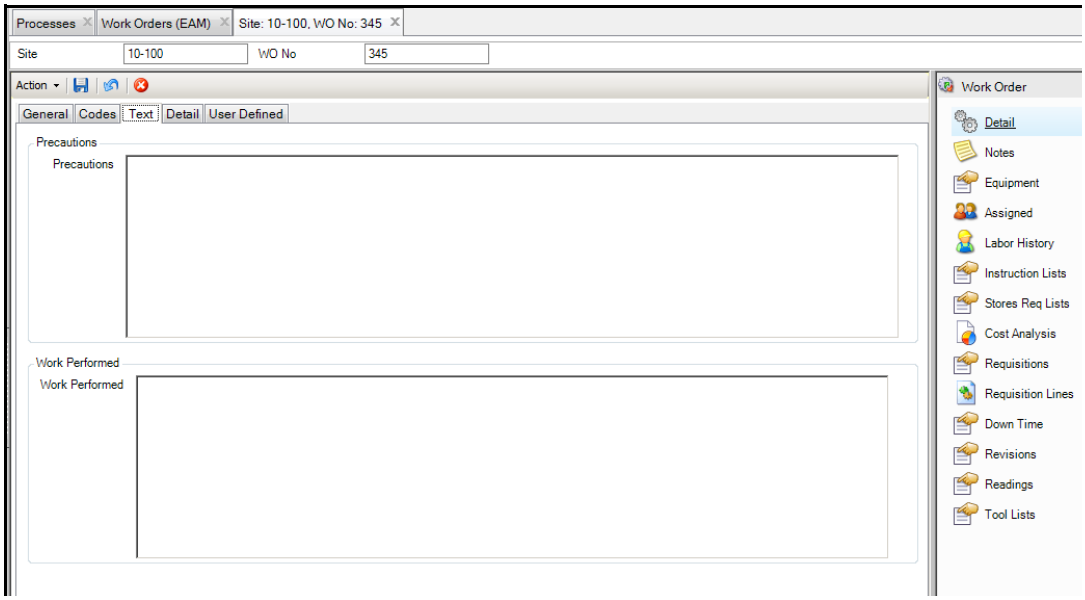
*Cost Center (Rebuild), Acct No (Rebuild), Sub Acct No (Rebuild), and Dept (Rebuild).*

Displays the expense information for the rebuild location.

Work Orders: Text Tab

Use this tab to add precautions and notes about work performed.

**Fig. 4.171**
Work Orders: Text Tab




### Precautions

*Precautions.* Displays all warnings entered when a work order is created from a PM template. If the equipment spending limits have been exceeded, or if service requests exist, they are automatically defaulted into this field.

***Note*** A printed copy of the work order includes all precautions.

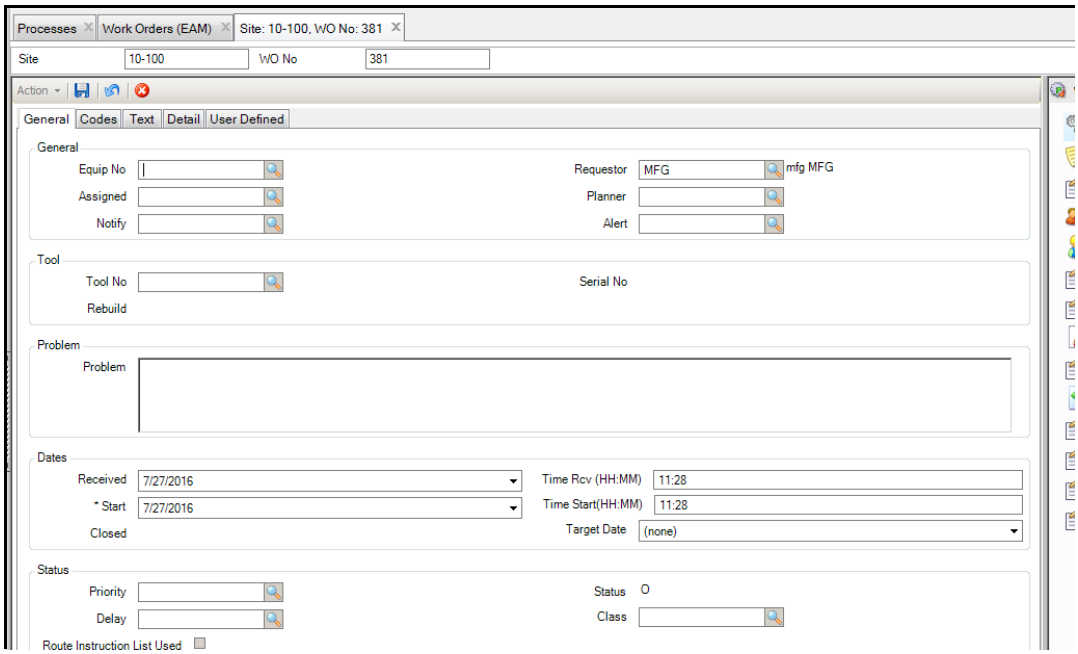
### Work Performed

*Work Performed.* Use this field to describe repairs made to the equipment.

## Work Orders: Detail Tab

Use this tab to enter accounting information, estimates, and work order source data.

**Fig. 4.172**
Work Orders: Detail Tab




## Expense Information

*Project No.* A project number can identify a project for which a work order captures cost.

If a work order is associated with a project, any planned costs that are created and attached to the work order display in the Project Cost tab as part of the planned costs.

*Job No.* You can associate cost with a project and specific job number within the project. Select from the lookup of jobs for the project entered.

*Expense Site.* This field defaults to the current site, but you can charge expenses for this work order to another site. In add or modify mode, the drop-down menu for this field displays only sites you are authorized to use. If the expense site differs from the source site or piece of equipment's site, expenses for the work order flow through intercompany accounts set up between sites in Finance|Codes|Intercompany Accounts.

*Dept.* Accounting does not assign department. Maintenance or Production can use this field to track expenses. It can represent legacy departments or cost centers.

*Cost Center.* Enter the cost center used to expense costs such as material issues, internal labor, or external contract costs. The lookup displays a list of valid cost centers for the expense site. Typically, expense accounting data defaults from the equipment or project associated with the work order.

## Account Information

*Matl Acct No/Sub Acct.* Enter the account and sub-account numbers assigned to a piece of equipment or tool to collect material costs.

*Cont Acct/Sub Acct.* Use these numbers when contract cost charges directly to a work order through a purchase order receipt. If a purchase order is received, the system automatically expenses the contract account number on the work order.

*Labor Acct No /Sub Acct No.* The account number assigned to a piece of equipment or tool to collect internal labor costs. The sub-account number allows for further details associated with an account number.

**Estimates**

*Labor Estimate.* Enter a cost estimate for labor on the work order. Use it to compare estimated cost with actual cost.

*Matl Estimate.* Enter a cost estimate for materials on the work order. Use it to compare estimated cost with actual cost.

*Cont Estimate.* Enter a cost estimate for contract work on the work order. Use it to compare estimated cost with actual cost.

*Est Hours Down.* Enter the estimated amount of time the equipment will be down for this work order. Define time from the point when the equipment stops working to the time it returns to production.

*Est Hrs Labor.* The estimated hours of labor the equipment or tool requires for this work order. This value is automatically populated and updated with the total number of estimated hours entered on all instruction list steps attached to the WO.

***Note*** If you manually change this value at any time, EAM no longer updates the estimated hours automatically.

*Est Downtime Date.* Enter the estimated start date when the equipment will be down for this work order.

*Est Down Start Time.* Enter the estimated start time (up to 24:00 hours) when the equipment will be down for this work order.

*Est Downtime End.* EAM uses Est Downtime Date and Est Down Start Time to mark a beginning date and time when the equipment will be down for this work order. Then EAM uses Est Hours Down to calculate Est Downtime End in a date and time. This information can be made available to the ERP Scheduling program.

***Note*** Downtime estimates are not needed for tools on a WO.

**Detail**

*Type.* The type of work order: PM (preventive maintenance) or CM (corrective maintenance).

*Auth.* Indicate whether the work order has been authorized.

*PM Template No.* The PM template number, if the work order originated from a PM template.

*Auth By.* The user who authorized the work performed on a work order.

*PM Run No.* A number assigned automatically when PM templates are globally issued.

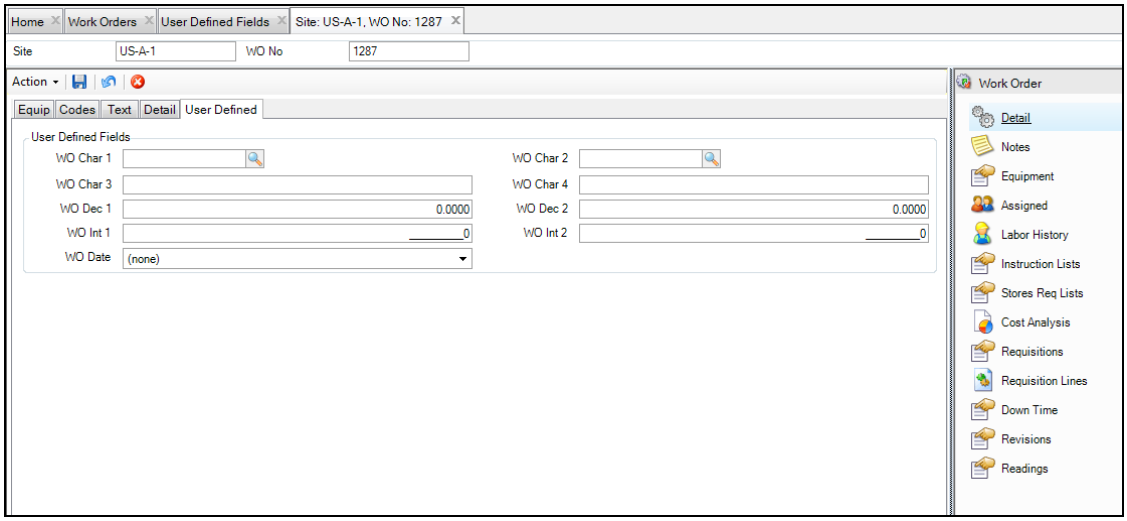
The number in Sequence Maintenance is the last number used, and EAM assigns the next sequential number when you globally issue PM templates.

*Orig WO No.* The original work order number, if the work order was copied from an earlier work order.

Work Orders: User Defined Tab

Use the WO User Defined tabs to track information against specific EAM work orders. There are ten user-defined fields. Service Request and PM Template modules share the WO user-defined fields. Data displayed here could come from entries in those modules.

**Fig. 4.173**
Work Orders: User Defined Tab




**User Defined Fields**

*WO Character 1/2.* User-defined character fields, validated against tables that you add.

*WO Character 3/4.* Free-form user-defined character fields, not validated against tables.

*WO Decimal 1/2.* User-defined decimal fields for the work order.

*WO Integer 1/2.* User-defined integer fields for the work order.

*WO Logical.* A user-defined check box.

*WO Date.* A user-defined date.

## Work Order Notes

If necessary, you can add any notes to the WO. To add notes, open the WO and select the Notes submenu.

***Note*** The Notes submenu is a free-form text box for notes that are for internal use only and are not printed on any documents.

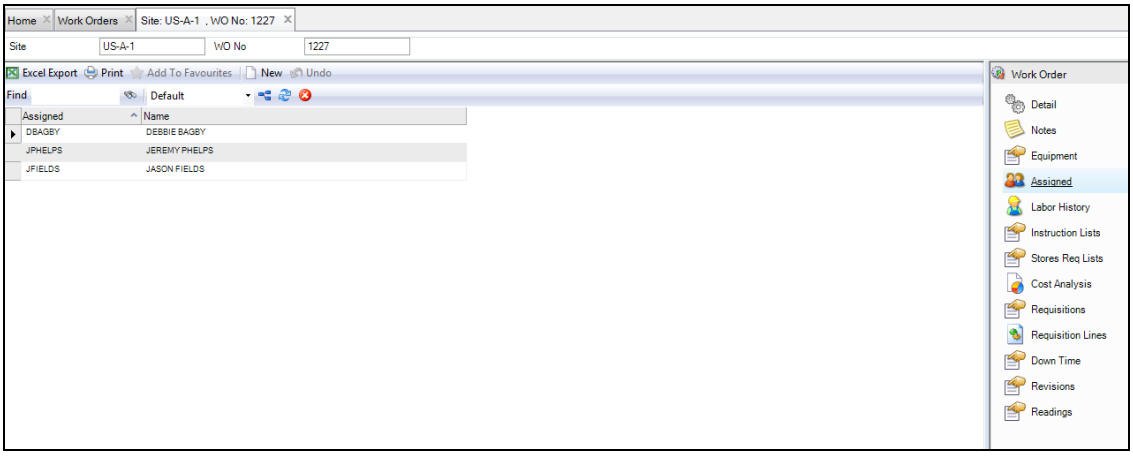
## Assign People to a Work Order

In the Assigned submenu, you can select multiple employees to assign to the WO. The employee that is entered as Assigned in the Equipment tab is automatically listed here. All the employees entered in this menu appear on the work order.

To assign people to a work order, open the Assigned submenu and click New. Use the lookup to select the employee to assign to the work order. Press Enter to save. EAM sends an e-mail to users as they are assigned to the WO.

***Note*** The lookup in the Assigned field only lists the employees who can be scheduled for work orders. For an employee to be scheduled for a work order, the Assigned? check box must be selected in the General|Employees|Codes tab. See “Employee: Codes Tab” on page 70.

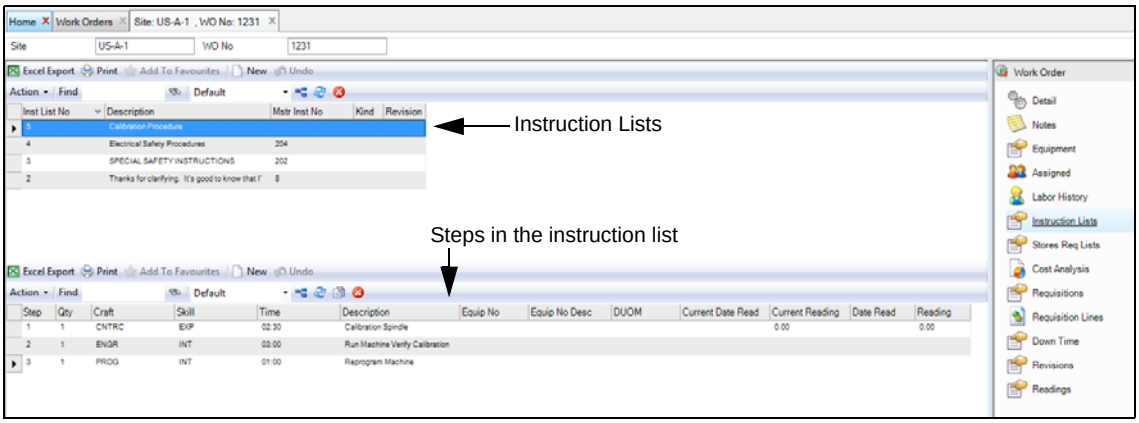
**Fig. 4.174**
Assign People to a Work Order




## Create an Instruction List for a Work Order

In the Instruction Lists submenu, you can define step-by-step instructions for technicians to use to perform the work.

**Fig. 4.175**
Create a Procedure for a Work Order




Follow these steps to create an instruction list for a work order:

1. Open the work order and select the Instruction Lists submenu.
2. In the upper browse, click New to create an instruction list.
3. Enter the following information to define the instructions:

*Instruction List Number.* Autofills with the instruction list number.

*Description.* Enter a short description of the instruction list.

*Master Instruction Number.* Displays the MIL number when this is copied from an MIL.

*Kind.* Enter the kind of instruction list; for example, Instruction or Route.

*Revision.* Displays the revision number for the instruction list.

4 Press Enter to save.

5 Add steps to the instruction list. Highlight the instruction list and click New in the lower browse.

6 Enter the following information about the step:

*Step.* Autofills with the step number.

*Quantity.* Enter the number of craft people required to complete that step. Calculate the cost per instruction step by multiplying the quantity by the time and its craft rate.

*Craft.* Select the specific craft required to complete this step from a validated table of user-defined codes.

*Skill.* Select a skill level from a validated table of user-defined codes.

*Time.* Enter the estimated amount of time in whole hours required to complete this individual step.

*Description.* Enter a short description of the step.

*Equipment Number.* The equipment number for route MILs only. Otherwise, this field is blank.

*Equipment Number Description.* The equipment description for route-type MILs only. Otherwise, this field is blank.

*Tool.* The Tool Number for route MILs only. Otherwise, this field is blank.

*Serial Number.* The serial number for route MILs only. Otherwise, this field is blank.

*DUOM.* The equipment's DUOM for route MILs only. Otherwise, this field is blank. It defaults from the equipment record.

*Current Date Read.* The date the current DUOM reading was taken.

*Current Reading.* The current DUOM reading.

*Date Read.* Select the date using the calendar lookup.

*Reading.* Defaults to zero.

7 Press Enter to save.

### Attach an MIL to a Work Order

In the WO module, you can copy an MIL to a work order.

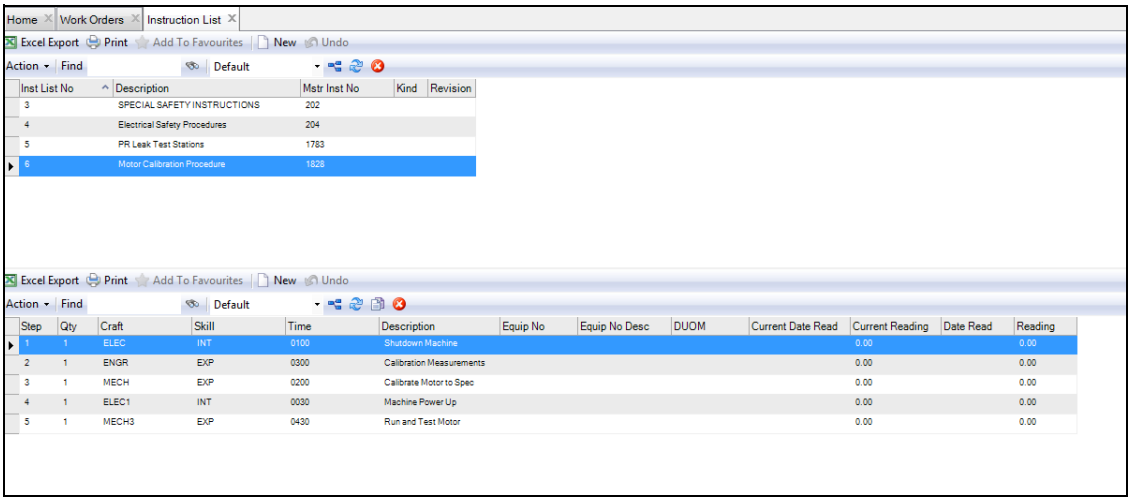
Follow these steps to attach an Instruction or Route MIL to a work order:

1 Open the Work Order browse. Highlight the work order and select Copy Master Instruction List from the WO Action menu.

2 Use the lookup to view the instruction or route MIL. Double-click to select the MIL from the list.

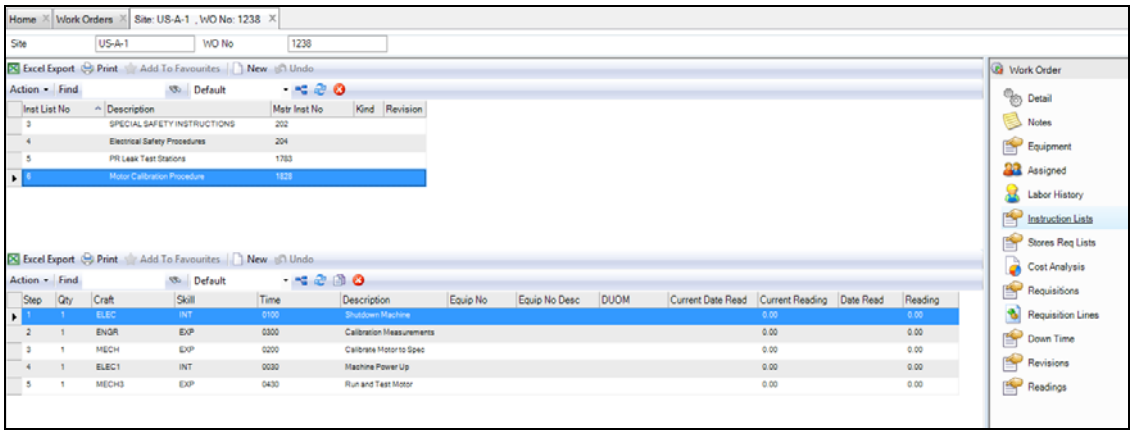
The Instruction List browse opens, displaying the MIL. The MIL has been added to the work order.

**Fig. 4.176**
Copy an MIL to a Work Order




3 If you open the work order and select the Instruction List submenu, you can view the MIL.

**Fig. 4.177**
Work Order Instruction List Submenu



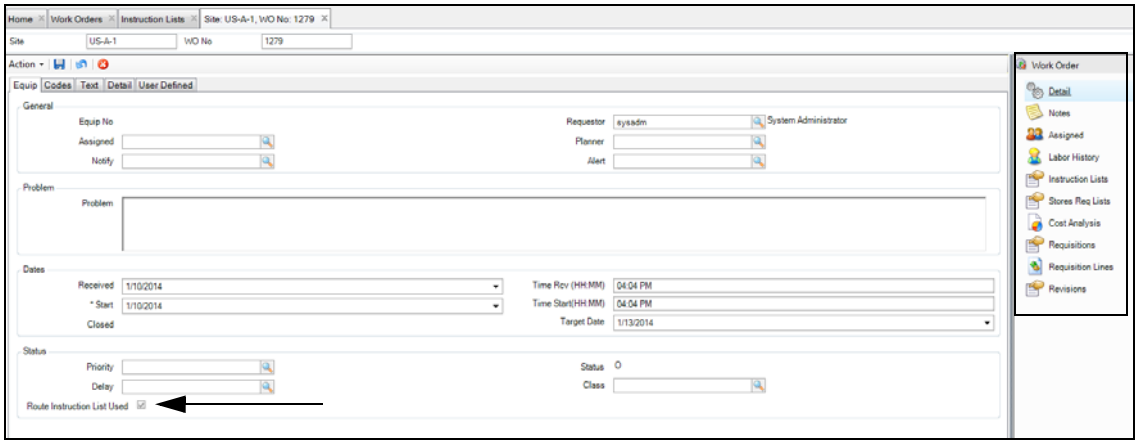

4 If necessary, make changes to the MIL.

***Note*** When you add a route MIL to a work order:

- The Route Instruction List check box on the WO is automatically selected. This check box indicates that a route MIL is attached to the WO.
- The Equipment field is blank and disabled.

- The Equipment, Downtime, and Readings submenus are disabled and are removed from the submenu panel.

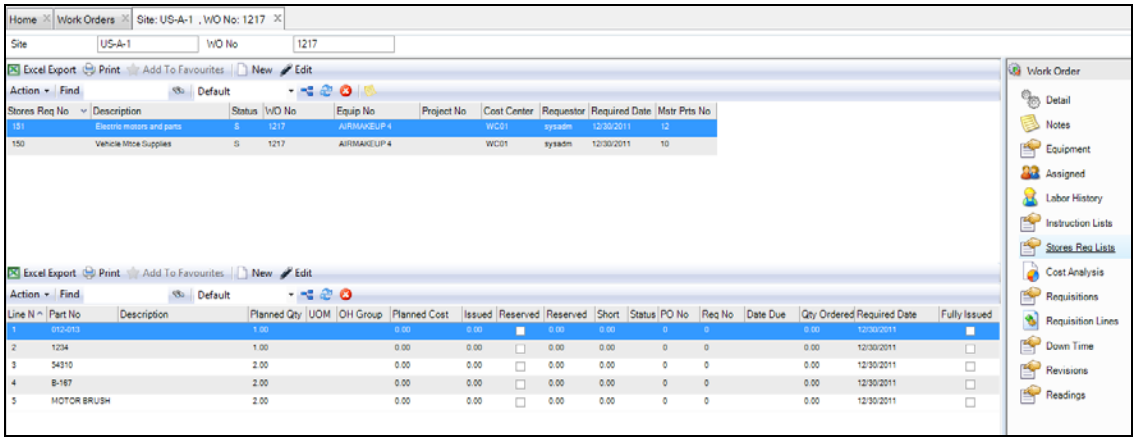
**Fig. 4.178**
Route Instruction List Used Selected




## Create a Stores Requisition List for a Work Order

Use stores requisitions lists to create a detailed list of parts for technicians to use to perform the work. See “Create Stores Requisition Lists” on page 352.

**Fig. 4.179**
Create a Stores Requisition List for a Work Order



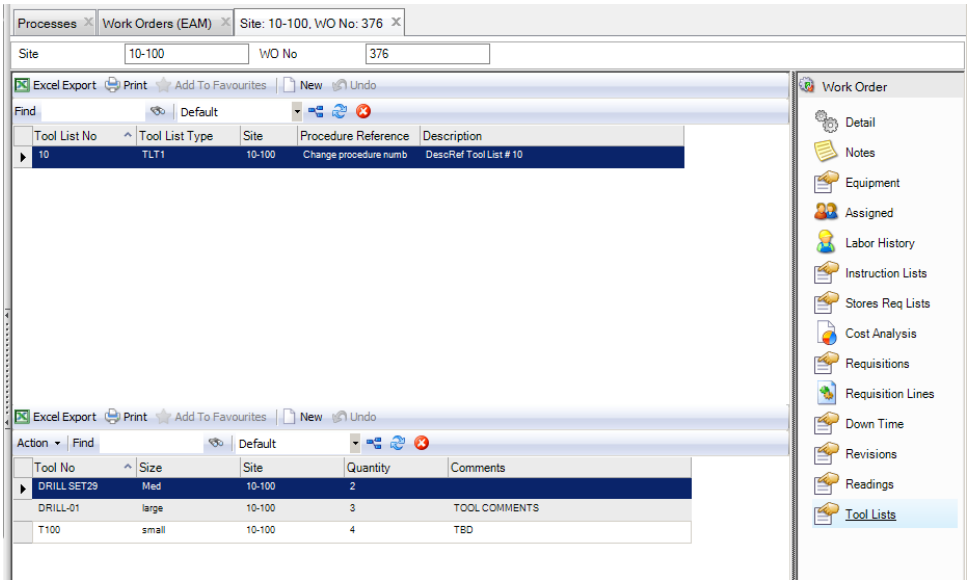

## Add Tool Lists to Work Orders

To add a tool list to a WO:

1 Open the WO.

2 Select the Tool Lists submenu.

**Fig. 4.180**
Add Tool List to Work Order




3 Click New in the upper browse.

4 Enter or select from the lookup the tool list you want to add to this WO. Press Enter to save. The lower browse displays the tools that are part of the newly added tool list.

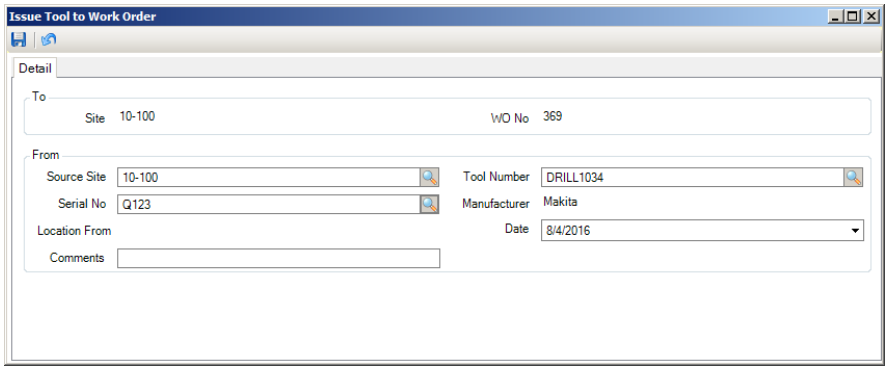
## Issue a Tool

To issue a tool from a WO:

1 Highlight the tool in the main WO browse.

2 Select Issue Tools from the WO Action menu. The Issue Tools to Work Order window appears.

**Fig. 4.181**
Issue a Tool




3 Enter or select the tool's Tool Number and Serial No.

4 Update the Source Site and Date, if necessary, and enter comments if desired.

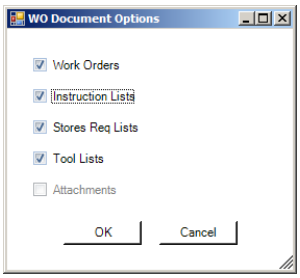
5 Click the disc icon to save.

## Print Work Orders

To print a WO, select Print Document from the WO Action menu. The WO Document Options pop-up window gives you the choice of what work-order related documentation you want to print. You can choose from the following:

- Work Orders
- Instruction Lists
- Stores Req Lists
- Tool Lists
- Attachments

**Fig. 4.182**
Work Order Print Options



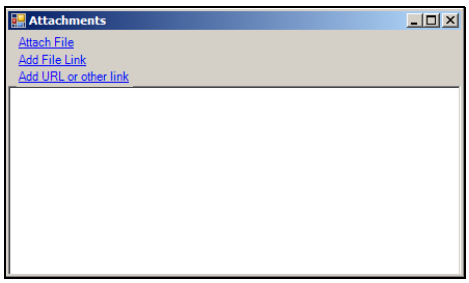

Select the boxes next to the elements you want to print and click OK.

To print multiple work orders, highlight the work orders and select Global Print Document from the WO Action menu. Select the boxes next to the elements you want to print for the selected work orders and click OK.

## Add Attachments to a Work Order

EAM gives you the option of attaching an unlimited number of files or linking an unlimited number of files or URLs to a work order. If you can run the file on your operating system, you can run it from EAM once it is linked.

**Fig. 4.183**
Attachment Window



### Attach a File

To attach a file to a WO:

1. Select a WO from the WO browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the WO.

***Note*** You can also use Attachments for equipment, parts, and PMs attached to the WO by selecting the Attach File Options in the Site|Maintenance tab.

### Link a File

To link a file to a WO:

1. Select a WO from the WO browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and click Open. The file is now linked to the WO record.

### Link a URL

To link a URL to a WO record:

1. Select the WO record from the WO browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add URL or other Link.
4. Copy and paste the link into the field and then click OK. The URL is now linked to the WO record.

## Authorize Work Orders

If WO Auth? is selected on the General|Business Units|Domains|Maint tab, you must authorize the work order before you can charge costs by issuing parts, posting labor, or posting receipts against a PO for the work order.

To authorize a work order, open the work order and select Authorize from the Action menu.

To authorize multiple work orders, select the work orders and then select Global Authorize from the Action menu.

***Note*** The work order's Global Authorize action is only enabled if WO Auth? is selected in the General|Business Units|Domain|Maint tab. See "Domain: Maintenance Tab" on page 33.

## Schedule Work Orders in MS Project

You can schedule work orders using MS Project 2007. When selecting the Export action from the WO browse, you can specify a filtered set of work orders. The system creates a file for specific WO fields and their values from the set of work orders specified, which are used for scheduling in MS Project.

You are able to name and save the export file created for EAM work orders into MS Project. You can create and save multiple files for different groups of WOs; for example, by sites. When you open MS Project, you can select the file created and it loads, ready to schedule. You can then make changes to specific data for the EAM work order such as resources (assigned) and due dates. You can then import the WO back into EAM to reflect the changes made in MS Project.

***Note*** There is no real-time interface with EAM when using this functionality.

### EAM and MS Project Setup

#### Export Employees from EAM to MS Project

Only employees who can be scheduled for work orders can be exported from EAM to MS Project. For an employee to be scheduled for a work order, the Assigned? check box must be selected in the General|Employees|Codes tab. See “Employee: Codes Tab” on page 70.

#### System Admin Registry – Set the Default Directory for Exported Files

To set up the default directory to which the .xml files are exported, open the EAM system registry in System Administration|Registry. For the WorkOrder/Schedule/ImportandExport/DefaultDir line, enter the directory in the Data Value field.

**Fig. 4.184**
Setting the Default Directory for Exported Files

| | | | |
|---|---|---|---|
| | SAF/Use SAF | yes / no | no |
| | SCP/. | | |
| | SCP/Bid File Archive | Bid File Archive | /mls/qa/programs/scpfiles/Archive/ |
| | SCP/Bid File Directory | Bid File Directory | /mls/qa/programs/scpfiles/fromscp/ |
| | SCP/Bid File Naming | Bid File Naming | rfq_bidding |
| | SerialNumber | Serial number for product. | 123456789 |
| | Unix Mail Command | sendmail -t -fname >> mail.err | sendmail -t -fname >> mail.err |
| | UserCount | Number of users product is licensed for. | 002 |
| | VerifyCurrencyExchExists | Verify if Currency has Exchange Rate? | yes |
| | Work Order Schedule | | |
| ▶ | Work Order Schedule/Import and Export/DefaultDir | | C:/JDR |
| | Work Order Schedule/Import and Export/RunProject | | no |

#### Add EAM Template to MS Project Template Directory

The EAM installation CD contains an MS Project template that contains all of the defined fields being exported from EAM. Add the EAM-supplied template—called `EAM Schedule.mpt`—to the MS Project template directory.

## Export Work Orders to MS Project

Follow these steps to export work orders to MS Project:

1 Open the Work Order browse.

2 Select Export Work Orders from the Work Order Action menu.

A Windows Explorer window opens.

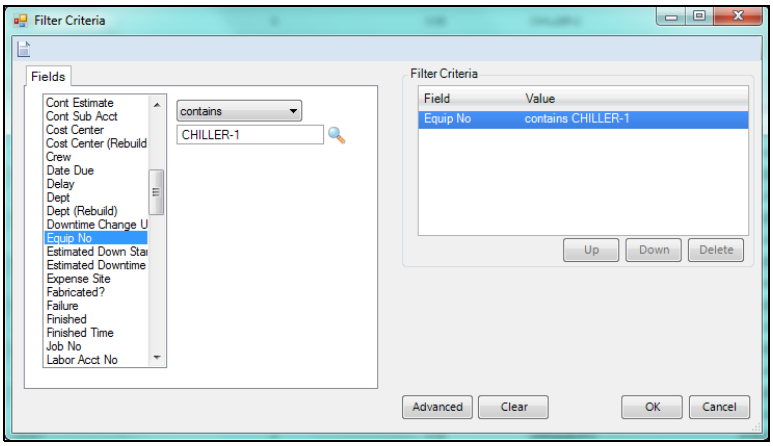
3 Rename the file or accept the default file name. Select the directory where the work order .xml file is saved.

The Filter Criteria window opens. This window offers enhanced filter capabilities that allow you to select the fields that you want to use to filter the work orders.

4 Select fields to filter the work orders. When you are finished, click OK.

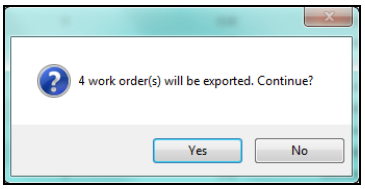
***Note*** EAM does not export any closed or canceled work orders.

**Fig. 4.185**
Export Filter Criteria for Work Orders



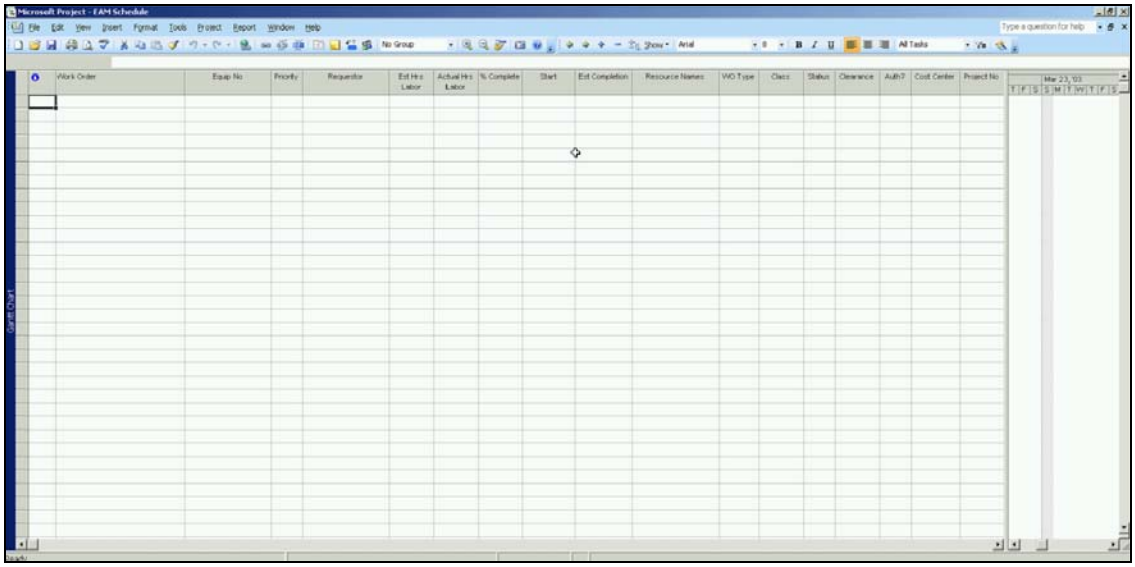

5 A window opens indicating how many work orders are scheduled to export. Click Yes to export the work orders as an .xml file.

**Fig. 4.186**
Exporting Work Orders to MS Project



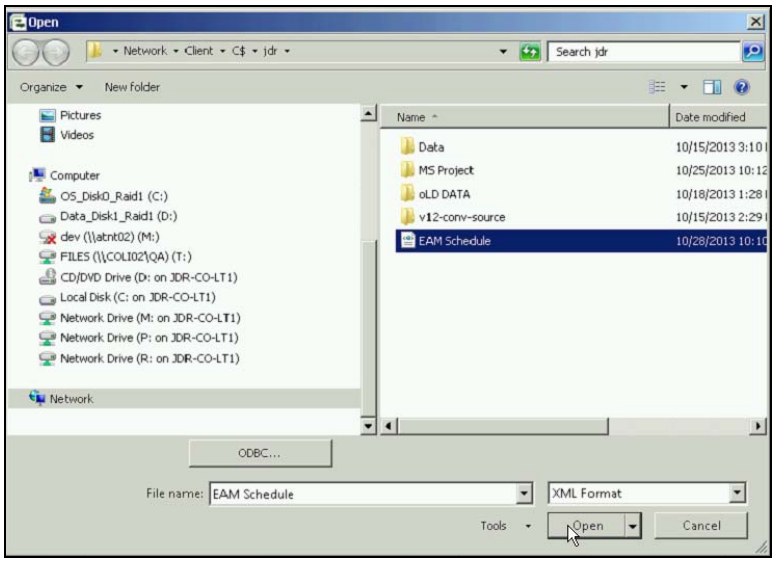

6 Open MS Project. Open the `EAM Schedule.mpt` template file.

**Fig. 4.187**
EAM Schedule Template



7 Open the EAM work order file as an .xml file.

**Fig. 4.188**
Open the EAM Work Order File

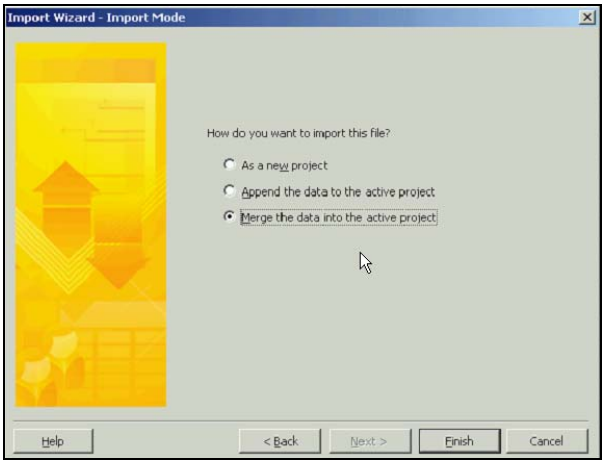



8 The Import Wizard window opens. Select one of the following options:

- As a new project
- Append the data to an active project
- Merge the data into the active project

Click Finish.

**Fig. 4.189**
Merge Data Into Active Project




**9** The work orders open in MS Project.

### Review and Update Schedule of EAM Work Orders in MS Project

The following data, which is exported from EAM work order into MS Project, is displayed:

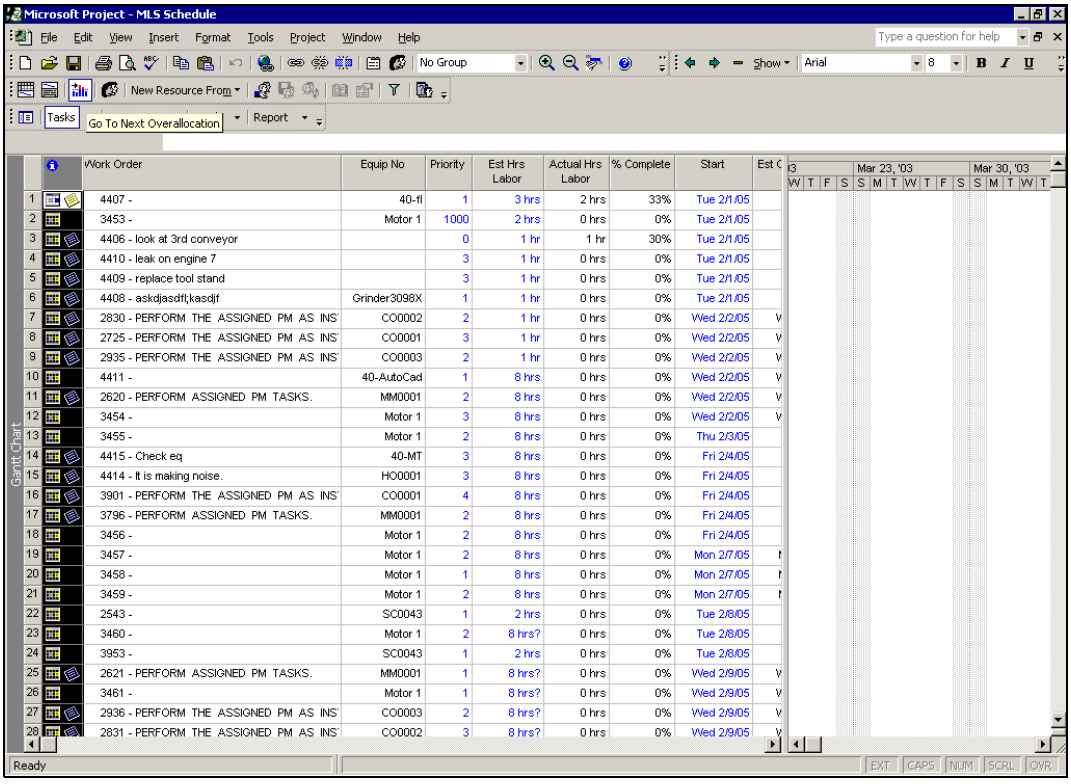
- Work Order
- Equip No
- Priority
- Requestor
- Est Hrs Labor
- Actual Hrs Labor
- % Complete
- Start
- Est Completion
- Resource Names
- WO Type
- Class
- Status
- Clearance
- Auth?
- Cost Center
- Project No
- Finished
- Closed
- Planner
- Crew

- Pri Craft
- Location
- Problem

Use MS Project to manage the schedule for the work orders in the project. You can modify and update the following enabled WO fields in MS Project. The changes you make can be imported back into EAM:

- Assigned
- Class
- Clearance
- Crew
- Estimated Hours Labor
- Planner
- Primary Craft
- Priority
- Start

**Fig. 4.190**
EAM Work Order in MS Project




| | Work Order | Equip No | Priority | Est Hrs Labor | Actual Hrs Labor | % Complete | Start |
|---|---|---|---|---|---|---|---|
| 1 | 4407 - | 40-fl | 1 | 3 hrs | 2 hrs | 33% | Tue 2/1/05 |
| 2 | 3453 - | Motor 1 | 1000 | 2 hrs | 0 hrs | 0% | Tue 2/1/05 |
| 3 | 4406 - look at 3rd conveyor | | 0 | 1 hr | 1 hr | 30% | Tue 2/1/05 |
| 4 | 4410 - leak on engine 7 | | 3 | 1 hr | 0 hrs | 0% | Tue 2/1/05 |
| 5 | 4409 - replace tool stand | | 3 | 1 hr | 0 hrs | 0% | Tue 2/1/05 |
| 6 | 4408 - askdjasdfl;kasdjf | Grinder3098X | 1 | 1 hr | 0 hrs | 0% | Tue 2/1/05 |
| 7 | 2830 - PERFORM THE ASSIGNED PM AS INS | CO0002 | 2 | 1 hr | 0 hrs | 0% | Wed 2/2/05 |
| 8 | 2725 - PERFORM THE ASSIGNED PM AS INS | CO0001 | 3 | 1 hr | 0 hrs | 0% | Wed 2/2/05 |
| 9 | 2935 - PERFORM THE ASSIGNED PM AS INS | CO0003 | 2 | 1 hr | 0 hrs | 0% | Wed 2/2/05 |
| 10 | 4411 - | 40-AutoCad | 1 | 8 hrs | 0 hrs | 0% | Wed 2/2/05 |
| 11 | 2620 - PERFORM ASSIGNED PM TASKS. | MM0001 | 2 | 8 hrs | 0 hrs | 0% | Wed 2/2/05 |
| 12 | 3454 - | Motor 1 | 3 | 8 hrs | 0 hrs | 0% | Wed 2/2/05 |
| 13 | 3455 - | Motor 1 | 2 | 8 hrs | 0 hrs | 0% | Thu 2/3/05 |
| 14 | 4415 - Check eq | 40-MT | 3 | 8 hrs | 0 hrs | 0% | Fri 2/4/05 |
| 15 | 4414 - It is making noise. | HO0001 | 3 | 8 hrs | 0 hrs | 0% | Fri 2/4/05 |
| 16 | 3901 - PERFORM THE ASSIGNED PM AS INS | CO0001 | 4 | 8 hrs | 0 hrs | 0% | Fri 2/4/05 |
| 17 | 3796 - PERFORM ASSIGNED PM TASKS. | MM0001 | 2 | 8 hrs | 0 hrs | 0% | Fri 2/4/05 |
| 18 | 3456 - | Motor 1 | 2 | 8 hrs | 0 hrs | 0% | Fri 2/4/05 |
| 19 | 3457 - | Motor 1 | 2 | 8 hrs | 0 hrs | 0% | Mon 2/7/05 |
| 20 | 3458 - | Motor 1 | 1 | 8 hrs | 0 hrs | 0% | Mon 2/7/05 |
| 21 | 3459 - | Motor 1 | 2 | 8 hrs | 0 hrs | 0% | Mon 2/7/05 |
| 22 | 2543 - | SC0043 | 1 | 2 hrs | 0 hrs | 0% | Tue 2/8/05 |
| 23 | 3460 - | Motor 1 | 2 | 8 hrs? | 0 hrs | 0% | Tue 2/8/05 |
| 24 | 3953 - | SC0043 | 1 | 2 hrs | 0 hrs | 0% | Tue 2/8/05 |
| 25 | 2621 - PERFORM ASSIGNED PM TASKS. | MM0001 | 1 | 8 hrs? | 0 hrs | 0% | Wed 2/9/05 |
| 26 | 3461 - | Motor 1 | 1 | 8 hrs? | 0 hrs | 0% | Wed 2/9/05 |
| 27 | 2936 - PERFORM THE ASSIGNED PM AS INS | CO0003 | 2 | 8 hrs? | 0 hrs | 0% | Wed 2/9/05 |
| 28 | 2831 - PERFORM THE ASSIGNED PM AS INS | CO0002 | 3 | 8 hrs? | 0 hrs | 0% | Wed 2/9/05 |

### Import Work Orders to EAM from MS Project

Once the work orders have been updated in the project schedule, it can be saved as an .xml file. The import file can have the same name as the exported file or can be renamed when created and imported back into EAM.

Follow these steps to import work orders to EAM:

1. In MS Project, save the work orders as an .xml file.
2. In EAM, open the Work Order browse.
3. Select Import Work Orders from the Work Order Action menu. An Explorer window opens.
4. Locate the .xml file and click Open. When you open the .xml file, any data that was changed in MS Project is automatically imported into EAM. Note the following:
   - **Invalid data.** If there is any invalid data, when you open the .xml file, message windows appear indicating the data that is invalid. Click OK to close these message windows and to continue the import process.
   - **Changes that are not applied.** EAM applies changes unless one of the following situations occurs, in which case an e-mail is sent to the person entered as the Notify during the import routine.

     Changes are not applied if the work order is closed, canceled, or restricted by the Owner field and the current user cannot modify it.

     Specific changes are not applied to:
     - Priority, Clearance, or Class if they are invalid.
     - Planner, if it is an invalid Emp No or the employee's Planner? setting is not selected.
     - Assigned, if it is an invalid Emp No or the employee's Assigned? setting is not selected.
     - Est Hrs Labor, if the duration could not be read properly from the .xml file.
     - Start, if the start date could not be read properly from the .xml file.
   - **Revision history.** If revision control is turned on, any changes that are applied update the revision history in the Work Orders Revisions submenu.
   - **Updates to other modules.** In addition to updating the work orders, EAM also performs the following updates to other modules:
     - If the person in the Assigned field is changed, all open service requests that reference the work order are updated with the new Assigned person.
     - If the Start Date is changed, the new Start Date is copied to the Required Date of all open stores requisition lists that reference the work order. Also, all open service requests that reference the work order are updated with the new Start Date.

## Post Labor

Use the Post Labor action to charge the employees' time against the work order.

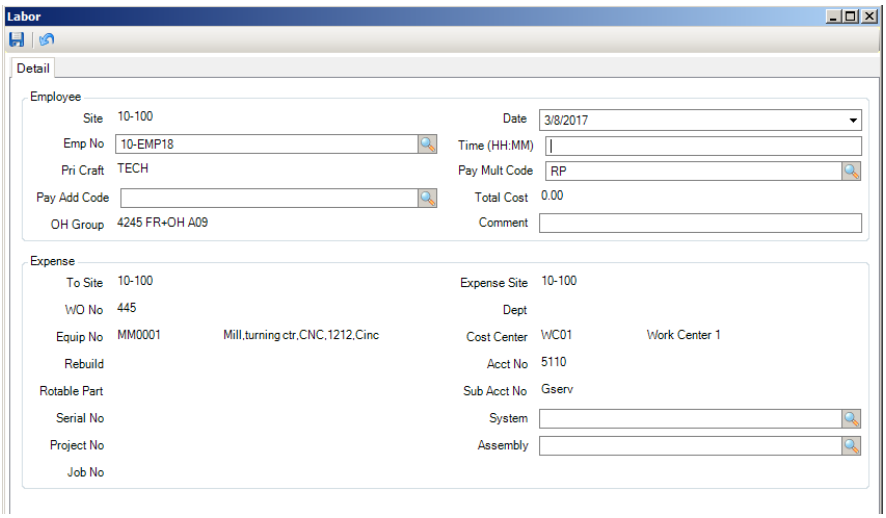
If necessary, EAM gives you the ability to reverse the labor that is charged against a work order.

## Posting Labor on a Work Order

Follow these steps to post labor on a work order:

1. In the Work Order browse, select the work order and then select Post Labor from the Action menu.
2. The Labor window opens. Fill in the necessary information in the Detail tab.

**Fig. 4.191**
Post Labor




### Employee

*Site.* The work order's default site.

*Date.* The editable date of the labor transaction defaults to today's date.

*Employee No.* The employee number of the employee who worked on the work order. You must identify an employee for a labor transaction. This employee number copies any corresponding information such as pay add rate, employee rate, primary craft, and overhead group.

*Time.* The amount of time (in hours and minutes, separated by a colon) the employee worked on the activity for which labor is being charged.

*Pri Craft.* The primary craft code, which defaults from the corresponding employee record.

*Pay Multi Code.* This code defaults in or you can use the lookup to select a code that adds a multiplier to the employee's pay rate. Some examples are for regular time (1x the rate) or time and a half (1.5x the rate) for holidays or call-in pay.

*Pay Add Code.* Use the lookup to select a code that specifies an amount of money paid to an employee on an hourly basis, in addition to that employee's regular hourly wage. This code can default from the Pay Add Code field in the General|Employees|Codes tab. See "Employee: Codes Tab" on page 70.

*Total Cost.* EAM calculates the total cost of a particular labor transaction.

*OH Group.* The employee's overhead group. Default information:

- If posting labor from the Employee module, this value defaults from the employee's OH group.
- If it is blank or not posting from the Employee module, the field defaults to the setting in the OH Group field in the General|Business Unit|Sites|Misc tab.

*Comment.* Enter a text comment that is attached to the labor record and can display in the Labor History browse.

**Expense**

*To Site.* The work order's source or default site.

*Expense Site.* Defaults to the current work order's expense site.

***Note*** The data in the following fields must be added to the work order to appear on this screen.

*WO Number.* The work order number.

*Dept.* The department against which the cost on the labor record is charged.

*Equip Number.* The equipment number linked to the work order.

*Cost Center.* The cost center against which the cost on a labor record is charged.

*Rebuild.* If the work order was created to repair a rotable part, this field displays the rebuild location for the part.

*Acct Number.* The sub-account number associated with a particular labor transaction.

*Rotable Part.* If the work order was created to repair a rotable part, this field displays the rotable part number.

*Sub Acct No.* The sub-account number used with an account number to charge the costs on the labor record.

*Serial No.* If the work order was created to repair a rotable part, this field displays the serial number for the rotable part.

*System.* If the labor transaction is against a piece of equipment that has corresponding system codes, you can charge labor to the system, as well as to the piece of equipment. Enter the specific system to which the labor can be charged.

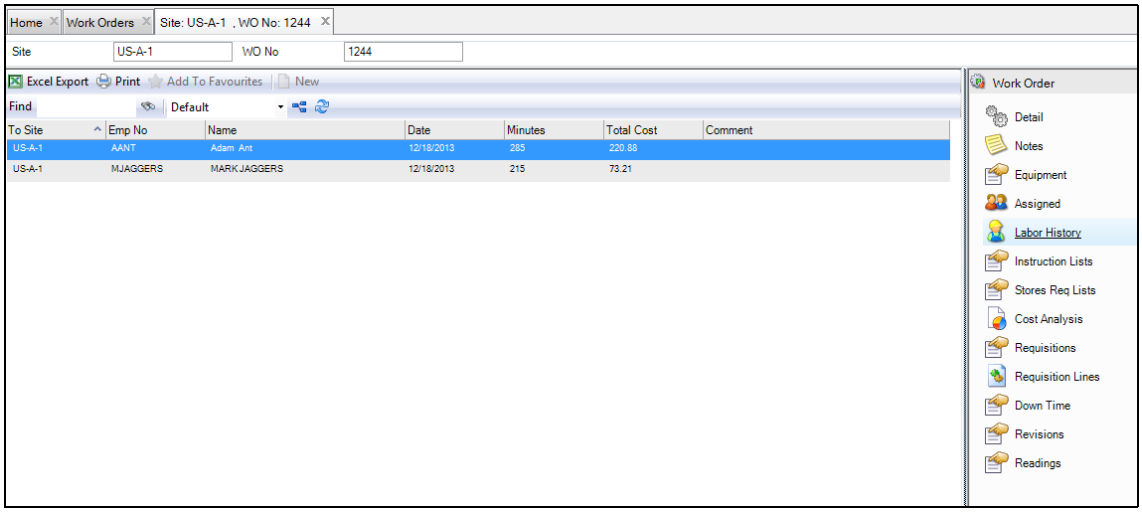
*Project No.* The project associated with the work order and labor transaction.

*Assembly.* If a system code was specified to identify a labor transaction associated with a piece of equipment after labor was distributed to the equipment, enter the system code.

*Job No.* This job number is identified in a labor transaction.

3 Once you have filled out the necessary information, click the disc icon to save. The labor charges post to the WO and the Labor window reopens with all values reset. You can review posted labor in the Labor History submenu.

**Fig. 4.192**
Labor History for a Work Order



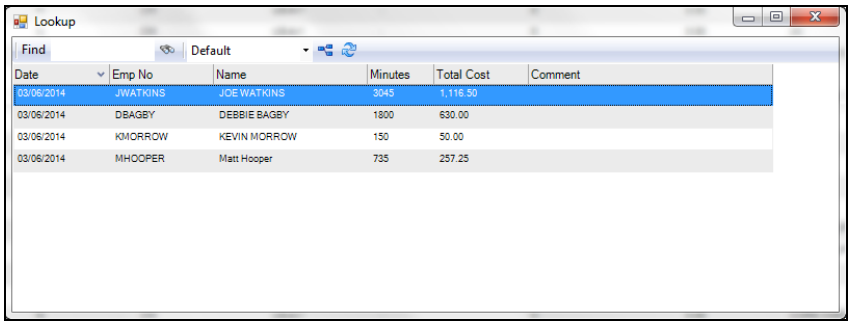

## Reverse Labor on a Work Order

Follow these steps to reverse the labor that is charged to a work order:

1 Open the WO browse and highlight the WO. Select Reverse Labor from the WO Action menu.

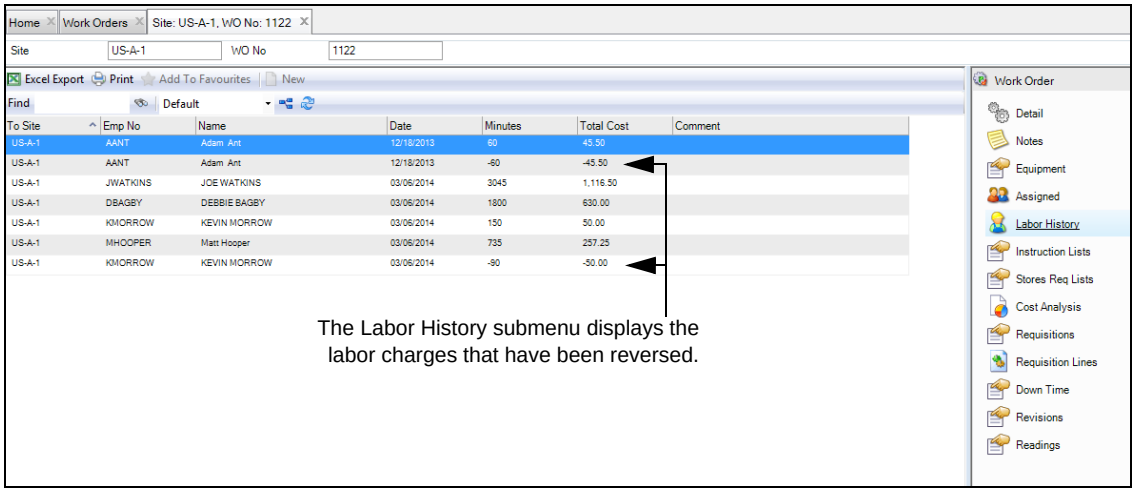
2 A lookup window opens listing the labor that has been posted to the WO. Double-click to select the labor charges to reverse.

**Fig. 4.193**
Reversing Labor Charges on a Work Order




3 The labor charges reverse and the lookup window reopens, displaying the remaining labor that is posted to the WO. The Labor History submenu displays the labor charges that have been reversed.

**Fig. 4.194**
Reversing Labor Charges on a Work Order




## Issue Parts to a Work Order

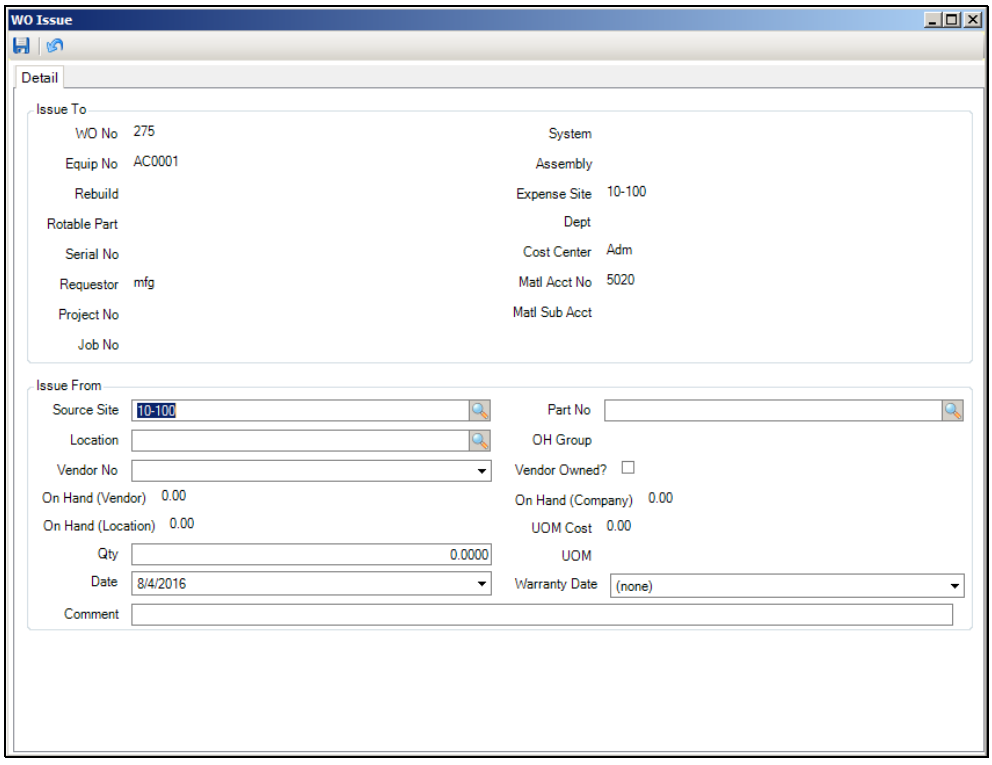
If repair parts are needed for a work order, you can issue parts to that work order.

Follow these steps to issue parts to a work order:

1 Open the work order and select Issue Parts from the WO Action menu.

2 The WO Issue window opens. Enter the necessary information in the Issue From section.

**Fig. 4.195**
WO Issue



**Issue To**

The data displayed in the Issue To fields defaults from the work order.

*WO No.* The default work order number to which to directly charge the part.

*System.* If you issue the part transaction against a piece of equipment with corresponding system codes, you can charge the part to this system as well as to the piece of equipment.

*Equipment Number.* The default equipment number to which to directly charge the part.

*Assembly.* A second code—the system code being established first—identified with a part issue transaction associated with a piece of equipment after the part is issued to that equipment.

*Rebuild.* If the work order was created to repair a rotable part, this field displays the rebuild location for the part.

*Expense Site.* This field defaults to the site on the work order.

*Rotable Part.* If the work order was created to repair a rotable part, this field displays the rotable part number.

*Department.* The department against which to charge the cost on the part expense.

*Serial Number.* If the work order was created to repair a rotable part, this field displays the serial number for the rotable part that is being repaired.

*Cost Center.* The cost center used when issuing and expensing the part.

*Requestor.* The user ID of the person requesting the part.

*Matl Acct No.* The sub-account number used when issuing the part.

*Project Number.* The capital or expense project number to which to issue the part.

*Matl Sub Account Number.* The sub-account number used with an account number when issuing the part.

*Job Number.* The job number (within a capital or expense project) to which to issue the part.

**Issue From**

*Source Site.* This editable field displays the current site.

*Part Number.* The part number to be issued to this work order.

*Location.* Select the location from which the part is issued. If there is more than one location available for this part, a list displays all the valid locations.

*OH Group.* Overhead Group. The part's overhead group. You only need to specify an overhead group if your issuing procedure requires one. Select the overhead group to automatically add the predetermined cost to the part.

*Vendor No.* If the Vendor Owned? check box is selected, the system populates this field with the primary vendor for this part.

*Vendor Owned?* Select this check box to indicate that a vendor owns the part. If this check box is cleared, the OH quantity is considered to be company owned.

*On Hand (Vendor).* Using the information linked to the vendor specified in the Vendor field, this field displays the available OH quantity for the vendor-owned part.

*On Hand (Company).* Displays the available on-hand quantity for the company-owned part.

*On Hand (Location).* The quantity of parts that are available in the selected location that can be issued.

*UOM Cost.* This part's cost per unit.

*Quantity.* Enter the quantity of parts to issue.

*UOM.* The unit of measure in which the selected part is issued.

*Date.* Today's date.

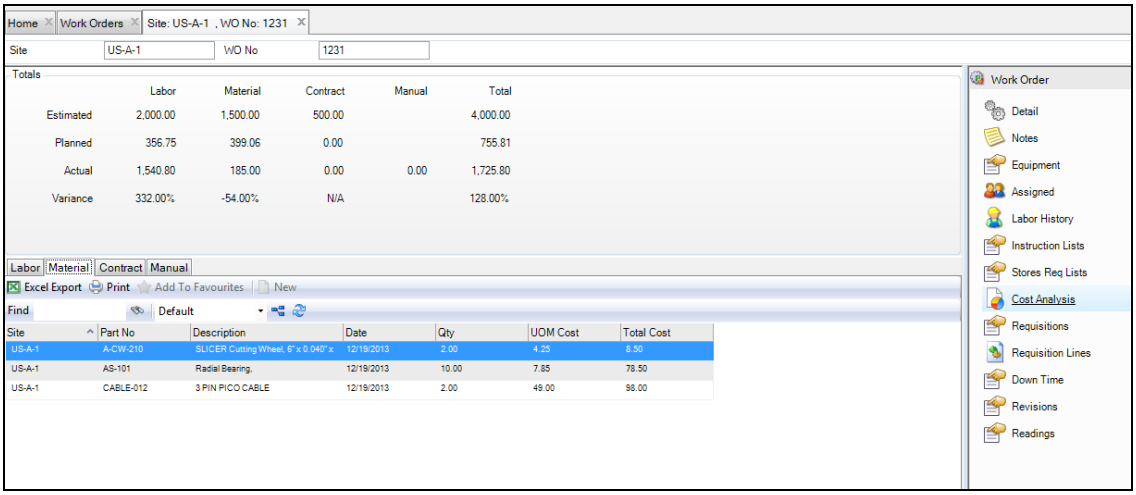
*Warranty Date.* This field is reserved for a future use.

*Comment.* Enter comments about this action.

3 After entering the necessary information, click Save. The part is issued to the work order.

4 You can view the list of parts that have been issued to the work order in the Cost Analysis submenu on the Material tab.

**Fig. 4.196**
Parts Issued to a Work Order




## Issue Tools to a Work Order

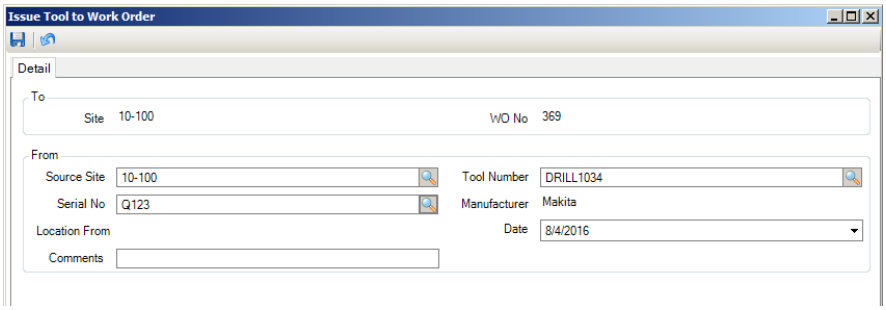
If a tool is needed for a work order, you can issue tools to that work order.

Follow these steps to issue tools to a work order:

1 Open the work order and select Issue Tools from the WO Action menu.

2 The Issue Tool to Work Order window opens. Enter the necessary information in the From section.

**Fig. 4.197**
Issue Tool




*Source Site.* This editable field displays the current site.

*Tool Number.* The tool number to be issued to this work order.

*Serial No.* The serial number of the tool to be issued to this work order.

***Note*** You cannot issue a serialized tool that has a Location Status of Inspection or one that is entered on an open PM or CM WO.

*Manufacturer.* The serialized tool's manufacturer, defaulted from the serial number.

*Location From.* The location from which to issue the tool, defaulted from the serial number.

*Date.* Today's date.

*Comment.* Enter comments about this action.

3 After entering the necessary information, click Save. The tool is issued to the work order.

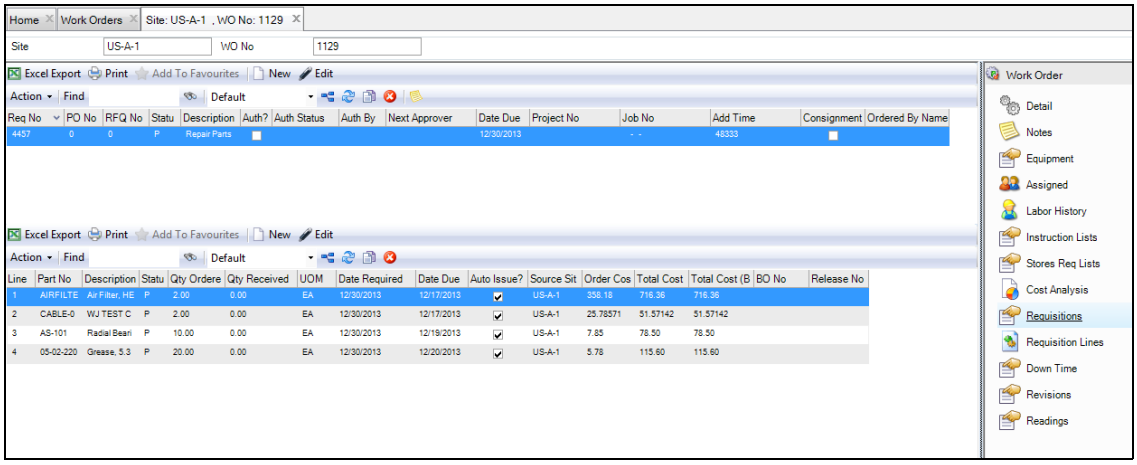
4 You can view the list of tools that have been issued to the work order in the Cost Analysis submenu on the Material tab.

## Work Order Requisitions

If you need to buy parts, EAM gives you the ability to create requisitions directly in the work order.

The Requisitions submenu contains the same menus and action items as those available in the Requisition browse in the Requisition module. See "Requisitions" on page 450.

**Fig. 4.198**
WO Requisition Submenu




## Create a Requisition for a Work Order

To create a requisition for a work order, open the work order and select the Requisitions submenu. Click New in the upper browse and enter the necessary information for the requisition. See “Creating a Requisition” on page 452.

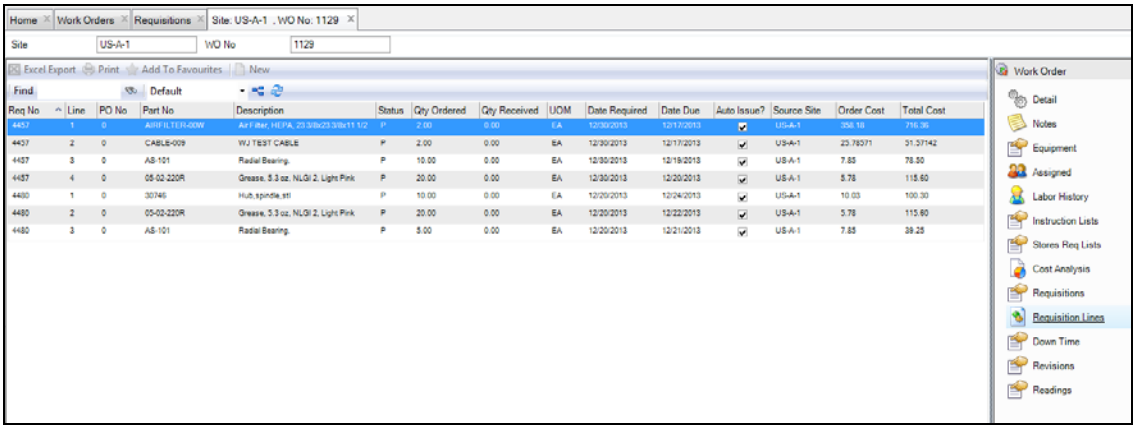
## Add Lines to a Requisition in a Work Order

To add lines to requisition, open the work order and select the Requisitions submenu. Click New in the lower browse and enter the necessary information for the requisition line. See “Add Lines to a Requisition” on page 459.

## Requisition Line Submenu

The Requisition Line submenu displays all the requisition lines associated with the work order. The information in this submenu can only be viewed. New lines cannot be added in this submenu.

**Fig. 4.199**
WO Requisition Line Submenu



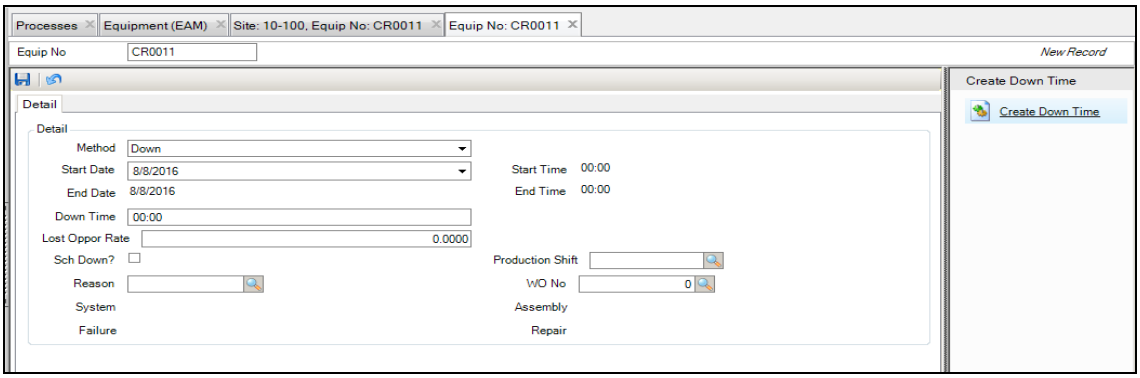
## Downtime for Work Orders

Downtime is considered to be the entire time a piece of equipment is not operational. EAM provides a method of tracking downtime directly to a specific work order and its associated equipment. Downtime may or may not be associated with a maintenance work order. Each downtime record added here is also associated with its equipment record and, potentially, system, assembly, reason down, and failure codes.

### Adding Downtime Records to a Work Order

To add a downtime record to a work order, open the work order and select the Down Time submenu. Click New and enter the necessary information in the Detail tab. See “Entering Equipment Downtime” on page 145.

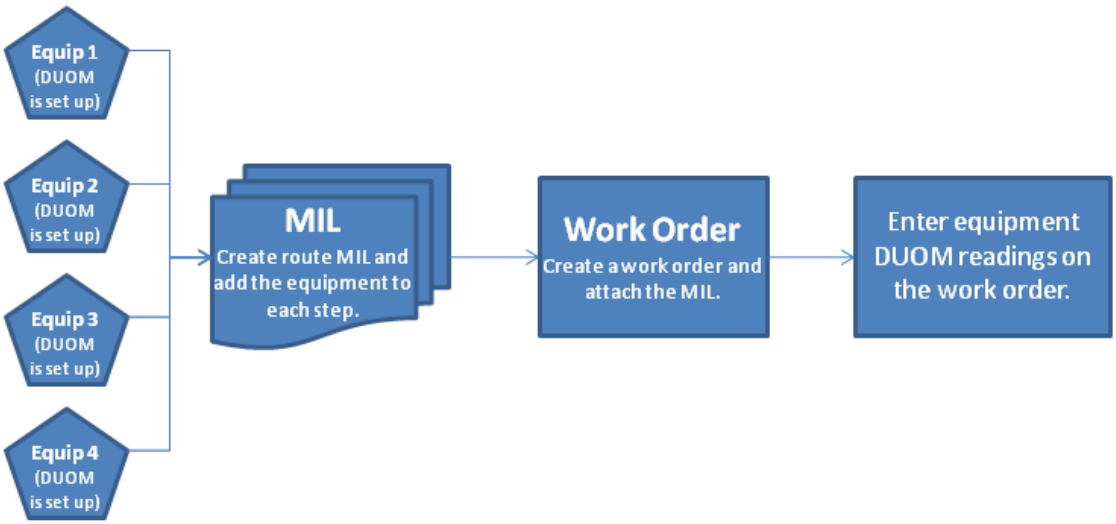
**Fig. 4.200**
Adding a Downtime Record on a Work Order




## PM Route Workflow Procedure Using Work Orders

The following procedure shows how to enter DUOM readings for multiple pieces of equipment using work orders with a route MIL.

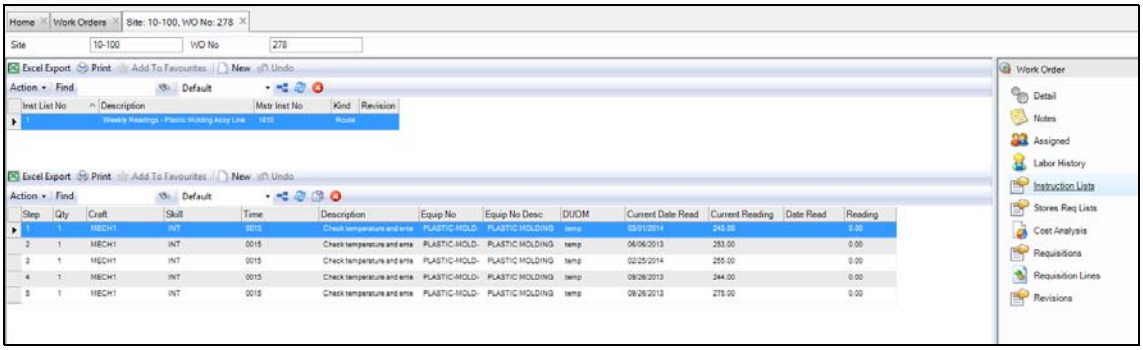
**Fig. 4.201**
PM Route Workflow Procedure Using Work Orders




1 Create a route MIL and add steps to the MIL. On each step, attach a piece of equipment. See “Creating an MIL” on page 115.

***Note*** Each piece of equipment must have the DUOM set up. See “Defining the DUOM for Equipment Readings” on page 146.

**Fig. 4.202**
Add the MIL to the Work Order



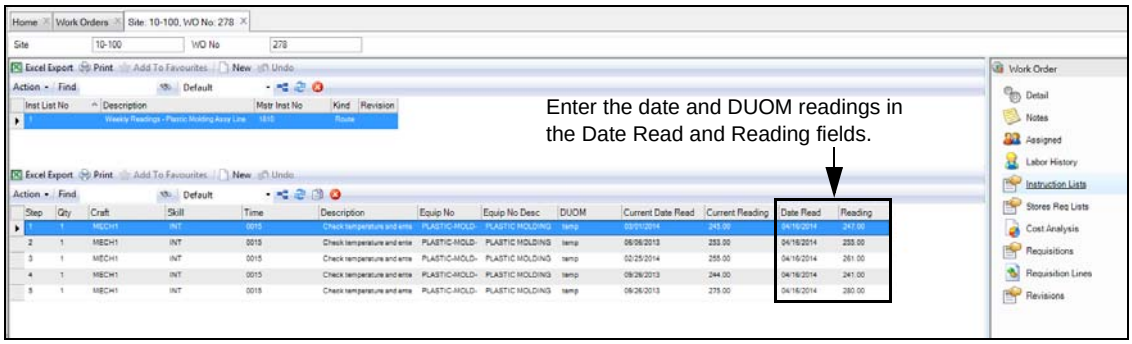
2 Create a work order. See “Creating a Work Order” on page 219.

3 Attach the MIL, which was created for the pieces of equipment, to the work order. See “Attach an MIL to a Work Order” on page 230.

4 To enter readings, open the work order and select the Instruction List submenu. Enter the date and the readings for each piece of equipment in the Date Read and Reading fields.

***Note*** If there are any out-of-tolerance readings, see “Defining the DUOM for Equipment Readings” on page 146.

**Fig. 4.203**
Entering Equipment Readings




## Editing a Work Order

To make any modifications to a work order, open the work order and make the necessary changes. See “Filling Out the Work Order” on page 219.

### Changing the Status of Work Orders

EAM comes with standard work order statuses such as closed, finished, and canceled. The closed, finished, and canceled statuses cannot be deleted, but you can add statuses to this list. EAM gives you the ability to create statuses with specific functionality. For instance, you can:

- Determine the default status when creating a CM or PM work order.
- Allow EAM to automatically send an e-mail to the WO notify person anytime a work order changes to that status.

For more information about creating new WO statuses, see “Work Order Status Codes” on page 104.

#### Change the Status of a Single Work Order

To change the status of a work order, highlight the work order and select Change Status from the WO Action menu. A window opens. Double-click to select the new status from the list.

#### Change the Status of Multiple Work Orders

Use this action to manage more than one work order at a time, such as when closing a large group of completed and reviewed work orders.

To change the status of multiple work orders, highlight the work orders and select Global Change Status from the WO Action menu. A window opens. Double-click to select the new status from the list.

### Reopen Work Orders

To reopen a closed or canceled WO, highlight the WO and then select Reopen from the Work Order Action menu.

***Note*** The reopen option only applies if Reopen WOs? has been enabled in General|Business Units|Domain on the Maintenance tab. Users with the required settings in Roles can reopen WOs once they have been closed. See “Domain: Maintenance Tab” on page 33.

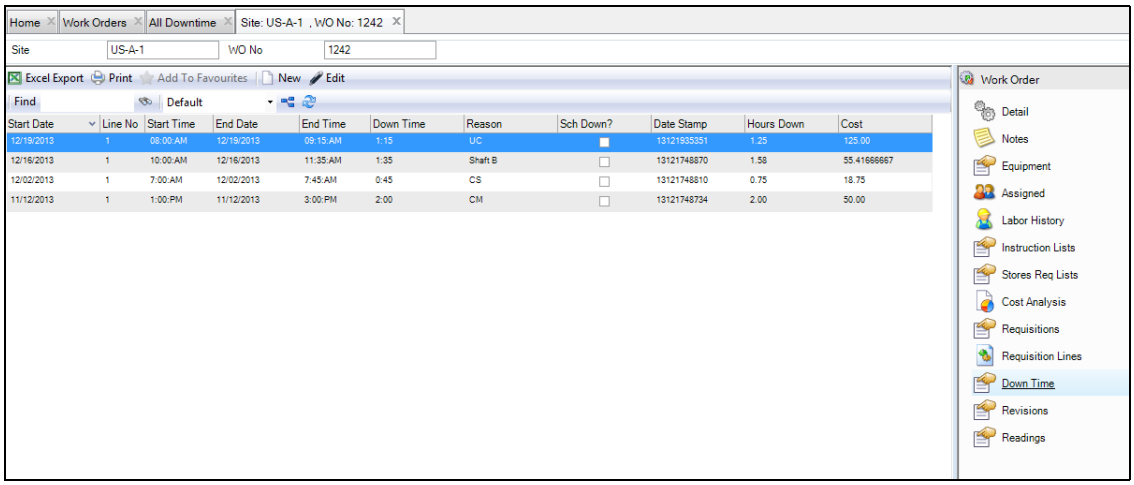
## Viewing Work Order Information

### View the Downtime Records on a Work Order

To view the downtime records on a work order, open the work order and select the Down Time submenu.

***Note*** EAM also provides a browse that displays all the downtime for all equipment. See “All Downtime Browse” on page 161.

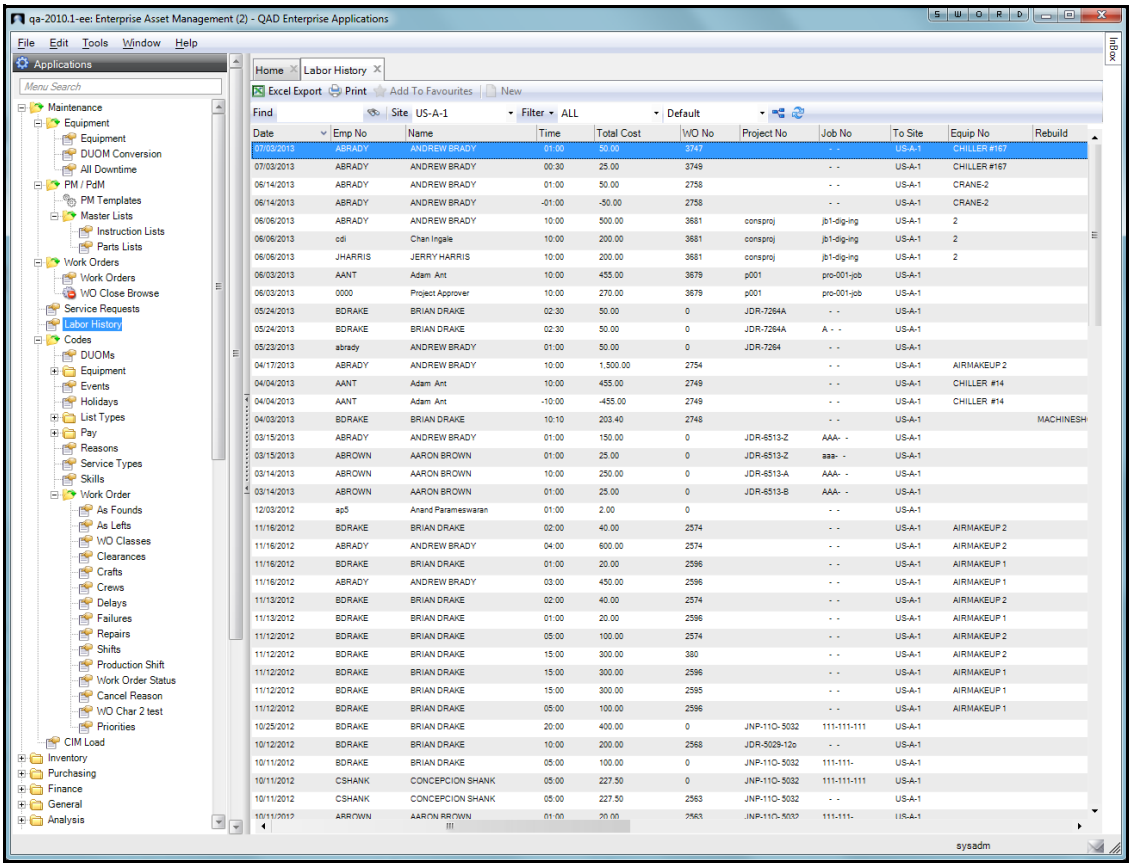
**Fig. 4.204**
Downtime Submenu




### View Labor History for a Work Order

The Labor History browse displays the list of labor records for all work orders, including posted and reversed records. Reversals show a negative number of hours and negative cost; postings show positive hours and costs. The Labor History browse is located in Maintenance|Work Orders|Labor History.

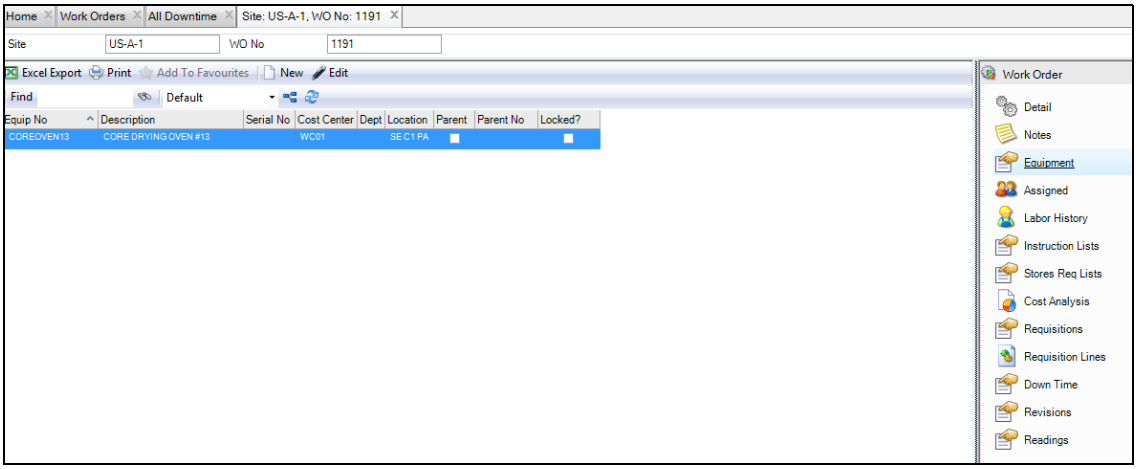
**Fig. 4.205**
Labor History Browse




## View the Equipment Associated with a Work Order

To view the equipment associated with a work order, open the work order and select the Equipment submenu. If necessary, you can double-click and drill into the equipment record.

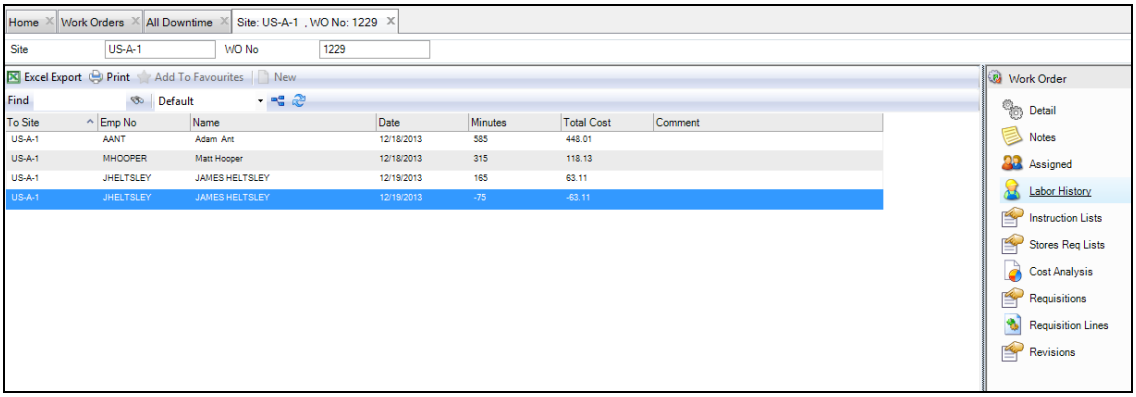
**Fig. 4.206**
WO Equipment Submenu



## View the Labor Record History for a Work Order

To view the labor record history for a work order, open the work order and select the Labor History submenu. This submenu displays all posted and reversed labor records.

**Fig. 4.207**
Labor History Submenu

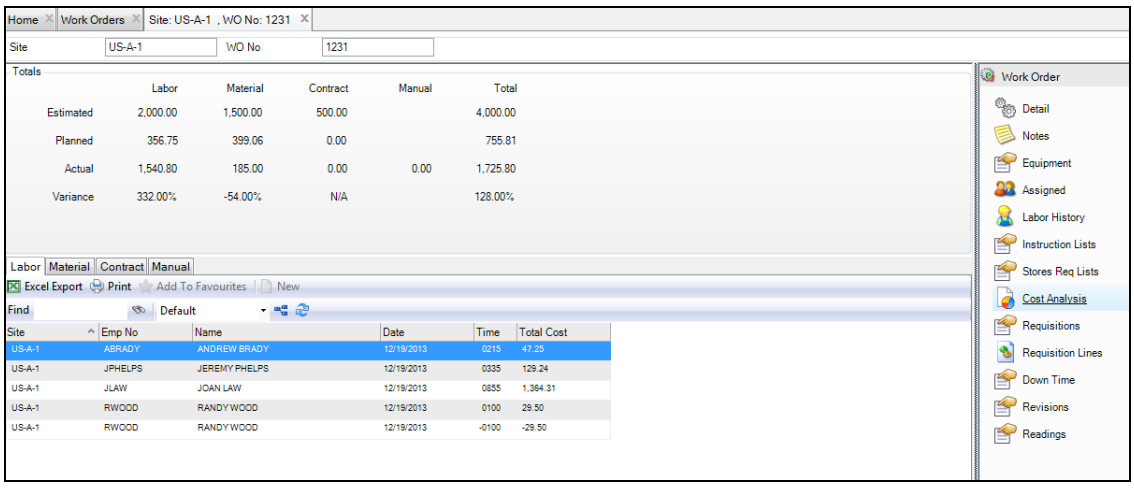



## View the Cost Analysis for a Work Order

The work order Cost Analysis submenu allows you to view detailed cost analysis for an individual work order. At a glance, you can see the accumulated cost for the work order and any type of estimated, planned, and actual costs. You can review cost summaries and totals, and by using tabbed pages you can find the details of those costs, such as labor postings, part issues, outside contractor charges, and manual GL transaction expenses.

***Note*** The WO Cost Analysis Manual tab displays GL transactions that reference a WO number and were created by a manual EAM general ledger entry in Unposted GL Transactions. You must post these transactions to add them to the cost analysis.

**Fig. 4.208**
WO Cost Analysis Submenu



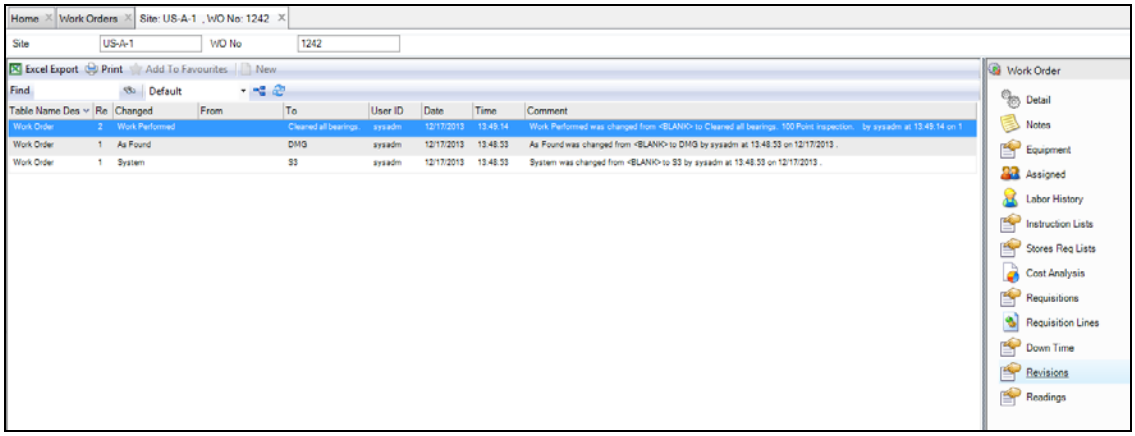
### View the Revision History for a Work Order

Because many quality systems call for strict record keeping about the revisions made to work orders, the Revisions submenu provides an audit trail of all modifications made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the WO.

To view the revision history for an equipment record, open the WO and select the Revisions submenu.

***Note*** Activate revision control for work orders in the Revision Control submenu on the Site record. See “Enable Revision Control” on page 61.

**Fig. 4.209**
Work Order Revisions Submenu

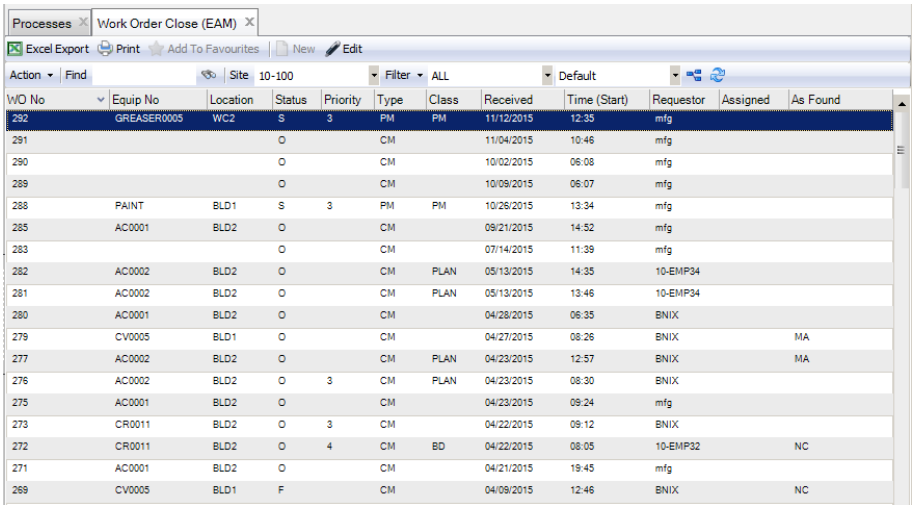



## Work Order Close

The WO Close browse provides a filtered view of work orders that you can update when maintenance or repair work has finished or when you are ready to finish or close a work order. You can enter maintenance codes, repair codes, and work performed, and view labor and downtime in a single entry form. Data entered in the WO Close browse is reflected in the standard WO module.

The browse is pre-filtered to exclude closed and canceled work orders, and contains a subset of information from the standard WO browse. You can add or remove columns in the browse to display the most relevant information for your organization.

**Fig. 4.210**
Work Order Close Browse




| WO No | Equip No | Location | Status | Priority | Type | Class | Received | Time (Start) | Requestor | Assigned | As Found |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 292 | GREASER0005 | WC2 | S | 3 | PM | PM | 11/12/2015 | 12:35 | mfg | | |
| 291 | | | O | | CM | | 11/04/2015 | 10:46 | mfg | | |
| 290 | | | O | | CM | | 10/02/2015 | 06:08 | mfg | | |
| 289 | | | O | | CM | | 10/09/2015 | 06:07 | mfg | | |
| 288 | PAINT | BLD1 | S | 3 | PM | PM | 10/26/2015 | 13:34 | mfg | | |
| 285 | AC0001 | BLD2 | O | | CM | | 09/21/2015 | 14:52 | mfg | | |
| 283 | | | O | | CM | | 07/14/2015 | 11:39 | mfg | | |
| 282 | AC0002 | BLD2 | O | | CM | PLAN | 05/13/2015 | 14:35 | 10-EMP34 | | |
| 281 | AC0002 | BLD2 | O | | CM | PLAN | 05/13/2015 | 13:46 | 10-EMP34 | | |
| 280 | AC0001 | BLD2 | O | | CM | | 04/28/2015 | 06:35 | BNIX | | |
| 279 | CV0005 | BLD1 | O | | CM | | 04/27/2015 | 08:26 | BNIX | | MA |
| 277 | AC0002 | BLD2 | O | | CM | PLAN | 04/23/2015 | 12:57 | BNIX | | MA |
| 276 | AC0002 | BLD2 | O | 3 | CM | PLAN | 04/23/2015 | 08:30 | BNIX | | |
| 275 | AC0001 | BLD2 | O | | CM | | 04/23/2015 | 09:24 | mfg | | |
| 273 | CR0011 | BLD2 | O | 3 | CM | | 04/22/2015 | 09:12 | BNIX | | |
| 272 | CR0011 | BLD2 | O | 4 | CM | BD | 04/22/2015 | 08:05 | 10-EMP32 | | NC |
| 271 | AC0001 | BLD2 | O | | CM | | 04/21/2015 | 19:45 | mfg | | |
| 269 | CV0005 | BLD1 | F | | CM | | 04/09/2015 | 12:46 | BNIX | | NC |

## Finishing a Work Order from the Work Order Close Browse

Standard WO rules apply. You must be the owner and the work order cannot have any open requisitions.

1. Highlight the WO that you want to finish.
2. Select Finish WO from the Action menu, accept the current date and time or enter the date and time to finish the WO, and click OK.

   The WO remains visible in the WO Close browse with updated Finished Date, Time, and User ID information.

You can secure this action by role for WO Close.

## Closing a Work Order from the Work Order Close Browse

Standard WO rules apply. You must be the owner and the work order cannot have any open requisitions.

1. Highlight the WO that you want to close.
2. Select Close WO from the Action menu, accept the current date and time or enter the date and time to close the WO, and click OK.

   Because the WO is now closed, it is filtered out of the WO Close browse and no longer appears in the list.
3. You can go to the standard WO module to review this WO.

You can secure this action by role for WO Close.

### Posting Additional Labor from the Work Order Close Browse

You can post labor to a work order directly from the WO Close browse.

1. Highlight the WO to which you want to post labor.
2. Select Post Labor from the Action menu.
3. Enter at least employee number and time worked, and then click the disc icon to save.
4. The labor charges post to the WO and the Labor window reopens with all values reset. You can review posted labor in the Labor History submenu.

### Reversing Labor from the Work Order Close Browse

You can reverse labor on a work order directly from the WO Close browse.

1. Highlight the WO from which you want to reverse the labor.
2. Select Reverse Labor from the Action menu.
3. Select the labor posting you want to delete and double click the entry.
4. The labor is automatically reversed. The lookup window reopens, displaying the remaining labor that is posted to the WO. The Labor History submenu displays the labor charges that have been reversed.

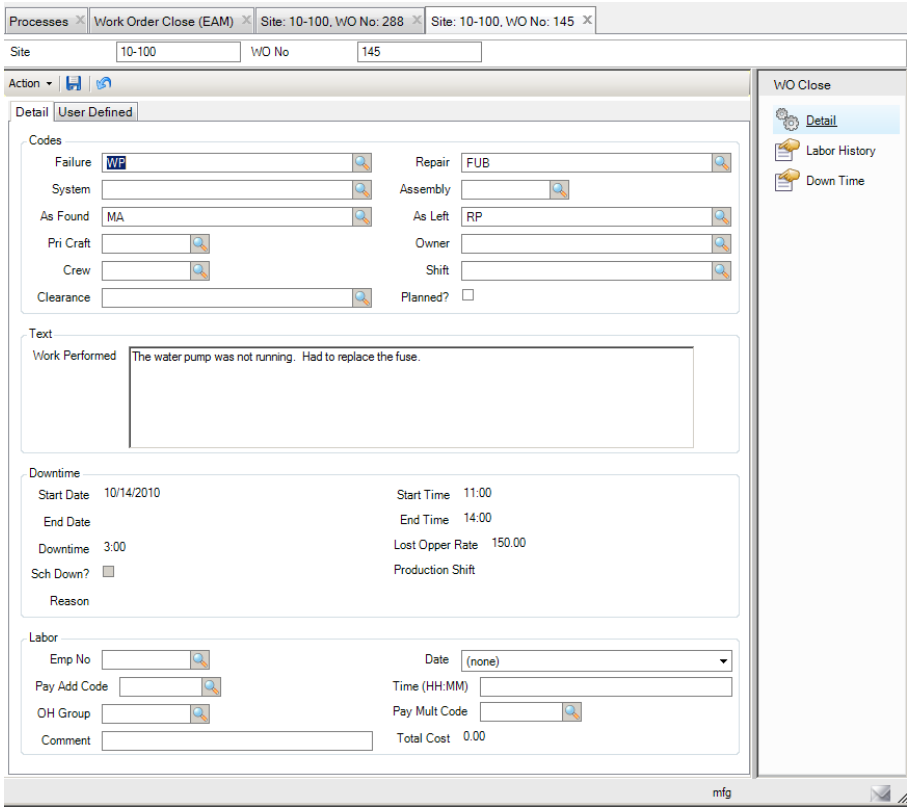
### Detail Tab

The Work Order Close Detail tab displays all fields that are in the Codes section of the standard Work Order Codes tab and the Work Performed text from the WO Text tab. The Detail tab also displays downtime and labor information from the related submenus. You can enter your initial labor or downtime details in this tab. However, once you enter information in the tab or through the standard WO module, these fields can no longer be edited here.

The Labor information shows details from the last labor value entered and is not a cumulative amount. Each time you post additional labor, the new entry displays on the Detail tab. If you reverse labor, this section displays the most current labor posting.

Similar to Labor, the Downtime section displays the most current downtime value entered.

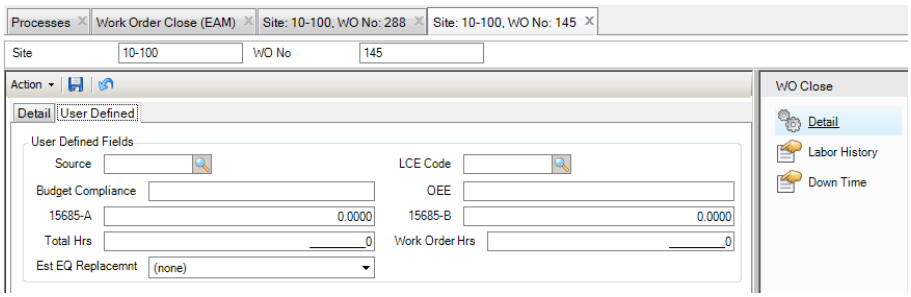
**Fig. 4.211**
Work Order Close Detail Tab




## User Defined Tab

The User Defined tab contains the same user-defined fields displayed in the regular Work Order module. See “Work Orders: User Defined Tab” on page 228.

**Fig. 4.212**
Work Order Close User-Defined Tab




## Labor History Submenu

You can view the labor that has been entered for this WO. To add additional labor performed or to reverse labor, use the Action menu on the main WO Close browse or on the WO Detail tab.

### Down Time Submenu

You can view and edit existing downtime, as well as entering new downtime for the work order. See “Adding Downtime Records to a Work Order” on page 250.

# Service Requests

Use service requests to consolidate requests and to improve communication through automated e-mail between requestors and the maintenance department.

If a piece of equipment has several associated service requests, you can consolidate them into a single work order. Service requests also list duplicate requests, enabling maintenance to cancel duplicates. If open service requests are not assigned to a work order, include them to address multiple issues on just one work order.

All users in a plant can use service requests. A receptionist can request light outage replacement. A technician can note a problem on a production line. Service requests are an easy way to request maintenance.

EAM notifies the requestor by e-mail when a work order is assigned and completed. If a work order exceeds a time period, EAM sends a reminder to maintenance to take action.

## Service Requests Setup

### Service Request Codes

Service requests use the work order codes to add supporting data to lookup tables. See “Work Order Codes” on page 97.

### Service Request Authorization Setup

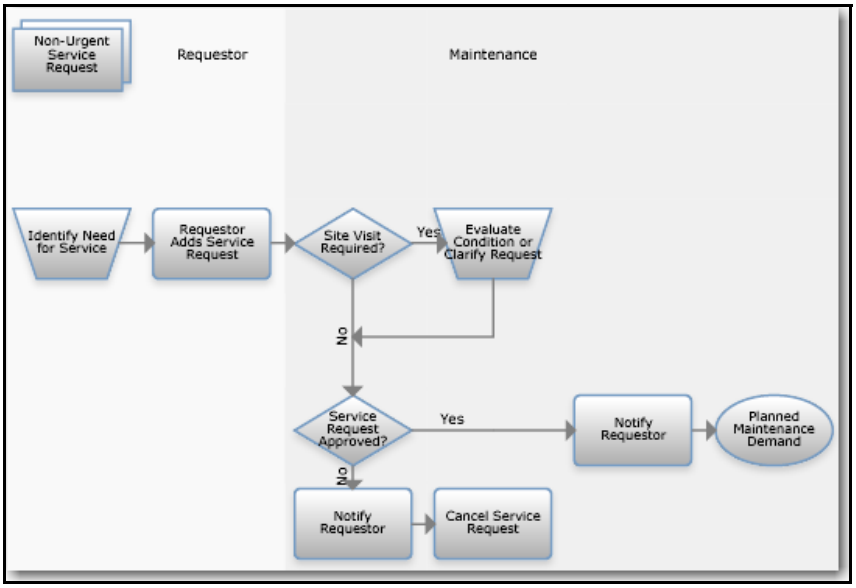
In the domain record, you can determine if authorization is required for service requests before they become work orders. See “Domain: Maintenance Tab” on page 33.

### Service Request Site Setup Options

In the site record, you can set the number of days before EAM sends an e-mail to the notify person who is associated with the equipment referenced on a service request. You can also determine the number of days the system maintains the records of closed or canceled service requests under Service Request History. See “Sites: Maintenance Tab” on page 51.

## Performing a Non-Urgent Service Request

**Fig. 4.213**
Non-Urgent Service Request Process Flow




Perform the following steps:

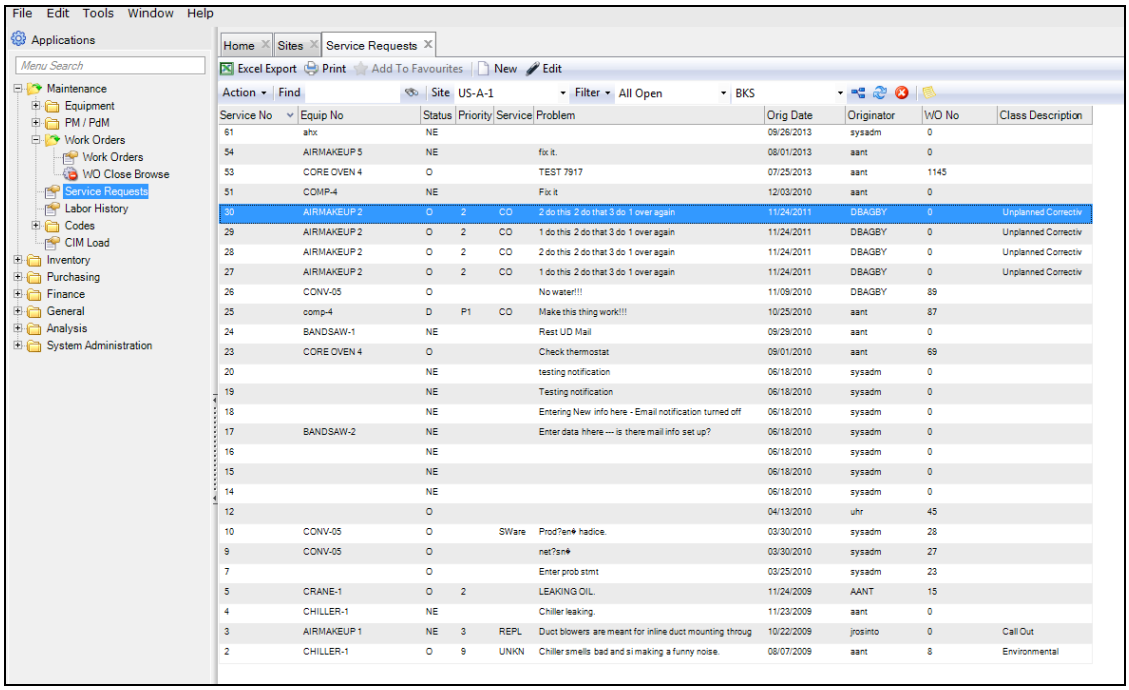
1. Add a service request. Click the node to open Maintenance|Service Requests.
2. Visit the site to evaluate the condition or clarify the request, if needed.
3. Notify the requestor about rejected, canceled, or approved service requests. Click the node to open Maintenance|Service Requests.
4. Maintenance adds a work order for approved requests. Click the node to open Maintenance|Service Requests.

## Creating a Service Request

Follow these steps to create a service request:

1 Open the Service Request browse in Maintenance|Work Orders|Service Requests.

**Fig. 4.214**
Service Request Browse




2 Click New.

A blank service request record opens. The system automatically assigns a service request number, which cannot be modified.

3 Enter the necessary information in the General and User Defined tabs. See “Filling Out the Service Request” on page 262.

4 Once you have entered all of the information, click Save.

### Filling Out the Service Request

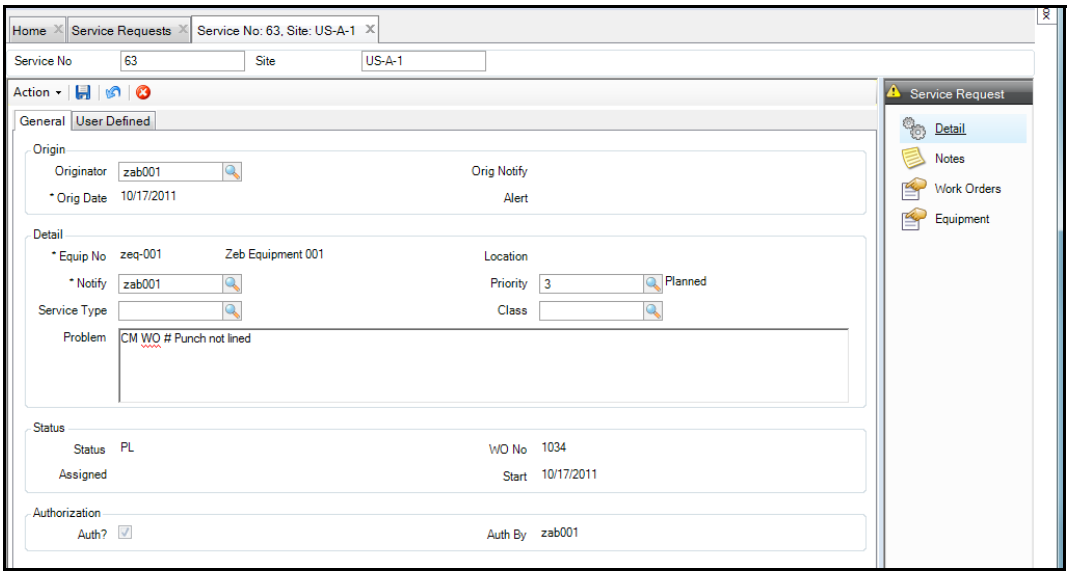
Use a service request to report an equipment problem that does not need a work order immediately. Often, the originator of the service request is the person who uses the piece of equipment. This employee is the most likely person to notice that a piece of equipment needs repair or service. Typically this person is not involved in creating maintenance work orders directly. Service requests provide an effective means of reporting equipment problems for which maintenance planners can subsequently create work orders.

When you create a work order for a piece of equipment with open service requests, the system prompts you to consider attaching those service requests. Attach any number of service requests, or none at all. Service requests ensure that all needed work happens at the same time. The service request originator receives notifications about status changes. Service requests improve the flow of information among employees.

Service Request Tab: General

Use this tab to view or change information about the service request origin, equipment and problem details, status, and authorization.

**Fig. 4.215**
Services Tab: General




## Origin

*Originator.* By default, this field displays the user who created the service request. You can overwrite this field.

*Orig Notify.* Enter the user or mail group who receives automatic e-mail notification when the service request is created and saved.

*Original Date.* This field defaults to the date on which the service request was created, but you can overwrite the date.

*Alert.* This field is enabled when the Alert setting for Priority is selected. Use the lookup to select a user or mail group to receive pager text messages for this service request.

## Detail

*Equip No.* Enter the identification number for the piece of equipment. It displays the equipment description and defaults the user or group to notify from the equipment record. If the equipment is locked, the system displays a warning message.

*Location.* Displays the physical location for the equipment entered on the SR.

*Notify.* The location defaults from the equipment entered on the SR. This field displays the designated user or mail group who receives notification about the service request.

*Priority.* This field indicates the importance of the service request. The priority code defaults from the equipment record, but you can manually enter it. If the Alert setting for the Priority is selected, then you can update the Alert field for the SR.

*Service Type.* Use the lookup to enter a code representing the category of service requested.

*Class.* Use to classify the type of work required. Select the class code for this service request from the lookup.

*Problem.* Enter a description of the problem.

### Status

*Status.* Identifies where the service request is in its life cycle.

*WO Number.* Displays the identifying number of the work order assigned to this service request.

*Assigned.* Displays the employee assigned to the work order associated with the service request.

*Start.* Enter the date when the requestor or planner wants to start the work. This defaults into the WO created for the SR.

### Authorization

If Auth SR? is selected for the SR site's domain, an authorization is required before a work order can be created from the SR.

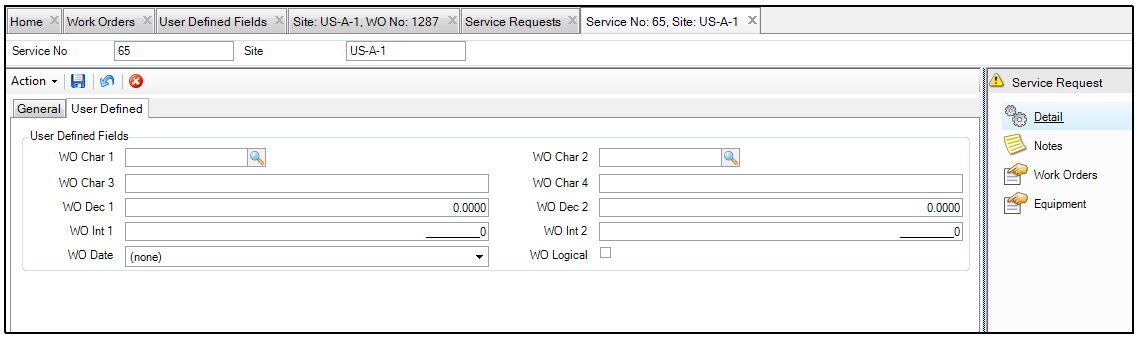
*Auth?* The system updates this check box when the service request is authorized.

*Authorized By.* The system updates this field with the ID of the user who authorized the SR.

## Service Request Tab: User Defined

Use the Service Request User Defined tab to track information against specific equipment in EAM. There are ten user-defined fields.

**Fig. 4.216**
Services Tab: User Defined




### User Defined Fields

*WO Character 1/2.* User-defined character fields, validated against tables that you add.

*WO Character 3/4.* Free-form user-defined character fields, not validated against tables.

*WO Decimal 1/2.* User-defined decimal fields for the work order.

*WO Integer 1/2.* User-defined integer fields for the work order.

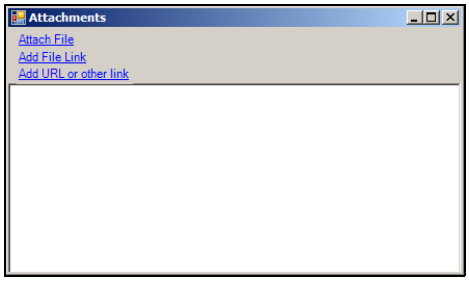
*WO Logical.* A user-defined check box.

*WO Date.* A user-defined date.

## Attach or Link a File to a Service Request

EAM gives you the option of attaching an unlimited number of files and linking an unlimited number of files or URLs to a service request. If you can run the file on your operating system, you can run it from EAM once it is attached or linked.

**Fig. 4.217**
Attaching or Linking a File to a Service Request




### Attach a File to a Service Request

To attach a file to a service request:

1. Select a service request from the Service Request browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the service request.

***Note*** You cannot edit an attachment from the Attachment window.

### Link a File to a Service Request

To link a file to a service request:

1. Select the service request from the Service Request browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and click Open. The file is now linked to the service request.

### Link a URL to a Service Request

To link a URL to a service request:

1. Select the service request from the Service Request browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add URL or other Link.

4 Copy and paste the link into the field and then click OK. The URL is now linked to the service request.

### Print a Service Request

To print a service request, select Print Document from the Service Request Action menu.

## Service Request Activities

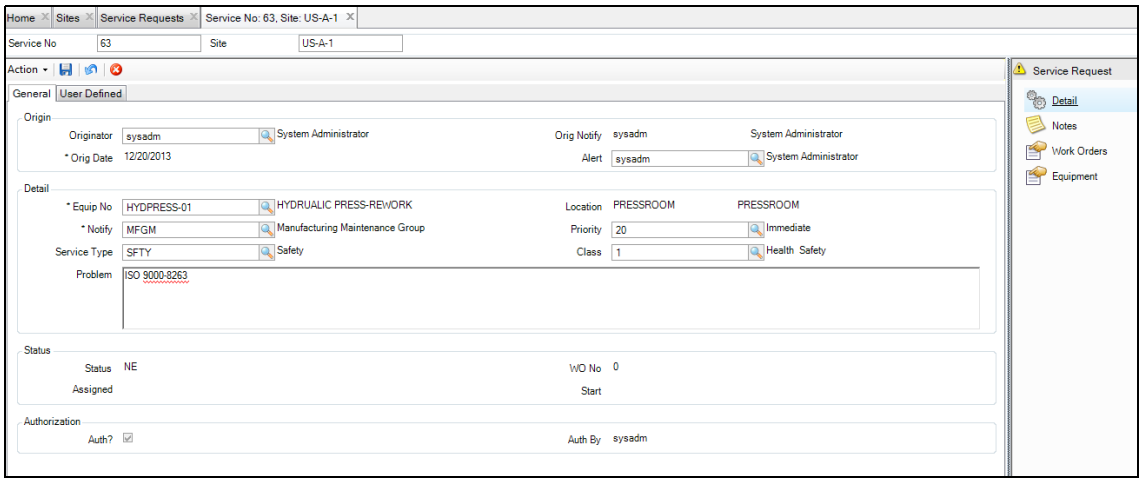
### Authorize a Service Request

If SR Auth? is enabled for the SR site's domain, service requests must be authorized before you can create a work order from the SR. If a service request is closed or canceled, you cannot authorize it.

***Note*** The Authorize function for service requests is optional. Service request authorization is enabled by selecting the SR Auth? check box in General|Business Units|Domain on the Maintenance tab. See "Sites: Maintenance Tab" on page 51.

To authorize a service request, open the service request and select Authorize from the Action menu. Enter your user name and password and click OK.

**Fig. 4.218**
Authorizing a Service Request




### Create Work Orders from Service Requests

The Create Work Order action allows you to create a work order and associate it with the current service request. When you create a work order from a service request, EAM pulls in all the data from the service request and automatically enters it into the work order. This feature saves you time and ensures data integrity. If a work order has been created from a service request, the work order is directly tied to the service request and the associated work order numbers appear in the Work Orders submenu.

***Note*** A work order serves as an outline of maintenance work to be done. When the work is complete, it is updated with summary information. A completed work order gathers valuable data for historical reporting and analysis.

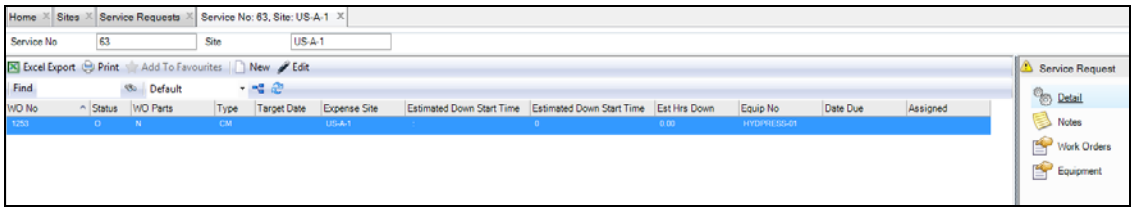
### Create a Work Order from a Service Request

Follow these steps to create a work order from a service request:

1. Open the Service Request browse. Display the Dept column in the browse to more easily sort your service requests.
2. Highlight the service request. Select Create Work Order from the Service Request Action menu.

   A Work Order browse opens displaying the work order that was created.

**Fig. 4.219**
Creating a WO from a Service Request




3. Double-click and drill into the work order and enter any additional information. See “Filling Out the Work Order” on page 219.

### Create a Work Order from Multiple Service Requests

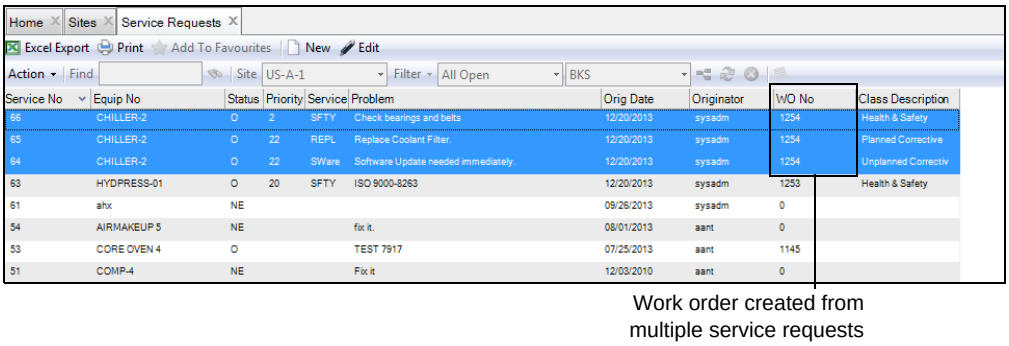
If a piece of equipment has several associated service requests, you can consolidate them into a single work order. When using the Global Create Work Order action, EAM combines multiple service requests into one work order as long as the service requests reference the same equipment number.

Follow these steps to create a work order from multiple service requests:

1. Open the Service Request browse. Display the Dept column in the browse to more easily sort your service requests.
2. Highlight the service requests and select Global Create Work Order from the Service Request Action menu.

   The work order number is displayed in the Service Request browse.

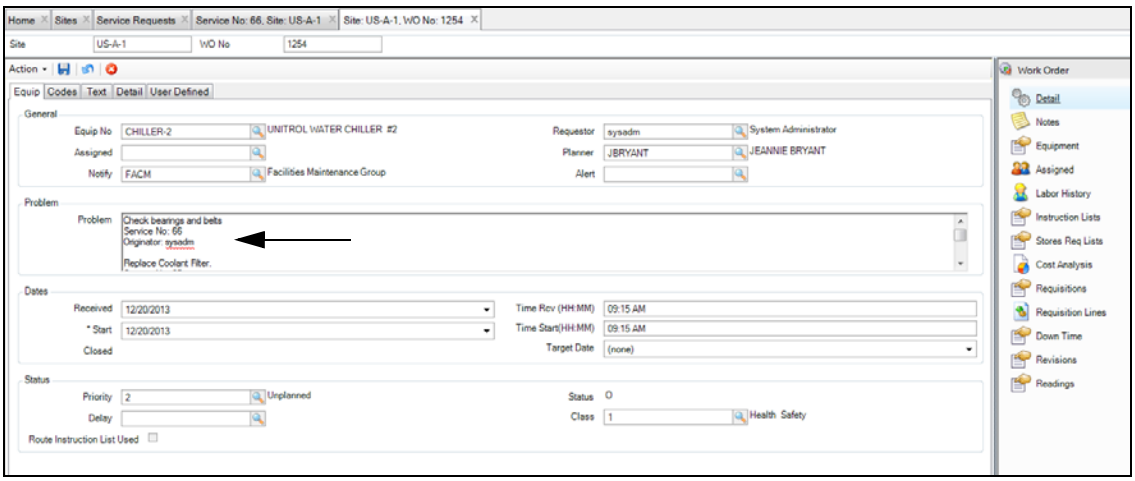
**Fig. 4.220**
Creating a WO from Multiple Service Requests




**3** If necessary, open the work order and enter any additional information. See “Filling Out the Work Order” on page 219.

***Note*** Information about each of the service requests is displayed in the Problem field.

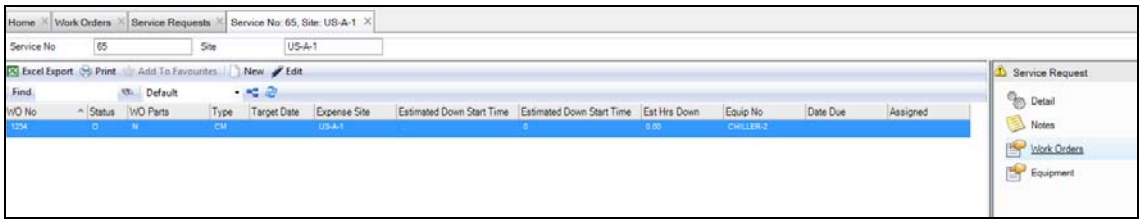
**Fig. 4.221**
Creating a WO from Multiple Service Requests




## Create a Work Order from the Work Order Submenu

You can also create a work order from a service request in the Work Order submenu. To create a WO from a service request, open the service request. Select the Work Orders submenu and click New. Enter the necessary information in the WO record. See “Filling Out the Work Order” on page 219.

**Fig. 4.222**
Creating a WO from a Service Request



### Remove the Association Between a Work Order and a Service Request

The Remove Work Order action allows you to remove the association between a service request and a work order. After performing the Remove Work Order action, the service request is no longer associated with the original work order and you can assign the service request to a new work order.

Follow these steps to remove the association between a work order and a service request:

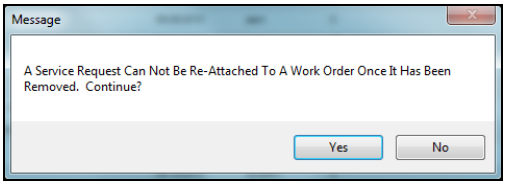
1 Open the Service Request browse and highlight the service request. Select Remove Work Order from the Service Request Action menu.

A message is displayed stating that the service request cannot be reattached to the original work order after it has been removed.

2 Click OK.

***Note*** Once you remove the association between the work order and the service request, the service request can be assigned to a new work order.

**Fig. 4.223**
Removing the Association Between WO and Service Request




3 When the association between the work order and the service request is removed, the work order field in the Service Request browse changes to 0.

***Note*** EAM automatically notes the service request removal, user ID, and date in the problem description on the work order.

4 If necessary, assign the service request to a new work order. See “Create a Work Order from a Service Request” on page 267.

## Edit a Service Request

To edit a service request, open the service request and make the necessary changes. See “Filling Out the Service Request” on page 262.

### Change the Status of a Service Request

Service requests use the same list of statuses as work orders. EAM comes with standard service request/work order statuses such as closed, finished, and canceled. The closed, finished, and canceled statuses cannot be deleted, but you can add to this list. EAM gives you the ability to create statuses with specific functionality. For example, you can:

- Determine the default status when creating a service request.
- Allow EAM to automatically send an e-mail to the SR notify person any time a service request changes to a particular status.

For more information about creating new service request/WO statuses, see “Work Order Status Codes” on page 104.

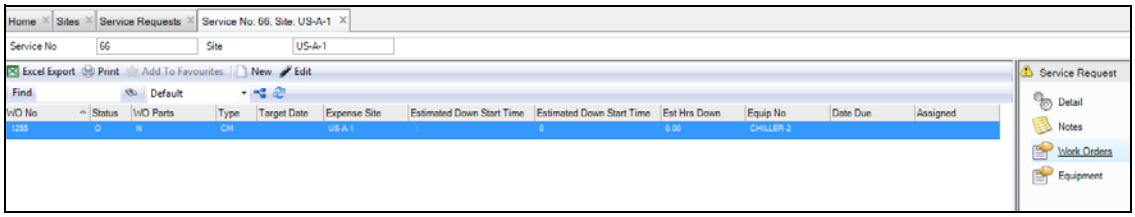
To change the status of a service request, highlight the service request and select Change Status from the Service Request Action menu. A window opens. Double-click to select the new status from the list.

***Note*** If the SR is associated with a WO, the following message is displayed: “Change the status of a service request that is associated with a work order, you must change the status of the work order.”

### View the Work Orders Associated with a Service Request

To view the work orders associated with a service request, open the service request and select the Work Orders submenu.

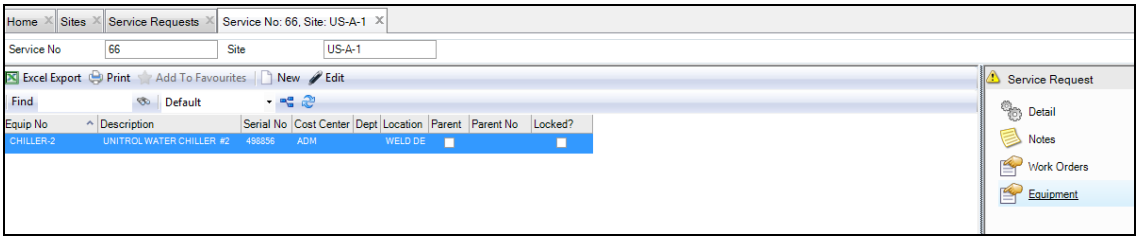
**Fig. 4.224**
Service Request WO Submenu




### View Equipment Records Associated with a Service Request

To view the equipment records associated with a service request, open the service request and select the Equipment submenu.

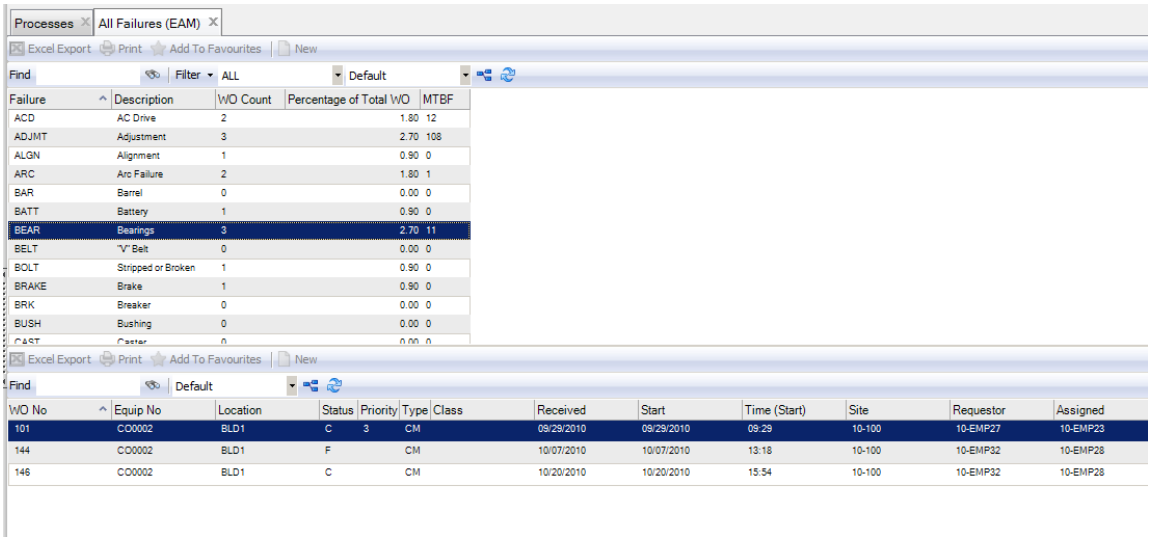
**Fig. 4.225**
Service Request Equipment Submenu




## All Failures

Use the All Failures read-only browse to view failures across your system.

**Fig. 4.226**
All Failures Browse




The upper browse lists all failure codes defined in EAM. Each failure code row displays:

- The failure code's description
- The number of CM WOs on which that failure appears
- This failure code as a percentage of all CM WOs
- The mean time between failure

  ***Note*** A failure must occur twice before the MTBF is populated. MTBF is calculated by finding the difference, in days, between the first and second failures and then dividing that number by *n*-1, where *n* is the total number of CM WOs associated with this failure.

The lower browse displays all of the CM WOs associated with the highlighted failure code in the sites for which you have access.

Chapter 5

# Inventory

This section discusses the following Inventory module topics:

***Inventory 274***

***Request Stock Replenishment 345***

***Create Stores Requisition Lists 352***

***Update Physical Inventory Count 366***

# Inventory

## Overview

Use Inventory to store Maintenance, Repair, and Operational (MRO) part records. EAM classifies and catalogs parts with unique part numbers.

**Fig. 5.1**
Inventory Top-Level Process Flow




EAM maintains inventory quantities by issuing parts, returning parts, or making adjustments to inventory levels. MRO inventory records integrate with other EAM modules. For example, users requesting parts from Maintenance can check availability in Inventory Stores. Inventory integrates with the Purchasing module to display delivery dates of parts on-order.

## Setup–MRO Inventory

### System Administration Module Setup

The system setup options for the Inventory module are located in System Administration|Registry. Do not modify the registry unless there is a definite need to do so. Contact the QAD EAM Support group for advice on your situation. See “Set Up Registry Data” on page 742.

### General Module Setup

There are various setup options in the General module in the domain and site records.

### Domain Setup

The Inventory tab on the domain record contains the following fields that provide setup options for the Inventory module:

- Inventory Cost Method
- Cons Res/Short?
- Cons Reserves?
- Cons Res Orders
- A,B,C Percent
- A,B,C Days
- Reserve Inventory
- Diff Acct Period?
- Part Description Protected
- Transit
- Reopen Stores?

See “Domain: Inventory Tab” on page 35.

### Site Setup

The Inventory, More Inventory, and Miscellaneous tabs on the site record contains setup options for the Inventory module.

**Inventory Tab**

Inventory Issues Defaults – Debit

- Department, Cost Center, Acct No, Sub Acct No, Acct No (Equip), and Sub Acct No (Equip)

Inventory Issues Defaults – Credit

- Stock Dept, Stock Cost Center, Stock Acct, Stock Sub Acct, and Stock OH Group
- NStock Dept, NStock Cost Center, NStock Acct, NStock Sub Acct, and NStock OH Group

Consignment Inventory Defaults

- Asset Dept, Asset Cost Center, Asset Acct No, and Asset Sub Acct
- Adj Dept, Adj Cost Center, Adj Acct No, and Adj Sub Acct

See “Sites: Inventory Tab” on page 48.

**More Inventory Tab**

Inventory Adjustment Defaults

- Dept, Cost Center, Acct No, and Sub Acct No

Include as Inventory Usage

- Issue, Relocation, Return, Adjust Up, and Adjust Down

Transit Accounts

- Dept, Acct No, Cost Center, and Sub Acct No

Options

- Auto Close Stores?, Stores Auth?, and Prompt for Pick Ticket?

See “Sites: More Inventory Tab” on page 49.

**Miscellaneous Tab**

Sole Source Options

- Automatically, Notify, and Requestor

See “Sites: Miscellaneous Tab” on page 58.

**Revision Control**

Activate revision control for inventory records in the Revision Control submenu on the Site record. See “Enable Revision Control” on page 61.

### Codes

The following codes can be set up for use in the Inventory module:

- **Descriptor Codes.** Use to further describe a piece of equipment or an inventory part. See “Descriptor Codes” on page 64.
- **Descriptor Definitions.** Use to create standard technical documentation for equipment and inventory parts. See “Descriptor Definition Codes” on page 65.

## Inventory Module Setup–Codes

Inventory codes, located in Inventory|Codes, are user-defined codes. Depending on your permissions, you can add or edit existing records. The following codes can be defined in the Inventory module:

- Commodity Codes
- Buyer Commodity Codes
- MSDS Codes
- Part Codes
  - Physical Inventory Types
  - Part Catalog Codes
  - Parts Classes
  - Part Location Codes
- Part Codes (cont.)
  - Parts Status Codes
  - Part Types
  - Inv Char 1 Codes
  - Inv Char 2 Codes
- Physical Inventory Types
- Stock Run Types
- UOMs

### Commodity Codes

The commodity codes, located in Inventory|Codes|Commodities, are user-defined codes that:

- Group items based on the type or use of the part. Maintenance technicians use them to find or order a repair part.
- Serve as an important tool for buyers to help analyze a company’s spending habits.
- Can also be used in the stock replenishment routine and in the Inventory and Purchasing modules.

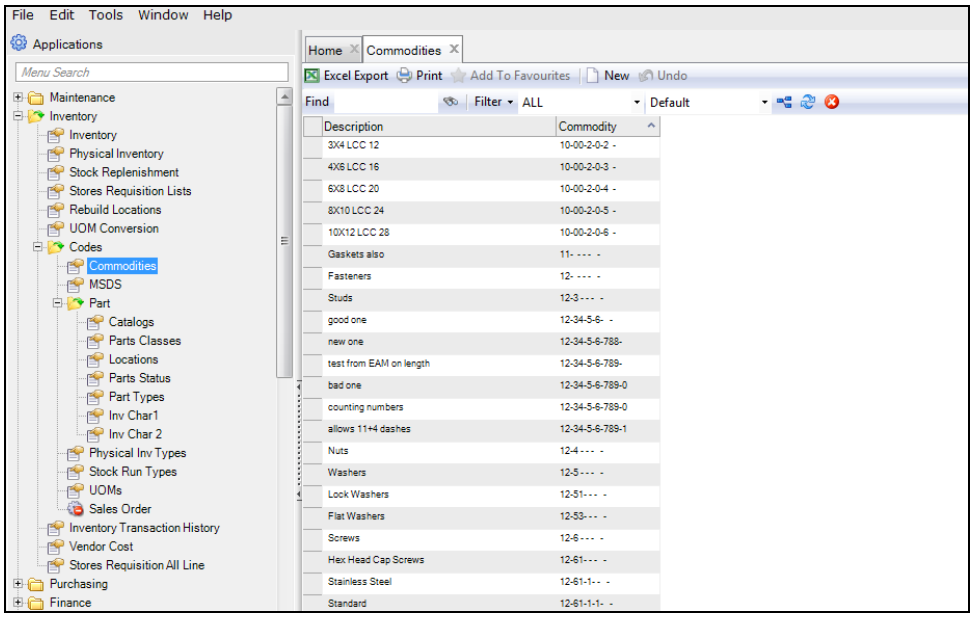
You can format commodity codes to match industry standards. The codes can be up to 15 characters in length, or have a hierarchical structure with up to four levels of two codes. The commodity code format displays dashes within the commodity, depending on the format definitions you establish in the System Registry.

***Example*** The format definition for commodity codes from the National Institute of Government Purchasing Web site allows up to five segments (“lengths”), in the format xxx-xx-xx-xxx-x. The first segment has three positions or characters, the second segment has two, the third segment has two, the fourth segment has three, and the fifth segment has one. The following are sample commodity codes from the site:

| Commodity | Description |
|---|---|
| 620 | Office Supplies |
| 620-80 | Pens |
| 620-80-21 | Pens, Ball Point |
| 620-80-21-075-4 | Fine Point, Black Ink, 12/box |
| 620-80-21-075-3 | Fine Point, Blue Ink, 12/box |
| 620-80-21-075-1 | Fine Point, Green Ink, 12/box |
| 620-80-21-075-0 | Fine Point, Red Ink, 12/box |

To add a commodity code, open the Commodities browse and click New. Enter the code in the Commodity field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 5.2**
Codes: Commodities

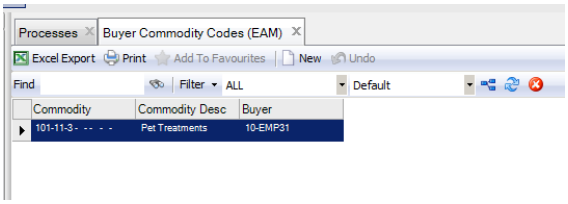



## Buyer Commodity Codes

The Buyer Commodity Codes menu item is visible when the Buyer/Commodity Purchasing? check box is selected in Domain|Inventory.

***Note*** You must log out and log back into the system to see the menu item.

**Fig. 5.3**
Buyer Commodity Codes




To link a Commodity code with a buyer,

1 Click New.

2 Select a Commodity code from the lookup. Tab to move automatically to the Buyer lookup. The Commodity Description updates with the description defined for that commodity.

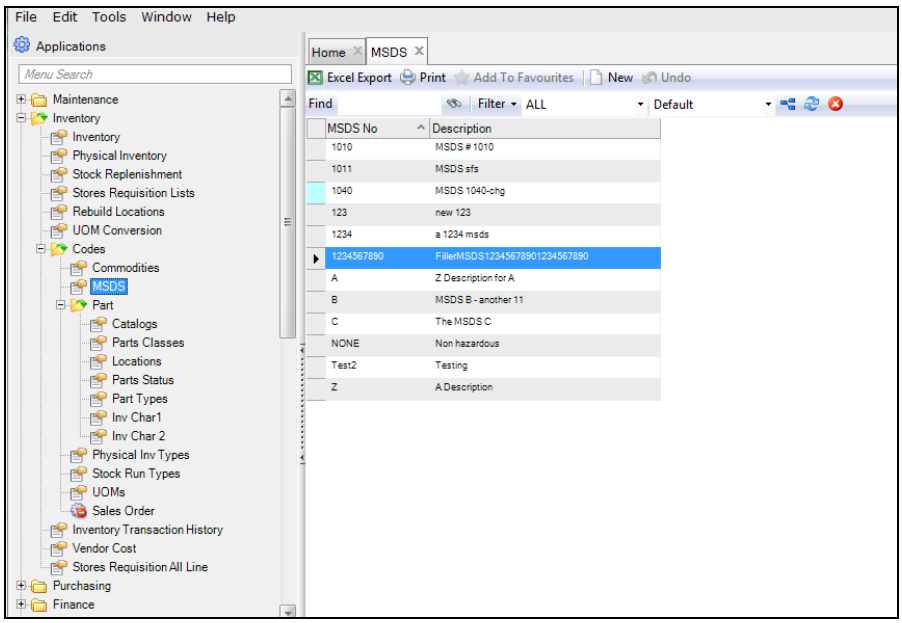
3 Select the buyer from the Buyer lookup. Tab again to save.

## MSDS Codes

The Material Safety Data Sheet (MSDS), located in Inventory|Codes|MSDS, are user-defined codes that can be used to cross-reference MSDSs that may be stored somewhere else in the organization.

To add an MSDS code, open the MSDS browse and click New. Enter the code in the MSDS No field and a brief description in the Description field. Press Enter to save.

**Fig. 5.4**
Codes: MSDS



## Part Codes

Part codes are user-defined codes that can be used to give additional information about parts, such as catalogs, part classes, locations, part statuses, and part types. The application also provides the Inv Char 1 and 2 codes, which are user-defined codes that are used with the user-defined fields. Part codes are located in Inventory|Codes|Part.

## Part Catalog Codes

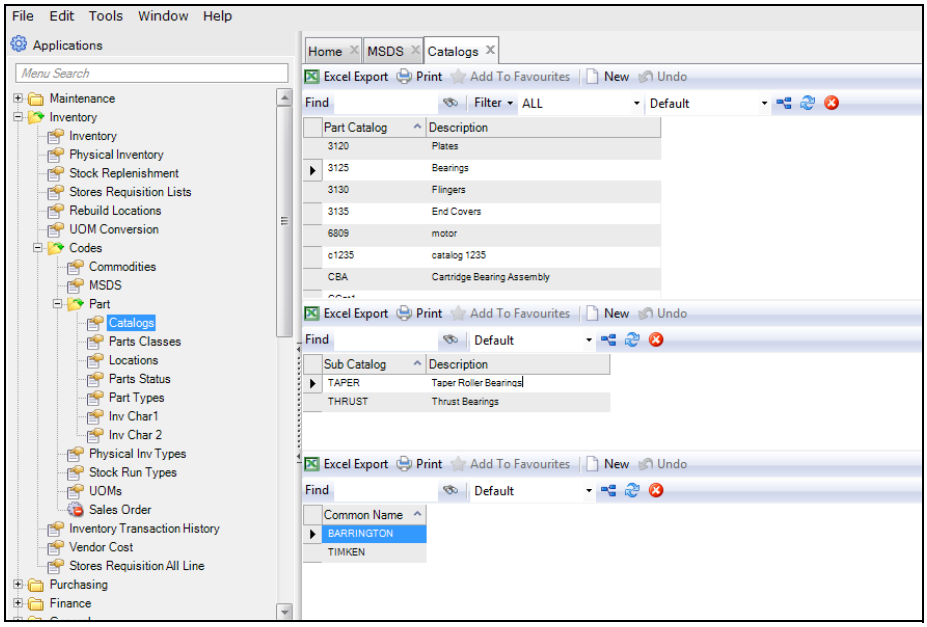
Catalog codes, located in Inventory|Codes|Part|Catalog, are user-defined codes that are used to group parts. The Catalog browse contains a hierarchical table. The top frame displays a broad grouping of parts, while the lower frames display the types within that group. Catalog codes are used in Inventory only, for filtering and reporting purposes.

Follow these steps to create a catalog code:

1. Open the Catalog browse. In the top frame, click New.
2. Enter the part catalog number in the Part Catalog field and a brief description in the Description field. Press Enter to save.
3. If there is a subcatalog number, select the catalog code in the top frame and click New in the middle frame. Enter the subcatalog number in the Sub Catalog field and a brief description in the Description field. Press Enter to save.
4. If there are any common names, select the subcatalog code in the middle frame and click New in the bottom frame. Enter the common name in the Common Names field. Press Enter to save. Repeat this step to add more names.

   ***Note*** A common name, which is associated with a subcatalog code, is a noun or an adjective used to describe the catalog or subcatalog. Sometimes, users enter their own names.

**Fig. 5.5**
Part Codes: Catalogs

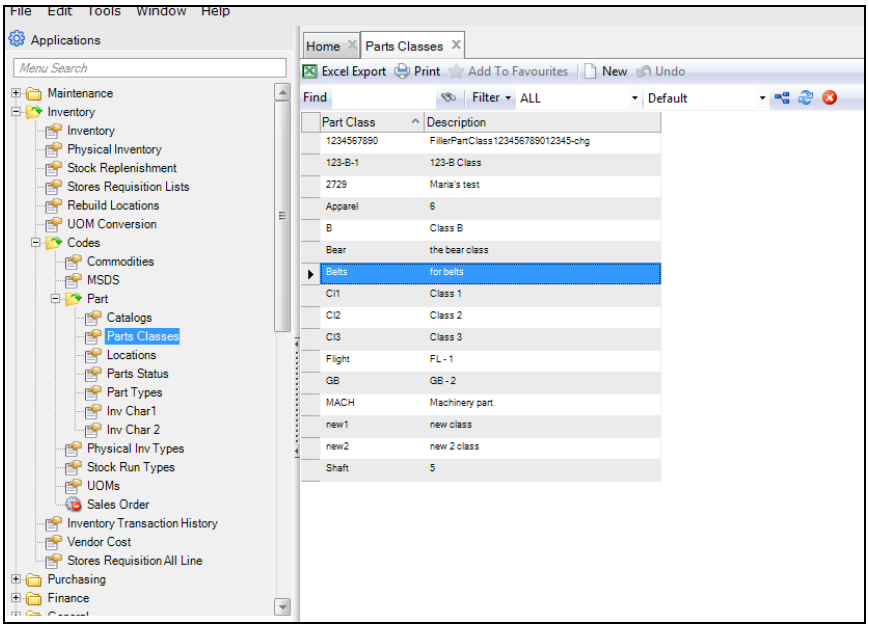


## Parts Classes

Parts classes are user-defined codes located in Inventory|Codes|Part|Parts Classes. Parts classes, which are used to group common parts together, are used in the Inventory module only, for filtering and reporting purposes.

To add a parts class code, open the Parts Classes browse and click New. Enter the class code in the Part Class field and a brief description in the Description field. Press Enter to save.

**Fig. 5.6**
Part Codes: Parts Classes

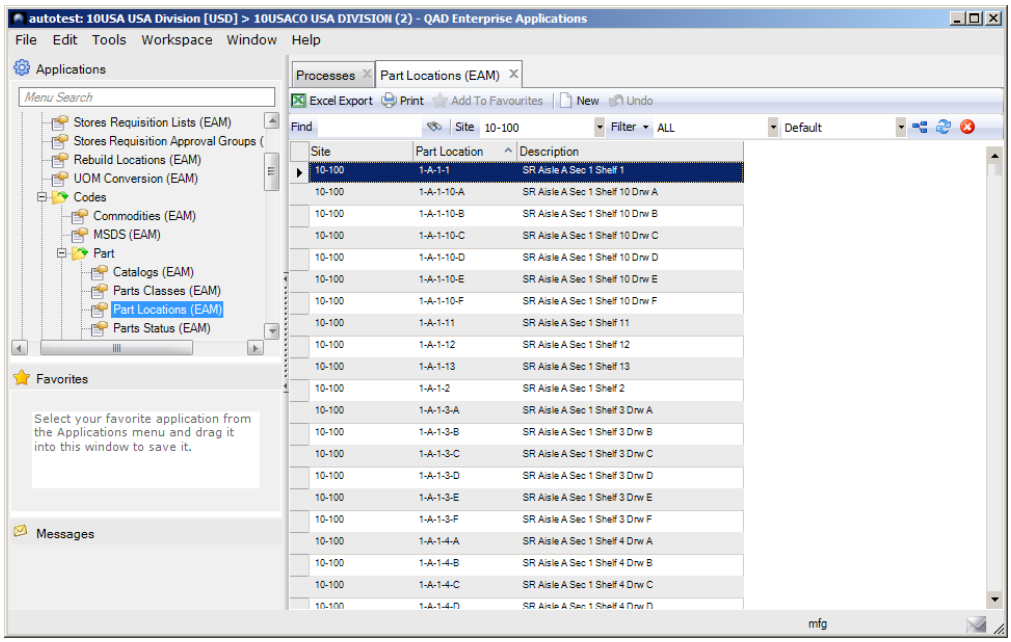



## Part Location Codes

Location codes, which are located in Inventory|Codes|Part|Part Locations, are user-defined codes used to indicate the bin location of the part. Each part requires at least one location to track quantities. A current quantity is associated with the location.

To add a part location code, open the Part Locations browse and click New. Enter the location code in the Part Location field and a brief description in the Description field. Press Enter to save.

**Fig. 5.7**
Part Codes: Part Locations

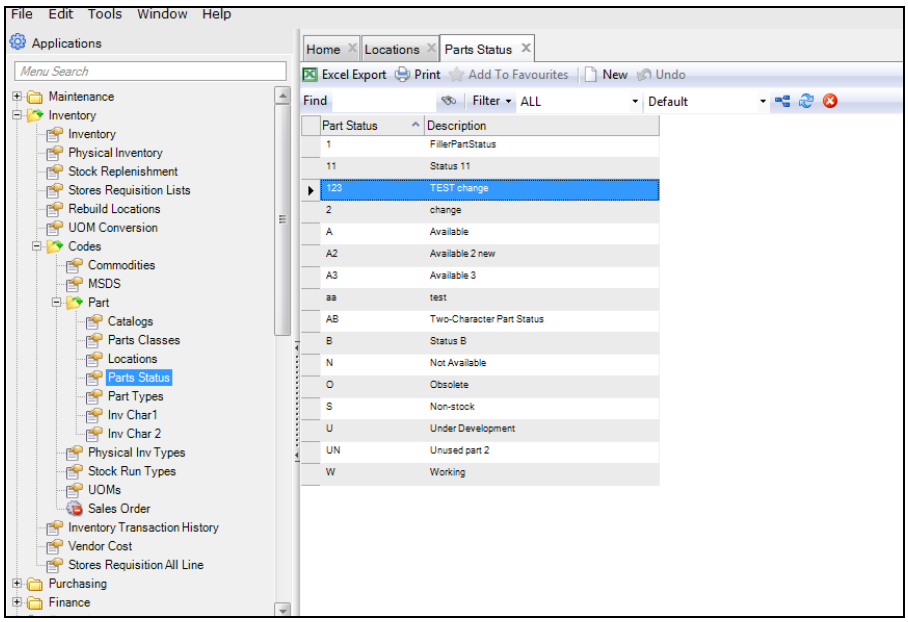



## Parts Status Codes

Parts Status codes, which are user-defined codes, such as Available (A), Spare (S), and Obsolete (O), are used for analysis and reporting purposes. These codes are located in Inventory|Codes|Part| Parts Status.

To add a parts status code, open the Parts Status browse and click New. Enter the parts status code in the Parts Status field and a brief description in the Description field. Press Enter to save.

**Fig. 5.8**
Codes: Parts Status



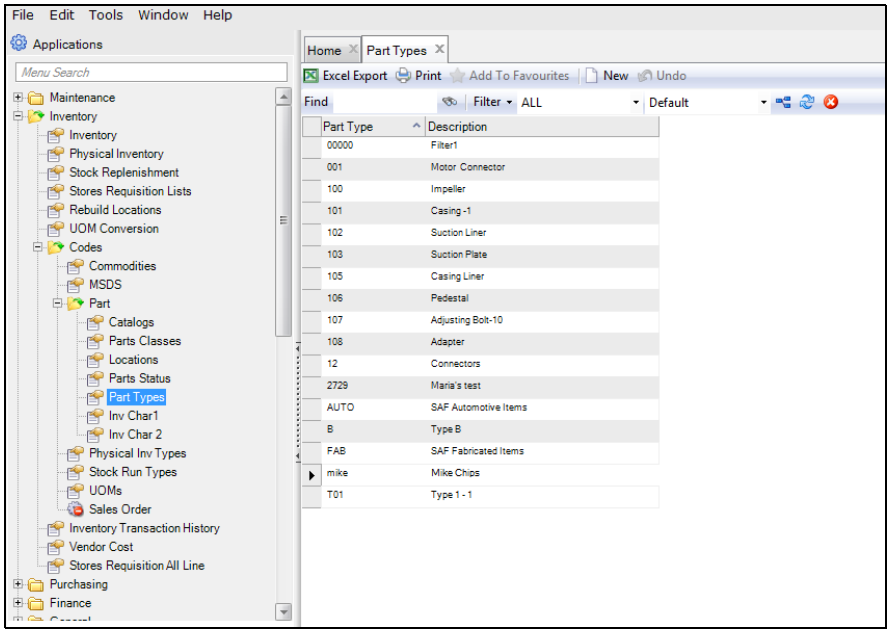
## Part Types

Part Type codes are used in the stock replenishment routine. Part types indicate a part's functional application and are used for filtering and reporting. Part type codes are located in Inventory|Codes|Part|Part Types.

To add a part type code, open the Part Types browse and click New. Enter the part type code in the Part Type field and a brief description in the Description field. Press Enter to save.

***Note*** Add or edit type codes only for accounting/SAF purposes. They should match the corresponding SAF data found in the QAD ERP in Generalized Codes Maintenance. If and when those items are used in operational transactions, the items with which they are associated should be items in Item Master Maintenance.

**Fig. 5.9**
Part Codes: Part Types



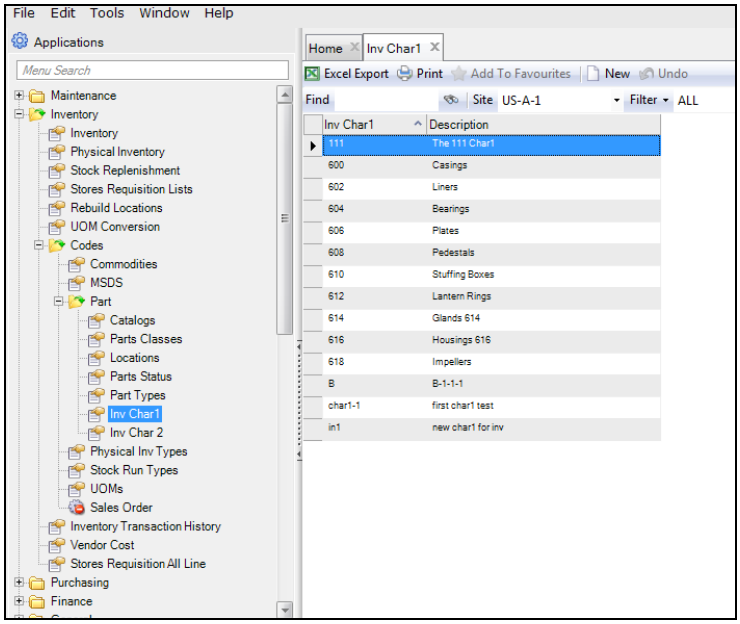

## Inv Char 1 Codes

Inv Char 1 codes are validation tables that are used with the Inv Char 1 user-defined fields. For example, if you click in the Inv Char 1 user-defined field, the lookup allows you to select one of the items in the inventory character 1 table. For more information about using user-defined fields, see "User-Defined Fields" on page 701. The Inv Char 1 codes are located in Inventory|Codes|Part|Inv Char 1.

***Note*** There are 70 user-defined fields in EAM. Of these fields, there are two Inventory tables for user-defined lookup codes that allow you to customize labels and build codes and descriptions.

To add an Inv Char 1 code, open the Inv Char 1 browse and click New. Enter the code in the Inv Char 1 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 5.10**
Part Codes: Inv Char 1



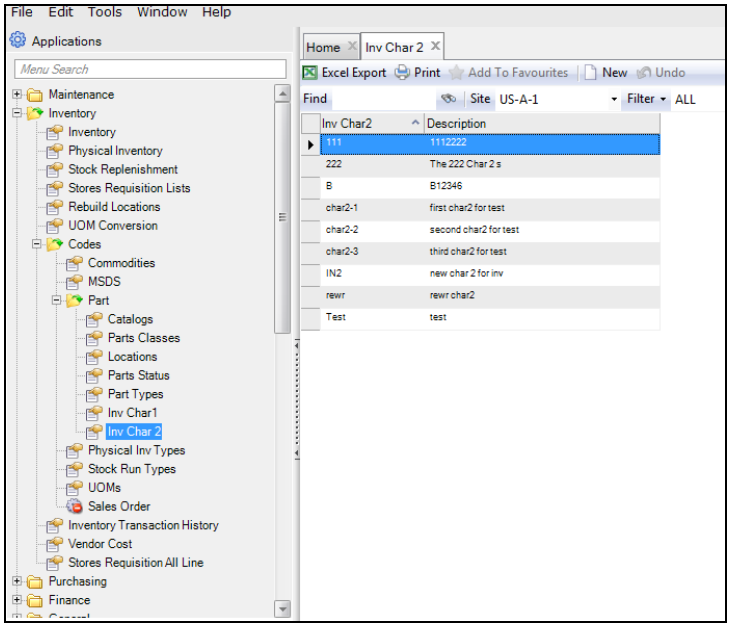

## Inv Char 2 Codes

Inv Char 2 codes are validation tables that are used with the Inv Char 2 user-defined fields. For example, if you click in the Inv Char 2 user-defined field, the lookup allows you to select one of the items in the inventory character 2 table. For more information about using user-defined fields, see “User-Defined Fields” on page 701. The Inv Char 2 codes are located in Inventory|Codes|Part|Inv Char 2.

***Note*** There are 70 user-defined fields in EAM. Of these fields, there are two Inventory tables for user-defined lookup codes that allow you to customize labels and build codes and descriptions.

To add an Inv Char 2 code, open the Inv Char 2 browse and click New. Enter the code in the Inv Char 2 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 5.11**
Part Codes: Inv Char 2

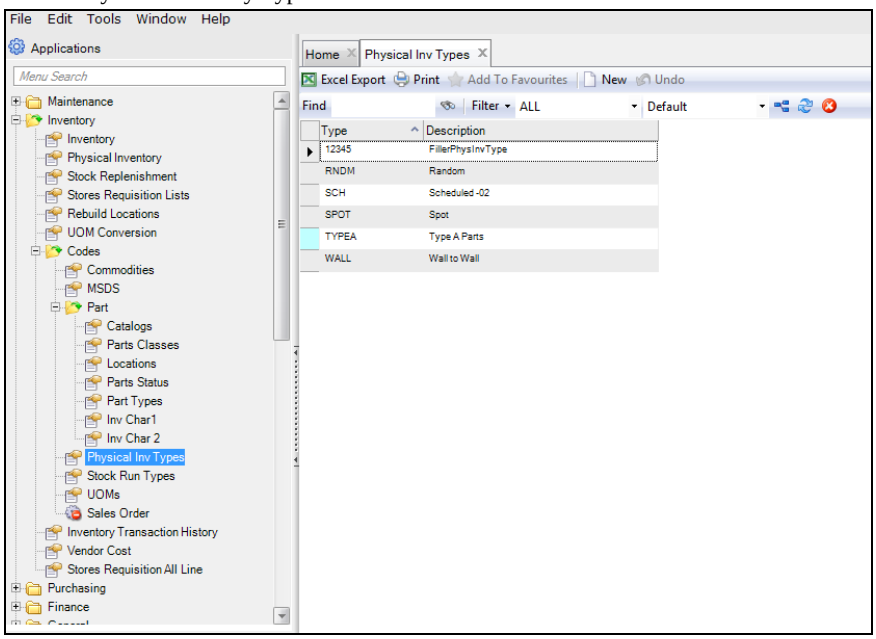



## Physical Inventory Types

The Physical Inventory Type codes, located in Inventory|Codes|Physical Inv Types, are used to classify the purpose of a physical inventory count, such as wall-to-wall or spot.

To add a physical inventory type code, open the Physical Inv Type browse and click New. Enter the physical inventory type in the Type field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 5.12**
Codes: Physical Inventory Types

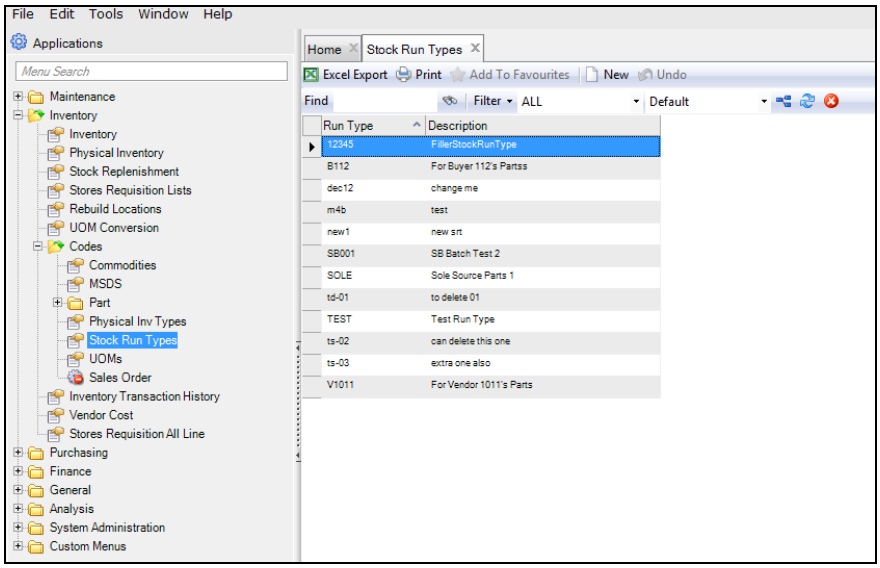


## Stock Run Types

The Stock Run Type codes, located in Inventory|Codes|Stock Run Types, are used to classify the purpose of a stock run, such as internal or critical parts.

To add a stock run type, open the Stock Run Types browse and click New. Enter the stock run type in the Run Type field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 5.13**
Codes: Stock Run Types

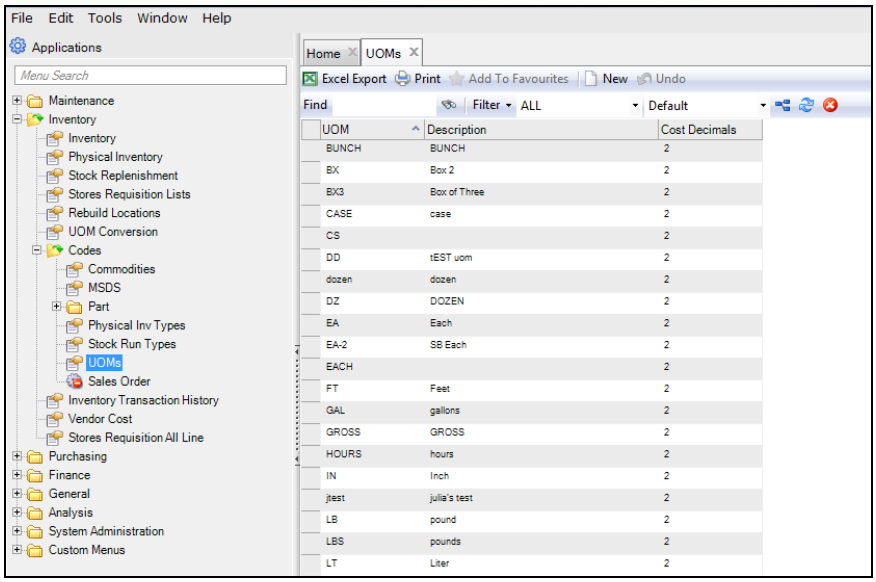



## UOMs

The Unit of Measure (UOM) codes, located in Inventory|Codes|UOMs, are used to classify UOMs and cost decimals.

To add a UOM, open the UOMs browse and click New. Enter the UOM in the UOM field, a brief description in the Description field, and the cost decimal in the Cost Decimals field. Press Enter to save.

**Fig. 5.14**
Codes: UOMs




## UOM Conversion

Use Unit of Measure (UOM) Conversion to automatically create a conversion when transitioning between issuing units of measure and purchasing units of measure.

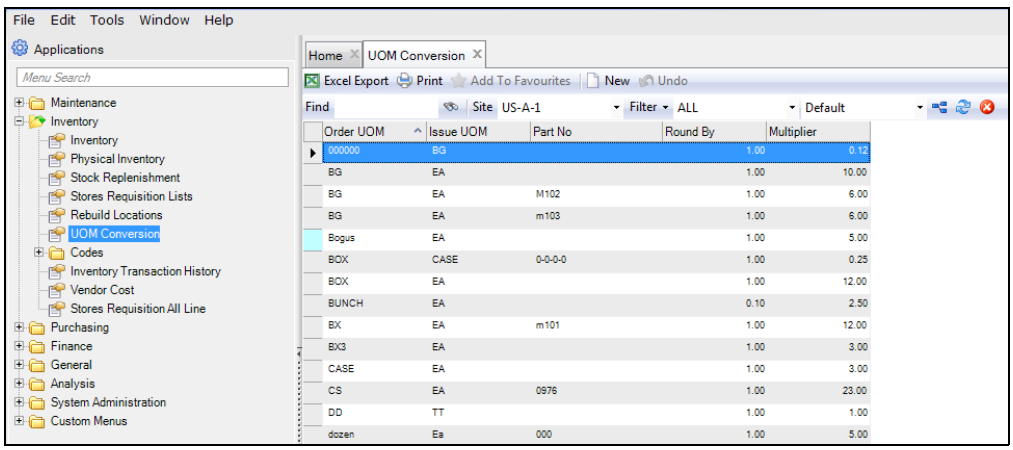
For example, parts issue out of inventory in units of each (such as individual pencils). The vendor requires the company to buy the part (pencils) in units of boxes (25 pencils to a box).

The conversion occurs when requesting 25 each. The system converts boxes from the vendor into eaches for issue. It converts the box price into each prices so that the cost at issue is for the individual pencil, not the box unit (order price).

### UOM Conversion Browse

Access this browse from Inventory|UOM Conversion. Use it to organize and display records, to access supporting functions, and to edit or create new records.

**Fig. 5.15**
UOM Conversions Browse



Creating a UOM Conversion Record

1 Open the UOM Conversion browse and click New.

2 Enter information into the following fields:

*Order UOM.* Use the lookup to select the UOM used when ordering the part.

*Issue UOM.* Use the lookup to select the UOM used when issuing the part.

*Part No.* Use the lookup to select the part number to associate with this UOM conversion. When the part has a unique multiplier, it is recommended that you associate a part number to the UOM conversion.

*Round By.* Specify rounding for resulting conversion.

*Multiplier.* Specify a number used to convert the Order UOM quantity to Issue UOM quantity.

3 Press Enter to save.

## Part Rebuild Locations

### Overview

Use Part Rebuild Locations to control serialized part rebuilds, such as for motors.

- Send parts removed from equipment to internal or external vendor locations for repair.
- Generate work orders against a rebuild location, instead of equipment, and the associated serial number for the serialized part at that location. Add work orders to build internal parts linked to a rebuild location.
- Charge costs to the work order. The cost flows to the part serial number. Cost remains with the part when it returns to inventory. It stays with the part until it issues out to a piece of equipment. Then, the cost expenses to the equipment when issued.

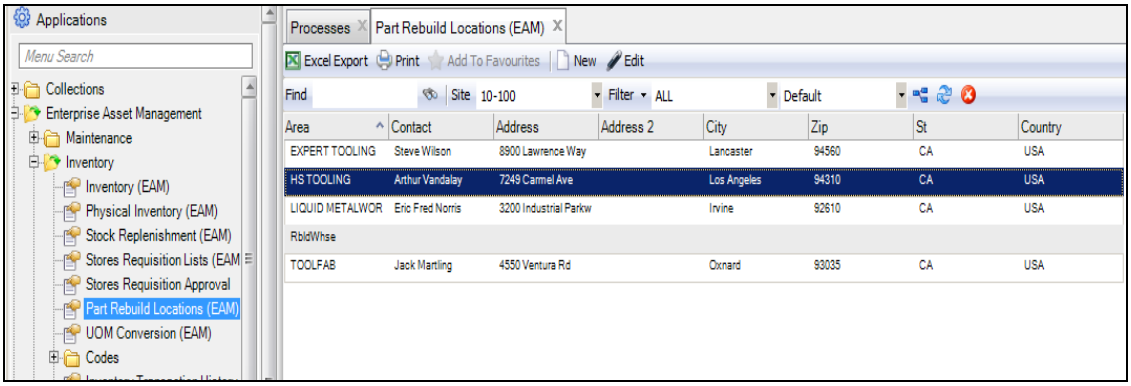
Also use Part Rebuild Locations when fabricating internally sourced parts.

## Creating a Part Rebuild Location

Follow these steps to create a rebuild location:

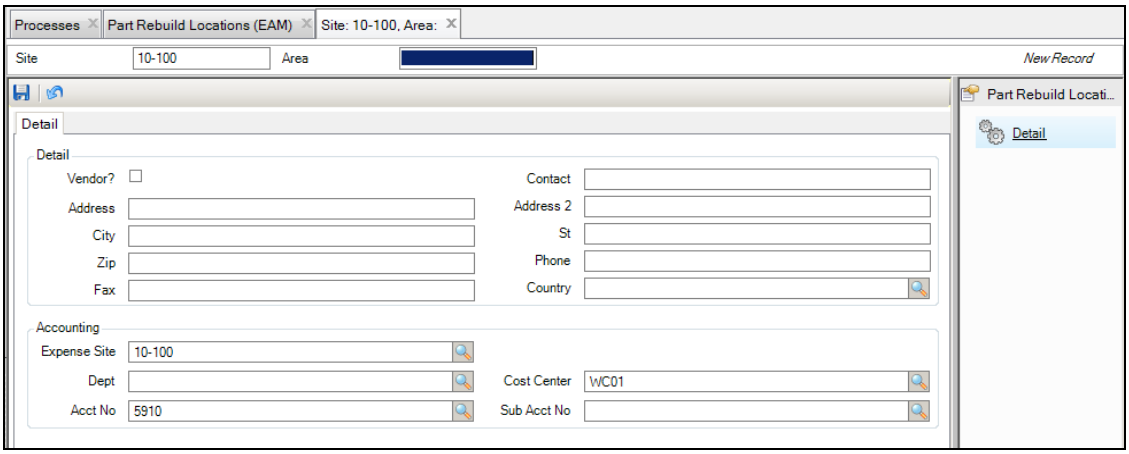
1 Open the Part Rebuild Locations browse located in Inventory|Part Rebuild Locations.

**Fig. 5.16**
Part Rebuild Locations Browse




2 Click New. A blank part rebuild location record opens. Enter the area number in the Area field.

**Fig. 5.17**
Part Rebuild Location Detail




3 Enter the relevant information in the following fields:

*Site.* Displays the site identified with the rebuild location. When the system creates the rebuild location, the Site field is read-only.

*Area.* The rebuild location name.

*Vendor?* Select this check box to indicate a vendor rebuild location.

*Contact.* The individual to contact for information at the rebuild location.

*Address.* The street address of the rebuild location.

*Address 2.* Additional information about the rebuild location street address such as suite number.

*City.* The rebuild location city.

*St.* The rebuild location state.

*Zip.* The postal code of the rebuild location.

*Country.* The country of the rebuild location.

*Phone Number.* The phone number of the rebuild location.

*Fax.* The fax number for the rebuild location.

*Expense Site.* Select the site to charge for the rebuild from the lookup.

*Dept.* The department to use as the default when charging parts, labor, or contractor costs against a rebuild work order.

*Cost Center.* The default cost center when charging parts, labor, or contractors against a rebuild work order.

*Acct No.* The account number associated with the expense side of any distribution of labor, issuing of materials, or contracting against a part in a rebuild location.

*Sub Acct No.* The sub-account number tied back to the account number.

***Note*** If you create a work order for a serial number in a rebuild location, then the default account structure for the work order comes from the rebuild location. If a serialized part returns to stores, then the account structure in the rebuild location represents the inventory asset account number. When the part is transferred from the rebuild, it is credited against the rebuild. It debits or increases the value of the inventory. Cost transfers to stores until the part is issued to a piece of equipment.

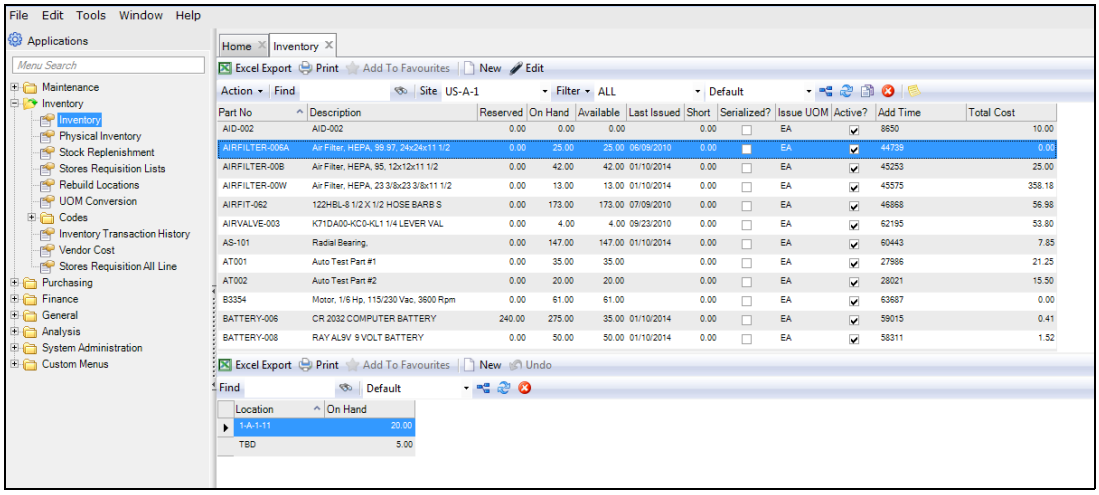
4 Click the Save icon to save.

## Defining an MRO Part

Follow these steps to define an MRO part:

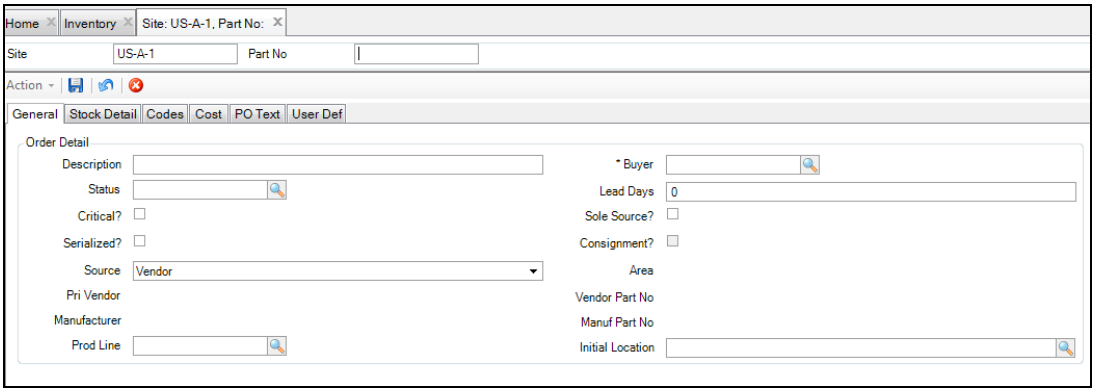
1 Open the Inventory browse located in Inventory|Inventory.

**Fig. 5.18**
Inventory Browse



2 Click New. A blank MRO part record opens. In the Part No field, enter a unique part number.

**Fig. 5.19**
Blank MRO Part Record




3 Enter information in relevant fields on the General, Stock Detail, Codes, Cost, PO Text, and User Defined tabs.

4 Once all the information has been entered, click Save.

## Filling Out the MRO Part Record

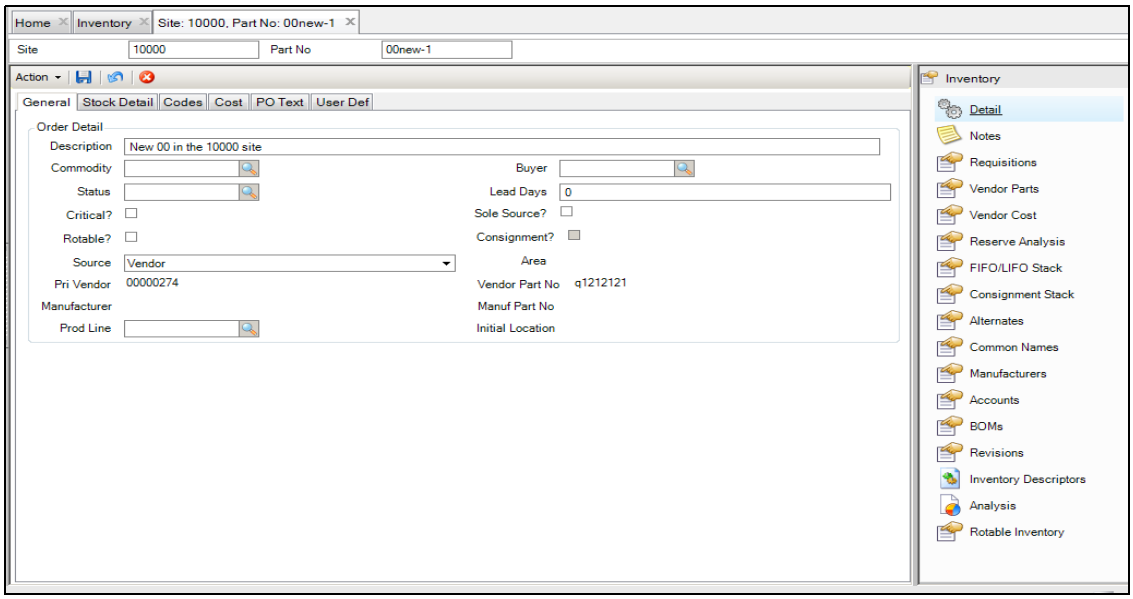
An MRO part record contains information about the part. The part number and current site are displayed above the associated tabs. When defining an MRO part record, enter the relevant information in the following tabs:

- Inventory: General Tab
- Inventory: Stock Detail Tab
- Inventory: Codes Tab
- Inventory: Cost Tab
- Inventory: PO Text Tab
- Inventory: User Defined Tab

### Inventory: General Tab

The General tab is used to record inventory order information.

**Fig. 5.20**
Inventory: General Tab




*Description.* Enter the part's primary description.

*Commodity.* Enter or select from the lookup the commodity code assigned to this part. This field is mandatory when Buyer/Commodity Purchasing? is selected on the General|Business Units|Domain|Inventory tab.

*Buyer.* Use the lookup to select the buyer's employee ID. When Buyer/Commodity Purchasing? is selected on the General|Business Units|Domain|Inventory tab, this field defaults to the buyer specified for the associated commodity and cannot be edited.

*Status.* Enter or select the status from the lookup.

*Lead Days.* Enter the number of days a vendor requires to deliver an ordered part.

*Critical?* Select this check box if this part is critical. This setting enables sort and filter for stock replenishment selection.

*Sole Source?* Select this check box to use sole sourcing and its expedited purchase process for stock replenishment.

*Rotable?* Select this check box to identify this part as a serialized and repairable part. For more information, see "Managing Rotable Parts" on page 327.

*Consignment?* Select this check box to indicate that this part is consigned from a vendor. For more information, see "Managing Consignment Inventory" on page 321.

***Note*** You cannot select both consignment and rotable for the same part.

*Source.* Select vendor to buy, or internal to build this part.

*Area.* This field refers to an internal build or fabrication location.

***Note*** Area is required for an internally sourced part.

*Pri Vendor.* The system displays the primary vendor ID specified on the Vendor Parts submenu.

*Vendor Part Number.* The system displays the part number the vendor uses to identify this part specified on the Vendor Parts submenu.

*Manufacturer.* The system displays the manufacturer for the part specified on the Vendor Parts submenu.

*Manufacturer Part Number.* The system displays the number the manufacturer uses to identify this part specified on the Vendor Parts submenu.

*Prod Line.* Select a Product Line code from the lookup.

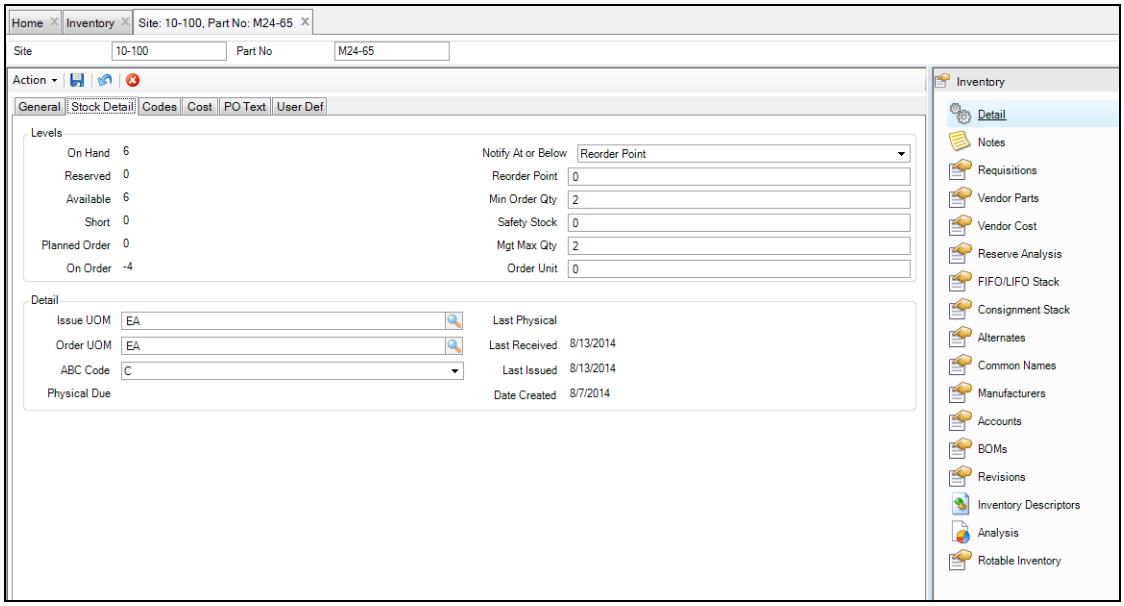
***Note*** The codes entered here are used exclusively for SAF accounting purposes set up in QAD Enterprise Edition Financials. Add and edit product line codes in System Administration|Product Line. The product line codes defined there must match the corresponding product line codes in the QAD ERP.

*Initial Location.* Enter the bin location of the part.

## Inventory: Stock Detail Tab

The Stock Detail tab is used to enter stocking information for a part.

**Fig. 5.21**
Inventory: Stock Detail Tab




*On-Hand.* Displays the quantity (in Issue UOM) of this part currently in inventory at all bin locations for this site. When a part is received or issued, the on-hand quantity automatically changes. This field is not updateable, however you can change the on-hand quantity using the Adjust action. Adjust is typically done after a physical inventory is performed and you discover a discrepancy between the system record and the physical count.

*Reorder Point.* Enter the amount at which the part should be reordered. If you enter an amount in this field, you can run stock replenishment routines based on the reorder point. You can also set the system to send an e-mail to the Notify user for the part if it is at or below reorder point.

*Reserved.* A system-calculated field that displays the total quantity of the part that is reserved on stores requisitions. When calculating the reserved quantity, the system looks at all of the stores requisitions that have reserved the part. This field is not updateable by the user.

***Note*** You cannot reserve a part if the available quantity is 0.

*On Hand Qty - Reserved Qty = Available Qty*

For example, if there are 10 unreserved parts in stores and the user attempts to reserve 12, the system only allows the user to reserve 10 and it shows a shortage of 2.

*Min Order Qty.* Displays the minimum economical amount to order.

When you create a requisition, there is a hierarchy for determining the minimum order quantity. When a part record is created, the default value for this field is 0 UOM. If this field is set to 0 UOM, the quantity requested on the requisition equals the quantity ordered on the requisition, provided that the quantity requested is greater than or equal to 1.

EAM checks the vendor part number on the requisition for a minimum order quantity for that number. The vendor has dictated this quantity. If no minimum order quantity is specified for the vendor part number, then minimum order quantity for the EAM part is used.

*Available.* Displays the total quantity on hand at all bin locations within a site, minus the quantity on reserve. This quantity represents the parts available to be charged, issued against, issued, or reserved against other stores requisitions. This field is not updateable by the user.

***Note*** The lowest quantity that can be displayed in this field is 0. If there is a deficit because of attempted reserves, the system displays the quantity of that deficit in the Short field.

*Safety Stock.* Enter the minimum quantity to keep on hand for a particular part. The stock replenishment can be run to display all parts at or below safety stock or reorder point. If the part is at or below the safety stock level, the system can be set to send an e-mail to the Notify user for the part.

*Short.* The system calculates this field to show the number of parts reserved but not available in stores. For example, if there are 10 unreserved parts in stores and you attempt to reserve 12, a shortage of 2 is shown because only 10 can be reserved. The number short is updated based upon reserving, unreserving, receiving, and issuing of a particular part. This field is not updateable by the user.

*Mgt Max Qty.* This field refers to the optimal amount to stock through stock replenishment, a quantity pre-set by management. This amount represents the minimum economical amount to order.

When you create a requisition, there is a hierarchy for determining the maximum order quantity. When a part record is created, the default value for this field is 0 UOM. If this field is set to 0 UOM, the quantity requested on the requisition equals the quantity ordered on the requisition, provided that the quantity requested is greater than or equal to 1.

EAM checks the vendor part number on the requisition for a maximum order quantity for that number. The vendor has dictated this quantity. If no maximum order quantity is specified for the vendor part number, then the maximum order quantity for the EAM part is used:

*Reorder point + Minimum order quantity = Mgt max qty*

*Planned Order.* Displays the planned order quantity for this part, which represents all requisitions with a status of P (planned). The planned order quantity is the quantity ordered on planned requisitions (not yet placed on order). When running the stock replenishment routine,

EAM subtracts the planned order quantity from the new quantity required. This prevents a user from running the stock replenishment routine multiple times and over-ordering inventory. This field is not updateable by the user.

*Order Unit.* To order a part, enter the vendor-designated quantity or the multiple of this quantity to use. If the Order Unit is set at 2, then the system always orders that part in increments of 2, unless there is a UOM Conversion established for the part. Typically, this represents the vendor-designated minimum order quantity required to purchase the part.

*On Order.* Displays the part's total quantities on all POs with that item listed. It represents all POs with a status of O (ordered). The system updates this calculated field as parts are ordered and/or received. This field is not updateable by the user.

*Issue UOM.* This field refers to a unit of measure, such as each, used when issuing a part from stores. When the user purchases parts and receives them into inventory, the purchasing unit of measure is automatically converted to the issuing unit of measure. When you view parts on the Inventory Maintenance screen, the quantity is always listed in the issuing unit of measure.

***Example*** If a vendor sells parts by the box, but your organization uses and issues the parts by "each," select "each" for the Issue UOM.

*Last Physical.* Displays the date of the last physical cycle count for the part. A physical count is when someone actually counts the parts and verifies or corrects the quantity listed as in stock. The date is changed when the Status for a physical inventory for this part is changed to closed. This field is not updateable by the user.

*Last Received.* Displays the date the part was last received from a purchase order. This date is automatically changed when a receiving transaction occurs. This field is not updateable by the user.

*Order UOM.* Select the unit of measure to use when ordering the part. For example, if your organization stocks the part by each but you purchase the part in boxes, boxes would be Order UOM.

***Note*** To use the Order UOM in the part record or on a requisition, a unit of measure conversion must be valid for the part. Establish a UOM conversion before adding it in the Inventory record. For example, if Order UOM for a part is box, Issue UOM is each, and the multiplier is 10, when you order a box for the part, EAM converts the quantity, resulting in 10 units available.

*ABC Code.* Classify each part as A, B, or C, based on its relative inventory value used for cycle count planning.

*Last Issued.* Displays the date that this part was last issued from inventory. Using reports and filters, you can identify parts only issued from a certain date, which enables you to identify inactive or slow-moving parts. This field is not updateable by the user.

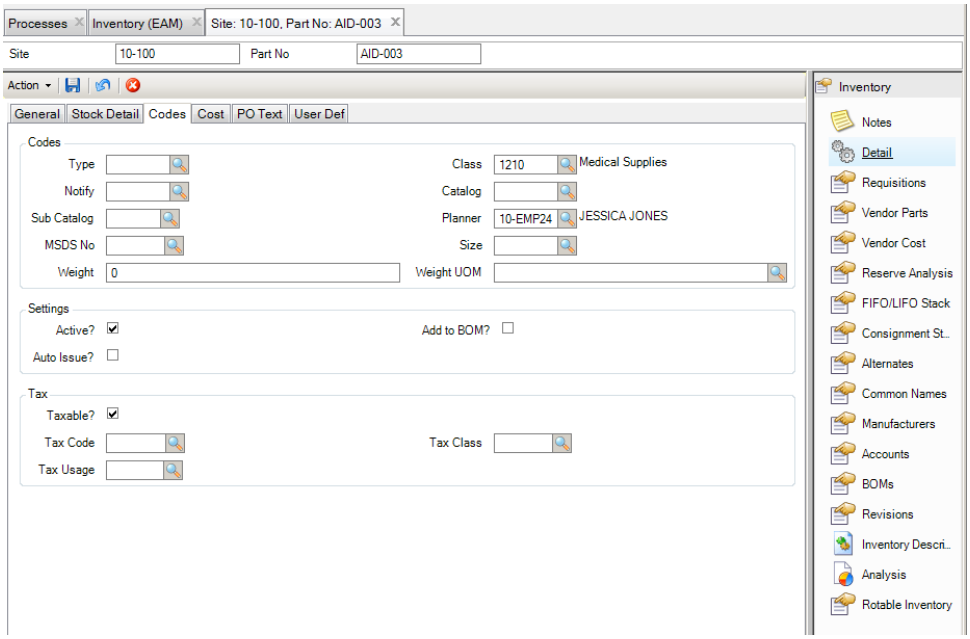
*Physical Due.* Displays the date of the next required physical inventory. You can search or filter for parts by this date.

*Date Created.* Displays the date this inventory record was created.

### Inventory: Codes Tab

The Codes tab is used to enter stocking information for a part.

**Fig. 5.22**
Inventory: Codes Tab




*Type.* Use the part type for reporting and filtering purposes in inventory only. For example, specify a type code in a filter in stock replenishment or physical inventory.

*Class.* Use the part class for filtering and ordering purposes in inventory only.

*Commodity.* Group general classifications of parts with this user-defined table in inventory, requisition, and vendor modules. Associate a part with a user-defined commodity code copied to a requisition for that specific part. Associate vendors with a list of codes for commodities that they can supply to your company.

*Notify.* Notify this user ID or group by e-mail when inventory stock drops to or below the reorder point or safety stock.

*Catalog.* The inventory table is hierarchical. The higher level, catalog, can be a broad grouping of parts.

*Sub Catalog.* The lower level, subcatalog, consists of types in the catalog.

*Size.* Select the size to assign to a part.

*Planner.* The employee name or code for the planner.

*MSDS No.* Use the lookup to select a code that is tied to descriptions of the MSDS (Material Safety Data Sheet).

***Note*** MSDS sheets may be stored elsewhere in the organization. EAM cross-references these sheets.

*Weight.* The weight of the part.

*Weight UOM.* The weight unit of measure for this part; for example, pounds or kilograms.

*Active?* Select this check box if a particular part is active. Inactive parts do not display in the lookup.

*Add to BOM?* Select the check box to add the part to the equipment BOM on issue.

*Auto Issue?* Select this option to determine whether to auto issue and expense this non-inventoried part on receipt.

***Note*** Because auto-issue parts are non-inventoried parts, you cannot perform the following actions in the Inventory Action menu: Return to Inventory, Relocate, and Adjust.

*Taxable?* If the part is taxable, select this check box.

*Tax Code.* The system copies the tax code for the part to the requisition for the part, unless assigned a project tax code. If the part has a special tax status, add a tax code to the part. Typically leave a part's Tax Code field blank.

*Tax Class.* The system copies the tax class for the part to the requisition.

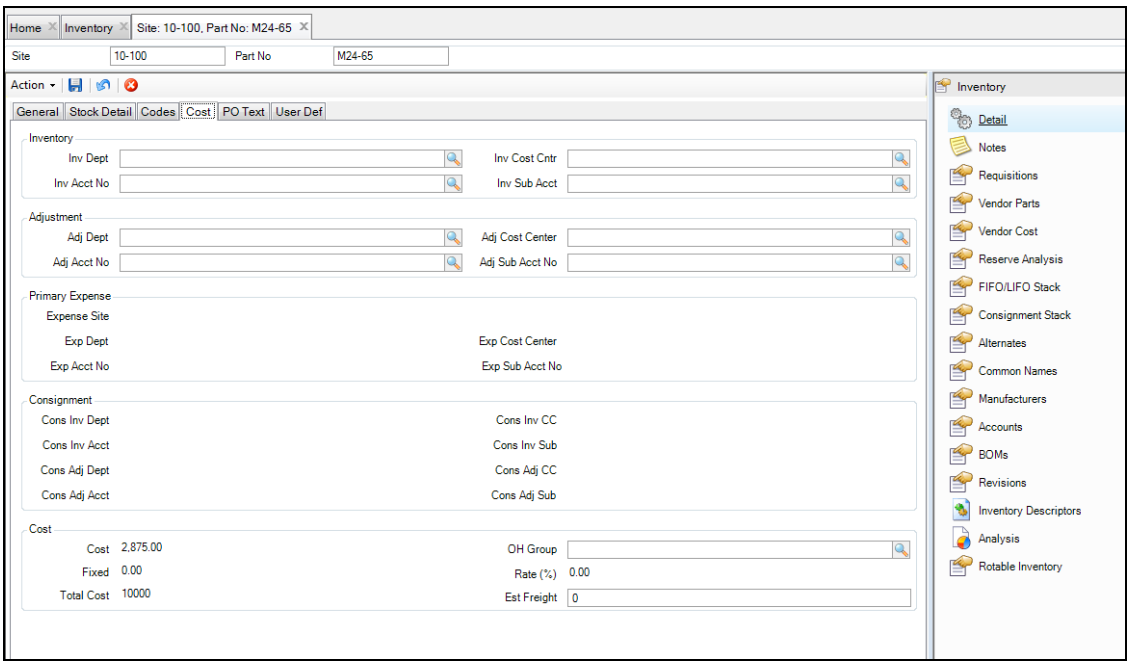
*Tax Usage.* The system copies the tax usage for the part to the requisition.

*Commodity Code.* Enter a valid code based on a selection from the lookup for codes defined in Intrastat Commodity Code Maintenance in EE. If no code is entered specifically for the part, then the code from Intrastat Control defaults for the PO line.

## Inventory: Cost Tab

The Cost tab is used to list unique accounting data for a part.

**Fig. 5.23**
Inventory: Cost Tab




**Inventory.** Typically, you leave Inventory fields blank, unless you intend to debit accounting data that is different from the system default upon receipt.

*Inventory Dept.* Transfer the inventory value upon receipt of the part to this inventory department code.

*Inventory Acct No.* Transfer the inventory value upon receipt of the part to this account. At issue, EAM credits the cost of the part from the inventory account number and that value is redirected or expensed to the entity that consumes that part; for example, equipment, project, work order.

*Inventory Cost Cntr.* Transfer the inventory value upon receipt of the part to this cost center. At issue, EAM credits the cost of the part from the inventory account number and that value is redirected or expensed to the entity that consumes that part; for example, equipment, project, work order.

*Inventory Sub Acct.* This field refers to the sub-account to which the part's inventory value is associated.

***Note*** If the inventory accounting data changes, the system prompts you to create new records and GL transactions.

**Adjustment.** Typically, you leave Adjustment fields blank, unless you intend to debit accounting data different from the system default upon receipt.

*Adj Department.* The department affected by an inventory adjustment transaction.

*Adj Acct No.* The account number affected by an inventory adjustment transaction, manually or through the Physical Inventory module. This account overrides the system default adjustment account.

*Adj Cost Center.* The cost center affected by an inventory adjustment transaction, manually or through the Physical Inventory module. This cost center overrides the system default adjustment cost center.

*Adj Sub Acct No.* The sub-account number affected by an inventory adjustment transaction, manually or through the Physical Inventory module.

**Primary Expense.** Expense fields are display-only. Data comes from the Accounts submenu. Use this information for parts such as consumables not charged directly to a project, equipment, or work order. You can set up more than one expense accounting combination, but one must be the Primary.

*Expense Site.* Charge this part to the site you indicate here.

*Exp Dept.* Charge the primary department for this part.

*Exp Acct No.* Charge this primary account number when issuing this part from stores.

*Exp Cost Center.* Charge the primary cost center when issuing this part from stores.

*Exp Sub Acct No.* Charge the primary sub-account number when issuing this part from stores.

**Consignment.** Suppliers stock inventory at the customer site, but do not bill the customer until inventory is issued from the storeroom. This provides critical spares available on demand, with payment due at the time of issue. You need consignment inventory and adjustment accounts for consignment transactions. If there is data in these fields on the part record, it is used on GL transactions created when an inventory transaction is done against a consignment part. Otherwise, EAM uses System Site defaults established at General|Business Units|Sites on the Inventory tab.

*Cons Asset Dept.* This field refers to the consigned asset department used for any transactions that occur for the vendor-owned stock for this part.

*Cons Adj Dept.* This field refers to the consigned adjustment department for any adjustments of the vendor-owned stock for this part.

*Cons Asset CC.* This field refers to the consigned asset cost center used for any transactions that occur for the vendor-owned stock for this vendor.

*Cons Adj CC.* This field refers to the consigned adjustment cost center used for any adjustments of the vendor-owned stock for this part.

*Cons Asset Acct.* This field refers to the consigned asset account used for any transactions that occur for the vendor-owned stock for this vendor.

*Cons Adj Acct.* This field refers to the consigned adjustment account used for any adjustments of vendor-owned stock for this part.

***Note*** If the Send Cons ERP? check box on the Vendor|Codes tab is clear for this vendor, the QAD ERP application does not create GL transactions.

*Cons Asset Sub.* This field refers to the consigned asset sub-account used for any transactions that occur for the vendor-owned stock for this part.

*Cons Adj Sub.* This field refers to the consigned adjustment sub-account for any adjustments of the part's vendor-owned stock.

**Cost.**

*Cost.* The current cost per issue UOM.

***Note*** The label for this field depends on the costing method (LIFO, FIFO, weighted average).

*OH Group.* Enter the overhead group into this field.

*Fixed.* Overhead value as a fixed amount. Defined in Overhead Groups.

*Rate (%).* Overhead value as a percentage. Defined in Overhead Groups.

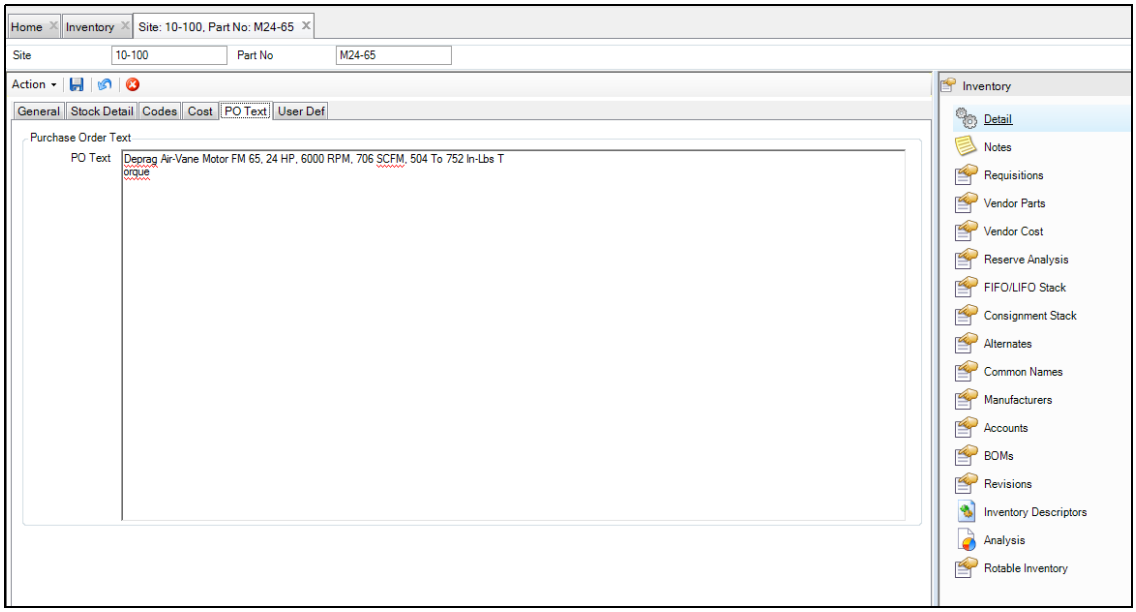
*Total Cost.* The system multiplies the cost by the overhead percentage and adds the result to the part cost. If no overhead percentage exists for this part, the Total Cost equals the regular part cost.

*Est Freight.* Use this field to estimate freight cost on a requisition, expressed as a percentage of the part's cost.

### Inventory: PO Text Tab

The PO Text tab is used to add an expanded definition of the part.

**Fig. 5.24**
Inventory: PO Text Tab

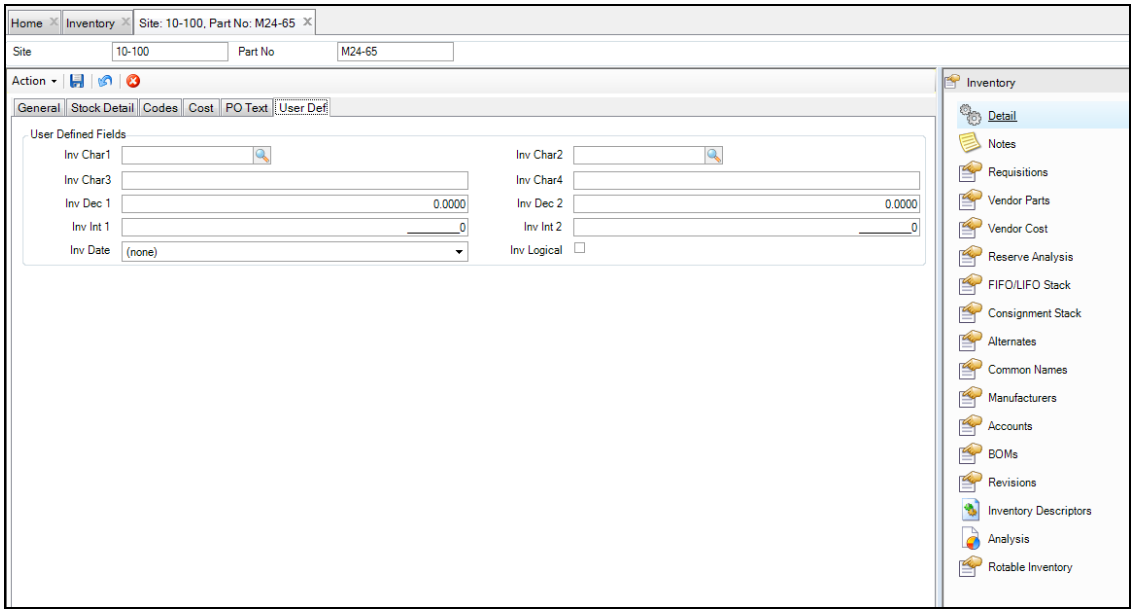



*PO Text.* Enter an expanded description, specifications, or other data for you and the supplier to identify the part. The purchase order may contain this information.

## Inventory: User Defined Tab

The User Defined tab is used to track information against specific inventory in EAM. There are ten user-defined fields.

**Fig. 5.25**
Inventory: User Defined Tab



*Character 1/2 for Inventory.* User-defined character fields, validated against tables that you add.

*Character 3/4 for Inventory.* Free-form user-defined character fields, not validated against tables.

*Inventory Decimal 1/2.* User-defined decimal fields for inventory.

*Inventory Integer 1/2.* User-defined integer fields for inventory.

*Inventory Date.* A user-defined date field for inventory.

*Inventory Logic.* A user-defined logical field for inventory.

### Setting Up Expense Accounting for a Part

In the Accounts submenu, you can set up specific expense cost centers, departments, accounts, and sub-account numbers to which MRO parts can be issued. When a part is not charged directly to a project, equipment, or work order, it can be charged to the expense accounting combination that is set up in this submenu. By setting up expense accounting for the part, you can avoid clerical errors, such as parts being issued to inappropriate account numbers and cost centers.

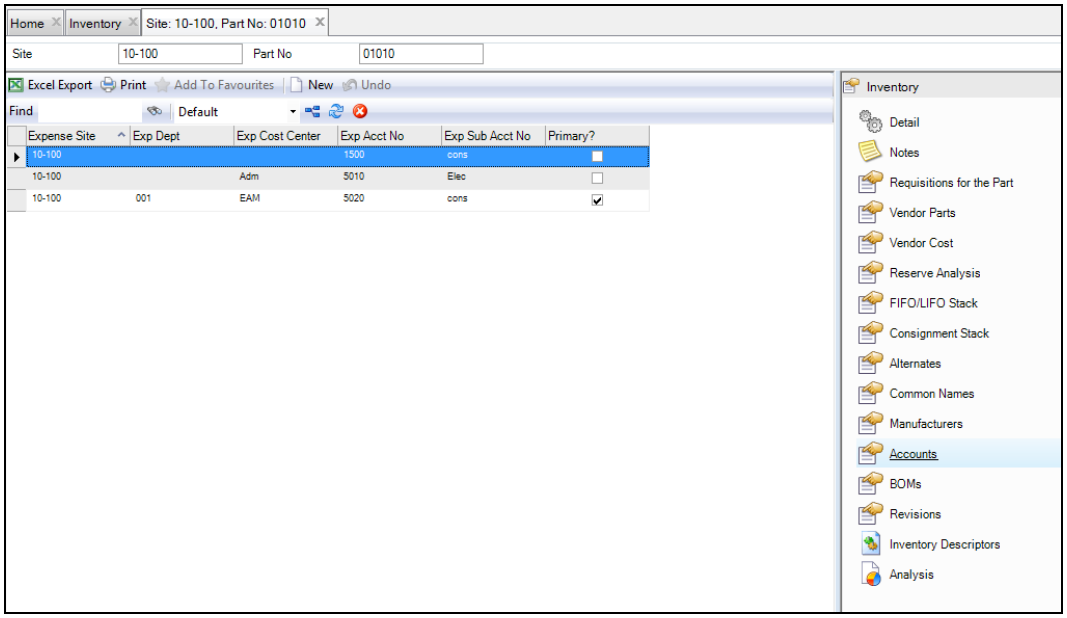
Follow these steps to set up expense accounting for a part:

1. Open the MRO part record and select the Accounts submenu.
2. Click New. The system generates a blank expense account line.
3. Enter the relevant information in the following fields:

   *Expense Site, Exp Department, Exp Account Number, Exp Cost Center, and Exp Sub Account Number.* Use the lookups to select the expense account information (expense site, department, account, cost center, and sub-account) to which to charge the part.

   *Primary?* Select this check box to designate this as the primary expense account combination. When a part is not charged directly to a project, equipment, or work order, it is charged to the primary expense account combination. The expense account line that is designated as primary is displayed in the Primary Expense field on the Cost tab.
4. Once the information has been entered, press Enter to save.

**Fig. 5.26**
Inventory: Accounts Submenu



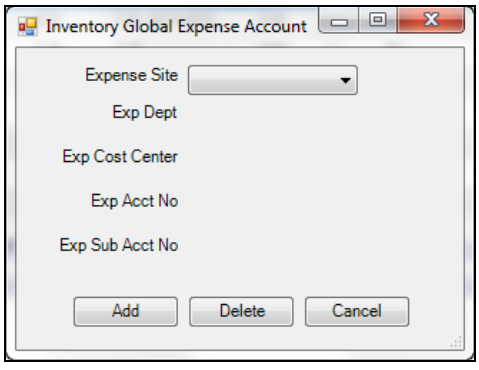

## Global Expense Account

The Global Expense Account action allows you to set up expense accounting to multiple records at the same time.

Follow these steps to set up expense accounting for multiple parts:

1. In the Inventory browse, highlight the part records.
2. Select Global Expense Account from the Inventory Action menu. The Inventory Global Expense Accounting window opens.
3. Use the drop-down lists to select the expense elements (Expense Site, Exp Department, Exp Cost Center, Exp Account Number, and Exp Sub Account Number). You have the option of setting the expense accounting for one element or multiple elements.

**Fig. 5.27**
Global Expense Account




4. Click Add to finish.

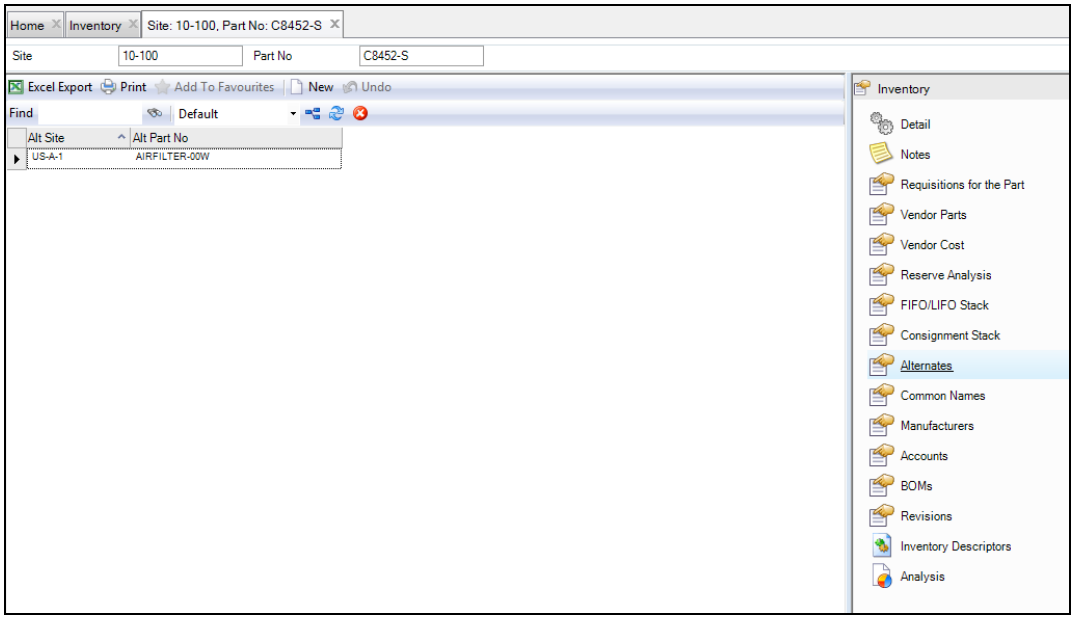
## Adding Alternate Part Numbers

The Alternates submenu allows you to add alternate part numbers that are used in other sites. This submenu allows you to cross-reference a part number in one site to a different part number in another site. This is helpful when an organization does not use the same part numbering scheme across sites.

Follow these steps to add alternate part numbers:

1. Open the part record.
2. Select the Alternates submenu and click New. A blank alternate part number line is created.
3. Use the lookups in the Alt Site and Alt Part Number fields to select the alternate site and part numbers.
4. Press Enter to save.
5. Repeat these steps to add additional part numbers.

**Fig. 5.28**
Inventory: Alternates Submenu




## Adding Inventory Descriptors

Inventory descriptors allow the user to set up a standard template for certain technical information, and these descriptors can be associated with an MRO part. A part can have multiple descriptors associated with it. Once the descriptor is associated with a part record, the user can update the information on a field. For information about setting up descriptor codes, see “Descriptor Codes” on page 64.

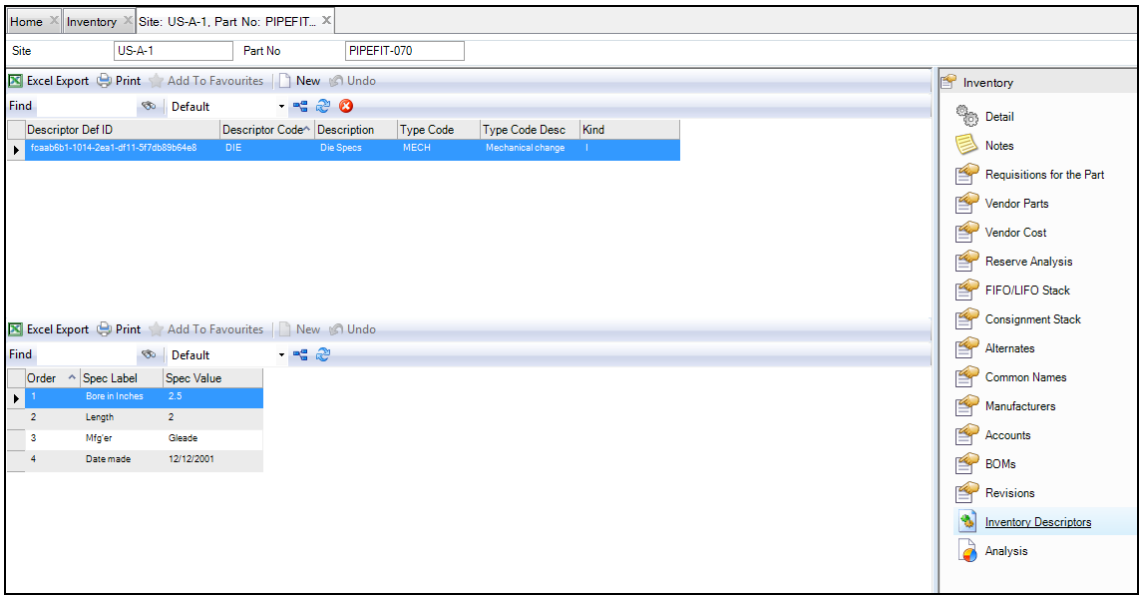
Follow these steps to add an inventory descriptor:

1. Open the inventory record and select the Inventory Descriptors submenu.
2. Click New and then use the lookup in the Descriptor Def ID field to select the descriptor.

3 Press Enter to save and to automatically populate the other fields with the associated data.

4 Repeat these steps to add additional descriptors.

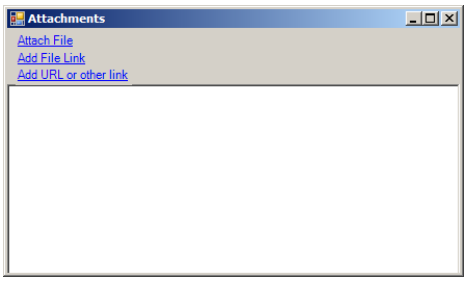
**Fig. 5.29**
Inventory: Inventory Descriptors Submenu




## Attaching and Linking Files to a Part Record

EAM allows you to attach and link an unlimited number of files and link an unlimited number of URLs to an MRO part record. If you can run the file on your operating system, you can run it from EAM once it is attached or linked.

**Fig. 5.30**
Attaching or Linking a File to a Part Record




### Attach a File

To attach a file to an MRO part record:

1 Select the part record from the Inventory browse.

2 Select Attachments from the Action menu.

3 In the Attachments window, select Attach File.

4 Locate the file on your computer and click Open. The file is now attached to the part record.

### Link a File

To link a file to a part record:

1. Select the part record from the Inventory browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and click Open. The file is now linked to the part record.

### Link a URL

To link a URL to a part record:

1. Select the part record from the Inventory browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add URL or other Link.
4. Copy and paste the link into the field and then click OK. The URL is now linked to the part record.

## Adding Vendor Parts Information to a Part

The Vendor Parts submenu allows you to associate an unlimited amount of vendor part information to an MRO part. The upper frame of the submenu displays the vendor information, the middle frame displays vendor part information, and the lower frame displays pricing schedules complete with quantity ranges and expiration dates.

Follow these steps to add vendor part information:

1. Open the MRO part record and select the Vendor Parts submenu.
2. Click New in the upper frame.
3. Use the lookup in the Vendor No field to select the vendor that supplies this part.
4. Press Enter to save and automatically populate the rest of the fields.
5. If this is the primary vendor for this part, select the Primary? check box.
6. Add vendor part information by clicking New in the middle frame.
7. Enter the relevant information in the following fields:

   *Vendor Part No.* Enter the vendor's part number.

   *Primary Part?* If the vendor has different part numbers for the part, select this check box to identify which part is the primary part number used for reordering.

   *Min Order.* Enter the minimum order amount that the vendor requires.

   *UOM.* Use the lookup and select the part's UOM.

   *Manufacturer.* Use the lookup to select the manufacturer of the part.

*Manufacturer Part No.* Enter the manufacturer's part number.

8 Press Enter to save.

9 Add the pricing schedules by clicking New in the lower frame. Add the relevant information in the following fields:

*Exp Date.* Use the calendar lookup to select the expiration date for the pricing schedule.

*From Qty, To Qty.* Enter the quantity ranges in these fields.

*UOM.* The UOM that was entered in the UOM field in the middle frame.

*Discount %.* If you buy the part in the quantity range entered in the From Qty and To Qty fields, enter the vendor discount as a percentage.

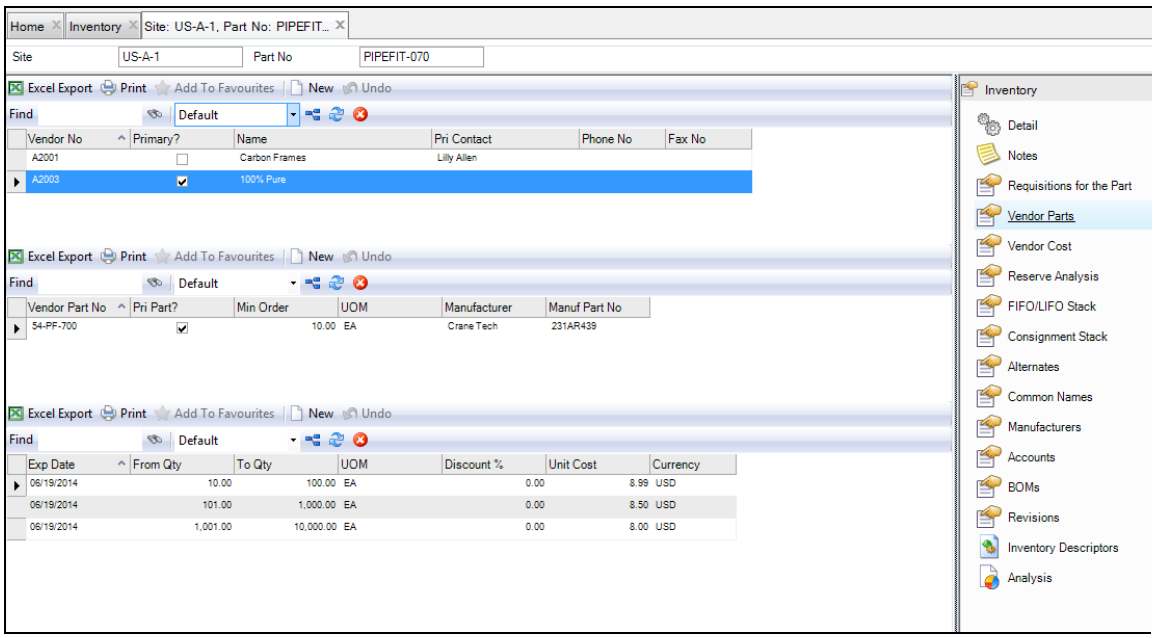
*Unit Cost.* If you buy the part in the quantity range entered in the From Qty and To Qty fields, enter the unit cost for the part.

*Currency.* The currency type of the price list.

10 Press Enter to save.

11 To add additional lines to the pricing schedule, repeat step 9.

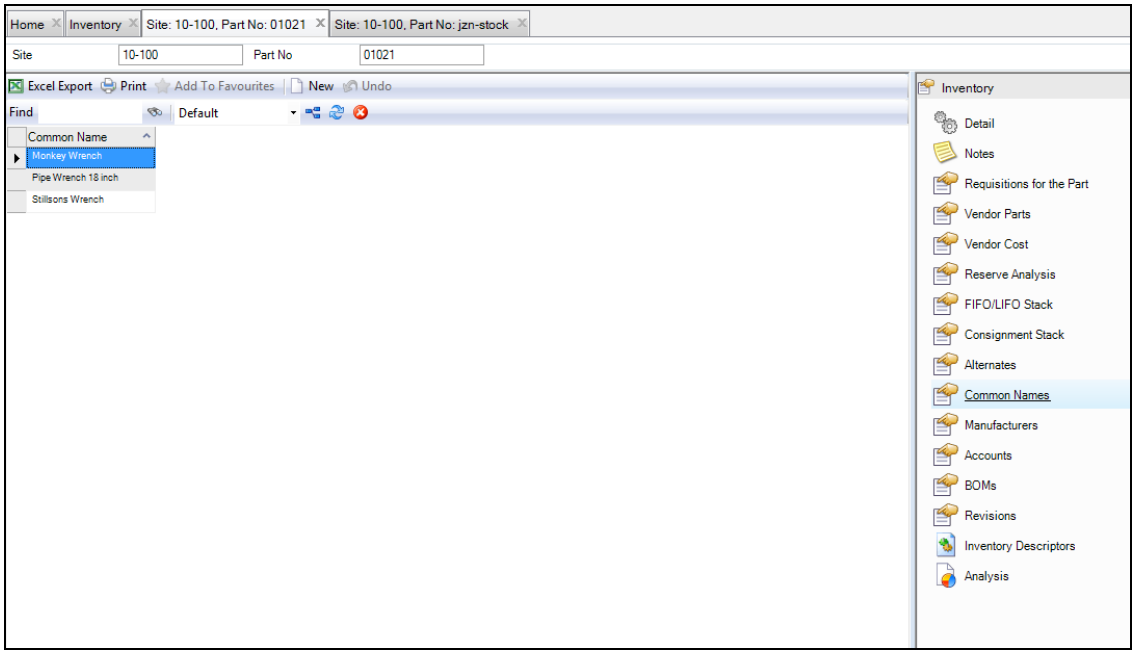
**Fig. 5.31**
Inventory: Vendor Parts Submenu




## Adding Common Names to a Part

The Common Names submenu allows you to add common names and nouns for a part. By entering common names for parts, employees can search for certain items using those common names. For example, a pipe wrench is commonly called a pipe wrench 18 inch, monkey wrench, or a Stillson's wrench.

**Fig. 5.32**
Inventory: Common Names Submenu

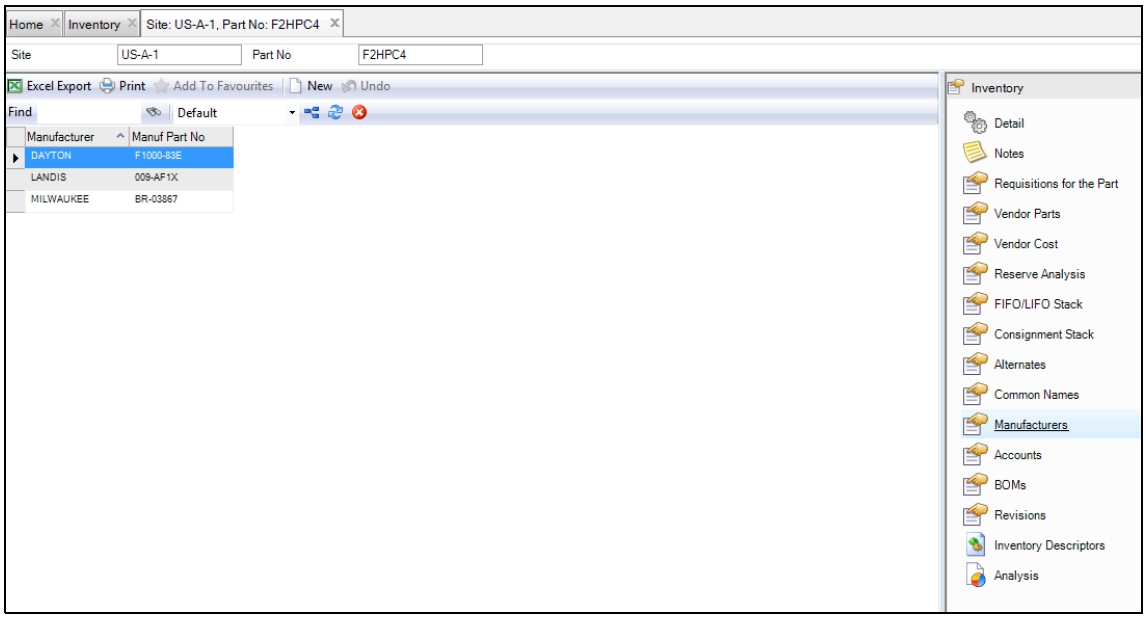



## Adding Manufacturers to a Part

The Manufacturers submenu displays all the manufacturers and manufacturer's part numbers that are added for this part in the Vendor Parts submenu. If necessary, you can add manufacturers and part numbers to this list.

To add additional manufacturers and part numbers, click New. Use the lookup in the Manufacturer field to select the manufacturer. Enter the manufacturer's part number in the Manufacturer Part No field.

**Fig. 5.33**
Inventory: Manufacturers Submenu

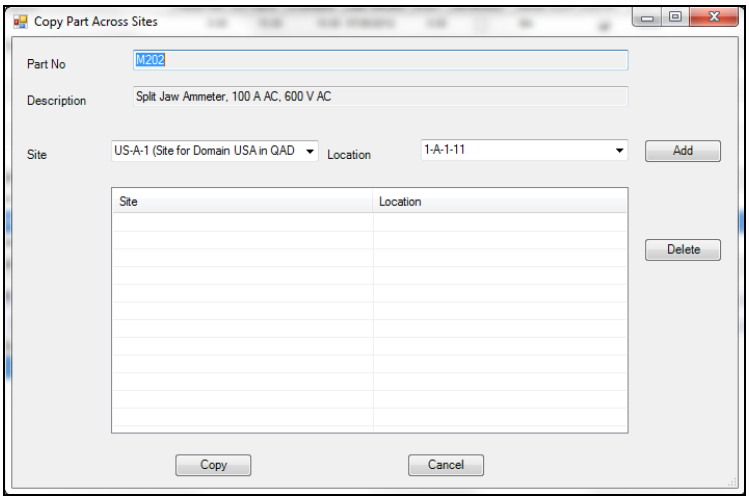



## Copy a Part Across Sites

The Copy Part Across Sites action allows you to copy a part record to another site and location. Follow these steps to copy a part to another site:

1. Open the Inventory browse and select the part record.
2. Select Copy Part Across Sites from the Inventory Action menu.
3. The Copy Part Across Sites window opens. The part number and part description are displayed in the Part No and Description fields.

**Fig. 5.34**
Copy Part Across Sites

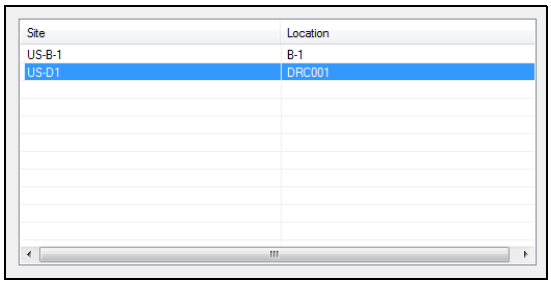


4 In the Site and Location drop-down lists, select the site and location to which you want to copy the part record.

5 Click the Add button to add the selected site and location to the list in the middle frame.

6 If necessary, add additional sites and locations to the list. To delete any site and locations from the list, click the Delete button.

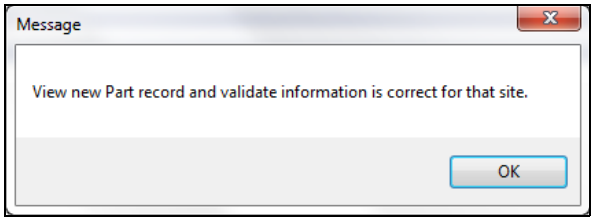
**Fig. 5.35**
Copy Part Across Sites: Copy List




7 Click Copy to copy the part record to the other sites and locations. The system prompts you to verify that the part record has been copied correctly.

***Note*** To ensure that part descriptions are protected and consistent across all sites, EAM allows you to prevent the part descriptions from being edited when parts are copied to other sites. The ability to edit the Part Description field can be enabled or disabled by selecting the Part Description Protected check box in the Inventory tab on the Domain record. See “Domain: Inventory Tab” on page 35.

**Fig. 5.36**
Copy Part Across Sites: Verification Message




### Adding Notes to a Part Record

If necessary, you can add notes to a part record. To add notes, open the part record and select the Notes submenu.

The Notes submenu is a free-form text box for notes that are for internal use only and are not printed on any documents.

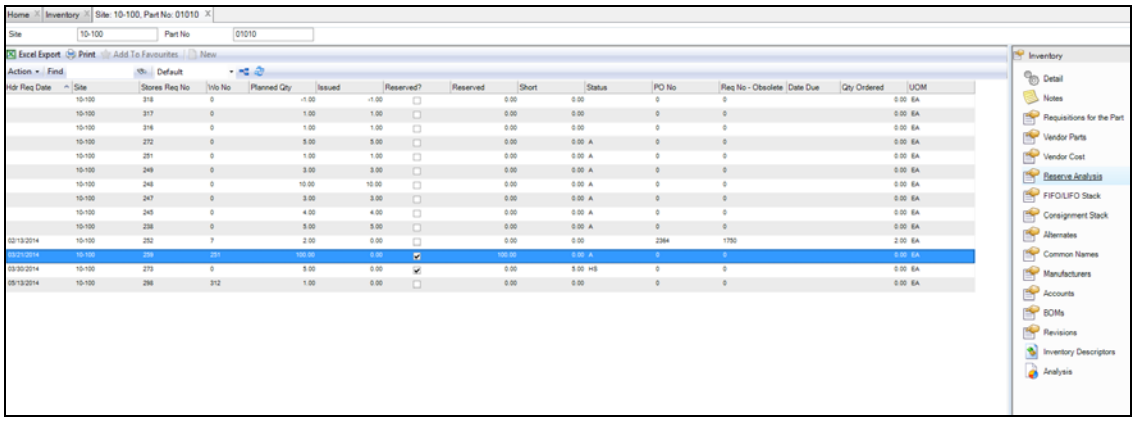
## Review Part Reserve Analysis

The Reserve Analysis submenu displays all reserved quantities for a part for specific stores requisitions. This submenu displays:

- The number of parts reserved
- Date required

- Number of parts short
- Any purchase orders and requisitions attached to a transaction

**Fig. 5.37**
Inventory: Reserve Analysis Submenu




## Reserve/Unreserve Parts

To reserve a part, open the part record and select the Reserve Analysis submenu. Highlight the correct line and select Reserve from the Action menu:

- If the quantity needed is less than the quantity available, the status changes to A (available) and the reserved quantity equals the planned quantity.
- If the quantity needed is more than what is available, the status changes to HS (Hold Short) and there is a short quantity.
- If a work order is canceled or closed, EAM automatically eliminates the demand for the part and the entry from the screen.
- If work is postponed, you may want to unreserve your parts. Doing so frees up the reserved parts for other requests.

To unreserve a part, highlight the line in the Reserve Analysis submenu and select Unreserve from the Action menu.

***Note*** You can also reserve and unreserve parts from the Stores Requisition browse. See “Reserve Parts on a Stores Requisition List” on page 360 and “Unreserve Parts on a Stores Requisition List” on page 360.

## Create a Requisition for an MRO Part

EAM gives you the ability to create requisitions for an MRO part from the Inventory browse. When you create a requisition from the Inventory browse, EAM automatically creates a requisition header with the MRO part added as the requisition line. The part information defaults into the requisition so you do not have to create a requisition header in the Requisition module before you add the line. If a requisition has been created from a part record, the requisition is directly tied to the part record and the associated requisition numbers appear in the Requisitions for the Part submenu.

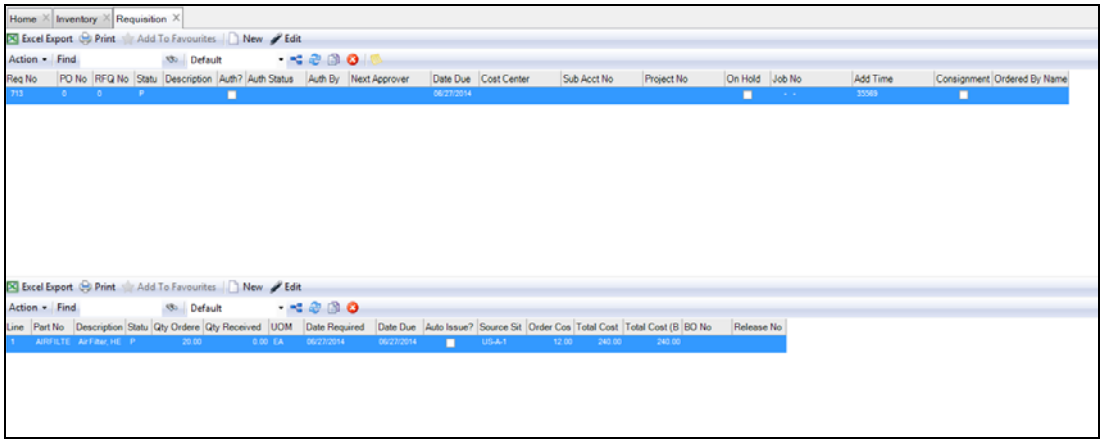
Follow these steps to create a requisition for an MRO part:

1 Open the Inventory browse.

2 Highlight the part record and select Create Requisition from the Inventory Action menu.

3 The system creates a requisition header with the MRO part added as the requisition line.

**Fig. 5.38**
Inventory: Analysis Submenu




4 Double-click the requisition header to open. Complete the requisition by filling out the rest of the information in the requisition header and line. See “Creating a Purchase Order” on page 488.

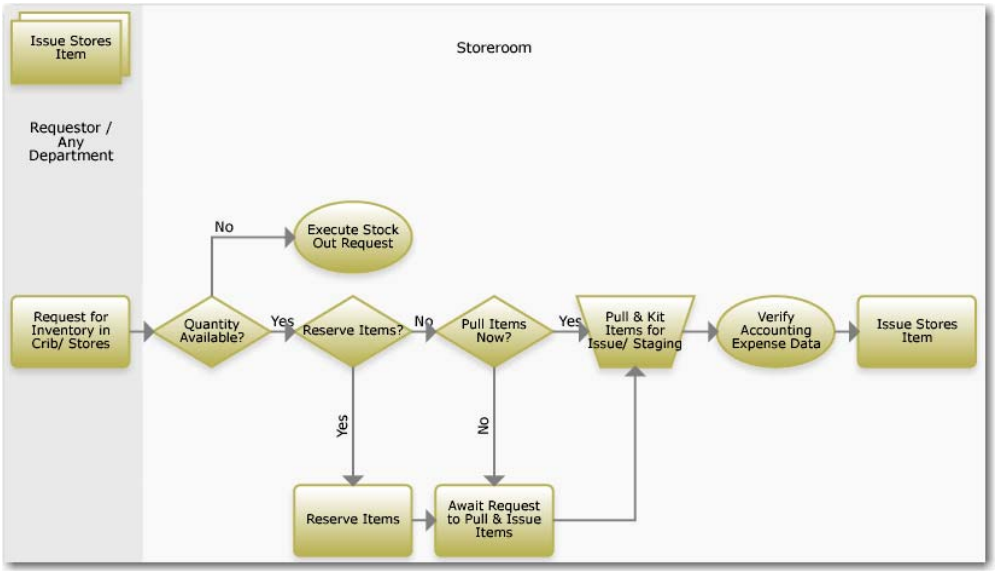
## Inventory Part Transactions

### Issue Inventory

The Issue action in the Inventory module allows you to issue parts or subtract parts from the current quantity on hand and charge them out against an account structure, work order, equipment, or project. You can issue inventory from stores by verifying whether the item is in stock or requires restocking.

## Issue Inventory Process Flow

**Fig. 5.39**
Issue Stores Item Process Flow



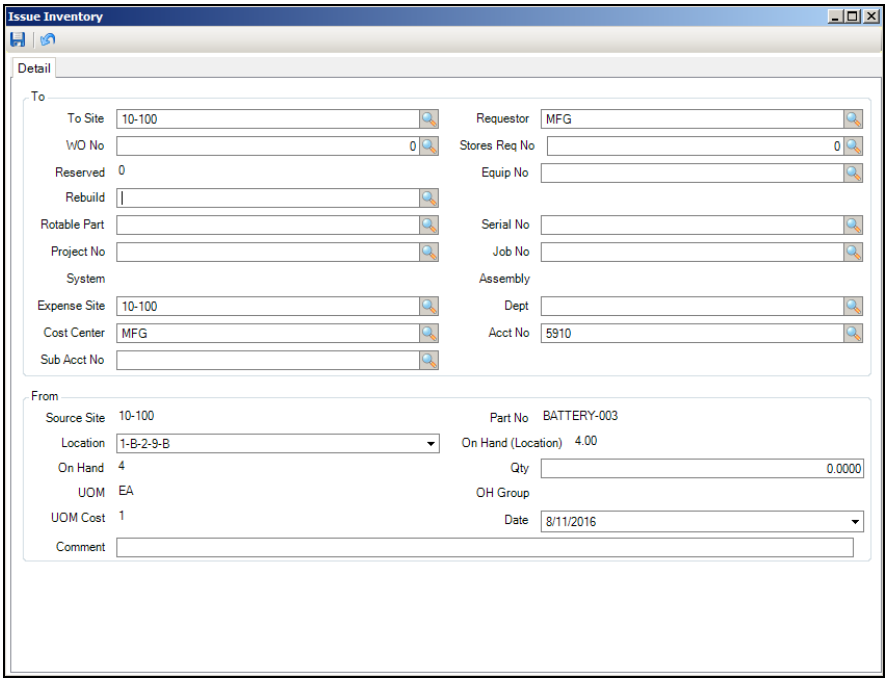

1. Request inventory from the crib or storeroom.
2. If the item is not available, execute a stock-out request.
3. If the item is available in the quantity requested, reserve or pull it.
4. You can:
   a. Reserve the item for a future date. Request it when you are ready.
   b. Pull the item now.
5. Pull and kit items for issue and staging.
6. Verify expense accounting data.
7. Issue the item.

## Issue Parts

Follow these steps to issue parts from inventory:

1. Open the Inventory browse and highlight the part record.
2. Select Issue from the Inventory action menu. The Issue Inventory window opens.

**Fig. 5.40**
Issue Inventory Detail




**3** Enter the required information in the following fields:

**To**

*To Site.* Use the lookup to select the site to which to issue this part.

*Requestor.* Use the lookup to select the employee number of the person requesting the part.

*WO No.* If the part must be issued and expensed to a work order, use the lookup to select the WO number.

*Stores Requisition Number.* Stores requisitions have unique numbers. Use the lookup to charge the part to a stores requisition.

*Reserved.* Displays the quantity that the system has reserved.

*Equipment Number.* Use the lookup to select the unique equipment number to which the part is charged.

*Rebuild.* If this issue transaction is expensed to a serialized part, identify the current rebuild location of the part.

*Rotable Part.* Displays the rotable part to which the part is charged.

*Serial Number.* The serial number of the part with which the work order is associated.

*Project Number.* If the part is associated with a project, use the lookup to select the project.

*Job Number.* Use the lookup to select the number by which a specific job is identified in a part transaction.

*System.* EAM allows you to issue a part against a system, which is a major component on a piece of equipment. Use the lookup to issue the part against a system.

*Assembly.* EAM allows you to issue a part against a piece of equipment and its system and assembly codes. The Assembly code is used to break the equipment's system into smaller components. Use to issue the part to a system's assembly.

*Expense Site.* Defaults to the current site. Use the lookup to charge the parts to another site.

*Department, Cost Center, Account Number, Sub Account Number.* Use the lookup to select the department, cost center, account number, and sub-account number against which to issue the part.

**From**

*Source Site.* The site from which a user receives a part.

*Part No.* The part number being issued.

*Location.* Use the drop-down list to select the part location from which to issue the part.

*On Hand (Location).* The quantity of parts that are available in the selected location that can be issued.

*On Hand.* The total quantity of parts that are available to be issued.

*Qty.* Enter the quantity of parts that you want to issue.

*UOM.* The unit of measure with which to issue parts. For example, you buy parts in boxes, but you issue them individually or in units of each.

*OH Group.* The part's overhead (OH) group, if one is associated with the part. If necessary, use the lookup to select another OH group.

*UOM Cost.* This part's cost per unit or issue cost.

*Date.* Today's date.

*Comment.* Enter any comments in this field.

4 Click the disc icon to issue the part.

### Return Parts to Inventory

The Return to Inventory action allows you to put an unused part back into inventory.

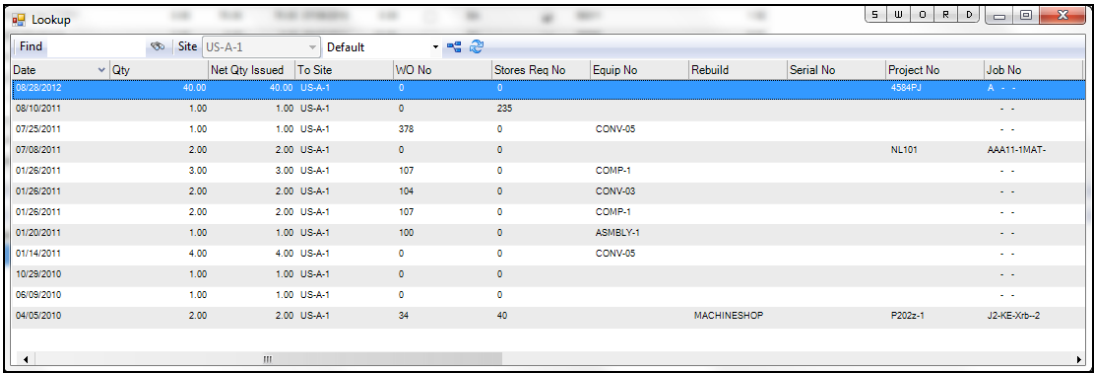
Follow these steps to return a part to inventory:

1 Open the Inventory browse and highlight the part record.

2 Select Return to Inventory from the Inventory Action menu. A lookup opens that displays where the part was issued.

3 Double-click to select the correct issue line.

**Fig. 5.41**
Return to Inventory



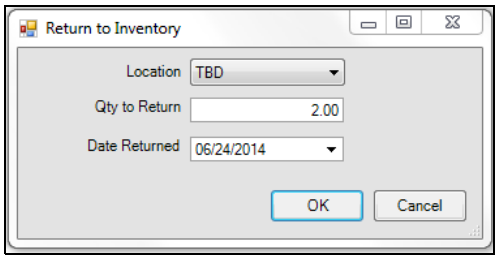

4 The Return to Inventory window opens. Enter the return information in the following fields:

*Location.* Use the drop-down list to select the part's return location.

*Qty to Return.* Enter the quantity to return.

*Date Returned.* Use the calendar drop-down list to select the date to return the part.

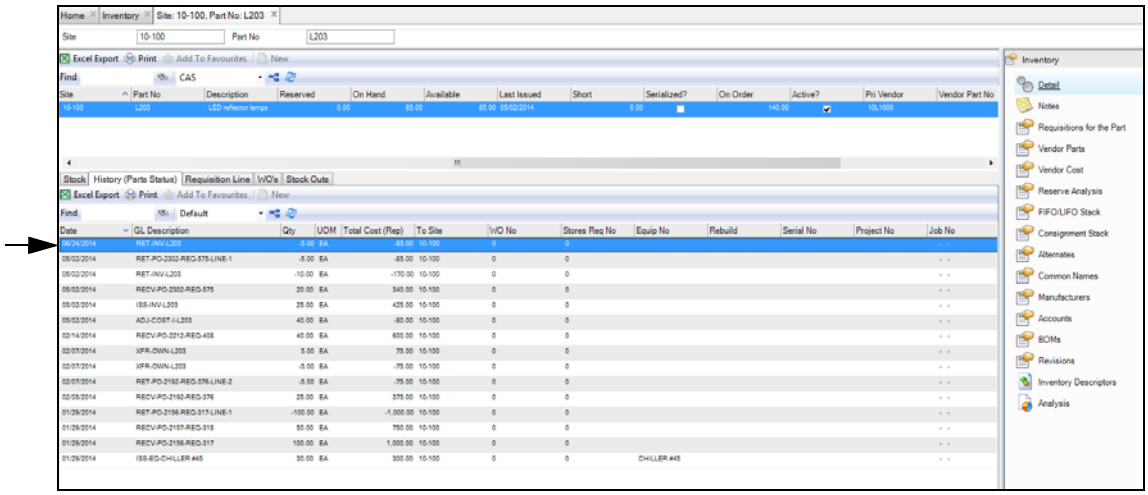
**Fig. 5.42**
Return to Inventory




5 Click OK to return the part to inventory.

6 To view a confirmation that the part has been returned to inventory, open the part record and select the Analysis submenu. The return to inventory transaction is displayed in the History (Parts Status) tab.

**Fig. 5.43**
Return to Inventory



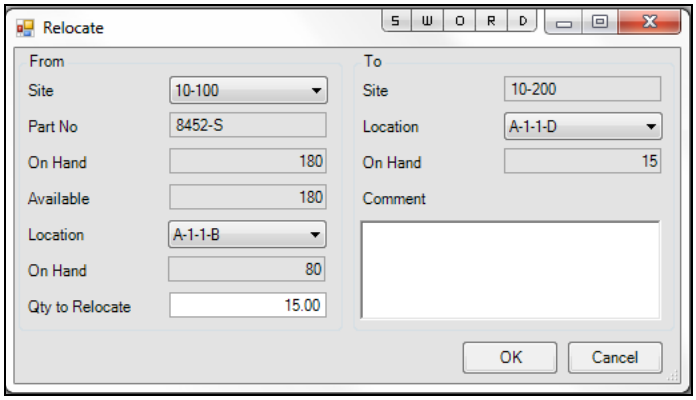
## Relocate Parts to Other Locations and Sites

The Relocate action allows you to send a part to another site, or to move a part between storeroom locations in one site.

Follow these steps to relocate parts to other locations and/or other sites:

1 Open the Inventory browse. Highlight the part record and select Relocate from the Inventory Action menu. The Relocate window opens.

**Fig. 5.44**
Relocate Parts




2 Enter the relocation information in the following fields:

**From**

*Site.* Use the drop-down list to select the site from which the part is being relocated.

*Part No.* Displays the part number.

*On Hand.* Displays the total number of parts on hand in all locations in the selected From Site.

*Available.* Displays the total number of parts in the selected From Site that are available to be relocated.

*Location.* Use the drop-down list to select the location from which the part is being relocated.

*On Hand.* Displays the quantity of parts in the selected From Location and From Site that can be relocated.

*Qty to Relocate.* Enter the number of parts to relocate.

**To**

*Site.* Displays the site to which the part is being relocated. This field cannot be changed.

*Location.* Use the drop-down list to select the location to which the part is being relocated.

*On Hand.* Displays the number of parts that are currently in the selected To Site and To Location.

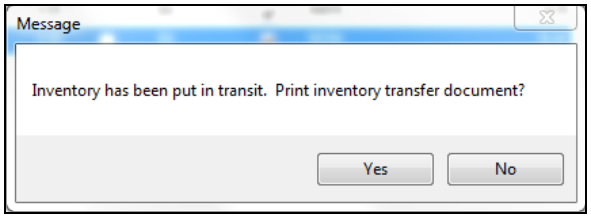
*Comment.* Enter any comments in this field.

3 Once you have entered the relocation information, click OK to relocate the part.

4 If you are relocating a part to another site, the system informs you that the part has been put in transit. If necessary, click Yes to print the inventory transfer document. To complete the relocation, receive the parts in the new site by performing the Receive from Relocation action.

***Note*** If you are relocating a part to another location in the same site, this message does not appear.

**Fig. 5.45**
Part in Transit Message




## Receive Parts from Relocation

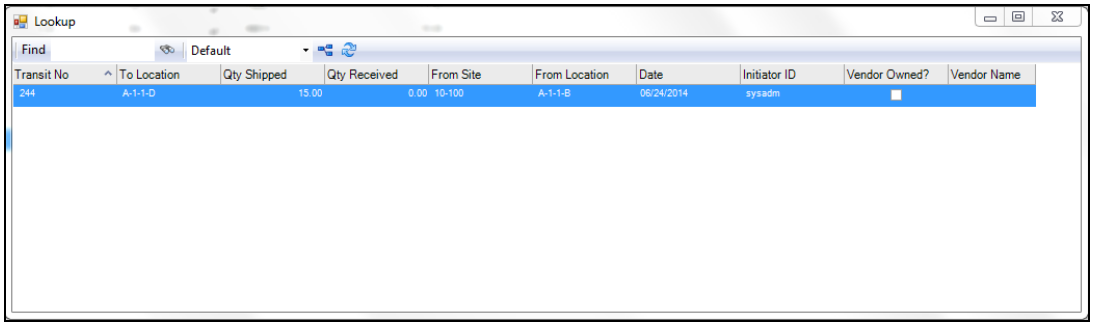
If you are relocating parts from one site to another, to complete the relocation you must receive the parts in the new site by performing the Receive from Relocation action.

Follow these steps to receive the parts in the new site:

1 Open the Inventory browse and highlight the part record.

2 Select the Receive from Relocation action. A lookup opens displaying the parts that can be received.

**Fig. 5.46**
List of Parts To Be Received

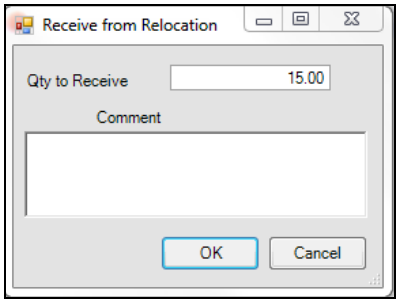



3 Double-click to select the parts to receive.

4 The Receive from Relocation window opens. In the Qty to Receive field, enter the quantity to receive. Enter any comments in the Comment field.

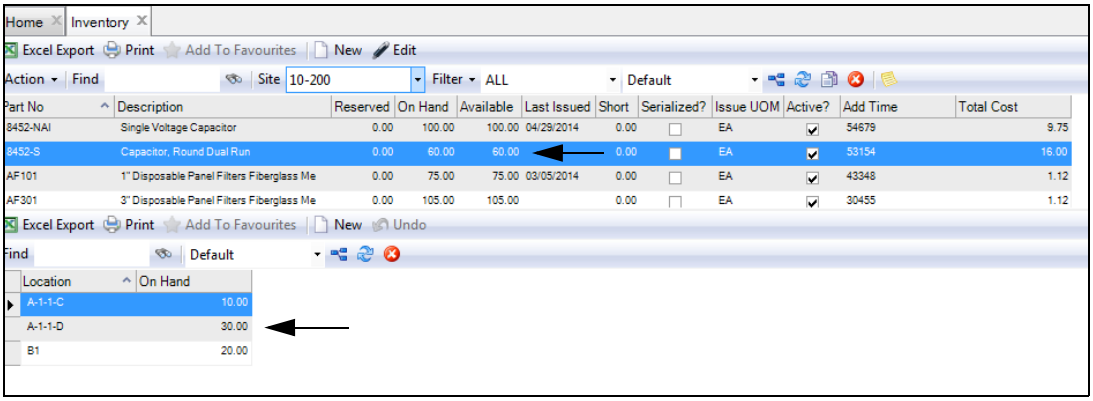
***Note*** The information that is entered in the Comment field can be viewed in the Inventory Transaction History browse in the Comment field.

**Fig. 5.47**
Receive Parts from Relocation




5 Click OK to receive the parts. The On Hand fields reflect that the parts have been received into the new site and location.

**Fig. 5.48**
Confirming Parts Are Received



## Receive Parts from Work Order

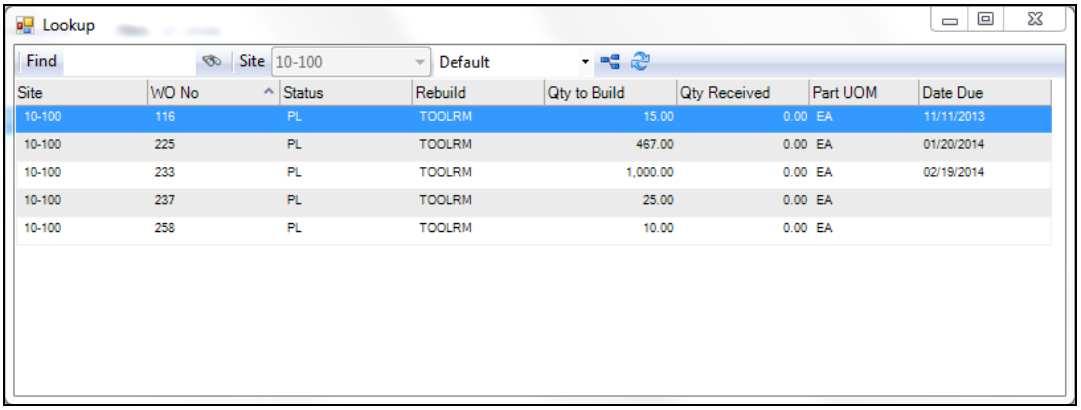
The Receive from Work Order action allows you to receive a fabricated part from a WO that was used to build that part.

Follow these steps to receive a part into inventory from a work order:

1 Open the Inventory browse and highlight the part record.

2 Select Receive from Work Order from the Inventory Action menu. A lookup opens displaying the work orders used to build the part.

**Fig. 5.49**
Select the Receive-From Work Order




3 Double-click to select the work order from which you are receiving the parts. The Receive from Work Order window opens. Enter the required information in the following fields:

### Received

*Qty Received.* Displays the number of parts that have been received from this work order.

*Received Cost.* Displays the total cost that has been received from this work order.

### Detail

*Location.* Use the drop-down list to select the location into which to receive the parts.

*Date Received.* Use the calendar lookup to select the received date. This field defaults to today's date.

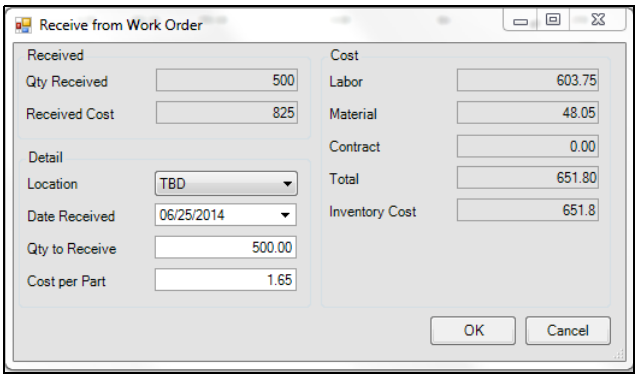
*Qty to Receive.* Enter the number of parts to receive from the work order. This field defaults to the total number of parts that can be received.

*Cost Per Part.* Enter the cost per part that will be received.

### Cost

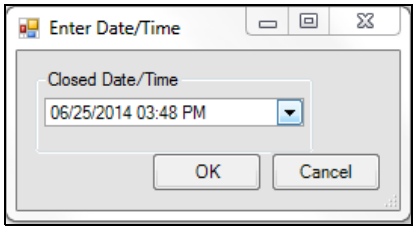
*Labor, Material, Contract, Total, and Inventory Cost.* These fields display the labor, material, contract, total, and inventory costs on the work order.

**Fig. 5.50**
Receive Parts from a Work Order




4 Click OK to receive the parts. If you receive all the parts on the work order, an Enter Data/Time window opens, which requires you to select the date and time to close the work order. Use the drop-down list to select the date and time and click OK. The parts have been received from the work order.

**Fig. 5.51**
Receive Parts from a Work Order




## Return Parts to a Work Order

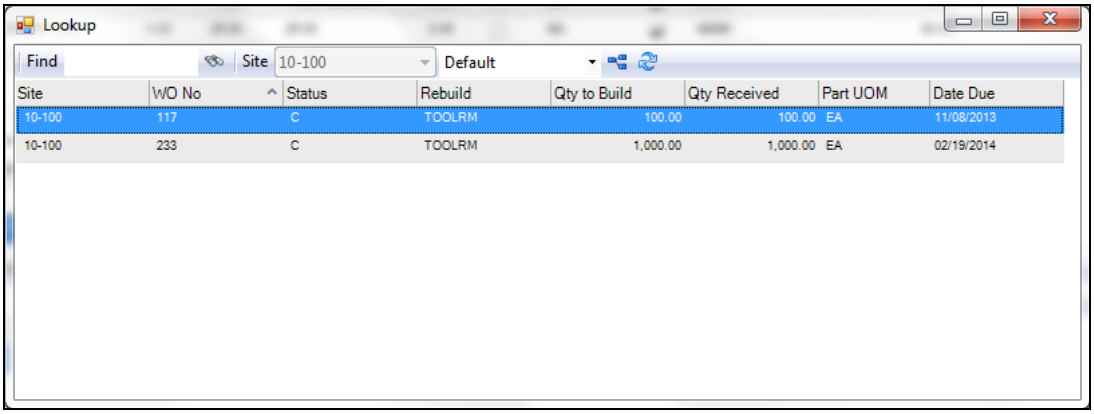
The Return to Work Order action allows you to return a fabricated part to a work order that was used to build that part.

Follow these steps to return parts to a work order:

1 Open the Inventory browse and highlight the part record.

2 Select Return to Work Order from the Inventory Action menu. A lookup opens displaying the work orders that were used to build the part.

**Fig. 5.52**
Select the Return-To Work Order




3 Double-click to select the work order to which you are returning parts. The Return to Work Order window opens. Enter the required information in the following fields:

*Location.* Use the lookup to select the return-to location.

*On Hand.* Displays the quantity available to be returned to the work order.

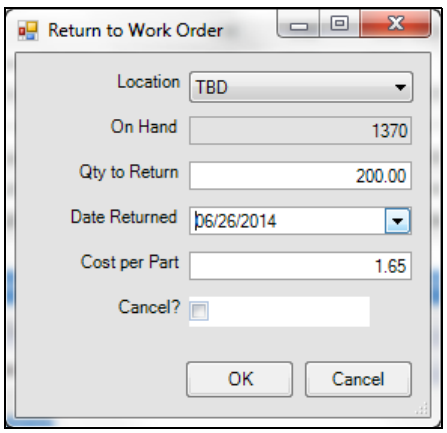
*Qty to Return.* Enter the quantity to return to the work order.

*Date Returned.* Use the calendar lookup to select the return date.

*Cost Per Part.* Enter the cost per part. This field defaults to the cost per part that was entered when the part was received from the work order.

*Cancel?* Select this check box to zero out the Qty Received on the WO.

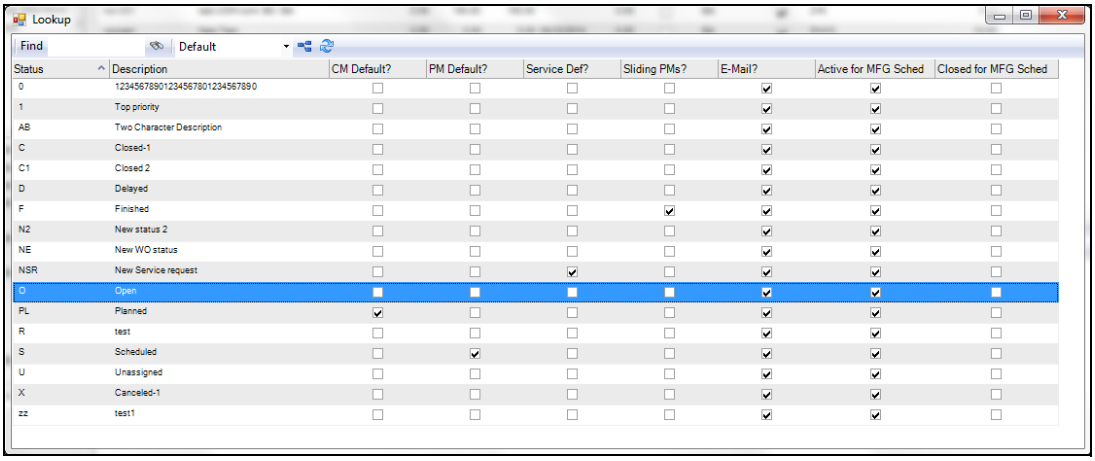
**Fig. 5.53**
Return Parts to a Work Order Window




4 Click OK to return the parts.

5 A lookup opens, which allows you to set the work order status once the parts are returned. Double-click to select the work order status.

**Fig. 5.54**
Select the Work Order Status




## Managing Consignment Inventory

### Adding a Consignment Part – Modify Consignment

Follow these steps to add a consignment part to inventory:

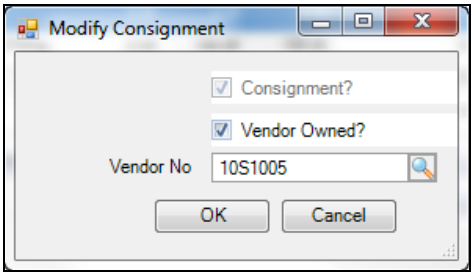
1 Open the Inventory browse and highlight the consignment part record.

2 Select Modify Consignment from the Inventory Action menu. The Modify Consignment window opens. Enter the required information in the following fields:

*Vendor Owned?* By default, this check box is selected, indicating that the consignment part is vendor owned. If the vendor does not own the consignment part, clear this check box. If this check box is not selected, the Vendor No field is disabled.

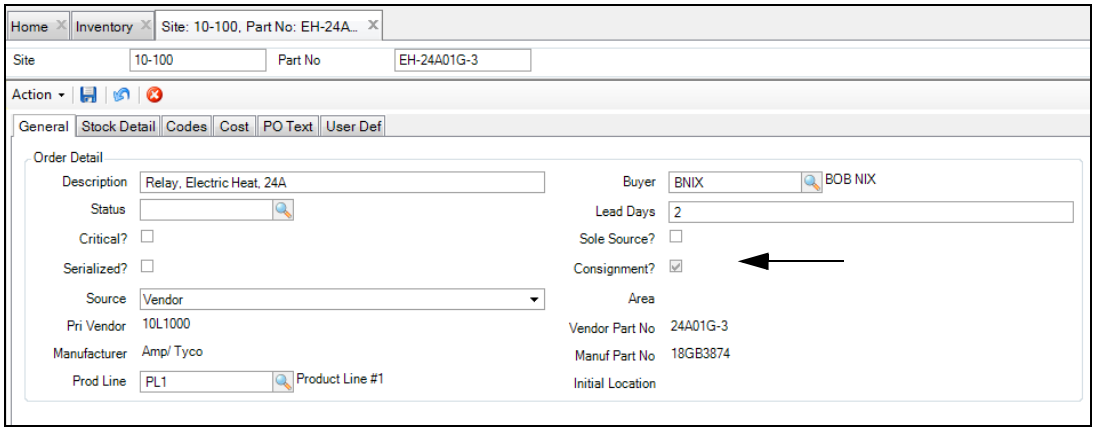
*Vendor No.* If the consignment part is vendor owned, use the lookup to select the vendor.

**Fig. 5.55**
Add Consignment Part to Inventory




3 Click OK to add the consignment part to inventory. The Consignment? check box on the part record is now selected, indicating that this part is a consignment part.

**Fig. 5.56**
Add Consignment Part to Inventory




## Consignment Inventory Transactions

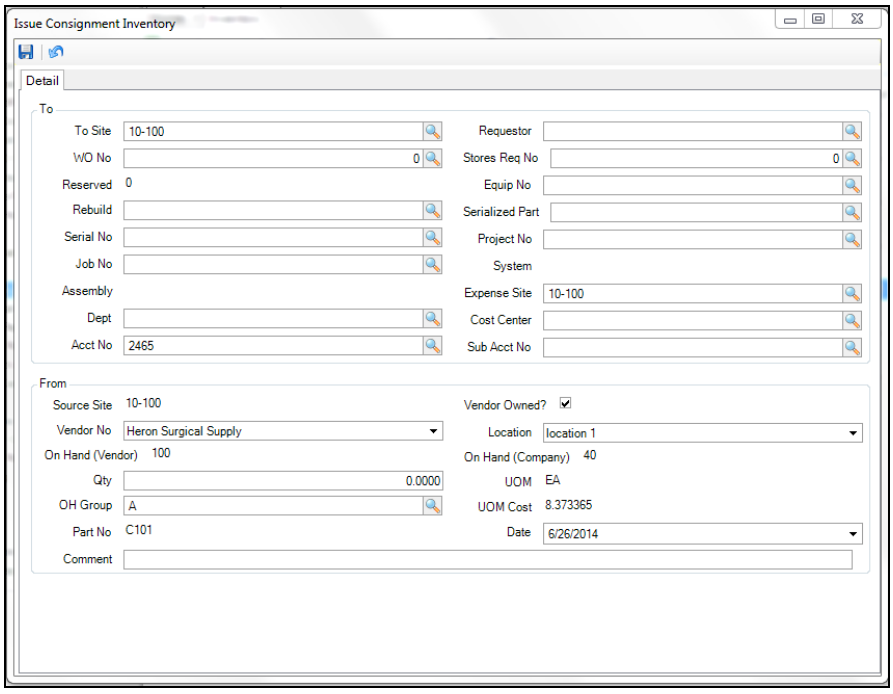
### Issue Consignment Inventory

Follow these steps to issue a consignment part from inventory:

1 Open the Inventory browse and highlight the consignment part record.

2 Select Issue from the Inventory Action menu. The Issue Consignment Inventory window opens.

**Fig. 5.57**
Issue Consignment Inventory




3 Enter the required information in the fields.

***Note*** The Issue Consignment Inventory window contains consignment-related fields, which are used for vendor information. This window also contains standard inventory-related fields. For definitions of those fields, see “Issue Parts” on page 311.

*Vendor Owned.* This check box, which only appears when issuing for consignment parts, indicates if the vendor or the company owns the consignment part. Select this check box to issue a vendor-owned consignment part.

*Vendor No.* If this consignment part is vendor owned, select the vendor who owns this part.

*On Hand (Vendor).* Using the information linked to the vendor specified in the Vendor field, this field displays the available OH quantity for the vendor-owned consignment part.

*On Hand (Company).* Displays the available on-hand quantity for the company-owned part.

4 Click OK to issue the part.

### Return Consignment Part to Inventory

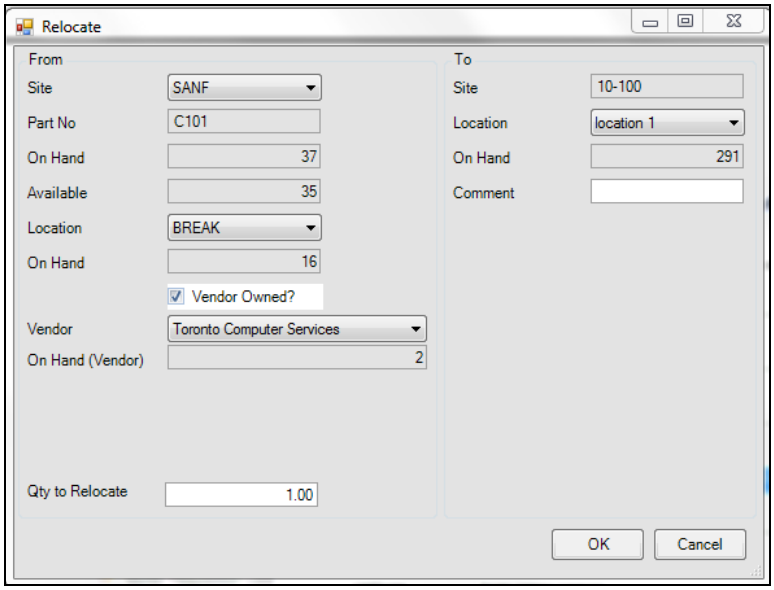
The procedure to return a consignment part to inventory is the same as returning an MRO part to inventory. See “Return Parts to Inventory” on page 313.

### Relocate Consignment Part

Follow these steps to relocate consignment parts to other locations and/or other sites:

1 Open the Inventory browse. Highlight the consignment part record and select Relocate from the Inventory Action menu. The Relocate window opens.

**Fig. 5.58**
Relocate Consignment Inventory




2 Enter the relocation information in the fields.

***Note*** The Relocate window contains consignment-related fields, which are used for vendor information. This window also contains standard inventory-related fields. For definitions of those fields, see “Relocate Parts to Other Locations and Sites” on page 315.

*Vendor Owned?* Select this check box to indicate that a vendor owns the consignment part. If this check box is cleared, the OH quantity is considered to be company owned.

*Vendor.* If the consignment part is vendor owned, select the vendor that owns this part.

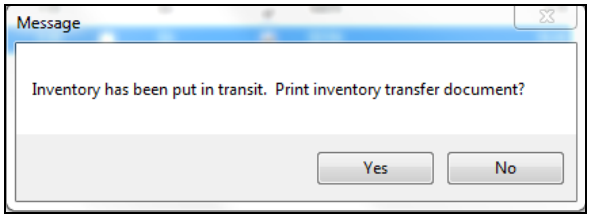
*On Hand (Vendor).* Using the information linked to the vendor specified in the Vendor field, this field displays the OH quantity of the vendor-owned consignment part.

3 Once you have entered the relocation information, click OK to relocate the part.

4 If you are relocating a part to another site, the system informs you that the part has been put in transit. If necessary, click Yes to print the inventory transfer document. To complete the relocation, receive the parts in the new site by performing the Receive from Relocation action.

***Note*** If you are relocating a part to another location in the same site, this message does not appear.

**Fig. 5.59**
Part in Transit Message




## Receive Consignment Part from Relocation

To receive a consignment part from relocation, see “Receive Parts from Relocation” on page 316.

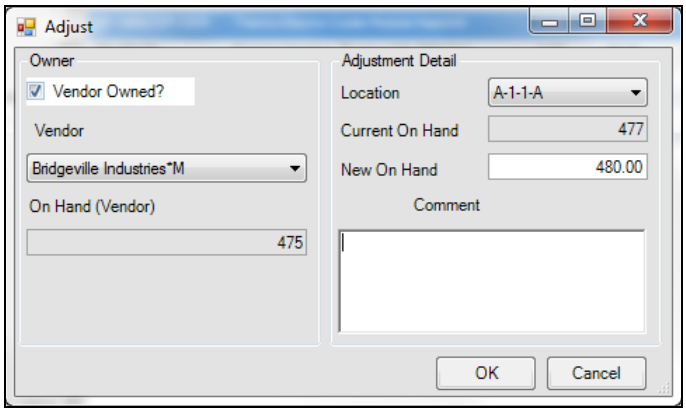
## Adjust On-Hand Quantity of a Consignment Part

Follow these steps to adjust the on-hand quantity for a consignment part:

1 Open the Inventory browse and highlight the consignment part record.

2 Select Adjust from the Inventory Action menu. The Adjust window opens.

**Fig. 5.60**
Adjust On-Hand Quantity




3 Enter the required information in the fields.

***Note*** The Adjust window contains consignment-related fields, which are used for vendor information. This window also contains standard inventory-related fields. For definitions of those fields, see “Adjust On-Hand Quantity of an MRO Part” on page 342.

*Vendor Owned?* Select this check box to indicate that a vendor owns the consignment part. If this check box is cleared, the OH quantity is considered to be company owned.

*Vendor.* If the consignment part is vendor owned, select the vendor that owns this part.

*On Hand (Vendor).* Using the information linked to the vendor specified in the Vendor field, this field displays the on-hand quantity of the vendor-owned consignment part.

4 Click OK to confirm.

### Modify Cost of a Consignment Part

The Modify Cost action allows you to change the cost of a part. When this action is performed, general ledger entries are generated based on the changes.

***Note*** Use this option only with approval from your Finance department.

Follow these steps to modify the cost of a consignment part:

1 Open the Inventory browse and highlight the part record.

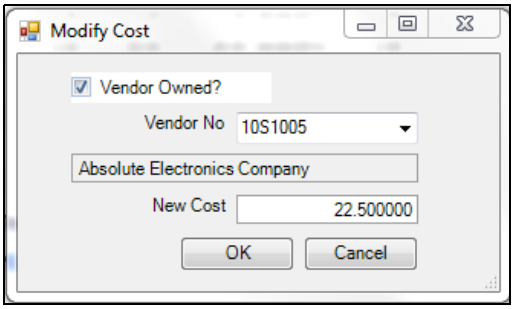
2 Select Modify Cost from the Inventory Action menu. The Modify Cost window opens. Enter the required information in the following fields:

*Vendor Owned?* Select this check box if the vendor owns the consignment part.

*Vendor No.* If the Vendor Owned? check box is selected, the system populates this field with the primary vendor for this part. The vendor name is displayed below this field.

*New Cost.* Enter the new cost of the consignment part in this field.

**Fig. 5.61**
Modify Cost of a Consignment Part




3 Click OK to accept the new cost.

## View Consignment Cost Stack

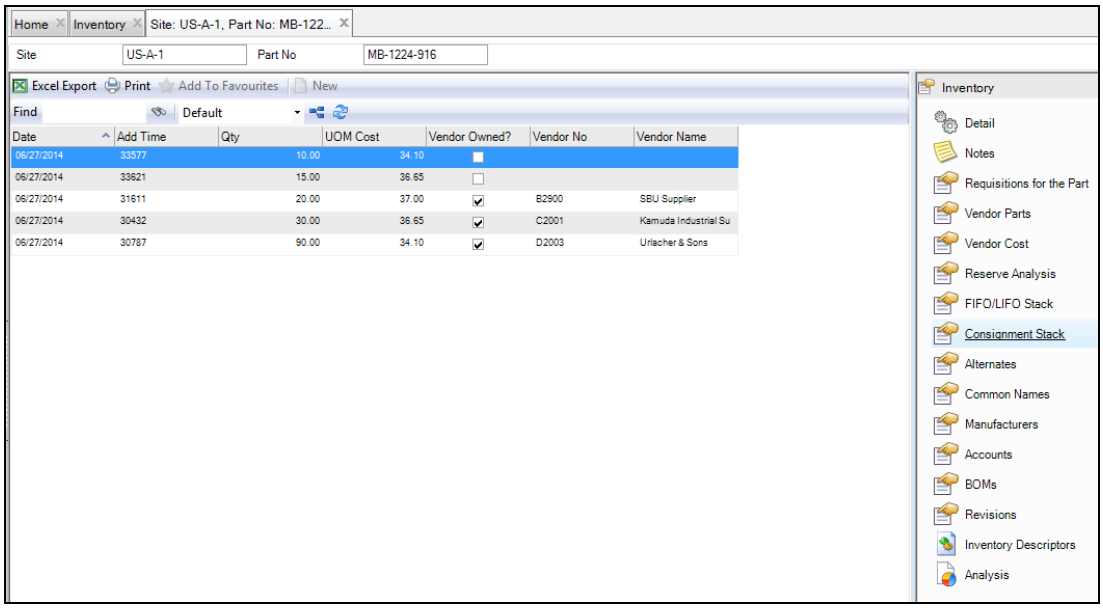
Vendors can stock consignment parts at your company’s location and retain ownership until you use those parts. To help you monitor the consignment parts, EAM provides the Consignment Cost Stack submenu, which allows you to view the following:

- The quantity of consignment parts that are available for each vendor

- A part's next-issue cost, which is based on FIFO, for each vendor
- Whether the part is vendor or company owned

***Note*** This submenu is only available for parts where the Consignment? check box is selected.

**Fig. 5.62**
Consignment Stack Submenu




## Transfer Ownership of a Consignment Part to Company Owned

The Transfer Ownership action allows you to indicate another owner for the consigned part. Follow these steps to transfer ownership of a consignment part to company-owned:

1 Open the Inventory browse and highlight the part record.

2 Select Transfer Ownership from the Inventory Action menu. The Transfer Ownership window opens. Enter the relevant information in the following fields:

**From**

*Vendor.* Use the drop-down list to select the vendor that owns the consignment part.

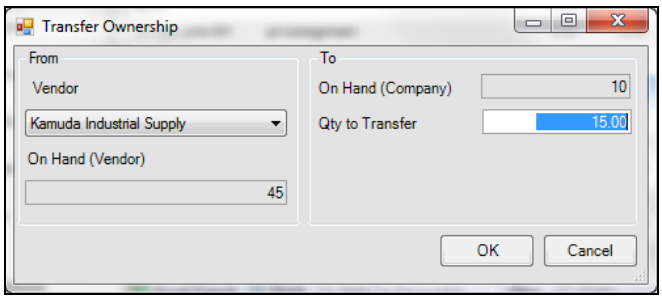
*On Hand (Vendor).* Displays the quantity of consignment parts that are on hand for the selected vendor.

**To**

*On Hand (Company).* Displays the quantity of parts on hand that the company owns.

*Qty to Transfer.* Enter the quantity of consignment parts to transfer from vendor-owned to company-owned.

**Fig. 5.63**
Transfer Ownership of a Consignment Part




**3** Click OK to complete the transfer of ownership.

## Managing Rotable Parts

A rotable part is a serialized and repairable part such as a pump or motor. EAM allows you to track rotable components that are purchased and stocked in inventory. However, when they are issued, they are treated like equipment. Maintenance repair costs are tracked and PMs can be scheduled for each component.

### Rotable Part Information

View Serialized Parts for a Rotable Part Number

The Rotable Inventory submenu displays detailed information for each individual, serialized part that matches the inventory part number. You can customize the information that is displayed in this submenu by adding or removing columns. Some of the following information (columns) can be displayed:

*Serial No.* Displays the serial number for the rotable part.

*PO No.* Displays the PO number that was used to purchase the rotable part.

*Location.* Displays one of the following current locations of the part:

- **Inv.** The part is located in inventory.
- **Equip.** The part is issued to a piece of equipment.
- **Rebuild.** The part is being rebuilt and has been issued to a WO, requisition, or PO.

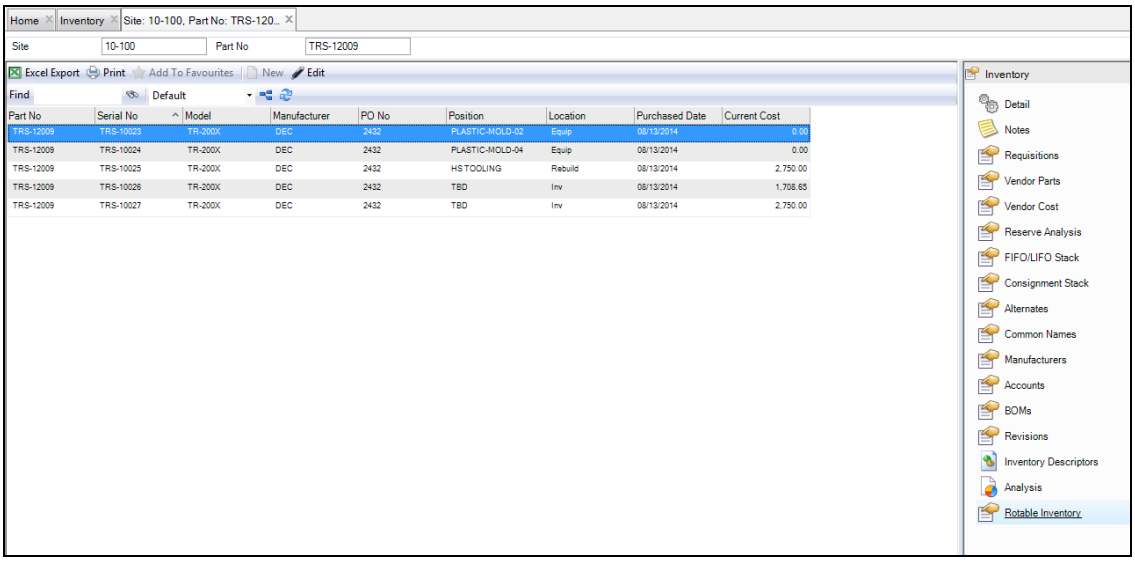
*Position.* Displays detailed information about the part's location:

- **Inventory.** If the part is located in inventory, the Position field displays the storage location.
- **Equipment.** If the part has been issued to a piece of equipment, the Position field displays the equipment number.
- **Rebuild.** If the part is being rebuilt, the Position field displays the rebuild location.

*Purchase Date.* Displays the purchase date of the rotable part.

*Current Cost.* Reflects the cost entered when the part is returned to inventory from equipment or rebuild.

**Fig. 5.64**
Rotable Inventory Submenu




View Cost Analysis for a Serialized Rotable Part

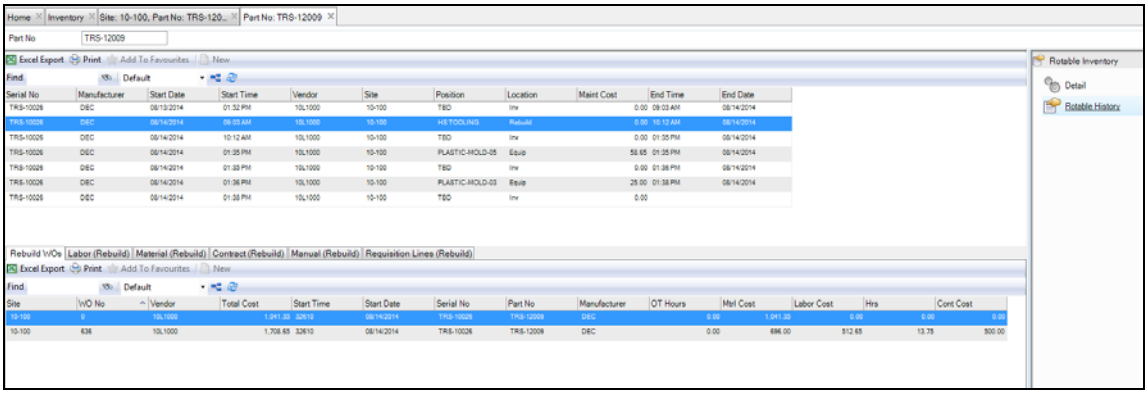
The Rotable History submenu displays detailed movement and cost analysis information about the serialized part.

The upper browse displays detailed movement history for the serialized part. It displays the locations and positions of the part when it was in inventory, when the part was issued to a piece of equipment, or when the part was repaired. The upper browse also displays when the movements occurred.

The lower browse displays detailed cost analysis information for the serialized part in the following tabs:

- **Rebuild WOs.** Displays any work orders that have been created and associated with the serialized part.
- **Labor (Rebuild).** Displays any direct labor postings to this serialized part and any labor postings to work orders associated with this serialized part.
- **Material (Rebuild).** Displays all part issues expensed to this serialized part, including direct issues and issues to work orders associated with this serialized part.
- **Contract (Rebuild).** Displays a list of all expenses charged to the serialized part on requisitions for contractors, including direct issues and issues to work orders associated with this serialized part.
- **Manual (Rebuild).** Displays manual GL transactions associated with the serialized part.
- **Requisition Lines (Rebuild).** Displays any requisitions and POs that have been created and associated with the serialized part.

**Fig. 5.65**
Rotable History Submenu

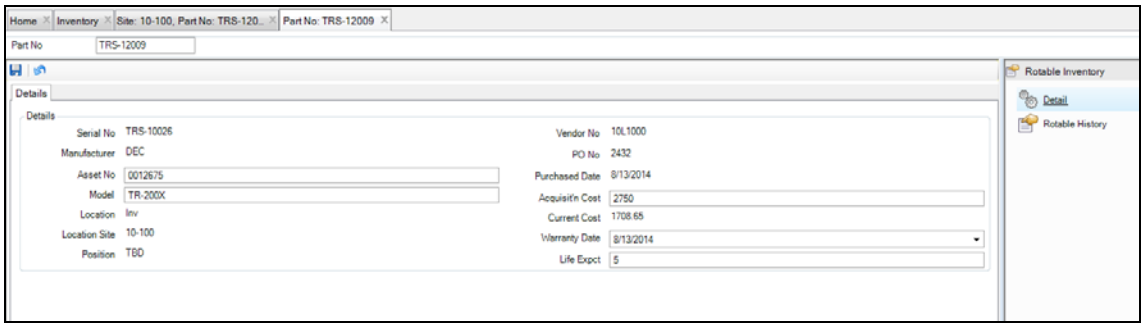


Follow these steps to access the Rotable History submenu for a serialized rotable part:

1 Open the rotable part record and select the Rotable Inventory submenu.

2 Double-click the serialized part to view the detailed part record for that serialized part.

**Fig. 5.66**
Part Record for Serialized Rotable Part



3 Select the Rotable History submenu to view cost analysis information for the part.

## Rotable Part Actions

### Create a Rotable Part and Receive It into Inventory

A rotable part is not created until it is received into inventory. The following flowchart shows the process of creating a rotable part record, ordering the part, and then receiving a rotable part through the Purchasing module, in which specifics about the part, such as serial number and manufacturer, are required for input at the time of receipt.

**Fig. 5.67**
Creating a Serialized Rotable Part Record



Follow these steps to create, order, and receive a serialized rotable part into inventory:

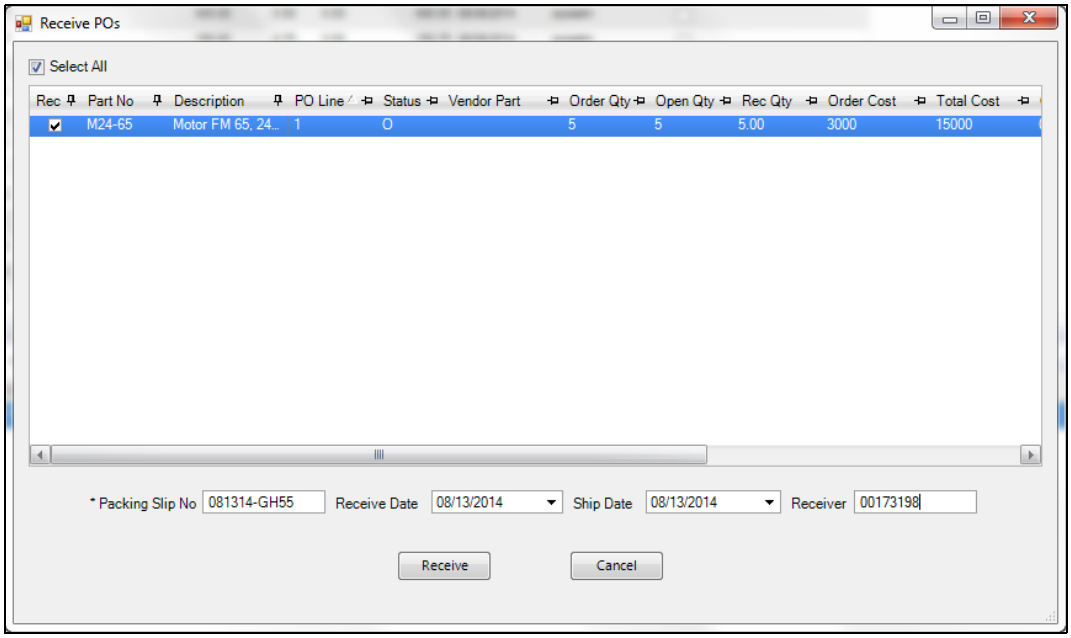
1 Create an inventory part record and designate the part as a rotable part. See “Defining an MRO Part” on page 289.

2 Create a PO for the rotable part. See “Creating a Purchase Order” on page 488.

3 When the rotable parts are ready to be received, open the Purchase Order browse and highlight the PO record.

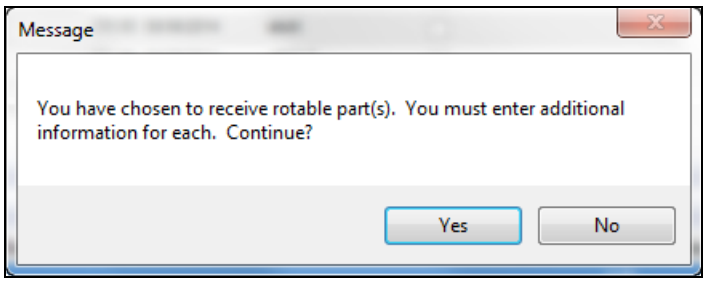
4 Select Receive PO from the PO Action menu. The Receive PO window opens. Enter the required information and click OK.

**Fig. 5.68**
Receiving Rotable Parts



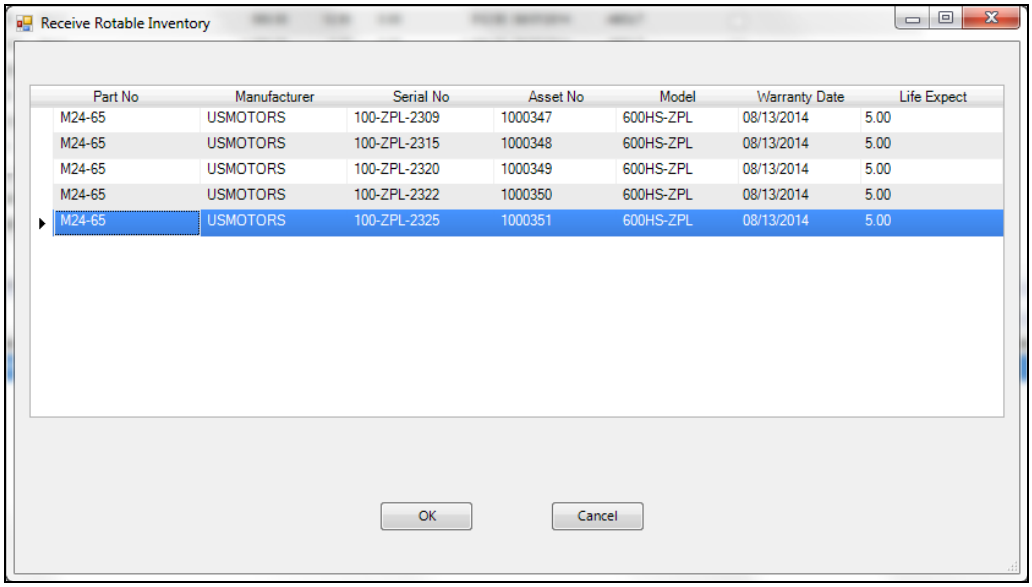

5 Because you are receiving rotable parts, the system displays a message that additional information for the rotable parts is required. Click Yes to continue.

**Fig. 5.69**
Receiving a Rotable Part




6 The Receive Rotable Inventory window opens. For each part, enter the manufacturer, serial number, asset number, and model number. Use the calendar lookup to select the warranty date and enter the life expectancy (in years) of each part.

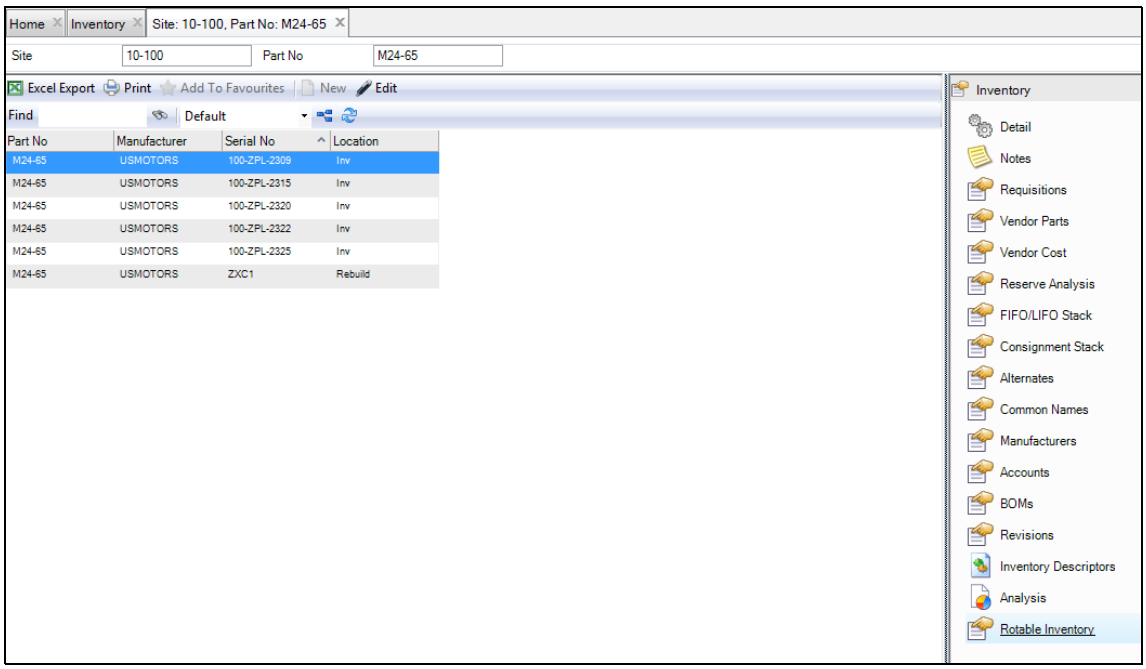
**Fig. 5.70**
Entering Rotable Part Information




7 Once all the information has been entered, click OK. EAM automatically creates rotable part records for each serial number.

8 The serialized rotable parts are now in inventory. Open the part record and select the Rotable Inventory submenu to view detailed information regarding each of the rotable parts that were received. You can double-click a serialized part to view the rotable part record associated with that serial number.

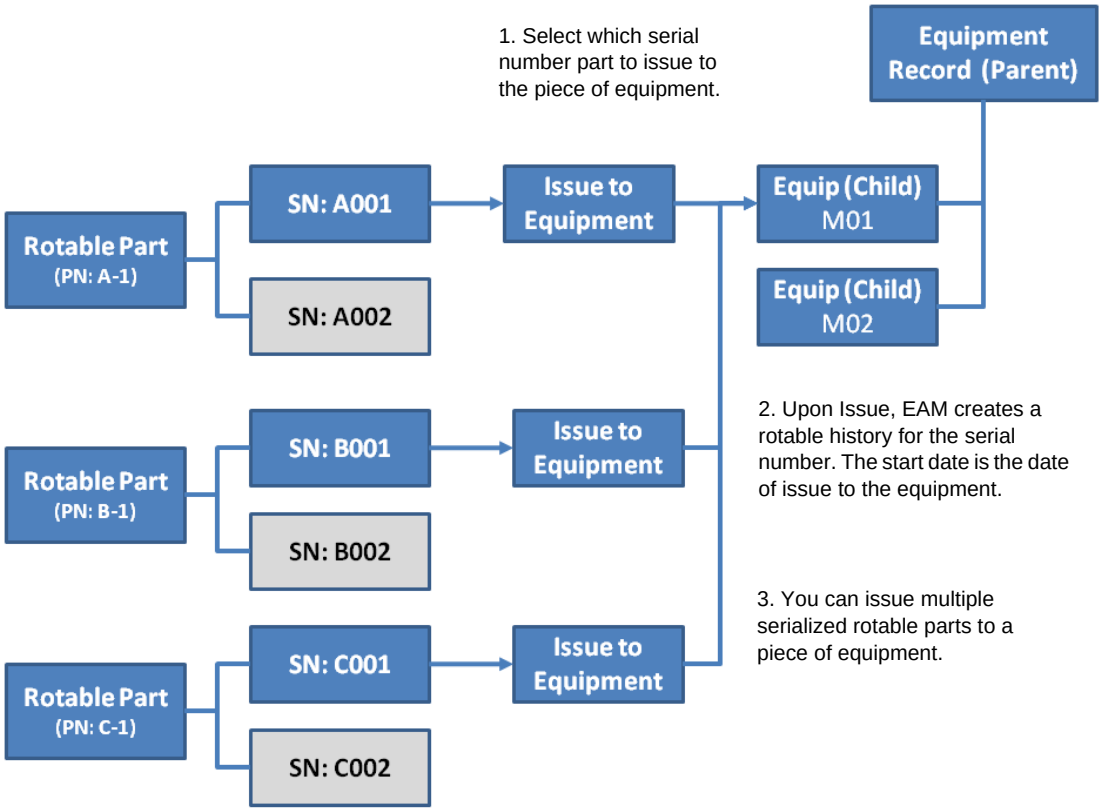
**Fig. 5.71**
Rotable Inventory Submenu



## Issue a Rotable Part to a Piece of Equipment

When creating rotable parts, you must establish a virtual equipment record and connect it to a parent. This virtual equipment represents a location for the rotable part. When the part is issued to the virtual equipment, the information in its inventory record is copied to the equipment record. Since rotable parts are always issued to a virtual piece of equipment, the system essentially turns the shell of an equipment record into one reflecting the vital statistics of the rotable part. In other words, the virtual equipment's manufacturer, serial number, asset number, model, vendor number, purchased date, acquisition cost, PO number, life expectancy, and installed date fields are filled with that information from the rotable part's record.

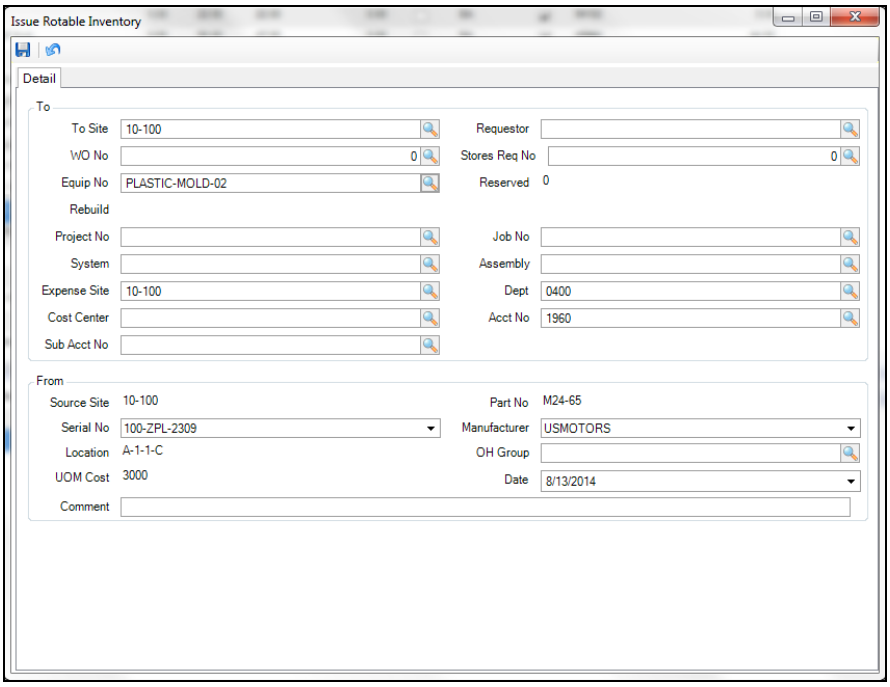
**Fig. 5.72**
Issuing Rotable Parts to a Piece of Equipment




Follow these steps to issue a rotable part to a piece of equipment:

1. Open the Inventory browse located in Inventory|Inventory and highlight the rotable part record.
2. Select Issue from the Action menu.
3. The Issue window opens. Using the Equip No lookup, select the piece of equipment to which you want to issue the rotable part.

**Fig. 5.73**
Rotable Inventory Submenu

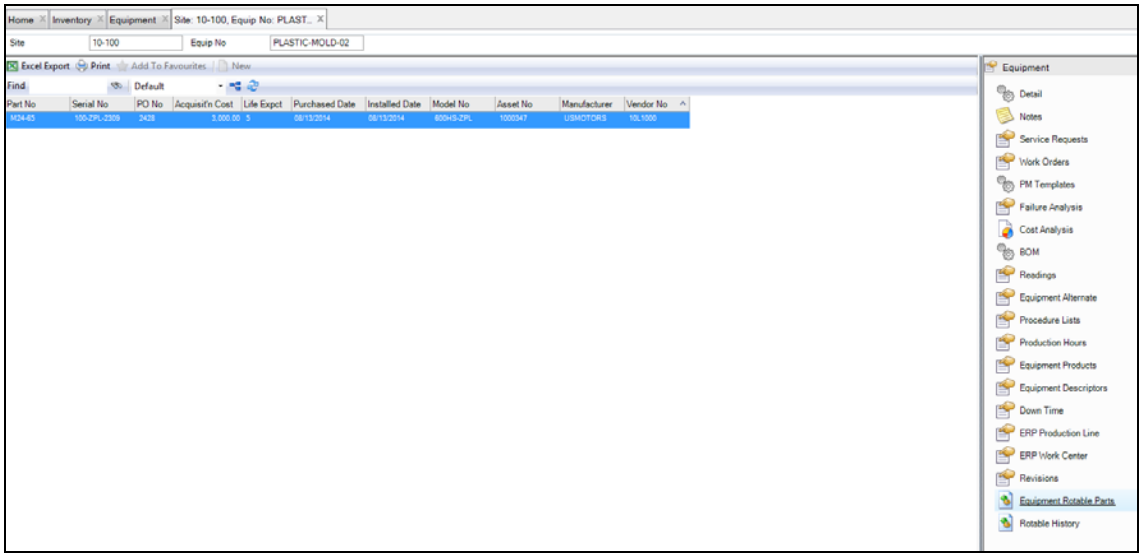



4 Click the save icon. The rotable part is now issued to the piece of equipment.

***Note*** You can issue multiple serialized parts to a piece of equipment.

5 You can verify that the part has been issued to the equipment by opening the equipment record and selecting the Equipment Rotable Parts submenu. This submenu displays the rotable parts that are issued to the piece of equipment. Notice that the end date and end time have been recorded from the part's time in inventory. A new start date and time were established when the part was issued to equipment.

**Fig. 5.74**
Rotable Inventory Submenu



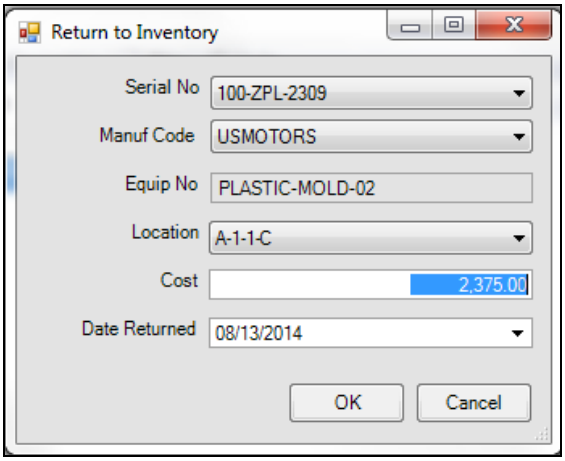
## Return a Rotable Part into Inventory

When a rotable part is no longer needed in an area to which it was issued, return the part to inventory for future issues.

Follow these steps to return a rotable part to inventory:

1. Open the Inventory browse and highlight the rotable part record.
2. Select the Return to Inventory action. The Return to Inventory window opens.

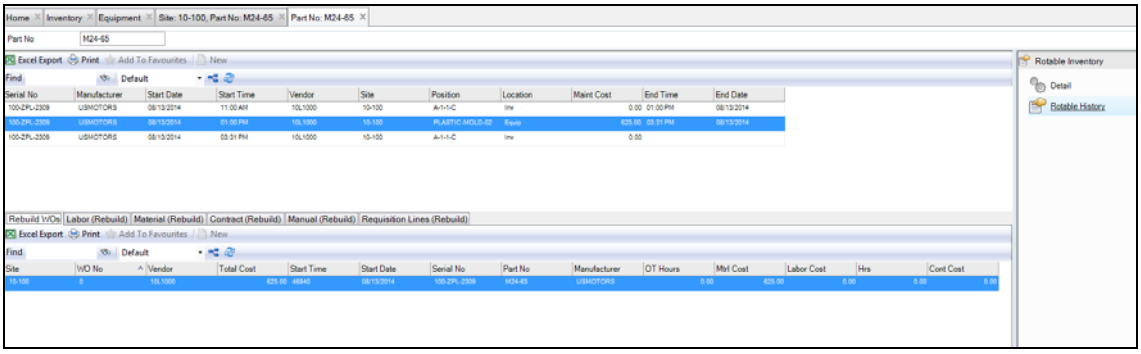
**Fig. 5.75**
Return Rotable Part to Inventory




3. Enter the serial number, manufacturer, and location information for the rotable part.
4. In the Cost field, enter the new cost for the rotable part based on its condition. This field allows you to establish a new value for the rotable part based upon its condition, length of previous use, and estimated lifespan.

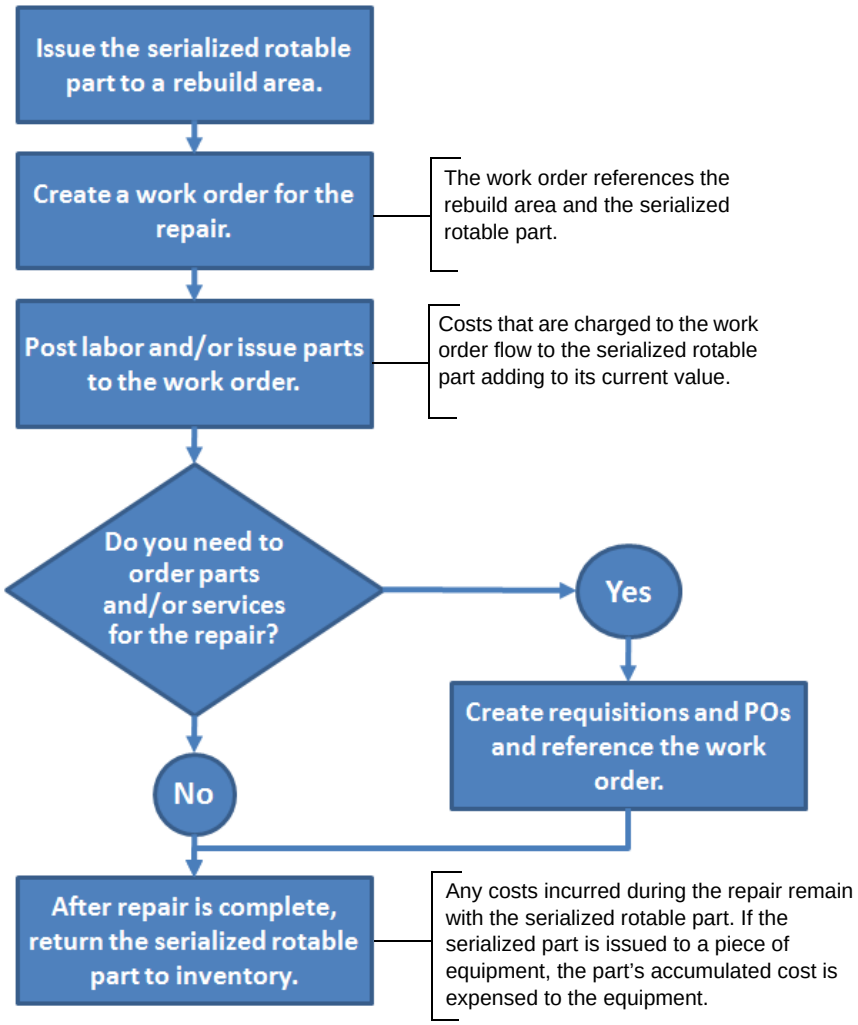
   ***Example*** If the part originally cost $3,000 but now is worth $2,375 because the part has been used, enter $2,375 in the Cost field. When the part is returned to inventory, the system uses this cost to calculate the Maintenance Cost for the part, which is the difference between the original cost and the new cost. In this example, the Maintenance Cost would be $625 ($3,000 - $2,375).
5. Use the calendar lookup to select the date returned.
6. Click OK to return the part to inventory.
7. If you open the Rotable History submenu for that serialized rotable part, you can view all the movements of that part, including the return to inventory details.

**Fig. 5.76**
Rotable History Submenu




## Rebuild/Repair a Rotable Part

**Fig. 5.77**
Rebuilding a Rotable Part

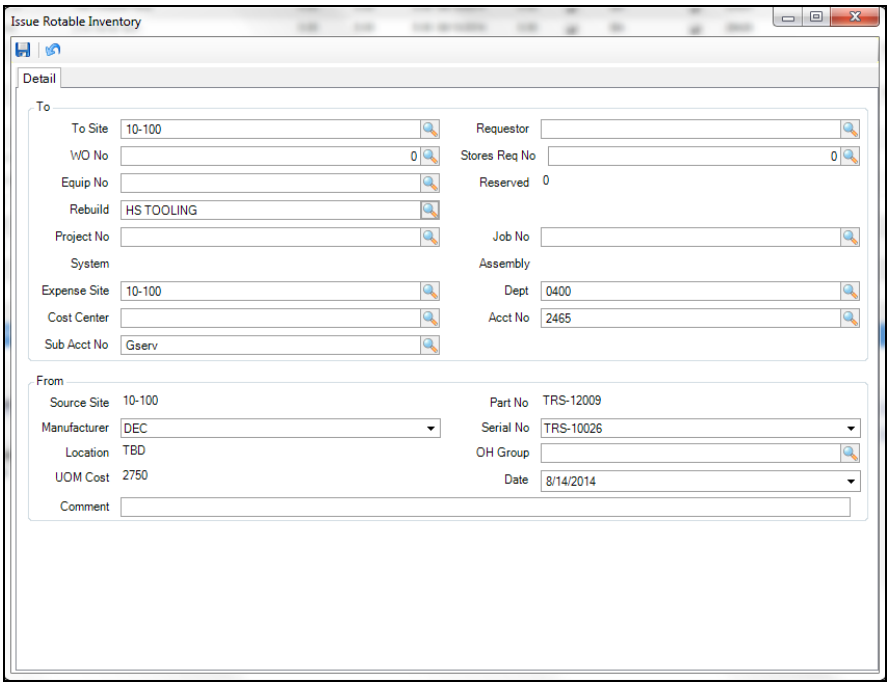


Follow these steps to rebuild or repair a rotable part:

1 Open the Inventory browse and highlight the rotable part record.

2 Select Issue from the Action menu. In the Rebuild field, use the lookup to select the rebuild area where the rotable part will be repaired.

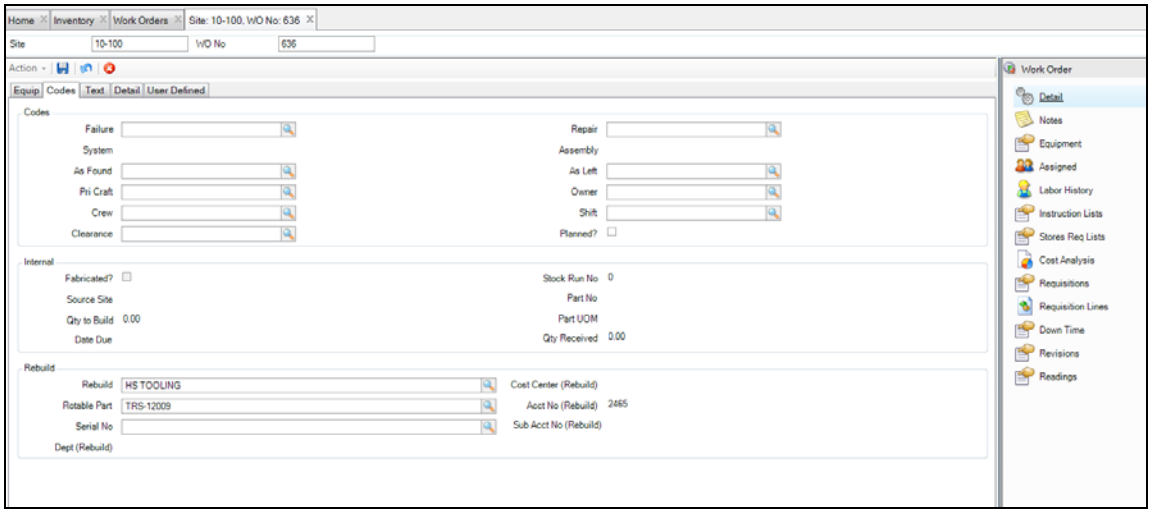
**Fig. 5.78**
Issue Rotable Part to Rebuild Area




3 Click the save icon.

4 Create a work order for the repair. In the Rebuild field on the Codes tab, select the rebuild area where you issued the rotable part. In the Rotable Part field, use the lookup to select the serialized rotable part. For more information about creating work orders, see “Creating a Work Order” on page 219.

**Fig. 5.79**
Create Work Order to Repair Rotable Part




5 From the work order, you can post labor and issue parts for the repair. See “Posting Labor on a Work Order” on page 242 and “Issue Parts to a Work Order” on page 245.

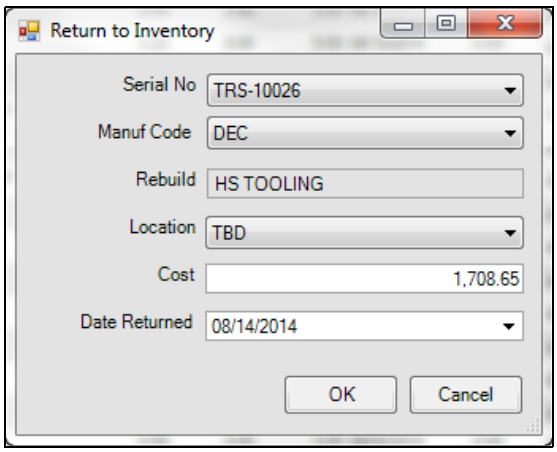
6 If you need to order parts or services, create requisitions and POs and reference the work order. Any costs associated with the requisition, PO, or work orders are associated with the serialized rotable part. See “Creating a Purchase Order” on page 488.

7 Once the repair is complete, return the rotable part to inventory. Open the Inventory browse and highlight the rotable part record. Select Return to Inventory from the Action menu.

8 Enter the serial number, manufacturer, and location information for the rotable part.

9 Because this rotable part was on a work order, the cost that was accumulated while the part was being repaired is pulled into the Cost field. If necessary, you can edit this value.

**Fig. 5.80**
Create Work Order to Repair Rotable Part




10 Once all the information has been entered, click OK.

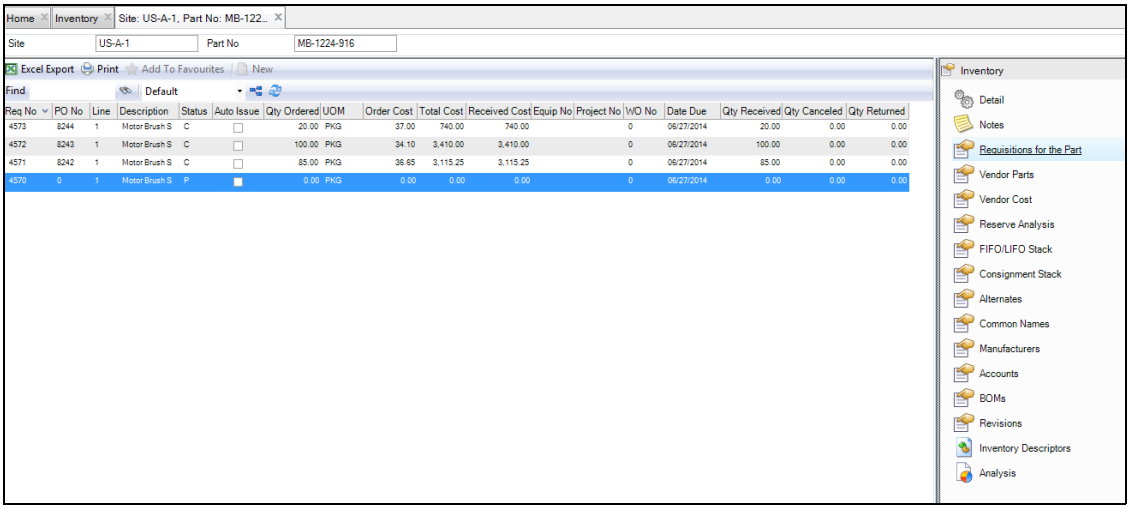
11 The part is returned to inventory.

# View Part Information

## Viewing Requisitions

The Requisitions for the Part submenu displays all requisitions associated with the part. The information displayed here is a combination of the contents of the upper and lower Requisition browses.

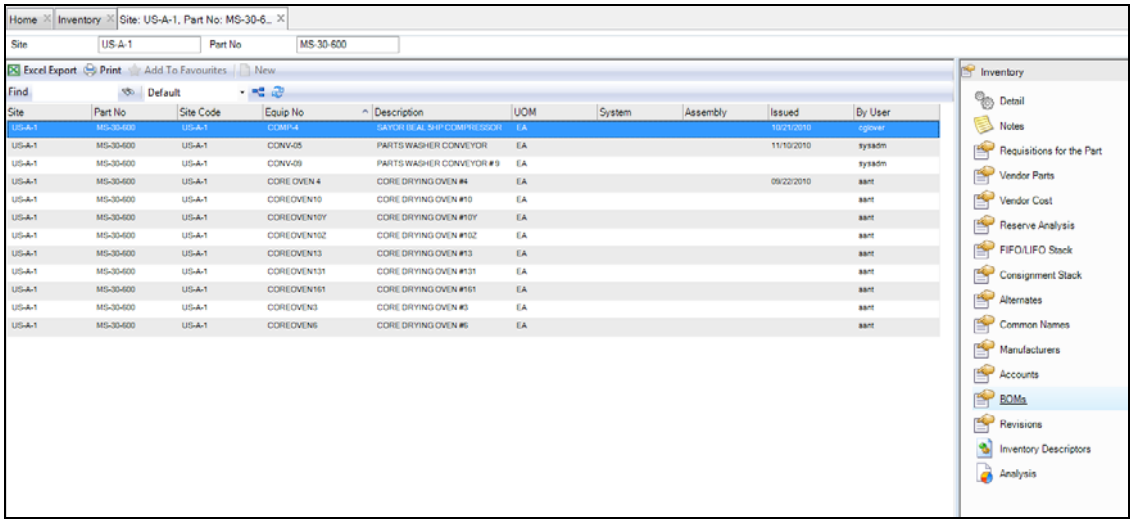
**Fig. 5.81**
Viewing Requisitions for a Part




## Viewing BOM Information

The BOMs submenu displays all the equipment Bills of Materials on which this part is used and appears. Build the BOM manually or automatically by selecting the Post Equip List check box in System Administration|System Control.

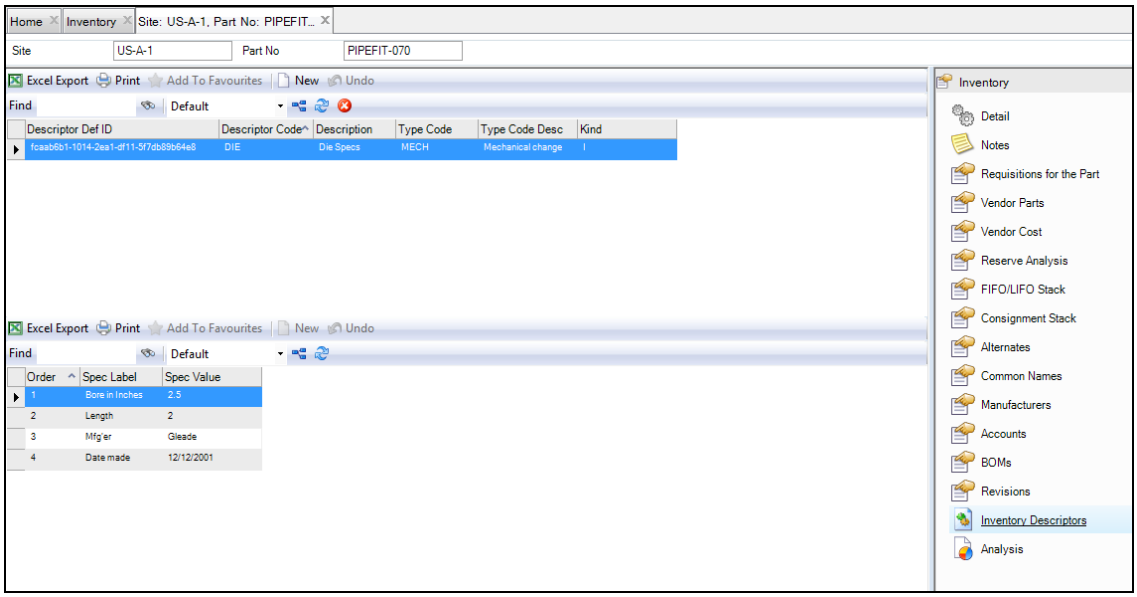
**Fig. 5.82**
Viewing Part BOM Information



## Viewing Inventory Descriptors

Inventory descriptors allow you to set up a standard template for certain technical information, and to then associate these descriptors with an MRO part. A part can have multiple descriptors associated with it. Once the descriptor is associated with a part record, you can update the information on a field.

**Fig. 5.83**
Viewing Inventory Descriptors




### Print Descriptors

To print an inventory descriptor, open the Inventory browse and select the part record. Then select the Print Descriptors option from the Action menu.

### Global Print Descriptors

To print descriptors for a group of parts, select the part records. Then select Global Print Descriptors from the Action menu.

## Viewing Part Analysis

The Analysis submenu consists of an upper and lower browse that displays a part's current availability, general ledger transaction history, work order usage, purchase requisition history, and stock-out history.

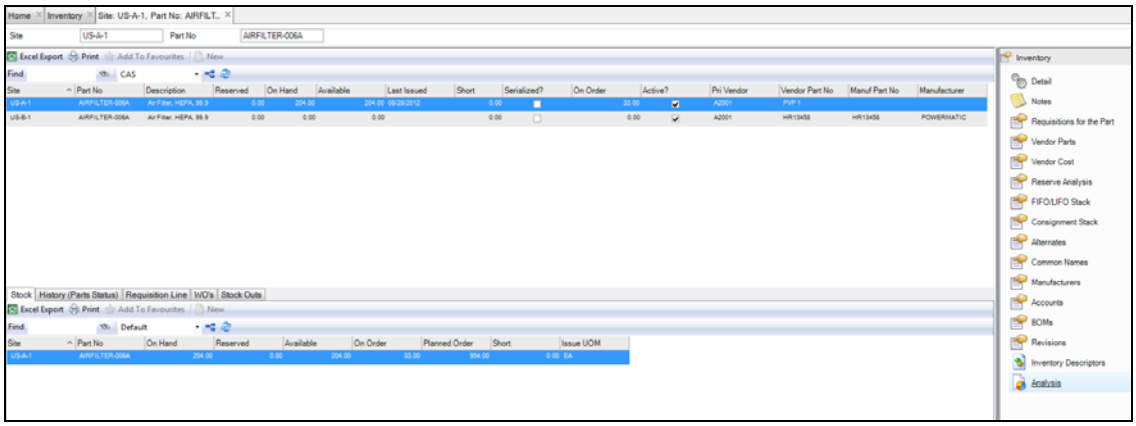
The upper browse displays the following part information for each site to which the part is extended:

- **Part Information.** Part number and description.
- **Detailed Availability Information.** Current reserved, on-hand, available, short, and on-order quantities.
- **Last Issued Date, Serialized, Active information.**
- **Primary vendor and manufacture information.**

The lower browse contains the following tabs:

- **Stock.** Displays part and detailed stock information (on-hand, reserved, available, on-order, planned order, and short quantities.
- **History (Parts Status).** Displays the general ledger transaction history.
- **Requisition Line.** Displays all requisitions and POs to which this part has been added, as well as the statuses, order quantities, and reserved order information.
- **WOs.** Displays detailed work order usage information.
- **Stock Outs.** Displays detailed stock-out history information.

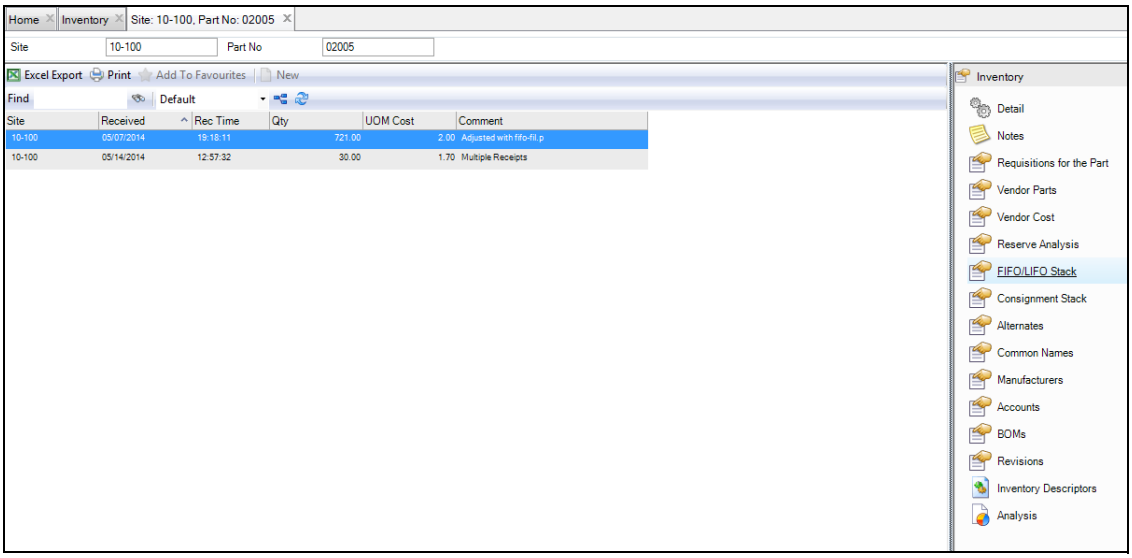
**Fig. 5.84**
Inventory: Analysis Submenu




## View FIFO or LIFO Cost Stack

The FIFO/LIFO Stack submenu displays the quantity and price of purchase receipts in LIFO or FIFO order for this part.

**Fig. 5.85**
Inventory: FIFO/LIFO Stack Submenu



# Edit Inventory Parts

## Modify Part Cost

The Modify Cost action allows you to change the cost of a part. When this action is performed, general ledger entries are generated based on the changes.

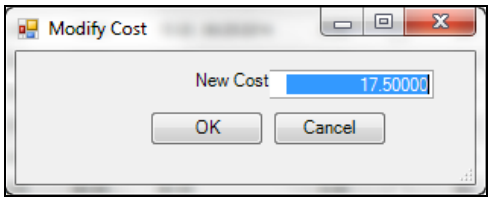
***Note*** Use this option only with approval from your Finance department.

Follow these steps to modify the cost of an inventory part:

1 Open the Inventory browse and highlight the part record.

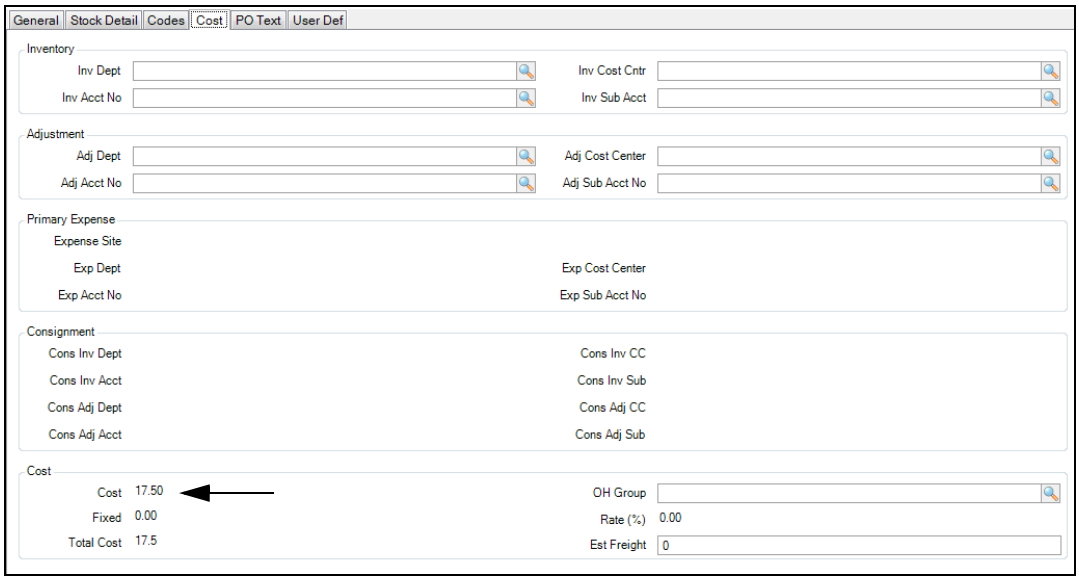
2 Select Modify Cost from the Inventory Action menu. The Modify Cost window opens. Enter the new cost.

**Fig. 5.86**
Modify Cost




3 Click OK to accept the new cost. The new cost is displayed in the Cost field on the part record's Cost tab.

**Fig. 5.87**
Modify Cost



## Adjust On-Hand Quantity of an MRO Part

Follow these steps to adjust the on-hand quantity for a part:

1. Open the Inventory browse and highlight the part record.
2. Select Adjust from the Inventory Action menu. The Adjust window opens. Enter the required information in the following fields:

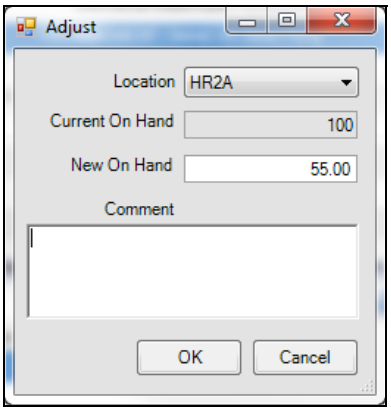
   *Location.* Use the drop-down list to select the part location.

   *Current On Hand.* Displays the current on-hand quantity for this part.

   *New On Hand.* Enter the new on-hand quantity in this field.

   *Comment.* Enter any comments in this field.

**Fig. 5.88**
Adjust On-Hand Quantity



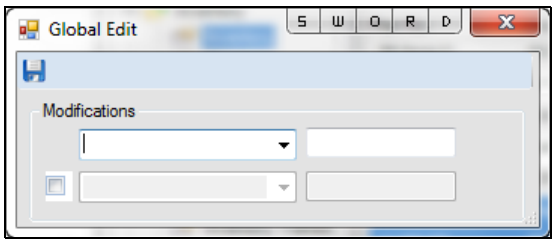

3. Click OK.

## Edit Multiple Part Records – Global Edit

Follow these steps to edit multiple records at the same time:

1. Open the Inventory browse and highlight the part records.
2. Select Global Edit from the Inventory Action menu. The Global Edit window opens.

**Fig. 5.89**
Global Edit

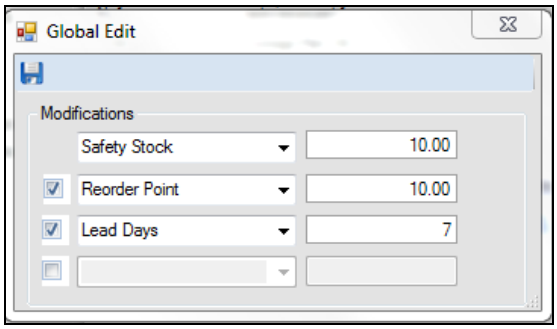



3. Use the drop-down list to select a field to edit. Then enter the new value in the field to the right. The following fields can be edited using the Global Edit action:

- ABC Code
- Add to BOM?
- Auto Issue?
- Buyer
- Catalog
- Class
- Commodity
- Critical?
- Description
- Est Freight
- Lead Days
- Mgt Max Qty
- Min Order Qty
- MSDS No
- Notify
- OH Group
- Order Unit
- Physical Due
- Planner
- Prod Line
- Reorder Point
- safety Stock
- Size
- Sole Source?
- Status
- Stock Out?
- Sub Catalog
- Tax Class
- Tax Code
- Tax Usage
- Taxable?
- Type

4 To edit another field, select the check box on the next line. The next fields are activated, allowing you to select another field from the drop-down list.

**Fig. 5.90**
Global Edit




5 Click the Save icon to accept the changes.

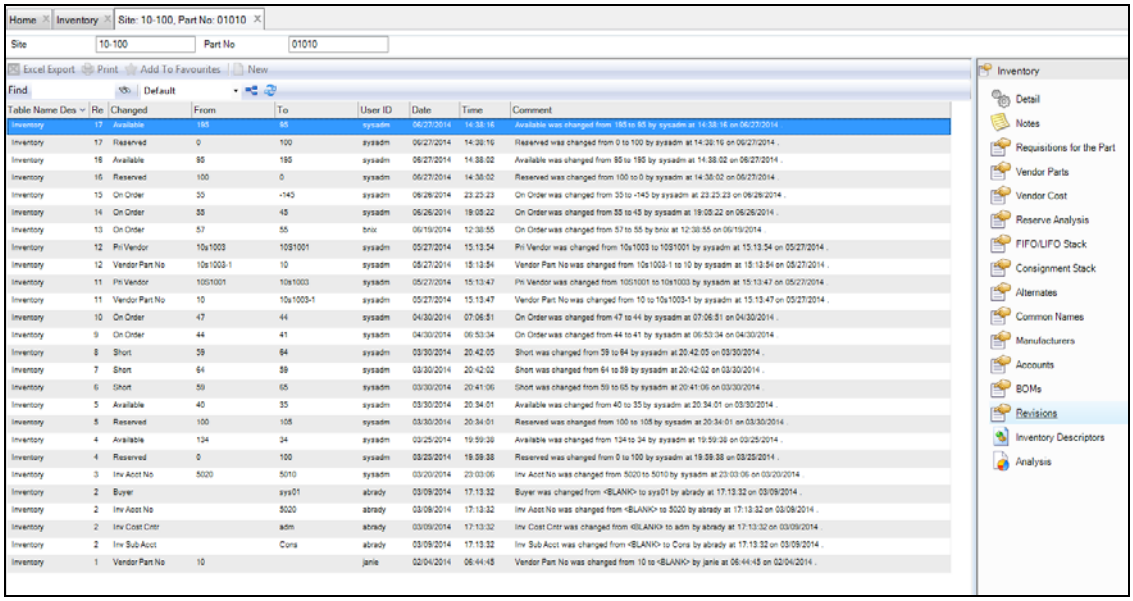
## View the Revision History for a Part Record

Because many quality systems call for strict record-keeping about the revisions made to part records, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the part record.

To view the revision history for a part record, open the part record and select the Revisions submenu.

***Note*** Revision control is activated in General|Business Units|Sites|Revision Control. See “Enable Revision Control” on page 61.

**Fig. 5.91**
Inventory: Revisions Submenu



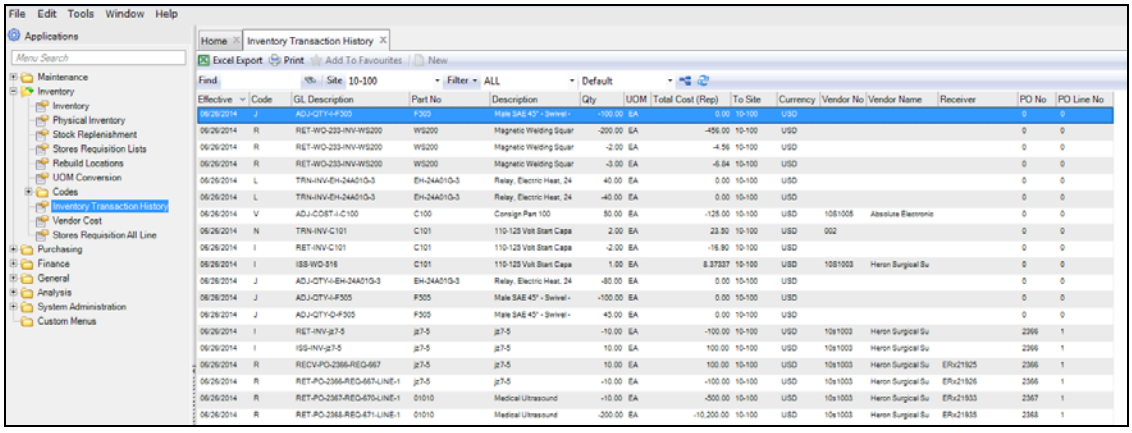

## Browse Inventory Information

### Inventory Transaction History

The Inventory Transaction History browse, which is located in Inventory|Inventory Transaction History, displays the inventory activity history for inventory parts. When an accounting period is closed, the system automatically records the inventory activity history for that period. The inventory activity history is not stored on a period-by-period basis.

***Note*** Accounting periods are set up in GL Calendar at Finance|Accounting|GL Calendar. See “GL Calendar” on page 378. When an accounting period is closed, EAM can create an inventory history for that closed period. This option is controlled by enabling the Create Inventory History? check box on the General tab in General|Business Units|Sites. See “Filling Out the Site Record” on page 42.

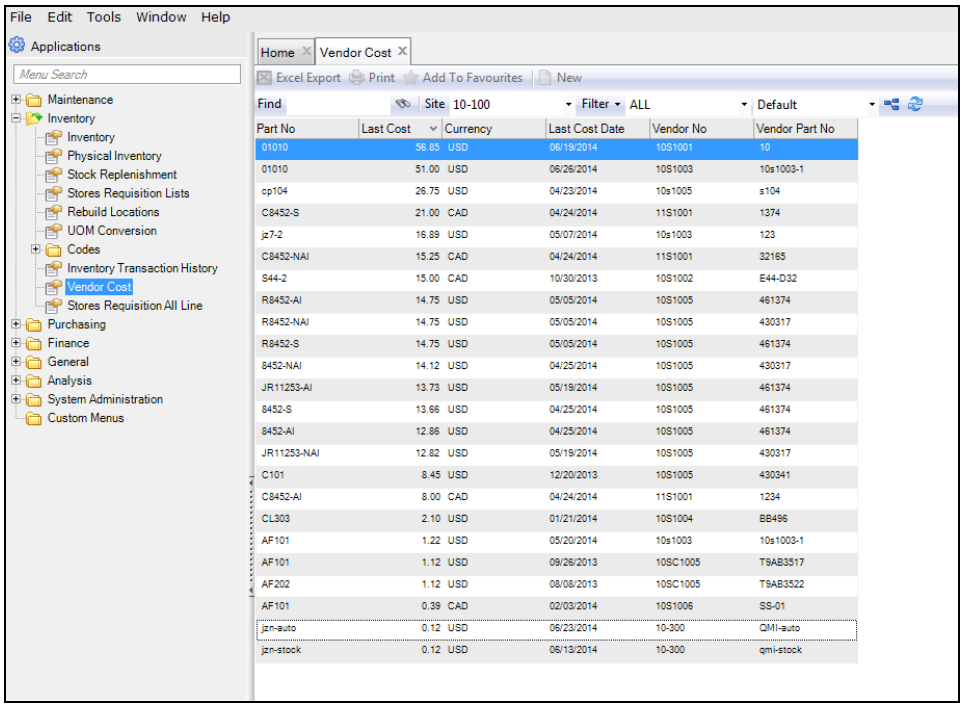
**Fig. 5.92**
Inventory Transaction History Browse



### Vendor Cost

The Vendor Cost browse, located in Inventory|Vendor Cost, displays the last cost for each part.

**Fig. 5.93**
Inventory Transaction History Browse




# Request Stock Replenishment

## Overview

Use Stock Replenishment to identify parts whose quantities are below the reorder point or safety stock level. Create requisitions or work orders to replenish depleted inventory.

- Create a stock replenishment header or stock run in the top frame.
- Globally add parts or attach individual parts to a stock run.
- Print the list of items that are below the reorder point or safety stock level for review in the bottom frame.

The stock run number is copied to the requisition or work order, noting its origin.

### Business Use Cases

#### Sole Source

Parts marked as sole source can be expedited through the purchasing process using the settings in the Misc tab on the Site record. The Sole Source Option fields set the status of the replenishment request for processing. See “Sites: Miscellaneous Tab” on page 58.

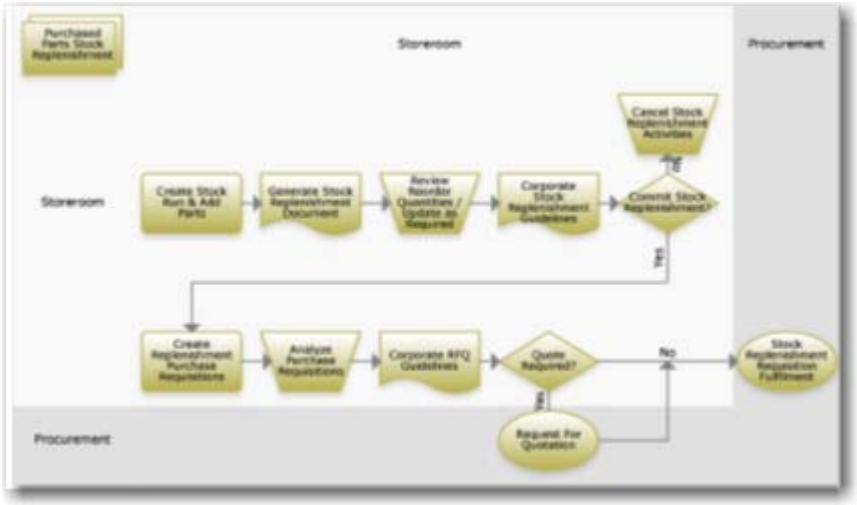
Blanket Order Releases

If a blanket order is active for the part, a PO is released when a request is created in Stock Replenishment.

## Replenishing Purchased Stock Process Flow

Verify that corporate guidelines authorize a replenishment requisition.

**Fig. 5.94**
Purchased Stock Replenishment Process Flow

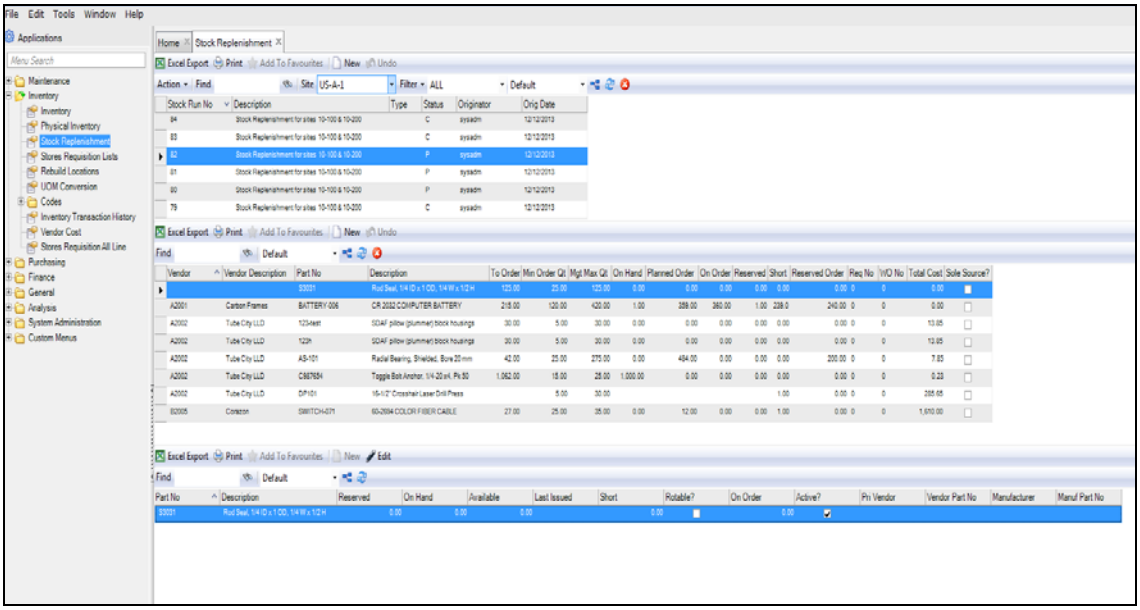



1. Create a stock run and add parts.
2. Generate a stock replenishment document.
3. Review and update reorder quantities, following corporate stock replenishment guidelines.
4. If you commit to the stock replenishment, create purchase requisitions.
5. Analyze purchase requisitions against corporate guidelines.
6. If there is a request for quotation required, obtain it.
7. Fulfill the stock replenishment requisition.

## Stock Replenishment Browse

The Stock Replenishment browse, located in Inventory|Stock Replenishment, consists of an upper, middle, and lower browse.

**Fig. 5.95**
Stock Replenishment Browse



The upper browse displays the stock replenishment headers. Highlight a stock replenishment header to view the parts, displayed in the middle browse, that have been added to it.

The middle browse, which displays a list of the parts that have been added to the stock replenishment run, contains the following fields:

*Vendor.* Displays the vendor number.

*Vendor Description.* Displays a short description of the vendor.

*Part No.* Refers to the inventory part number.

***Note*** Stock replenishment does not include inactive parts. Inactive parts do not display in the parts lookup in the bottom frame.

*Description.* Displays the description from the master parts record.

*To Order.* The system calculates this field based on the management maximum quantity, minus on-hand, minus planned and ordered requisitions. You can update this field manually.

***Example*** The reorder point is 10, the management maximum is 20, and the current on-hand is 10. The system determines that it takes 10 parts to get the on-hand back up to the management maximum.

If there are five parts on order, the system adds that value to the on-hand quantity, 10 + 5, which is 15 on-hand. Order five more parts to get the management maximum of 20.

*Mgt Max Qty.* Management Maximum Quantity. The maximum quantity of a particular part that should be held in inventory.

*On-Hand.* This field displays the current on-hand quantity of a specific part in the inventory bin locations.

*Planned Order.* The system displays the planned order quantity for this part. It represents all requisitions with a status of P (planned).

*On-Order.* The system adds and displays the total quantity of a part from all purchase orders with that item listed. It represents all purchase orders with a status of O (ordered).

*Reserved.* The system displays the current reserved quantity for the specific part.

***Note*** The system can add the quantity short, the considered reserved, and the reserved orders into the replenishment calculation. These options are user-set for all sites within a domain.

***Example*** If the on-hand quantity is 10 with a management maximum of 20, the system recommends that you order 10. If five parts are already on-order, the system recommends that you order five parts. Of those five parts on-order, if two parts are reserved for a specific work order, then the system recommends that you order seven parts.

*Short.* This system-calculated field is the total quantity reserved in all open stores requisitions beyond the current on-hand quantity availability.

For example, the reorder point is 10 and the management maximum is 20. If no parts are on-hand, the system recommends that you order 20 parts. If the short quantity is two parts, then the system recommends that you order 22 parts.

*Reserved Order.* Current requisitions and reserved orders comprise this calculated field.

*Source.* This field specifies the part replenishment source. There are two settings: vendor or internal.

A vendor source generates a requisition to buy the part. Internal source creates a work order to make the quantity of parts required.

*Pri Vendor.* EAM displays the primary vendor from the part master record.

*Requisition No.* The requisition header number displays in this field. After you create a request, the system adds requisitions for vendor-sourced parts. Create Requests adds one requisition for each vendor listed on that stock run, and groups all vendor parts as lines on that requisition.

*Line No.* The requisition line number displays in this field.

*WO No.* The work order number assigned to this part displays in this field. After you use the Create Requests action, EAM adds work orders for each internally sourced part.

The lower browse displays order information about each part highlighted on the middle browse.

## Creating a Stock Replenishment Run

### Create a Stock Replenishment Header

Follow these steps to create the header for a stock replenishment run:

1 Open the Stock Replenishment browse.

2 Click New in the upper browse. Enter the relevant information in the following fields:

*Description.* Enter a short description of the stock replenishment run.

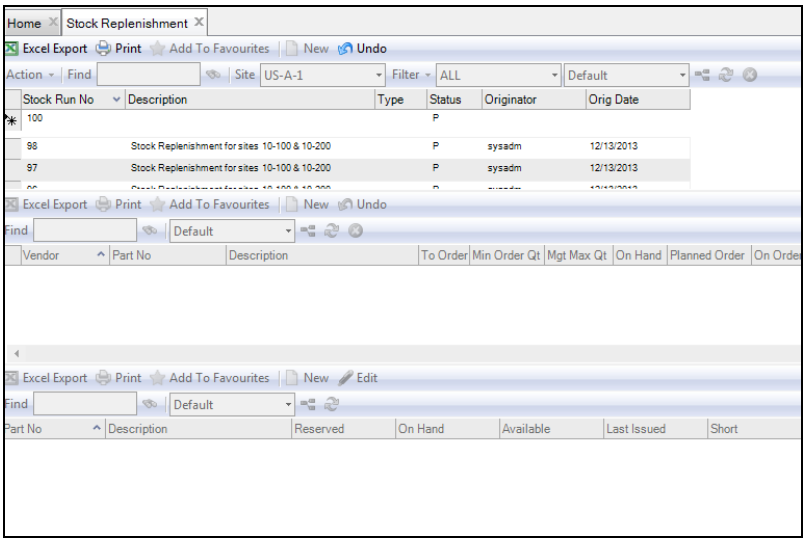
*Type.* Use the lookup to select the stock replenishment type.

*Status.* Displays the status of the stock replenishment run. By default, when a stock replenishment is created, the status is Planned (P).

*Originator.* Use the lookup to select the originator of the stock replenishment run.

*Original Date.* When the stock replenishment run is saved, the system populates today's date into this field.

**Fig. 5.96**
Stock Replenishment Run




3 Press Enter to save the stock replenishment header.

## Adding Parts to a Stock Replenishment Run–Manually

Follow these steps to manually add parts to a stock replenishment run:

1 To add a single part to a stock replenishment run, highlight the stock replenishment run and click New in the middle browse.

2 Select the part by using the lookup in the Part No field.

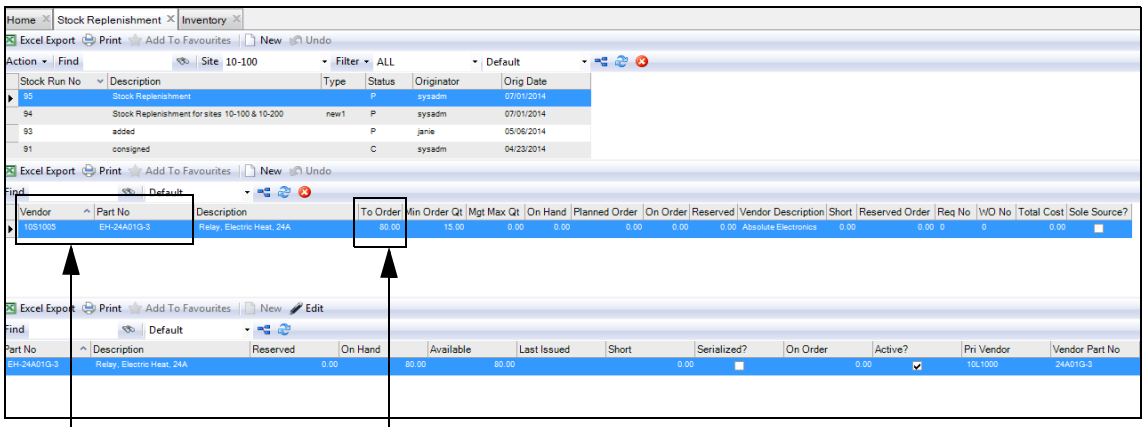
***Note*** The parts lookup does not display inactive parts.

3 The system automatically pulls in the vendor information for the part. If the Vendor field is blank, use the lookup to select the vendor.

4 The system also calculates the order quantity and populates it into the To Order field. The calculation in the To Order field is based on the management maximum quantity, minus on-hand, minus planned and ordered requisitions. If necessary, you can edit the order quantity by entering a new value in the field.

5 Press Enter to save. Repeat these steps to add additional parts.

**Fig. 5.97**
Stock Replenishment Run




## Adding Multiple Parts to a Stock Replenishment Run–Global Add

Follow these steps to add multiple parts to a stock replenishment run:

1 To add multiple parts to a stock replenishment run, highlight the stock replenishment run and select Global Add from Stock Replenishment Action menu.

2 The Global Add window opens, which allows you to add any parts that are at or below their reorder point or safety stock levels. This window also allows you to filter for critical items, specific commodities, or selected vendors. For example, you can filter for all items from a specific vendor that are at or below the safety stock level. Any parts that meet that criteria are added to the stock replenishment list.

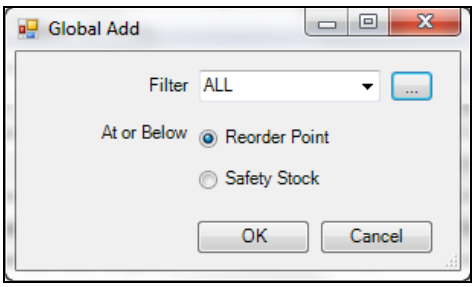
You have the following options when adding parts:

*Filter.* Click the drop-down list and select one of the available filters. Click the search button to open the Filter Manager, which allows you to edit an existing filter or create a new filter.

*Reorder Point.* Select this radio button to add all parts that are at or below their reorder point.

*Safety Stock.* Select this radio button to add all parts that are at or below their safety stock point.

**Fig. 5.98**
Stock Replenishment Run



3 Click OK to add the parts. The system automatically adds the parts to the stock replenishment run based on the settings you selected in the Global Add window.

4 The system automatically pulls in the vendor information for each part. If any of the Vendor fields are blank, use the lookup to select the vendor.

5 The system also calculates the order quantities and populates them into the To Order fields. The calculation in the To Order field is based on the management maximum quantity, minus on-hand, minus planned and ordered requisitions. If necessary, you can edit the order quantity by entering a new value in the field.

### Printing Stock Replenishment Document

To print a stock replenishment document, open the Stock Replenishment browse and highlight the stock replenishment header. Select Print Document from the Stock Replenishment Action menu.

## Create a Replenishment Request

The Create Requests action allows you to automatically create requisitions and work orders for the parts that were added to the stock replenishment run.

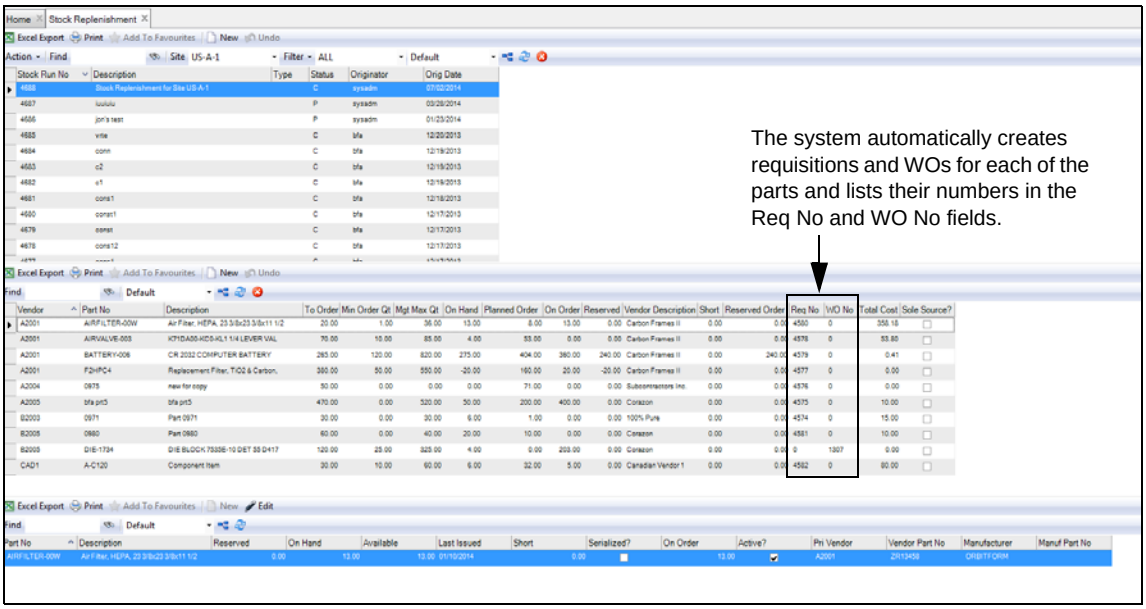
### Creating Requisitions and Work Orders from a Stock Replenishment Run

Follow these steps to create requisitions and WOs from a stock replenishment run:

1 Open the Stock Replenishment browse and highlight the stock replenishment run.

2 Select Create Requests from the Stock Replenishment Action menu. The system automatically creates requisitions and WOs for each of the parts and populates the numbers in the Req No and WO No fields.

**Fig. 5.99**
Create Requests for a Stock Replenishment Run



### Blanket Order Release

When the Create Request action is performed, EAM automatically looks for active BOs that contain the parts and then creates releases from the BOs. For more information about BOs, see “Blanket Orders” on page 512.

### Automate Stock Replenishment

The Stock Replenishment job program adds a new stock replenishment run, globally adds parts, and then creates requests based on the run parameters that are entered. This job program can produce the same results as if the stock replenishment run was added manually in the Inventory| Stock Replenishment browse. For more information, see “Stock Replenishment” on page 723.

# Create Stores Requisition Lists

## Overview

Use Stores Requisition Lists to internally request stock items; create a detailed parts list for a work order or task; print the stores requisition and use it as a stock item pick list; or process it directly online. After the items are pulled, issued, and staged, the transactions are completed, expensing costs directly to the work order, equipment, expense account data, or project code. Use Stores Requisition Lists to attach multiple parts lists to a work order. Pre-plan a work order by identifying all required parts. To separate parts lists by groups of technicians, categorize mechanical parts separately from electrical parts.

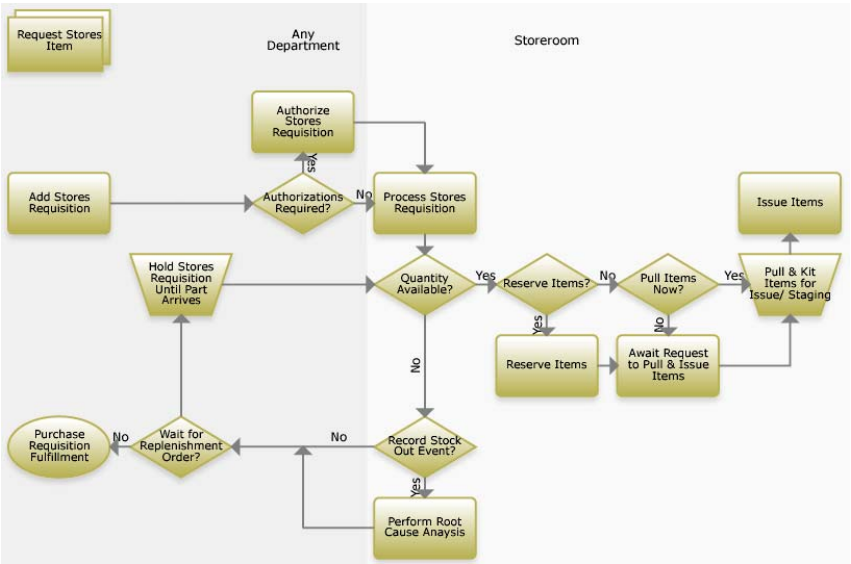
EAM automatically creates a stores requisition if you are:

- Issuing a stock part to a work order, and no stores requisition has been designated
- Auto-issuing a non-stock part from a requisition without a contractor to a work order, and no stores requisition has been designated
- Issuing a PM with master parts lists

### Adding a Stores Requisition Process Flow

Request a stores item following the recommended procedure, and order replenishments if needed.

**Fig. 5.100**
Request Stores Item Process Flow




1 Add a stores requisition to the system.

2 Acquire authorization and process the requisition.

3 If the quantity is not available:

   a Record a stock out event, or

   b Hold the requisition until a replenishment order is available.

4 If the quantity is available, reserve or pull the item.

5 Pull the items and kit for issue or staging.

6 Issue the items.

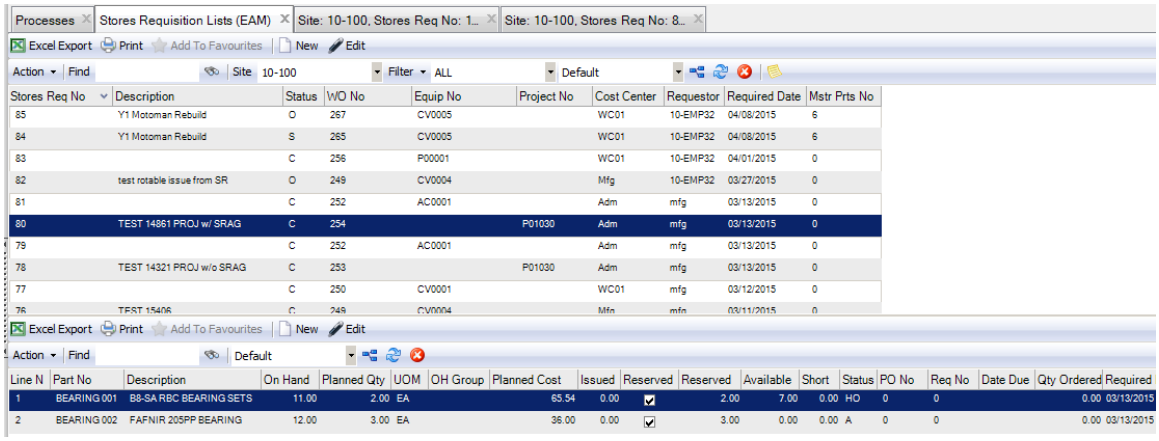
## Business Use Cases

A stores requisition list is a request for the withdrawal of parts from stores or a tool room. A stores requisition list can be created for a work order; in that case, it can be accessed from the Work Order Maintenance screen or from the Inventory module. Otherwise, a requisition to purchase the parts can be created for vendor-sourced lists.

## Stores Requisition List Browse

The Stores Requisition List browse, which is located in Inventory|Stores Requisition Lists, contains an upper browse that displays the stores requisition headers and a lower browse that displays the parts that have been added to the list.

**Fig. 5.101**
Stores Requisition List Browse




## Creating a Stores Requisition List

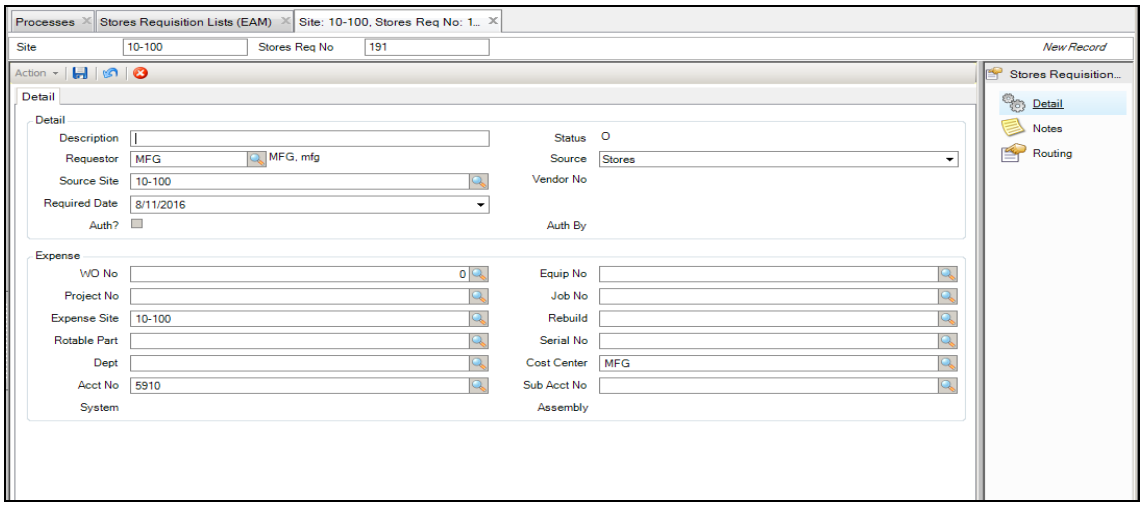
### Create a Stores Requisition List Header

Follow these steps to create a stores requisition list header:

1 Open the Stores Requisition List browse. Click New in the upper browse.

2 A blank Stores Requisition List opens. The system increments the new stores requisition list number and defaults to the current site for the source and expense site data. The requestor defaults to the current user and today's date. Change any of this data if needed.

**Fig. 5.102**
Creating a Stores Requisition List




3 Enter the relevant information in the following fields:

**Detail**

*Description (Detail).* Each parts list has a description. Since you can associate multiple parts lists to a work order, the description helps to quickly identity the task for these parts.

*Status (Detail).* The stores requisition status code and the work order share the work order status validation table.

***Note*** After you issue all parts on the child browse of the stores requisition and the issued quantity equals the planned quantity, EAM automatically changes the status of the stores requisition to C (closed). You can reopen a closed stores requisition. You can change the status of the stores requisition.

*Requestor.* The employee who created the stores requisition list.

*Source.* This field indicates whether to source a stores requisition list internally or from an outside vendor. Options include vendor and stores. The default is stores.

*Source Site.* The site from which to select parts and issue to a stores requisition.

*Vendor No.* This vendor is the source for the parts on the stores requisition list. You can update it only if source is Vendor.

*Required Date.* The required date for the requested parts.

*Auth?* If the stores requisition is authorized, this check box is selected. You can require that stores requisition lists are authorized by setting the Stores Auth? field to All in the More Inventory tab of the Site record. See “Sites: More Inventory Tab” on page 49.

*Auth By.* The ID of the user who approved the stores requisition list.

**Expense**

*WO No.* Associate a work order with the stores requisition list. The stores requisition inherits the work order account structure.

*Equip No.* The equipment associated with the stores requisition list.

*Project No.* Associate a project to a stores requisition list.

*Job No.* If a specific project requires the list of parts associated with the stores requisition, associate the project number. On issue, the parts are expensed correctly to the project. Projects can have multiple jobs. Select the specific job to expense parts on issue if there is an associated project.

*Expense Site.* Defaults to the current site, but you can charge material expenses to another site when parts issue to the stores requisition.

*Rebuild.* Send rebuildable components to this location. Associate a valid rebuild area on the stores requisition. On issue, the parts are directed to the rebuild location.

*Rotable Part.* Select a valid rebuild area to charge material to a rotable part. Identify the rotable part number and specific serial number. Only rotable parts currently in the rebuild area display in the lookup.

*Serial Number.* The serial number of the part with which the work order is associated.

*Dept.* The expense department number issued to the stores requisition list. All parts issued against the stores requisition list charge to the department number on the stores requisition list.

***Note*** If you use the QAD ERP application, there is not a department field associated with the general ledger number. EAM does not send the department code to the QAD ERP application. Most customers use the cost center as a department field.

*Cost Center.* The expense cost center number issued to the stores requisition list. All parts issued against the stores requisition charge to the cost center number on the stores requisition list.

*Acct No.* The expense account number associated with the stores requisition list. All parts issued to the stores requisition charge to the account number on the stores requisition list.

*Sub Acct No.* The expense sub-account number associated with the stores requisition list. All parts issued against the stores requisition charge to the sub-account number on the stores requisition list.

*System.* If the stores requisition is for a piece of equipment, find further usage detail in the system and assembly codes. Codes reference specific locations on specific equipment. They provide an inventory breakdown for cost and where items are used.

*Assembly.* Stores requisitions for a piece of equipment contain more usage detail using the system and assembly codes. Codes reference specific locations on specific equipment. They provide an inventory breakdown for cost and where items are used. Enter a system code before you select an assembly code.

4 Once you have entered your data, click the disc icon to save.

### Adding Notes to the Stores Requisition List

If necessary, you can add any notes to the stores requisition list. To add notes, select the Notes submenu and enter the notes in the field.

***Note*** The Notes submenu is a free-form text box for notes that are for internal use only and are not printed on any documents.

### Adding Parts to a Stores Requisition List–Manually

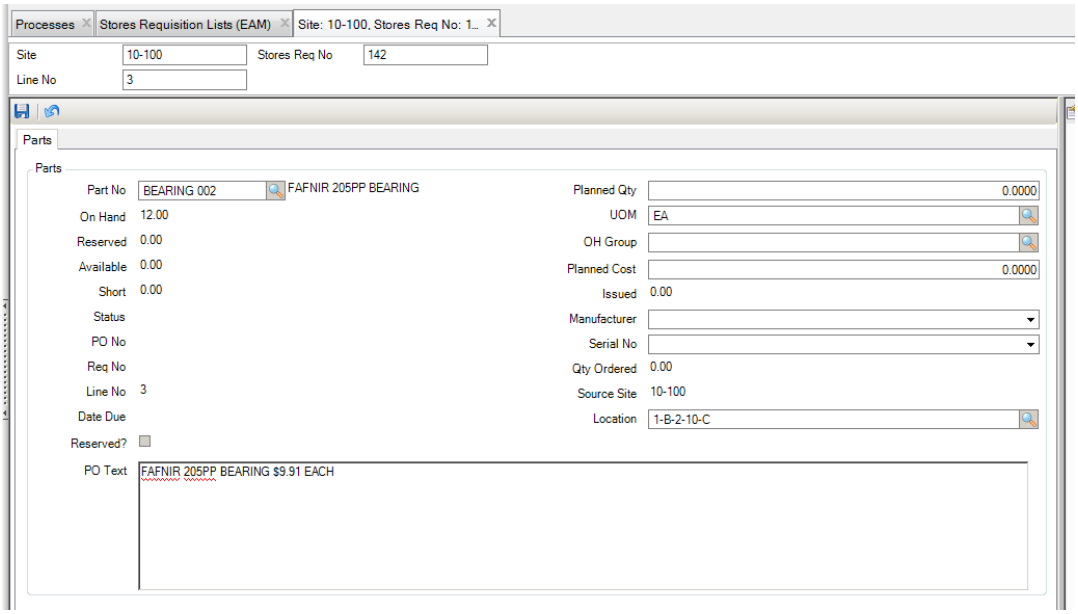
***Note*** In EAM, there are three ways to add parts to a stores requisition list:

- **Manually.** You can add parts individually. Follow the procedure in this section
- **Copy an Equipment BOM.** With the Copy BOM action, you can add multiple parts to a stores requisition list. See “Copy an Equipment BOM into a Stores Requisition List” on page 358.

- **Copy a Master Parts List.** With the Copy Master Parts List action, you can add multiple parts to a stores requisition list. See “Copy a Master Parts List to a Stores Requisition List” on page 359.

1 To manually add parts, highlight the stores requisition list header and click New in the lower browse.

**Fig. 5.103**
Adding Parts to a Stores Requisition List




2 A blank part record opens. Enter the required information in the following fields:

*Part No.* Use the lookup to select the part number to add to the stores requisition list.

*Planned Qty.* Enter the quantity to order in this field. When you enter a planned quantity, EAM calculates the cost and enters it into the Planned Cost field.

*On Hand.* Displays the quantity of this part in inventory.

*UOM.* Displays the part’s unit of measure, which is pulled from the inventory part record. You can also select the UOM using the lookup.

*Reserved.* The quantity of this part reserved for this stores requisition.

*OH Group.* Displays the part’s OH group, which is pulled from the inventory part record. If necessary, you can select the OH group using the lookup.

*Available.* Displays the quantity of this part that is available in inventory.

*Planned Cost.* Displays the planned cost of the part. If necessary, you can enter a new cost in this field.

*Short.* The system calculates this field to show the number of parts reserved but not available in stores. For example, if there are 10 unreserved parts in stores and you attempt to reserve 12, a shortage of 2 is shown because only 10 can be reserved. The number short is updated based upon reserving, unreserving, receiving, and issuing of a particular part. This field is not updateable by the user.

*Issued.* Displays the number of parts that have been issued.

*Status.* Displays the part's status, which is pulled from the inventory part record.

*Manufacturer.* If this is a rotable part, select the part's manufacturer from the drop-down list.

*PO No.* If a PO is created because of this stores requisition list, this field displays the PO number.

*Serial No.* If this is a rotable part, select the part's serial number from the drop-down list.

*Req No.* If a requisition is created because of this stores requisition list, this field displays the requisition number.

*Qty Ordered.* If a PO is created because of this stores requisition list, this field displays the quantity ordered.

*Line No.* If a requisition is created because of this stores requisition list, this field displays the requisition line number for this part.

*Source Site.* Displays the part's source site, which is pulled from the inventory part record.

*Date Due.* If a requisition has been created for this part, this field displays the due date, which is pulled from the requisition.

*Location.* Displays the part's location, which is pulled from the inventory part record.

*Reserved? .* .This check box is selected if parts have been reserved for this stores requisition list. See "Reserve Parts on a Stores Requisition List" on page 360.

*PO Text.* Displays an expanded description, specification, or other data that identifies the part. The purchase order may contain this information, which is pulled from the inventory part record. If necessary, you can enter additional information in this field.

3 After entering the part information, click the Save icon.

### Copy an Equipment BOM into a Stores Requisition List

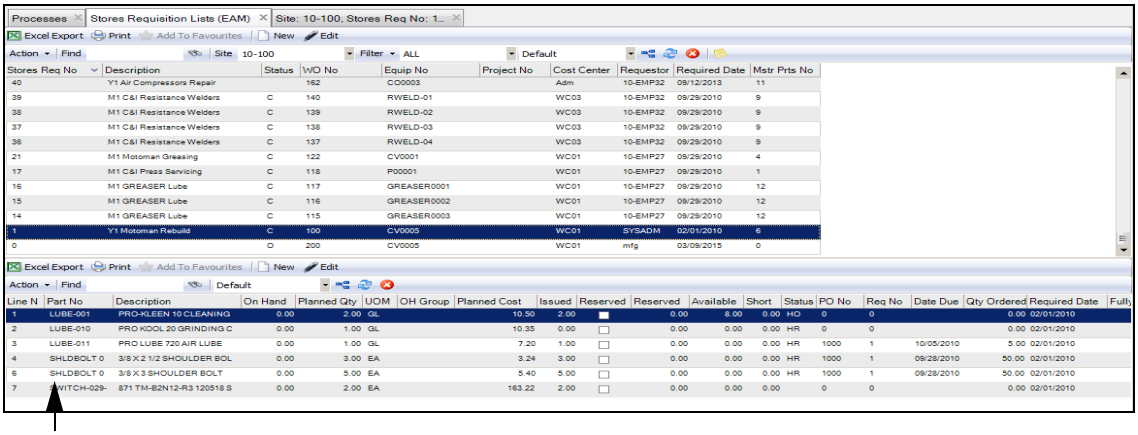
Follow these steps to copy an equipment BOM to a stores requisition list:

1 To add parts on an equipment BOM to a stores requisition list, highlight the stores requisition list and select Copy BOM.

2 A lookup opens, which displays a list of equipment BOMs. Double-click the BOM to add the parts to the stores requisition list.

3 Click the Save icon.

**Fig. 5.104**
Copy an Equipment BOM to a Stores Requisition List




The system adds the parts from the equipment BOM to the stores requisition list

### Copy a Master Parts List to a Stores Requisition List

Follow these steps to copy a master parts list to a stores requisition list:

1. To add parts on a master parts list to a stores requisition list, highlight the stores requisition list and select Copy Master Parts List.
2. A lookup opens, which displays a list of master parts list. Double-click the parts list to add the parts to the stores requisition list.
3. Click the Save icon.

### Print a Stores Requisition List

To print a pick list or a stores requisition list document, open the Stores Requisition List browse and highlight the requisition list header. Select Print Document from the Stores Requisition List Action menu.

## Authorize a Stores Requisition List

To authorize a stores requisition list, open the Stores Requisition Lists browse and highlight the requisition list header. In the upper browse, select Authorize from the Action menu.

If the Authorization action is enabled on the More Inventory tab in General|Business Units|Sites, the system prevents parts from being issued from any stores requisition lists that have not been authorized. See “Sites: More Inventory Tab” on page 49.

The system also allows you to restrict the users who can authorize stores requisition lists in System Administration|Roles|Inventory|Stores Requisition Lists|Authorize. See “Roles” on page 664. When a stores requisition is authorized for the first time, all users in the Stores Requisition Approval Group with E-mail? selected receive an e-mail notification that there is a stores requisition to approve. After one of the users in the group authorizes the requisition, the authorization status shows “approved” and all other users are skipped. To see the user that approved the stores requisition list and others that were skipped, view the Routing submenu.

## Stores Requisition List Activity

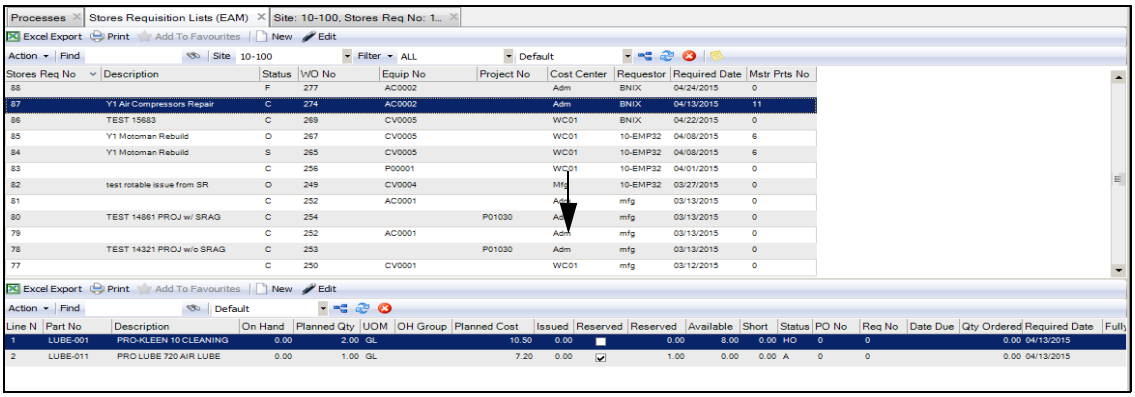
### Reserve Parts on a Stores Requisition List

The Reserve action allows you to hard-reserve available inventory for a specific work order from the scheduled start date. When you reserve a part, EAM checks if there are any available parts in storage, and if so, it reserves and reduces the available quantity by the number requested for that particular part on the work order.

To reserve a part, highlight the part in the lower browse and select Reserve from the Action menu. Once a part has been reserved, the Reserved check box is selected.

To reserve multiple parts, highlight the part records in the lower browse and select Global Reserve from the Action menu.

**Fig. 5.105**
Reserve Parts on a Stores Requisition List




### Unreserve Parts on a Stores Requisition List

The Unreserve action allows you to release the quantity reserved for that part on the work order. When you unreserve a part, EAM releases a part quantity and increases the available amount in inventory, making more parts available for other work orders.

To unreserve a part, highlight the part in the lower browse and select Unreserve from the Action menu. When a part is unreserved, the Reserved check box is cleared.

To unreserve multiple parts, highlight the part records in the lower browse and select Global Unreserve from the Action menu.

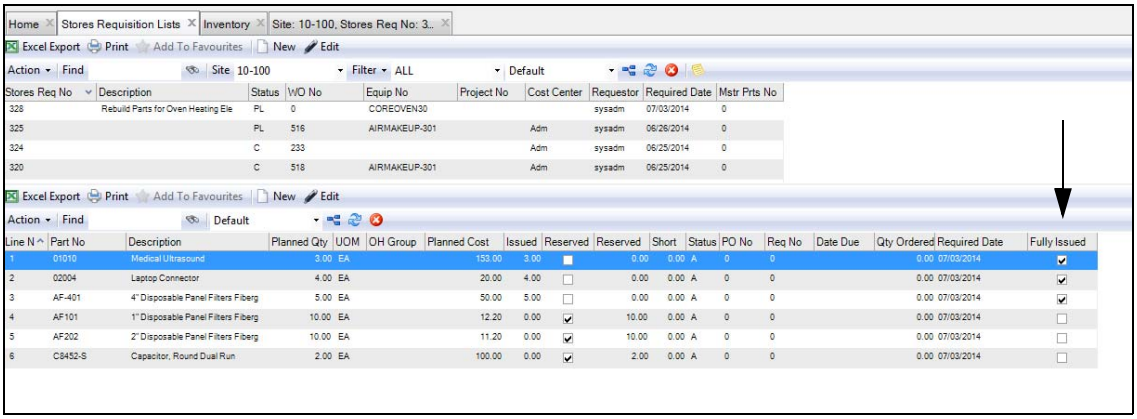
### Issue Parts on a Stores Requisition List

The Issue action allows you to perform a material issue for the designated planned quantity of the part selected. To issue all planned quantities for every line item, use the Global Issue action. Once a part has been issued, the Fully Issued check box is selected.

To issue a part on a stores requisition list, highlight the part in the lower browse and select Issue from the Action menu.

To issue multiple parts, highlight the part records in the lower browse and select Global Issue from the Action menu.

**Fig. 5.106**
Issue Parts on a Stores Requisition List




## Partially Issue Parts on a Stores Requisition List

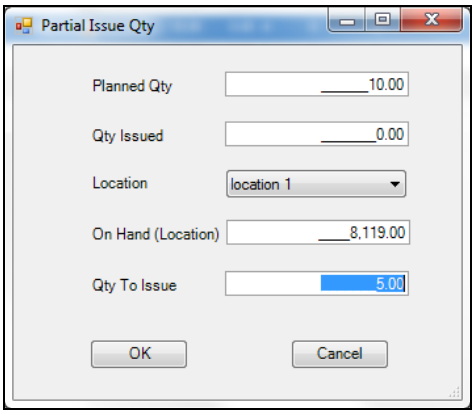
Follow these steps to partially issue a part from a stores requisition list:

1 Open the Stores Requisition Lists browse and highlight the part in the lower browse.

2 Select Partial Issue from the Action menu. The Partial Issue Qty window opens.

3 Enter the quantity to issue in the Qty To Issue field.

**Fig. 5.107**
Partially Issue Parts on a Stores Requisition List




4 Click OK to issue the parts.

## Return Parts on a Stores Requisition List

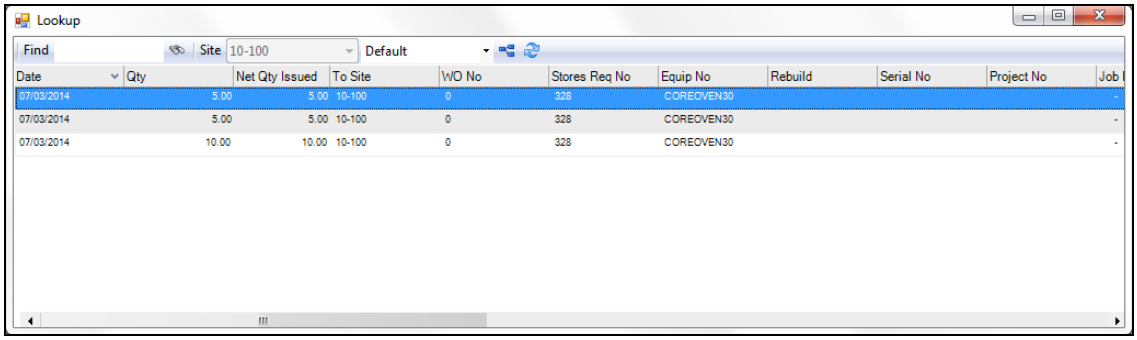
Follow these steps to return parts on a stores requisition list:

1 Open the Stores Requisition Lists browse and highlight the part in the lower browse.

2 Select Returns from the Action menu. A lookup opens displaying the issue lines for the part. Double-click to select the issue line.

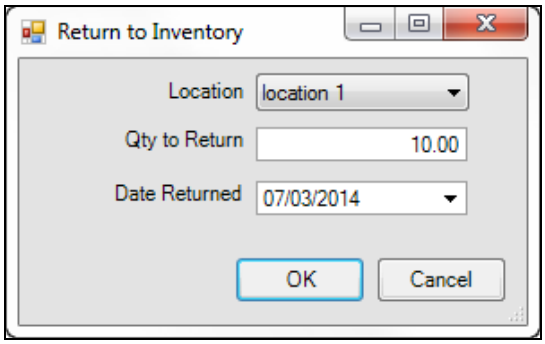
***Note*** If the part was partially issued multiple times, there are multiple lines representing each time the part was issued.

**Fig. 5.108**
Return Parts on a Stores Requisition List



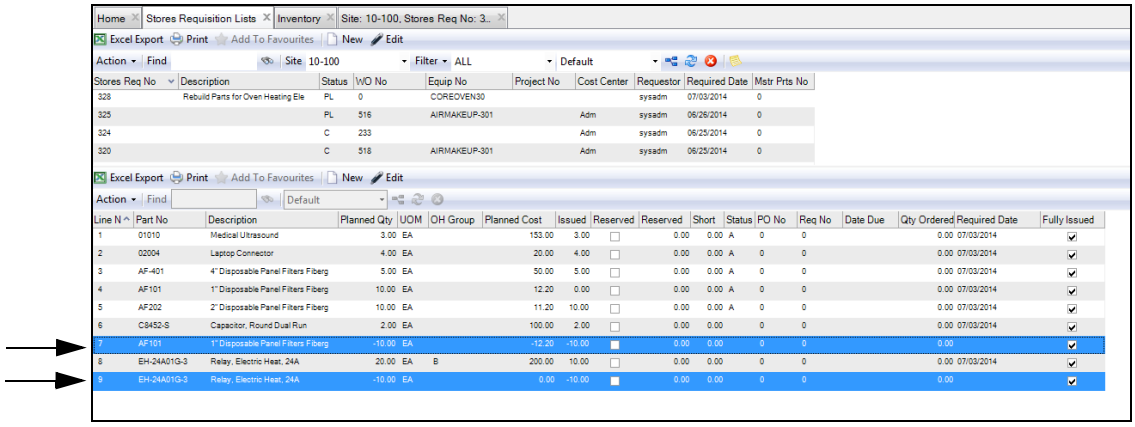

3 The Return to Inventory window opens. Enter the return quantity in the Qty to Return field.

**Fig. 5.109**
Return Parts on a Stores Requisition List




4 Click OK to return the parts to inventory. The system adds lines in the lower browse to reflect any parts that have been returned.

**Fig. 5.110**
Return Parts on a Stores Requisition List



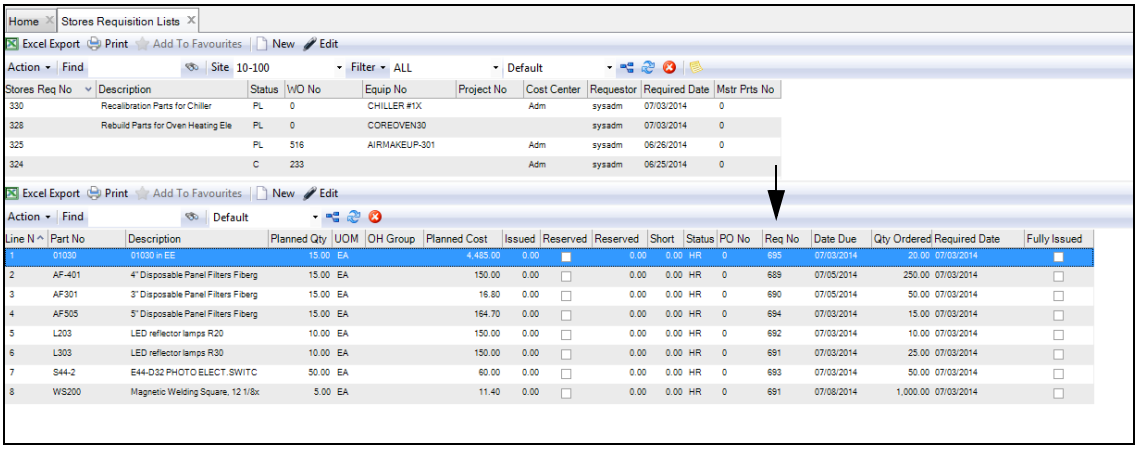

## Create Requisitions for Parts on a Stores Requisition List

### Create Requisition

Follow these steps to create a requisition for a part on a stores requisition list:

1. Open the Stores Requisition Lists browse and highlight the part record in the lower browse.
2. Select Create Requisition from the Action menu.
3. The requisition browse opens displaying the requisition that was created. Double-click to open the requisition so that you can enter additional information. See “Filling Out the Requisition Header” on page 453 and “Add Lines to a Requisition” on page 459.
4. The requisitions that are created are displayed in the Req No field.

**Fig. 5.111**
Create Requisitions for Parts on a Stores Requisition List



Global Create Requisition

Follow these steps to create a requisition for multiple parts on a stores requisition list:

1 Open the Stores Requisition Lists browse and highlight the part records in the lower browse.

2 Select Global Create Requisition from the Action menu.

3 The requisition browse opens, displaying the requisitions that were created. Double-click to open a requisition so that you can enter additional information. See “Filling Out the Requisition Header” on page 453 and “Add Lines to a Requisition” on page 459.

4 The requisitions that are created are displayed in the Req No field.

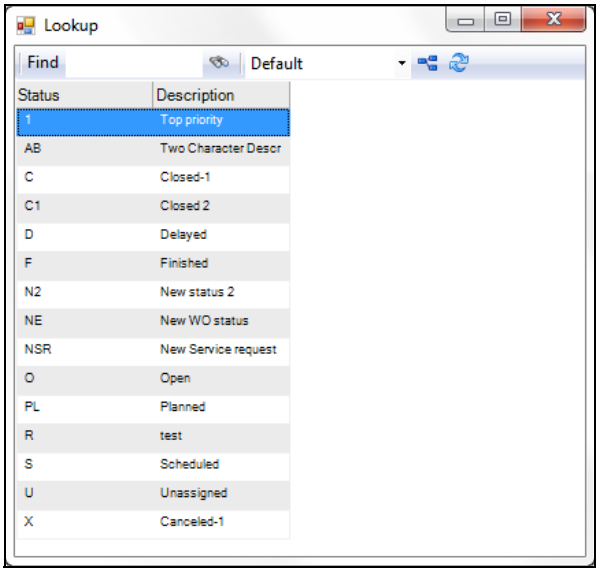
## Edit a Stores Requisition List

### Change the Status of a Stores Requisition List

To change the status of a stores requisition list, highlight the requisition list header and select Change Status from the Action menu. A lookup window opens. Double-click to select the new status from the list.

***Note*** The statuses for stores requisition lists are user-defined. To add or delete a status, see “Work Order Status Codes” on page 104.

**Fig. 5.112**
Change Status of a Stores Requisition List

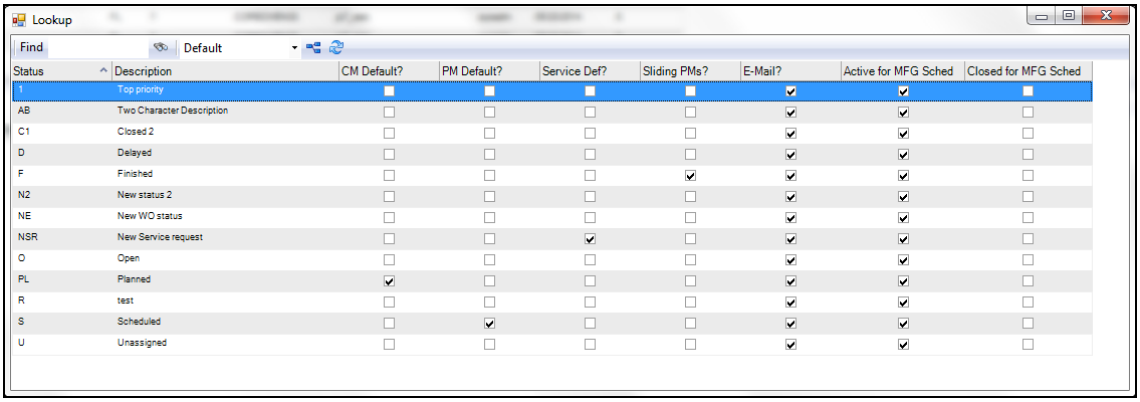



### Reopen a Closed Stores Requisition List

To reopen a closed stores requisition list, select the requisition list header and select Reopen from the Action menu. A lookup window opens, displaying a list of the statuses. Double-click to select the status.

You can set whether stores requisition lists can be reopened by selecting the Open Stores? check box on the Inventory tab in the Domain record. See “Domain: Inventory Tab” on page 35.

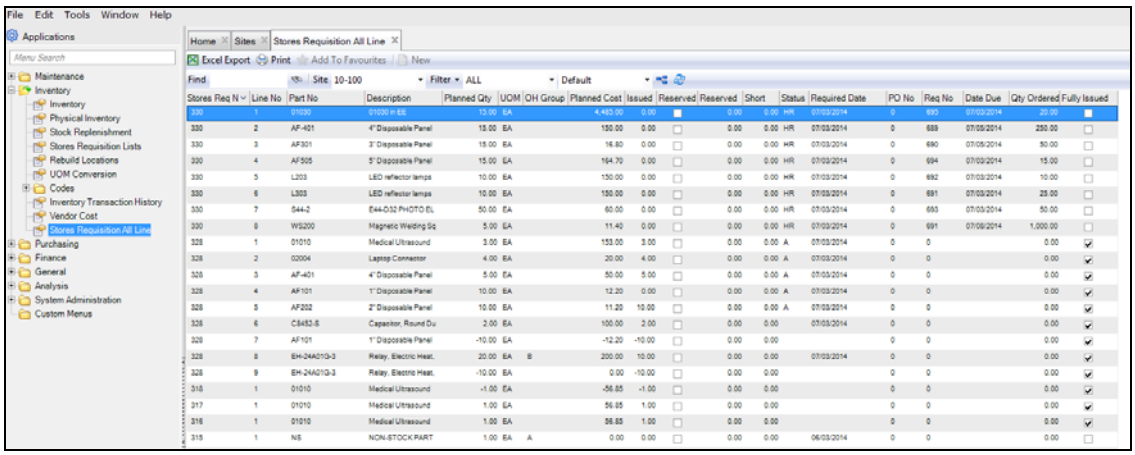
**Fig. 5.113**
Reopen a Stores Requisition List




## View Stores Requisitions All Lines

The Stores Requisition All Lines browse, located in Inventory|Stores Requisition All Lines, displays all the requisition lines that have been created from stores requisition lists.

**Fig. 5.114**
Stores Requisition All Lines Browse




## Stores Requisition Approval Groups

The Stores Requisition Approval Groups browse, which is located in the upper browse of Inventory|Stores Requisitions Approval Groups, displays the groups that have been created to approve stores requisitions. The lower browse displays the names linked to the approval group highlighted in the upper browse.

### Create a Stores Requisition Approval Group

To create a Stores Requisition Approval Group:

1. Click the New button in the toolbar at the top of the upper browse. A new, blank row appears in the upper browse, above any approval groups already in the system.
2. Enter a name and an accompanying description for this new group.
3. Tab off the page to save.
4. Tab back to the Stores Requisition Approval Group page to add users to the newly created group.
5. Highlight the new approval group in the upper browse.
6. Click New in the toolbar of the lower browse. A new, blank row appears in the lower browse.
7. Click the magnifying glass to the right side of the user ID field to display the users that can be added to this approval group.
8. Double-click the user ID you want to add to the group.
9. Leave the E-mail? check box selected if this user should receive e-mails when stores requisitions are issued.
10. Tab off the page to save.
11. Repeat steps 5 through 10 to add additional users to this approval group.

When a stores requisition is authorized for the first time, all users in the Stores Requisition Approval Group with E-mail? selected receive an e-mail notification that there is a stores requisition to approve. After one of the users in the group authorizes the requisition, the routing shows “approved” by that user and shows “skipped” for all other users in the group.

# Update Physical Inventory Count

## Overview

Use the physical inventory module to:

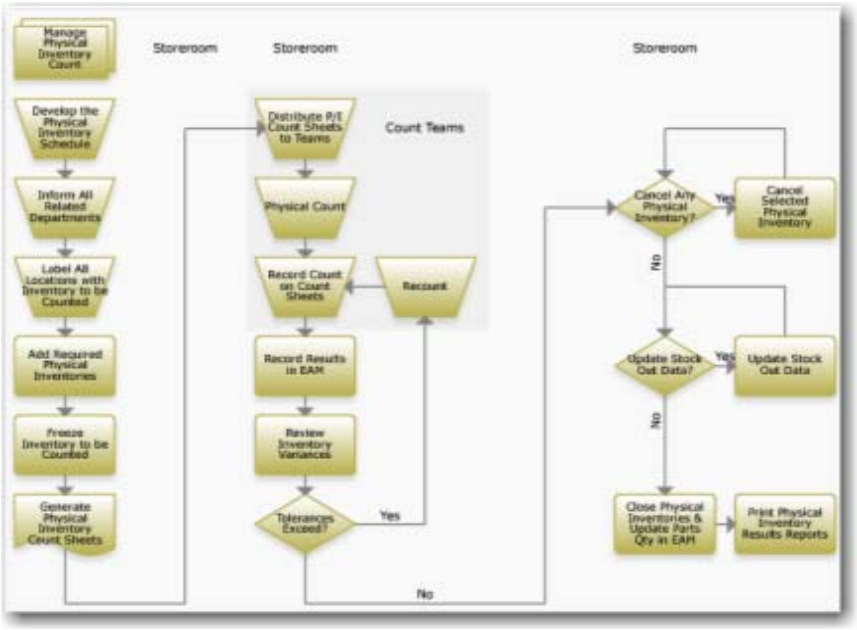
- Pick a group of parts based on user-defined criteria to count and print count sheets.
- Verify the quantity in inventory and enter count results.
- Adjust the on-hand inventory quantity automatically after closing count.

EAM includes active and inactive parts in the physical inventory lists and the physical inventory add lookup.

## Managing Physical Inventory Process Flow

Periodically, count the inventory in your storeroom.

**Fig. 5.115**
Manage Physical Inventory Process Flow




1 Develop the physical inventory schedule and inform all affected departments.

2 Label inventory locations with items to count.

3 Add required physical inventories.

4 Freeze inventory to count.

5 Generate physical inventory count sheets and distribute to teams.

6 Perform the physical count and compare it to records on the count sheets.

7 Record the results in EAM.

8 Review variances. If tolerances are exceeded, perform a recount.

9 Cancel physical inventory that requires cancelation and update stock out data.

10 Close physical inventories and update EAM.

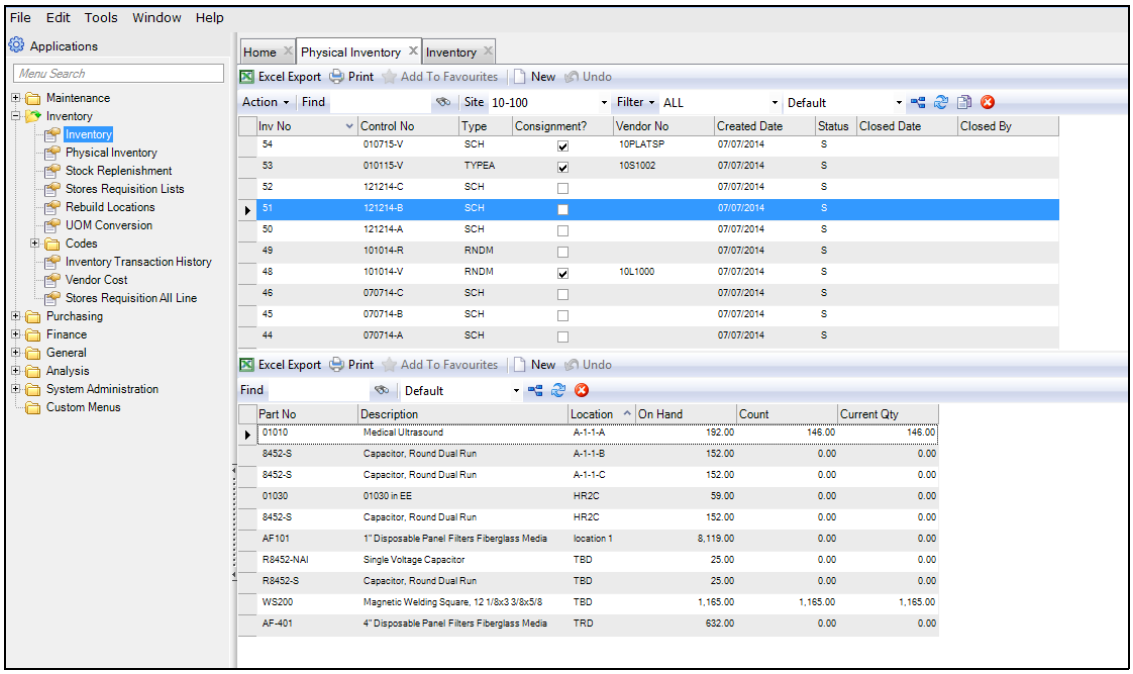
11 Print physical inventory results reports.

## Physical Inventory Browse

The Physical Inventory browse, which is located in Inventory|Physical Inventory, consists of:

- An upper browse, which displays the physical inventory headers
- A lower browse, which displays the parts that have been added to the record

**Fig. 5.116**
Physical Inventory Browse




## Creating a Physical Inventory Record

### Creating a Physical Inventory Header

Follow these steps to create a physical inventory header:

1 Open the Physical Inventory browse. Click New in the upper browse.

2 A blank physical inventory record is created. The system automatically generates a record number.

3 Enter the relevant information in the following fields:

*Control No.* Enter a control number in this field.

*Type.* Select the physical inventory record type using the lookup.

*Consignment?* Select this check box if consignment parts will be added to the physical inventory record

*Vendor No.* if this physical inventory record is used for consignment parts, use the lookup and select the vendor who owns the parts. You cannot select a vendor in this field if the Consignment? check box is not selected.

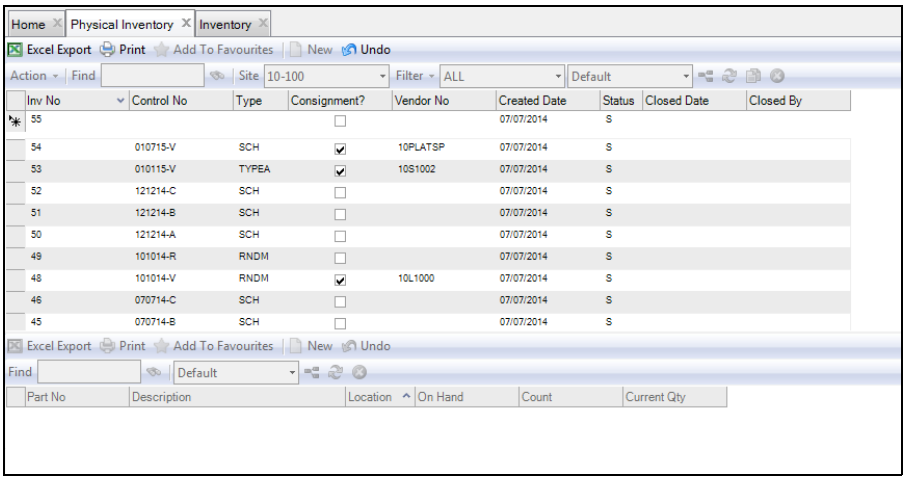
*Created Date.* When the physical inventory record is created, the system automatically enters today's date in this field.

*Status.* When the physical inventory record is created, the system sets the status to S (Scheduled).

*Closed Date.* When a physical inventory record is closed, the system enters the day's date in this field.

*Closed By.* When a user closes a physical inventory record, the system enters the user ID in this field.

**Fig. 5.117**
Creating a Physical Inventory Header




4 Once the information has been entered, press Enter to save.

## Adding Parts to the Physical Inventory Record–Manually

Follow these steps to manually add parts to a physical inventory record:

1 To add a part to a physical inventory record, highlight the record and click New in the lower browse.

2 Select the inventory part using the lookup in the Part No field.

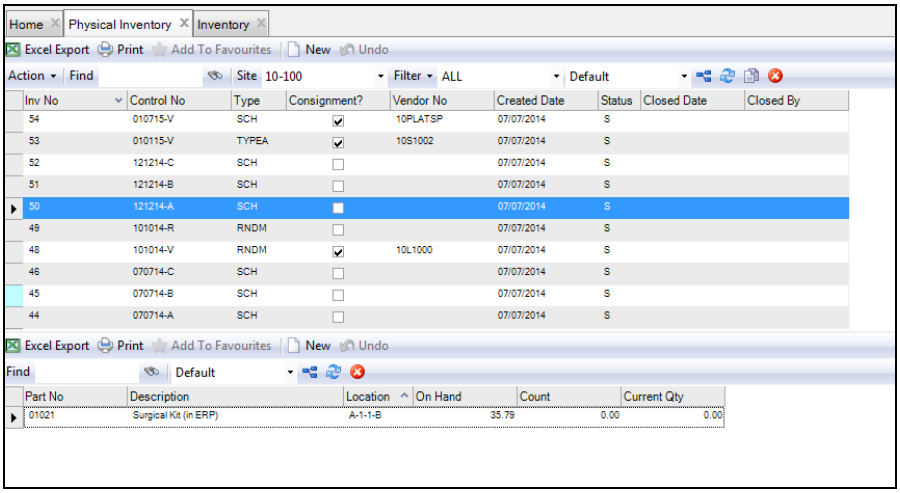
***Note*** You cannot add an inventory part if it is added to another physical inventory record that is currently open.

3 Press Tab or click in the Location field. Select the inventory part location using the lookup.

4 Press Enter to save.

5 Repeat these steps to add additional parts.

**Fig. 5.118**
Adding a Part to a Physical Inventory Record



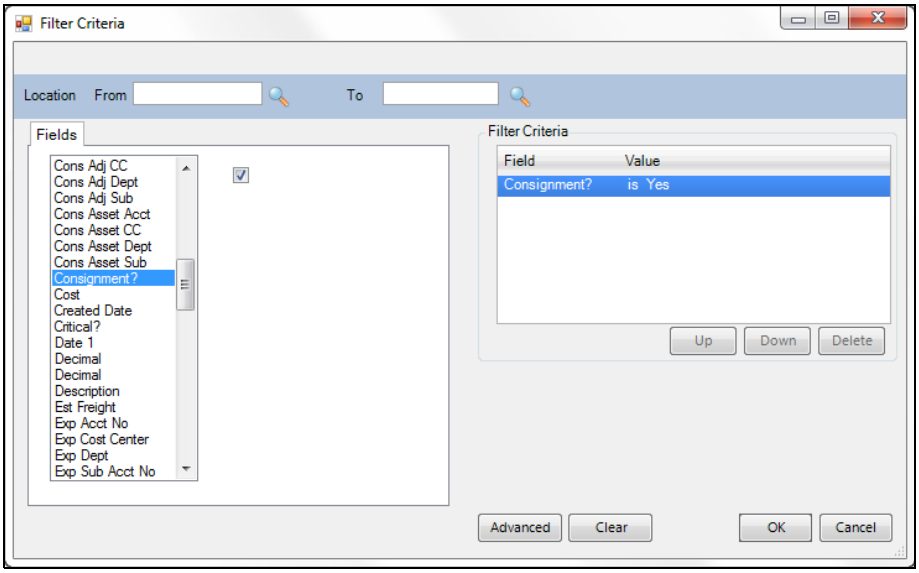

## Adding Multiple Parts to a Physical Inventory Record–Global Add

Follow these steps to add multiple parts to a physical inventory record:

1 To add multiple parts to a physical inventory record, highlight the record and select Global Add from the Action menu.

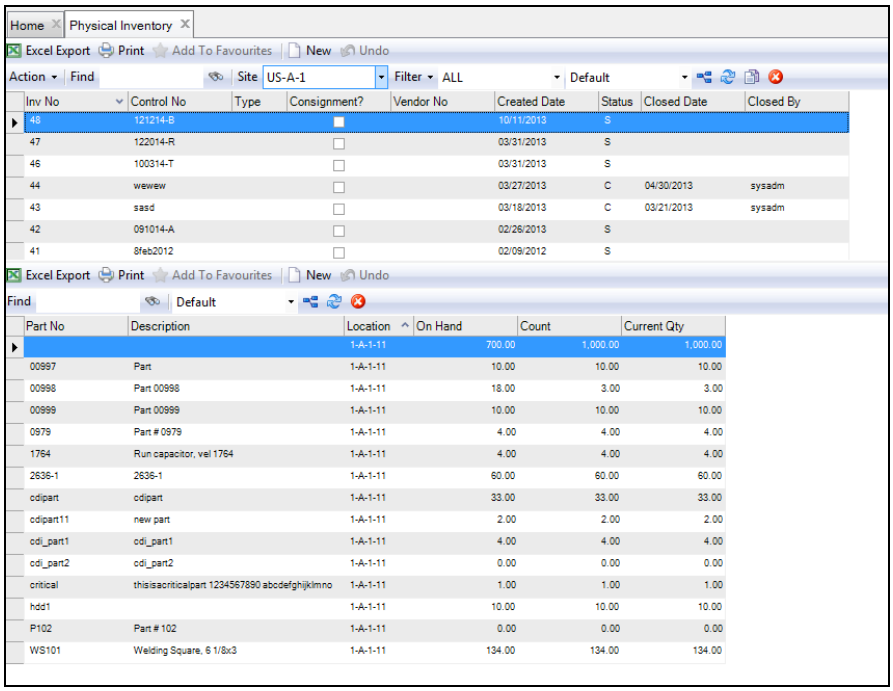
2 A Filter Criteria window allows you to filter for groups of parts. For example, you can filter for consignment parts, for parts in the same location, or for parts that are associated with the same planner, buyer, or vendor. Once you have configured the filter, click OK.

**Fig. 5.119**
Adding Multiple Parts to a Physical Inventory Record




3 The parts that meet the filter criteria are added to the physical inventory record.

**Fig. 5.120**
Adding Parts to a Physical Inventory Record




### Printing a Physical Inventory Record

The Print Document action allows you to print a count sheet for the physical inventory record. To print a physical inventory record, highlight the record and select Print Document from the Action menu.

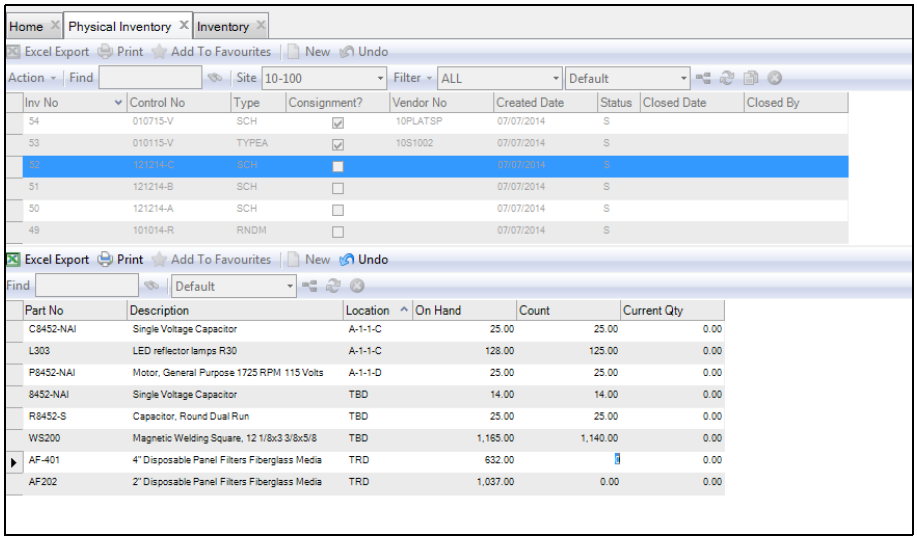
## Simulate Update

The Simulate Update action allows you to simulate the update of the physical count results. Once this action is selected, a report displays for the Physical Inventory selected in the browse. The report allows you to review the proposed updates and make any necessary changes before committing the update by closing the Physical Count.

## Update Count of Physical Inventory List

To update the count, highlight the physical inventory record and select the part record. Enter the count in the Count field. Once the count has been updated for each part on the list, close the physical inventory list. When the physical inventory list is closed, the system adjusts the counted quantities based on what was entered.

**Fig. 5.121**
Update Count of Physical Inventory List




## Change Status–Close or Cancel

When you create a physical inventory list, EAM assigns the Scheduled (S) status to the inventory header record. If necessary, you can close or cancel a physical inventory list by changing the status to the following:

- **Closed (C).** When a physical inventory list is closed, the system adjusts the counted quantities, based on what changed for the part/location. Adjust cost if needed, based on cost structure (LIFO/FIFO, and so on).
- **Canceled (X).** When a physical inventory list is canceled, the system abandons any pending transactions.

To close or cancel a physical inventory list, highlight the inventory header record and select Change Status. Double-click to select Closed (C) or Canceled (X).

Chapter 6

# Finance

This section discusses the following Finance module topics:

***Finance 374***

***Accounting 376***

***Tax 392***

***Overhead 400***

***Groups 404***

***Codes 410***

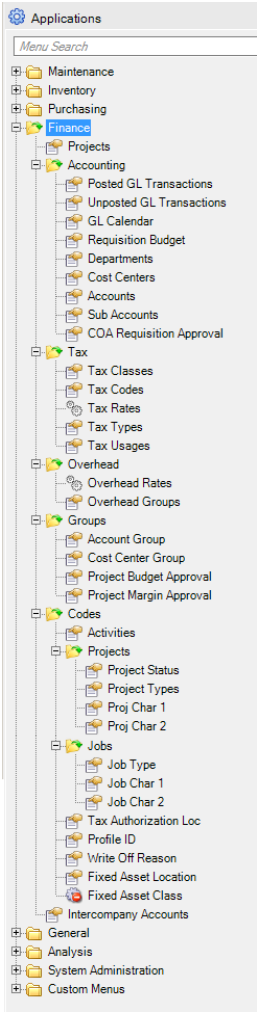
***Intercompany Accounts 414***

# Finance

Use Finance to view, manage, and enter manual journal entry transactions, create and manage GL accounting calendars, access records for accounting periods that have been closed, and create and manage budgets. Finance includes:

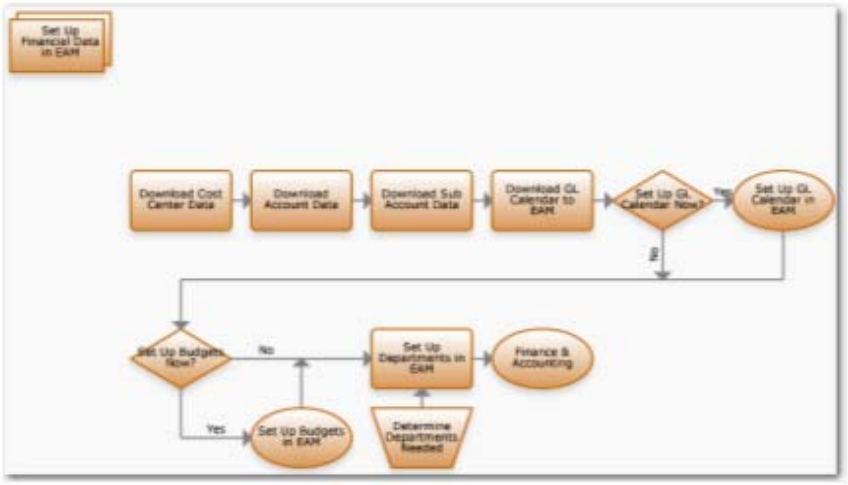
- Accounting
- Tax
- Overhead
- Groups
- Codes
- Intercompany Accounts

**Fig. 6.1**
Finance Menu



## Setting Up Financial Data in EAM

**Fig. 6.2**
Set Up Financial Data Process Flow

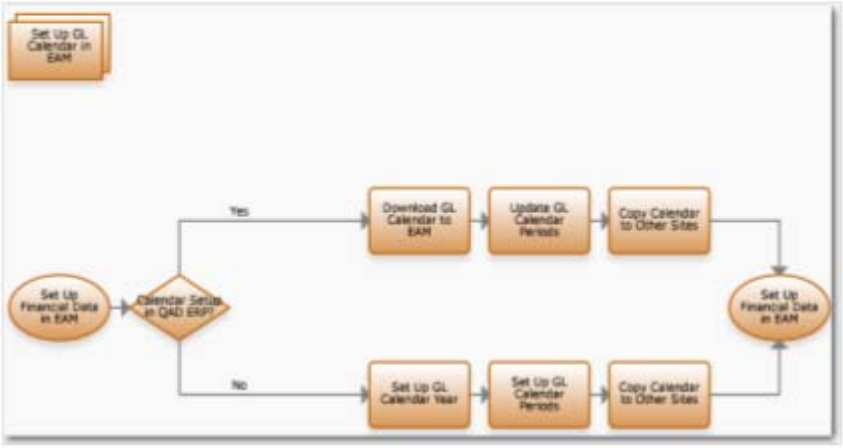



1. Download cost center data from QAD ERP.
2. Download account data from QAD ERP.
3. Download sub-account data from QAD ERP.
4. Download GL calendar from QAD ERP to EAM.
5. Set up the GL calendar in the EAM application.
6. Download budget data from the EAM application.
7. Download budget data from QAD ERP.
8. Determine departments needed and set them up in EAM.

## Setting Up the GL Calendar in EAM

Use this module to set up the GL accounting period calendar. Download the GL calendar from QAD ERP if one is there.

**Fig. 6.3**
Set Up Accounting Calendar Process Flow




1 If the calendar in the QAD ERP application is already set up:

   a Download the GL calendar year.

   b Update the GL calendar period.

   c Copy the calendar to other sites.

2 If QAD ERP does not offer a GL calendar:

   a Set up the GL calendar year.

   b Set up the GL calendar period.

   c Copy the calendar to other sites.

## Accounting

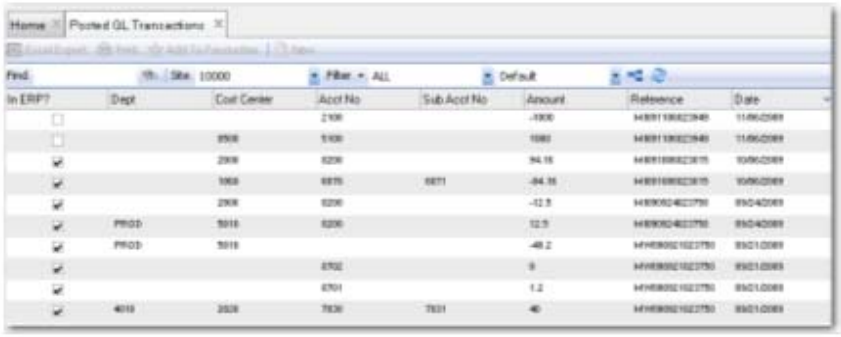
Accounting includes the following:


- “Posted GL Transactions” on page 377
- “Unposted GL Transactions” on page 377
- “GL Calendar” on page 378
- “Requisition Budget” on page 382
- “Departments Browse” on page 385
- “Cost Centers” on page 386
- “Accounts” on page 388
- “Sub-Accounts” on page 389
- “COA Requisition Approval” on page 391

## Posted GL Transactions

Access this browse from Finance|Accounting|Posted GL Transactions. Use it to view posted GL transactions. Organize and display records, access supporting functions, export to Excel, and edit or create new records.

**Fig. 6.4**
Posted GL Transactions Browse

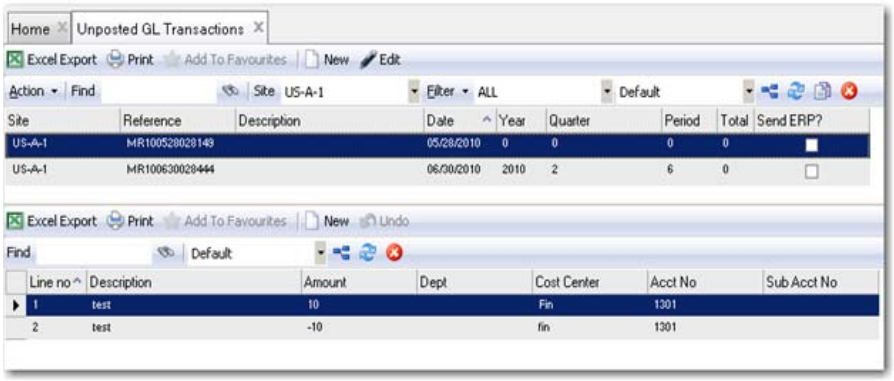



The Posted GL Transactions screen displays all EAM transaction records on the browse after filtering.

## Unposted GL Transactions

Access this browse from Finance|Accounting|Unposted GL Transactions. Use it to enter general ledger transactions into EAM. You can also organize and display records, access supporting functions, export to Excel, and edit or create new records.

**Fig. 6.5**
Unposted GL Transactions: Browse




You can associate the manually created GL with a work order number, equipment number, or project number and job number in EAM. You can indicate whether the manually entered GLs should ultimately post to QAD ERP.

### Unposted GL Transactions Action Menu (upper browse)

Options on this menu depend on context. Access the Action menu from the toolbar or right-click menu.

**Fig. 6.6**
Unposted GL Transactions Action Menu




Post

Select the Post action to post the selected GL record to EAM.

Global Post

Select the Global Post action to post the selected GL records to EAM.

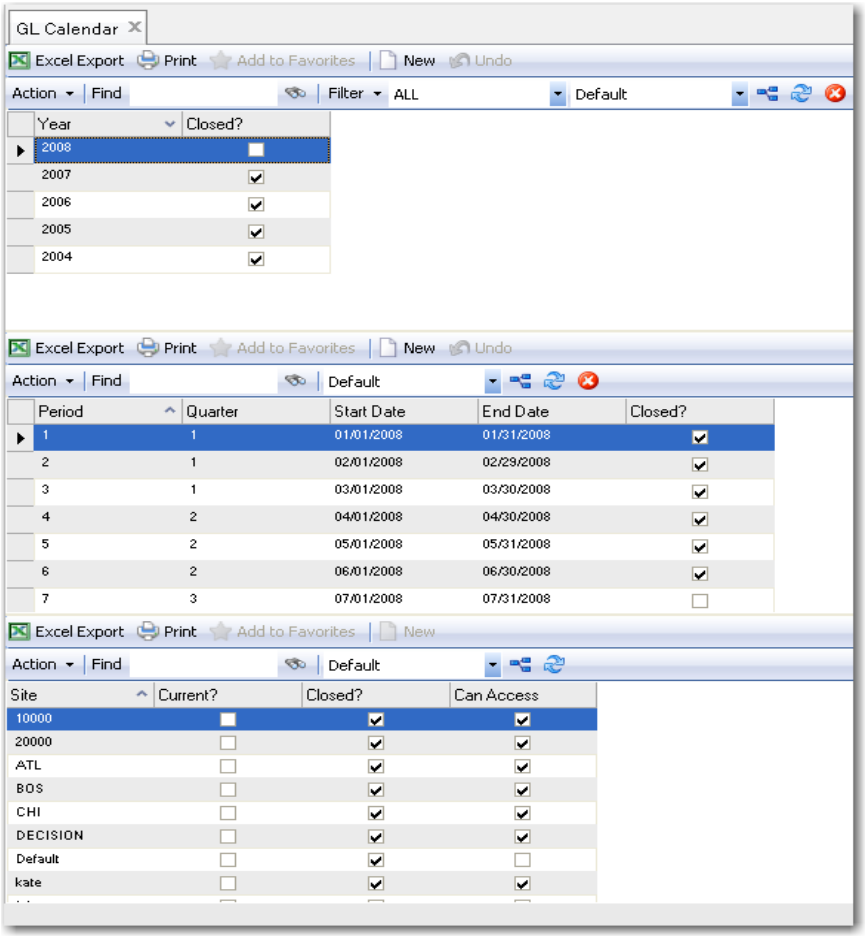
## GL Calendar

Use the GL Calendar to set up and close accounting periods based on year, period, and site.

## GL Calendar Browse

Access this browse from Finance|Accounting|GL Calendar. Use it to set up the GL calendar for a fiscal year, period, and quarter for each site. Organize and display records, access supporting functions, export to Excel, and edit or create new records.

**Fig. 6.7**
Sites Account Calendar Browse




The Sites calendar includes three browses: year, period, and site. The upper browse displays the selected accounting year.

The middle browse contains quarters and periods for the selected accounting year. The first period is number 1, and the system sequentially increments the numbers of subsequent periods. You can manually enter beginning and end dates for each period. If you change an account period's end date, EAM automatically changes the start date of the following period to eliminate gaps or overlaps. Use the Close action to close the selected period.

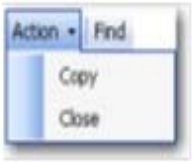
Use the lower browse to close account periods on a site-by-site basis.

***Important*** You cannot reopen closed accounting periods.

## GL Calendar Action Menu (upper browse)

Options on this menu depend on context. Access the Action menu from the toolbar or right-click menu.

**Fig. 6.8**
Sites Account Calendar Action Menu




Copy

Use Copy to copy the selected GL calendar to the new year on the Copy Calendar screen.

**Fig. 6.9**
Copy Calendar




Close

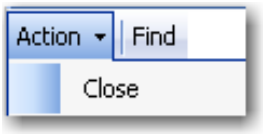
Use Close to end the selected year. EAM notifies you when there are transactions you must send to QAD ERP.

***Note*** You cannot overwrite an existing GL calendar.

## GL Calendar Action Menu (middle browse)

Options on this menu depend on context. Access the Action menu from the toolbar or right-click menu.

**Fig. 6.10**
Sites Account Calendar Action Menu




Close

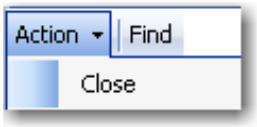
Use Close to end the selected period. EAM notifies you to send transactions to QAD ERP. If you proceed, QAD ERP excludes unsent transactions from period totals.

You may close account periods in certain sites earlier due to time zone differences. Close account periods by site to set specific end-of-period accounting deadlines for individual sites.

## GL Calendar Action Menu (lower browse)

Options on this menu depend on context. Access the Action menu from the toolbar or right-click menu.

**Fig. 6.11**
Sites Account Calendar Action Menu




### Close

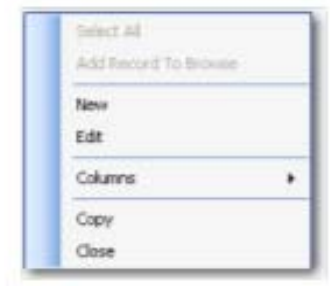
Use this action to close account periods on a site-by-site basis. EAM notifies you to send transactions to QAD ERP. If you proceed, QAD ERP excludes unsent transactions from period totals.

You may close account periods in certain sites earlier due to time zone differences. Close account periods by site to set specific end-of-period accounting deadlines for individual sites.

## GL Calendar Right-Click Menu (All Browse Levels)

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.12**
Sites Account Calendar Right-Click Menu




### New

Use New to open the GL calendar browse to create a record.

### Edit

Use Edit to open the GL calendar browse to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

Copy and Close are options from the Action menu.

## GL Calendar Record Detail

Download any GL calendars from QAD ERP.

### Creating a GL Calendar Site Record

1 Click New to add a blank GL calendar for a fiscal year.

2 Assign the fiscal year.

3 Verify the domain.

### Editing a GL Calendar Site Record

EAM displays downloaded accounting period dates as they have been set up in QAD ERP. On the GL Calendar middle browse, you can edit beginning and end dates for each period. If you change an account period's end date, EAM automatically updates the start date of the following period.

1 Double-click a record from the middle browse to edit begin and end dates for a period.

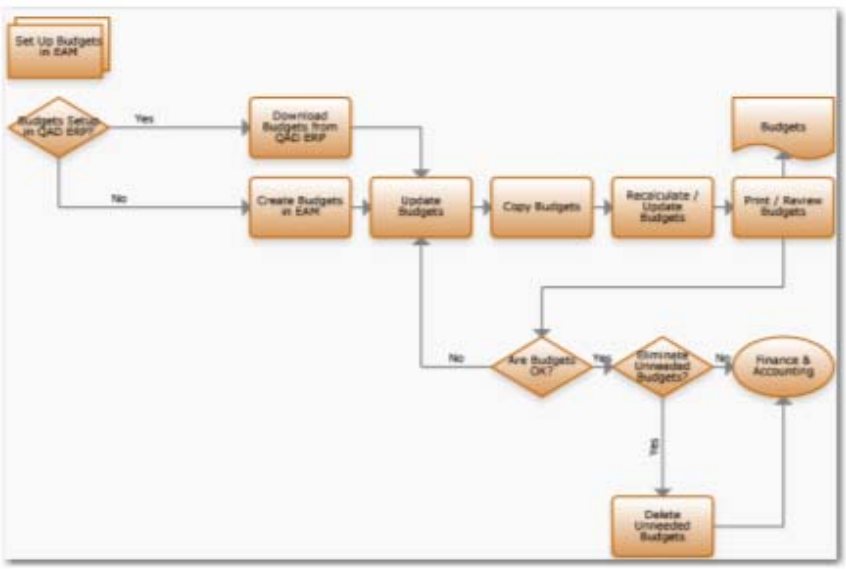
2 Verify or change the dates.

3 Verify the site.

## Requisition Budget

Use this module to plan resource allocations. Enter cost center, account, and sub-account combinations for specific account calendar periods. Download budgets in QAD ERP to EAM.

**Fig. 6.13**
Budgets Process Flow




1 Create budgets in EAM if you are not downloading them from QAD ERP.

2 Update budgets in EAM.

3 Copy budgets in EAM.

4 Recalculate and update budgets in EAM.

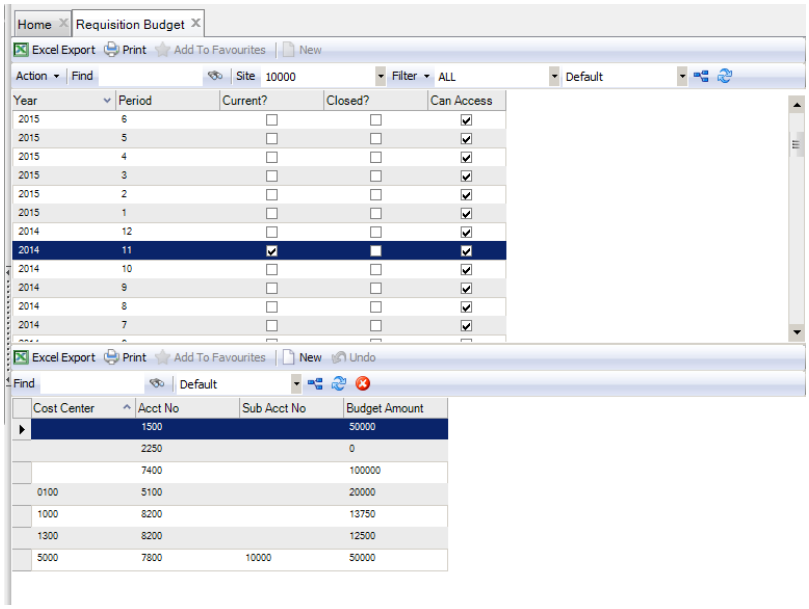
5 Print and review budgets

6 Eliminate unnecessary budgets.

## Requisition Budget Browse

Access this browse from Finance|Accounting|Requisition Budget. Use it to set up budgets for the fiscal year and periods for each site. Organize and display records, access supporting functions, and edit or create new records.

**Fig. 6.14**
Requisition Budget Browse




The Requisition Budget functionality includes two browse levels. The upper browse, which is read only and site specific, can display numerous columns, including the Domain, Site, Year, and Period set up in the GL calendar.

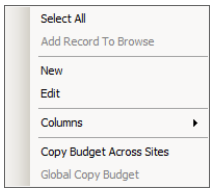
The lower browse contains budget details for cost center, account, and sub-account combinations and the planned spending amount for the selected accounting periods. You can add new records, modify current records, and delete records within the lower browse.

Set up a budget for Period 1 of a year for a site. Copy this budget to all periods (including Period 1) for the year.

### Requisition Budget Right-Click Menu (Upper Browse)

The right-click menu contains administrative functions. You cannot update the upper browse.

**Fig. 6.15**
Requisition Budget Right-Click Menu




### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Copy Budget Across Sites

Copy the single, highlighted requisition budget to other sites within the same entity. You are prompted to confirm the update for a site if the budget already exists in the target site. You can only copy a budget to other sites to which you have access.

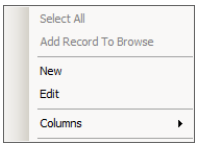
### Global Copy Budget

Copy multiple requisition budgets to other sites within the same entity. You are prompted to confirm updates if the budget already exists in a target site. You can only copy budgets to sites to which you have access.

## Requisition Budget Right-Click Menu (Lower Browse)

The right-click menu contains administrative functions.

**Fig. 6.16**
Requisition Budget Right-Click Menu




### New

Use New to open the budgets browse to create a record.

### Edit

Use Edit to open the budgets browse to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

## Budget Record Detail

### Budget Records for a Site in a Domain (upper browse)

Download budgets from QAD ERP to the QAD EAM application. The display in the upper browse comes from the data set in the GL calendar and is not updateable.

### Creating a Budget Site Record (lower browse)

EAM displays the accounting period's budgets as they have been set up in QAD ERP. On the lower browse, set up or edit a budget for Period 1 of a year for a site. Copy it to all other periods for that year in the site. You can copy this budget to all periods (including Period 1) for the year in a different site.

1. Click New.
2. Enter the cost center, account, and sub-account combination for the highlighted budget period record.
3. Add the budget amount for the cost center, account, and sub-account combination.

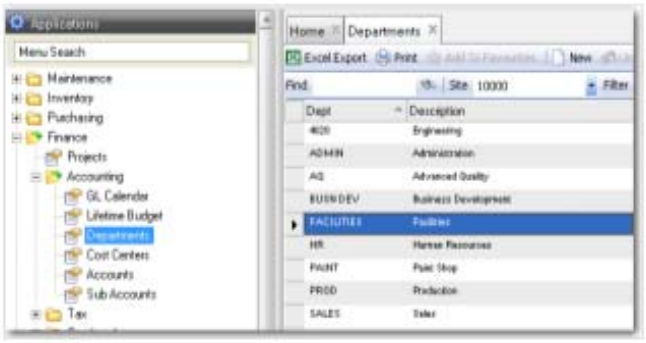
## Editing a Budget Site Record (lower browse)

1. Double-click a record from the lower browse to open the site's budget record detail.
2. Verify or change the budget amount for the cost center, account, and sub-account combination.

## Departments Browse

Access this browse from Finance|Accounting|Departments. Organize and display records, access supporting functions, and edit or create new records. Each site may contain different departments. QAD ERP does not use departments. Departments in EAM do not impact GL transactions in QAD ERP.

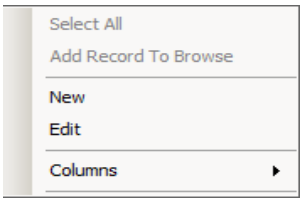
**Fig. 6.17**
Departments Browse




### Departments Right-Click Menu

The right-click menu contains administrative functions.

**Fig. 6.18**
Departments Right-Click Menu




### New

Use New to open the department record detail to create a record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Edit

Use Edit to open the department record detail to edit the selected record.

#### Creating a New Department

1. Click New. EAM assigns the user's current site.
2. Enter a department name and description.

#### Editing a Department

1. Double-click the department to edit.
2. Enter or edit the department description. The system automatically saves the updated description.

## Cost Centers

Use cost centers with the cost center group. Associate a cost center group code with the user ID.

You can use a cost center as a basis of routing approvals for a purchase requisition as well as a stores requisition. You can associate each cost center with an approval group.

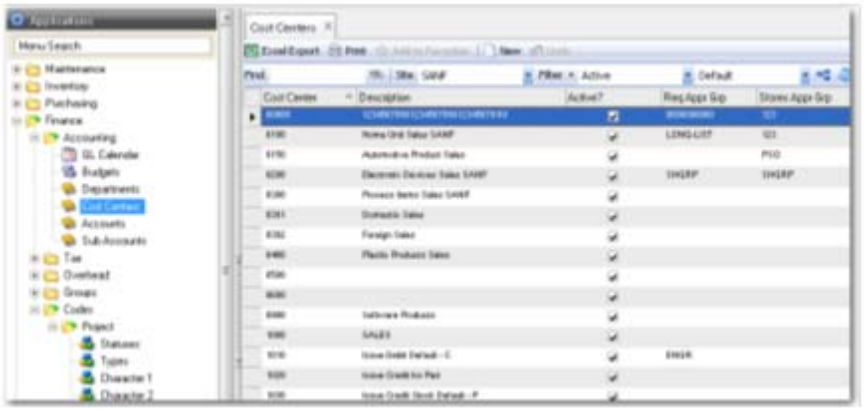
Create and name a cost center group at Finance|Groups|Cost Center Group. Add a list of cost centers to the group on the lower browse.

Use EAM to associate the cost center group with selected user IDs under System Administration|User|User Subdetail|Cost Center Group. You can associate multiple cost center groups with a user ID.

## Cost Centers Browse

Access this browse from Finance|Accounting|Cost Centers. Organize and display records, access supporting functions, and edit or create new records.

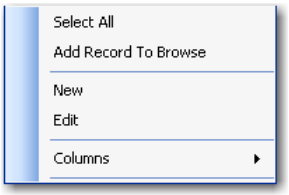
**Fig. 6.19**
Cost Center Browse



### Cost Centers Right-Click Menu

The right-click menu contains administrative functions.

**Fig. 6.20**
Cost Centers Right-Click Menu




#### New

Use New to create a cost center record. Download cost centers from QAD ERP.

#### Edit

Use Edit to edit the selected cost center record.

#### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a New Cost Center

1 Click New.

***Note*** Download cost centers from QAD ERP.

2 Enter a cost center name, description, requisition approval group, and stores approval group.

3 Select the check box if this cost center is currently active.

### Editing a Cost Center

1 Double-click a record from the browse to open the cost center record detail.

2 Enter or edit a cost center name, description, requisition approval group, or stores approval group.

3 Select the check box if this cost center is currently active.

## Accounts

Use accounts to charge labor, issue parts, or purchase materials for a site. Use an account as a basis of routing approvals for a purchase requisition and a stores requisition. Associate each account with an approval group.

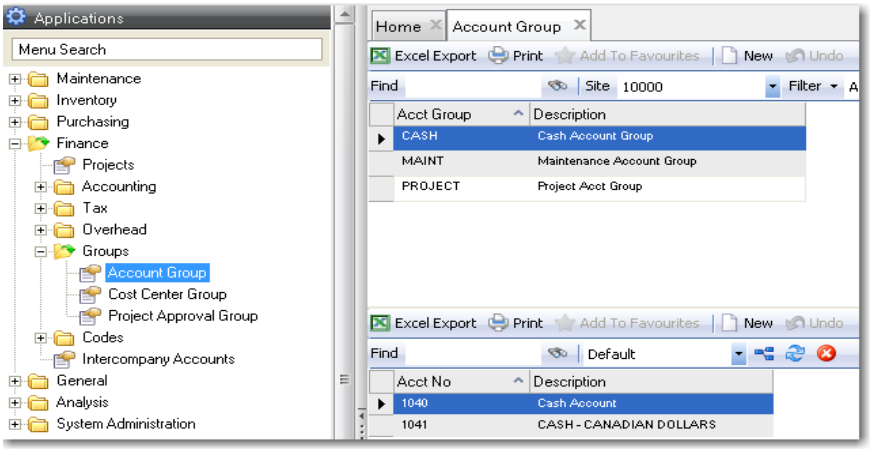
Create and name an account group at Finance|Groups|Account Group. Add a list of account numbers to the group on the lower browse.

Use EAM to associate the account group with any selected user IDs, under System Administration|Users|User Subdetail|Account Group. You can associate multiple account groups with the user ID.

## Account Browse

Access this browse from Finance|Accounting|Accounts. Use it to organize and display records, to access supporting functions, and to edit or create new records.

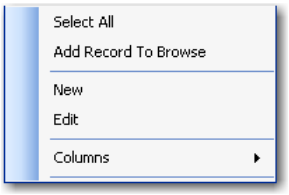
**Fig. 6.21**
Account Browse




### Account Right-Click Menu

The right-click menu contains administrative functions.

Fig. 6.22
Account Right-Click Menu




### Creating a New Account

1 Click New.

***Note*** Download account data from QAD ERP.

2 Enter an account name, description, type, requisition approval group, and stores approval group.

3 Select the check box if this account is currently active.

### Editing an Account

1 Double-click a record from the browse to open the account record detail.

2 Enter or edit an account, description, type, requisition approval group, or stores approval group.

3 Select the check box if this account is currently active.

### Adding a Valid Account Range

1 Click New on the lower browse. Designate the cost centers for which the selected account number is valid.

2 Enter the starting cost center, press Tab, and enter the ending cost center.

3 Repeat as necessary. You can associate multiple cost center ranges to an account number.

***Note*** When you download accounts and cost centers from QAD ERP, the valid account associations for cost centers download as well.

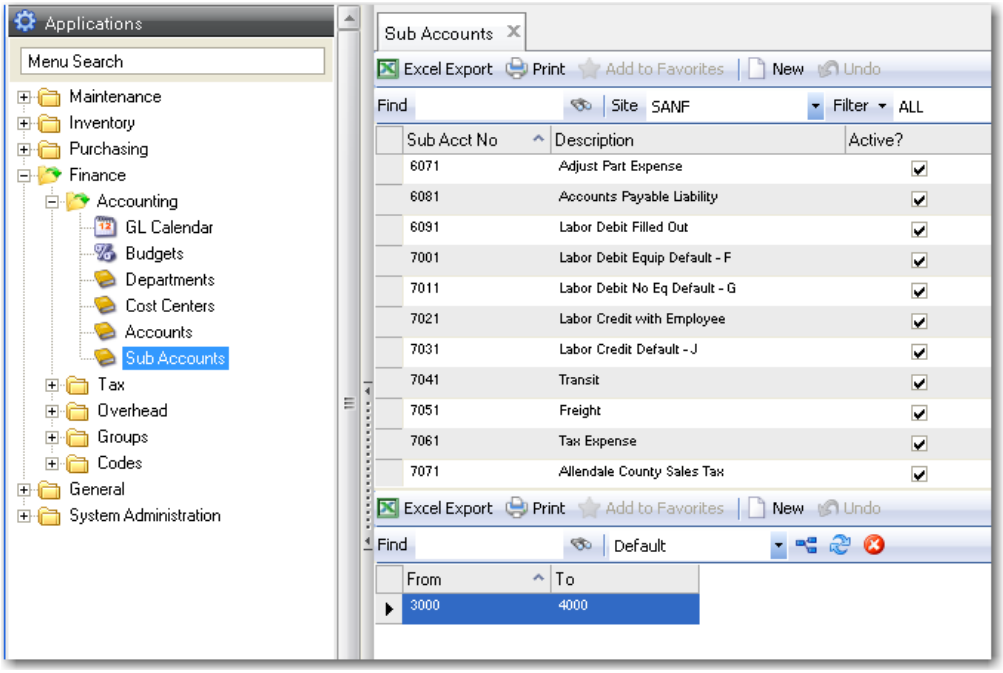
## Sub-Accounts

Use the sub-account download feature to download accounts from QAD ERP into EAM. QAD ERP uses sub-accounts to analyze activity on an account code and to provide detail for financial reporting. Use sub-accounts to report on the financial activity of business units or divisions in an entity.

## Sub Accounts Browse

Access this browse from Finance|Accounting|Sub Accounts. Use it to organize and display records, to access supporting functions, and to edit or create new records.

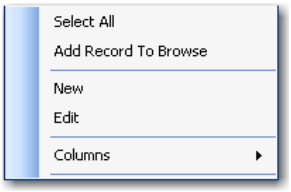
**Fig. 6.23**
Sub Accounts Browse




## Sub Accounts Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.24**
Sub Accounts Right-Click Menu




## Creating a New Sub-account

1. Click New. Download sub-accounts from QAD ERP.
2. Enter a sub-account code and description.
3. Select the check box if this sub-account is currently active.

## Editing a Sub-account

1. Double-click a record from the browse or click Edit to open the sub-account record detail.
2. Enter or edit a sub-account code and description.
3. Select the check box if this sub-account is currently active.

### Adding a Valid Sub-Account Range

1. Click New on the lower browse. Designate the accounts for which the selected sub-account number is valid.
2. Enter the starting account, press Tab, and enter the ending account.
3. Repeat as necessary. You can associate multiple account ranges to a sub-account number.

***Note*** When you download accounts and sub-accounts from QAD ERP, the valid account associations for sub-accounts download as well.

## COA Requisition Approval

Use Chart of Accounts (COA) Requisition Approval as a basis of routing approvals for a purchase requisition by associating a specific cost center or sub-account, or cost center and sub-account combination with an approval group.

COA requisition approval uses the following logic:

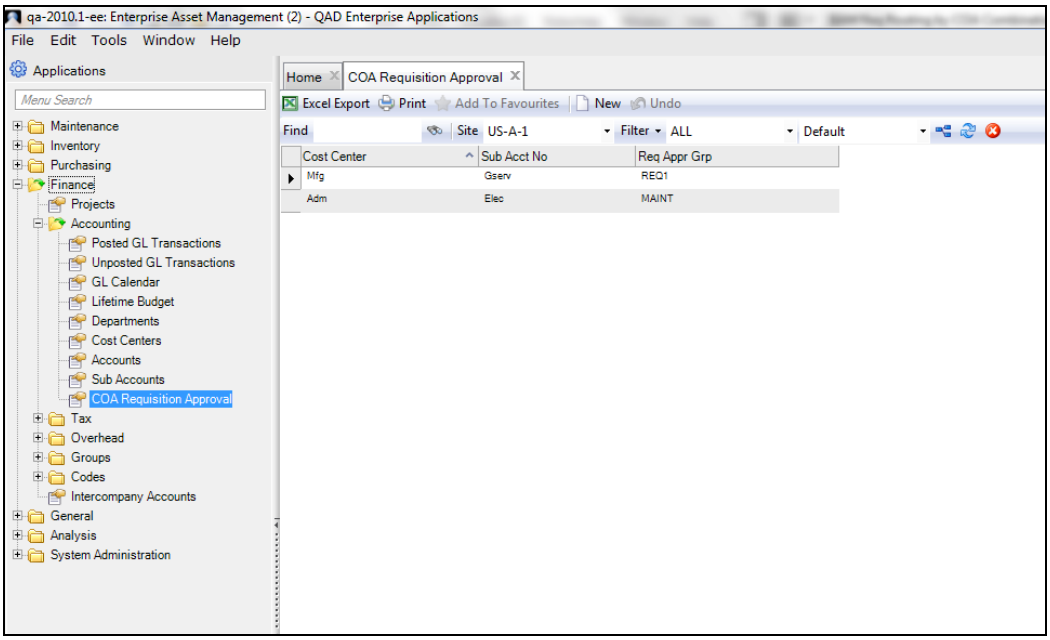
Before the system checks the Use Hierarchy? setting in the site record, the system checks if the specific cost center or sub-account, or cost center and sub-account combination matches the combination in a COA requisition approval record.

- If a combination is found, the requisition is routed to the requisition approval group specified in the COA requisition approval record.
- If a combination is not found, the system checks the Use Hierarchy? setting. For more information about Use Hierarchy?, see Chapter 3, “Sites: Authorization Options Tab,” on page 54.

Follow these steps to create a COA requisition approval record:

1. Open the COA Requisition Approval browse in Finance|Accounting|COA Requisition Approval.
2. Click New.
3. Use the lookups in the Cost Center and Sub Acct No fields to select the cost center or sub-account or cost center and sub-account combination
4. Use the lookup in the Req Appr Grp field to select the requisition approval group to which the requisition is routed when the cost center or sub-account or cost center and sub-account combination is used.
5. Press Enter to save.

**Fig. 6.25**
COA Requisition Approval




# Tax

Global Tax Management (GTM) in QAD ERP allows multinational enterprises to calculate taxes on business transactions. The types of taxes, the formulas used to calculate them, and the times at which taxes are assessed often vary considerably between countries. GTM can process taxes for multiple countries within the same database.

EAM always calculates its own taxes and has no concept of a tax environment. EAM Tax Management includes tax classes, tax codes, tax rates, and tax types. These data items can depend on one another, and most are based on tax laws relevant to the corporation and location.

## Setting Up Tax Structures in EAM

Tax elements are specified in the following EAM sections:

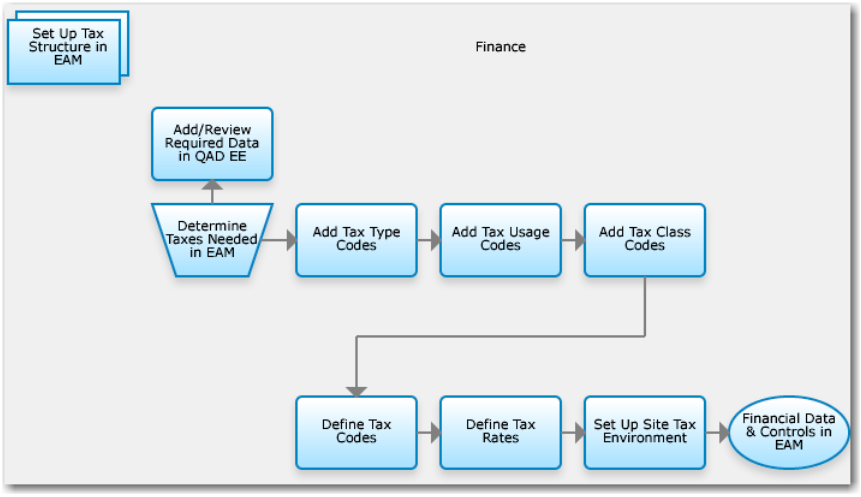
- Project
- Vendor
- Part
- Site
- Ship to

Taxes default onto purchase transactions in the following order:

- Project on requisition
- Part on requisition
- Vendor on requisition
- Ship to from site

See “Tax” on page 490 for detailed information on this hierarchy.

**Fig. 6.26**
Set Up Tax Structure in EAM Process Flow




1. Enter and review required data in QAD ERP.
2. Determine taxes needed in EAM.
3. Add tax type codes.
4. Add tax usage codes.
5. Add tax class codes.
6. Define tax codes.
7. Define tax rates.
8. Define project tax definitions on the Project General tab.
9. Record part tax definitions on the Inventory Codes tab.
10. Record vendor tax definitions on the Vendor Codes tab
11. Record requisition tax definitions on the Requisitions Expense tab.
12. Set up the site tax environment.

## Tax Classes

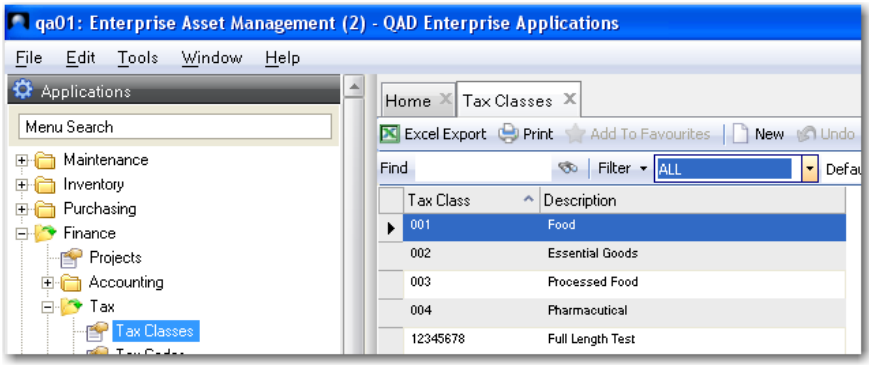
Use this table to create and modify tax class codes. Tax class codes track a class of people or items. A tax class can represent a customer, supplier, or item. In some cases, tax law specifies that the tax applies based on tax class. In QAD ERP, the tax class determines the tax rate for tax types in the set of tax types for related transactions.

***Note*** In EAM, tax class is associated with a tax rate.

## Tax Classes Browse

Access this browse from Finance|Tax|Tax Classes. Organize and display records, access supporting functions, and edit or create new records.

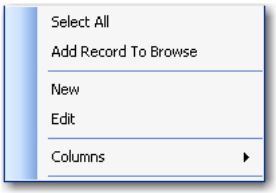
**Fig. 6.27**
Tax Classes Browse




### Tax Classes Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.28**
Tax Class Right-Click Menu




### Creating a New Tax Class

1. Click New.
2. Enter a tax class name (maximum of three characters) and description.

### Editing a Tax Class

1. Double-click a record from the browse or click Edit to open the tax class record detail.
2. Enter or edit a tax class description.

## Tax Codes

A tax code specifies the tax types that apply to a particular taxable purchase.

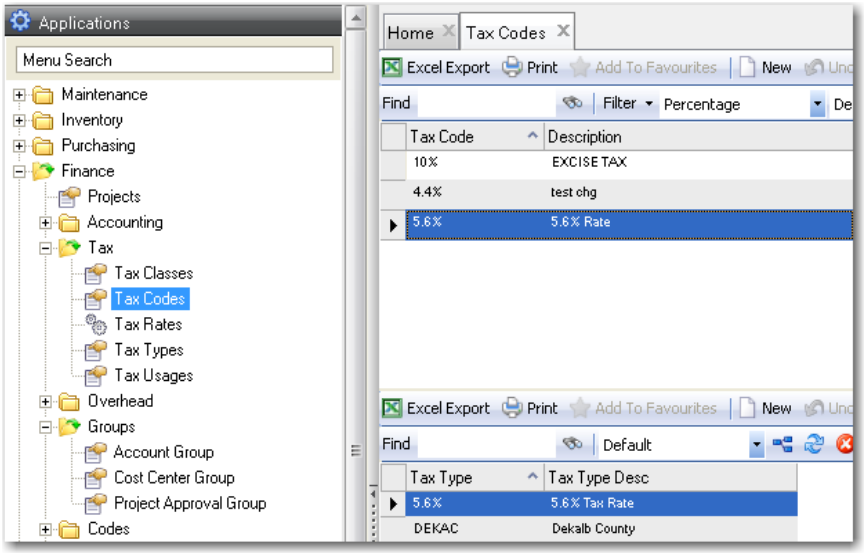
Tax types are individually associated or grouped under a tax code.

When you specify a tax code on a purchase transaction, EAM validates associated tax types against rates that include those types, as well as any tax class or usage associated with the purchase.

## Tax Codes Browse

Access this browse from Finance|Tax|Tax Codes. Use it to organize and display records, to access supporting functions, and to edit or create new records.

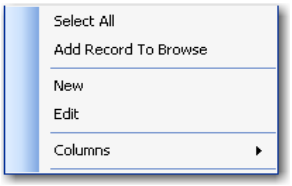
**Fig. 6.29**
Tax Codes Browse




### Tax Codes Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.30**
Tax Codes Right-Click Menu




New

Use New to open the tax code record detail to create a record.

Edit

Use Edit to open the tax code record detail to edit the selected record.

Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a New Tax Code

1 Click New.

2 Enter a tax code and description.

3 Click New on the lower browse and add one or more tax types.

### Editing a Tax Code

1 Double-click a record from the browse or click Edit to open the tax code record detail.

2 Enter or edit the tax code description.

## Tax Rates

Use a tax rate to define a specific tax rate percentage. Each tax rate must have an associated tax type. Associate a tax class or usage code with a rate code to identify a specific rate percentage.

The tax rate defines tax accrual.

During a taxed purchase transaction, EAM begins the tax calculation by validating the tax code on the requisition. EAM validates each associated tax type code. It matches them with the applicable tax rate. If tax type codes are combined with the specified class or usage codes on a tax rate, the system adds those applicable percentages to the tax calculation.

The combination of tax type, tax class, and tax usage determines the tax rate in EAM.

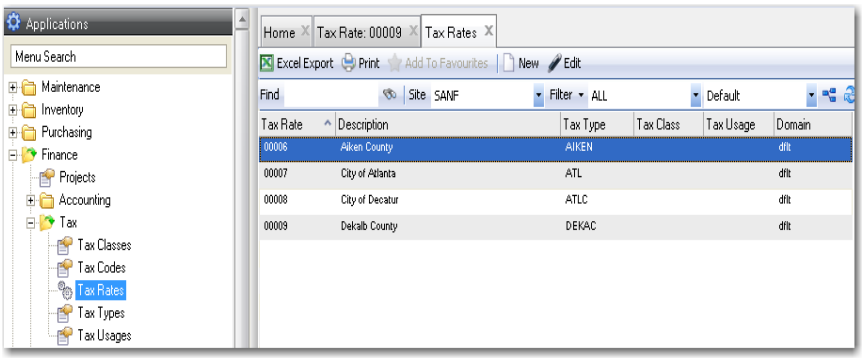
*Tax Type + Tax Class + Tax Usage = Tax Rate*

***Note*** Tax class and tax usage are not required. The tax type can define the tax rate.

## Tax Rates Browse

Access this browse from Finance|Tax|Tax Rates. Use it to organize and display records, to access supporting functions, and to edit or create new records.

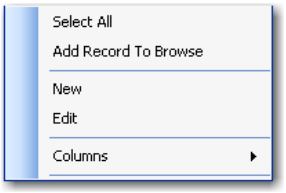
**Fig. 6.31**
Tax Rates Browse




### Tax Rate Maintenance Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.32**
Tax Rates Right-Click Menu




### New

Use New to open the tax rate record detail to create a record.

### Edit

Use Edit to open the tax rate record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a New Tax Rate

1. Click New.
2. Enter a tax rate, description, type, class, usage, and other relevant information.

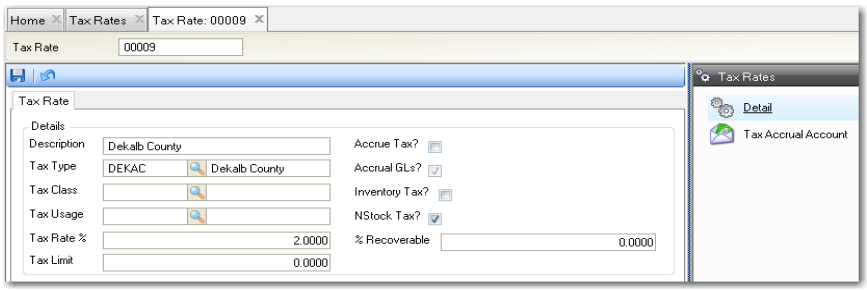
### Editing a Tax Rate Record

1. Double-click a record from the browse or click Edit to open the tax rate record detail.
2. Enter or edit a tax rate description, type, class, usage, or other relevant information.

## Tax Rate Record Detail

The record detail contains all information about this tax rate. Assign a tax rate code, enter other tax elements previously established, set limits for this rate, and select variables unique to this rate.

**Fig. 6.33**
Tax Rates Browse




*Tax Rate.* Enter the code to define a tax percentage based on tax type, and optionally combine with a tax class and tax usage.

*(Tax Rate) Description.* A text description of the tax rate. Enter meaningful text to identify the tax rate.

*Tax Type.* Enter the tax type code. A tax type is associated with a specific tax rate, alone or with a tax class and tax usage. If there are various tax class and tax usage codes to include in the calculation, you can include the same tax type in multiple tax rates.

*Tax Class.* This code represents a customer, supplier, or item. Use this code to track a class of people or items.

*Tax Usage.* This code represents the operation type or how the purchased items are used.

*Tax Rate%.* This field contains the percent of tax charged on receipts of goods upon close and receipt of the PO.

*% Recoverable.* Enter a percentage if this tax rate permits you to recover some of the entire purchase tax amount.

*Tax Limit.* This field contains the upper limit on the taxable amount. EAM automatically ceases to include this tax when you reach that limit. Set up a tax limit only when the law stipulates a ceiling on the cumulative total.

*Accrue Tax?* Select this check box if the amount of tax for this tax rate should be accrued instead of paid to the vendor.

*Accrue G/L?* Select this check box if you create GL transactions for the accrual of the tax upon receipt in EAM. Use it when the Accounts Payable department wants to calculate the accrued amount of tax based on actual invoices.

*Inventory Tax?* Select this check box if you want the tax on stock items to go to the cost of the inventory item and include it when the part is issued. Do not select it if you want the tax on a stock item to go to a tax expense account.

*Non Stock Tax?* Select this check box if you want the tax on non-stock items to go to a tax expense account.

## Tax Types

Tax types are the building blocks of tax codes. A tax type represents the tax definition for a region (state, county, city, and so on). EAM groups tax types under a tax code. They apply to all domains in the database. In QAD ERP, tax types are individually calculated and reported as regional taxes or tax exemptions. They apply to all domains in the database. Some samples are Canadian PST/GST, California sales tax, and federal excise tax. On transactions, the system calculates taxes for line items based on the tax types specified.

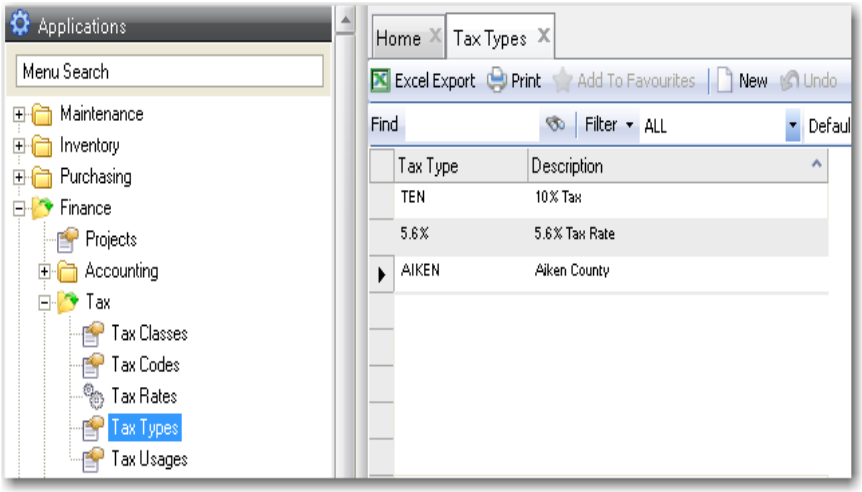
You can create as many tax types and as many tax codes as you need.

When you specify a tax code on a purchase transaction, EAM validates associated tax types against rates that include those types, as well as any tax class or usage associated with the purchase.

## Tax Types Browse

Access this browse from Finance|Tax|Tax Types. Use it to organize and display records, to access supporting functions, and to edit or create new records.

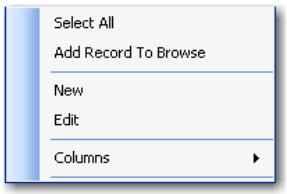
**Fig. 6.34**
Tax Types Browse




### Tax Types Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.35**
Tax Types Right-Click Menu




#### New

Use New to open the tax type record detail to create a record.

#### Edit

Use Edit to open the tax type record detail to edit the selected record.

#### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a New Tax Type

1 Click New.

2 Enter a tax type (maximum of 16 characters) and description.

### Editing a Tax Type

1 Double-click a record from the browse or click Edit to open the tax type record detail.

2 Enter or edit a tax type description.

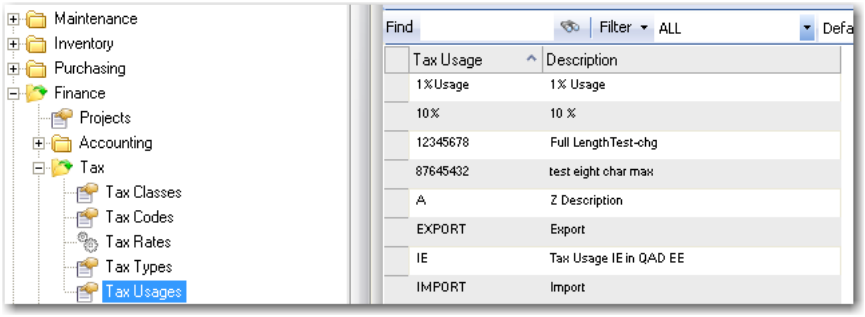
## Tax Usages

You can create as many tax usages as you need.

## Tax Usages Browse

Access this browse from Finance|Tax|Tax Usages. Use it to organize and display records, to access supporting functions, and to edit or create new records.

**Fig. 6.36**
Tax Usages Browse




# Overhead

Overhead refers to a continuing cost of operating a business. Overhead usually groups expenses that are necessary to the continued functioning of the business, but that do not directly generate profits, such as accounting, advertising, depreciation, indirect labor, insurance, interest, legal fees, rent, repairs, supplies, taxes, telephone, travel, and utilities.

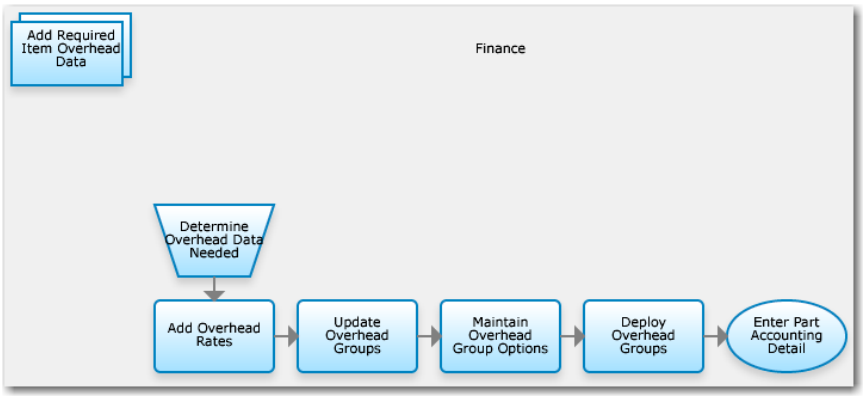
## Overhead Rates

Set up overhead rates to associate with overhead groups. Overhead rates and groups add costs to a transaction to account for an organization’s overhead expenses.

## Overhead Rates

Set up overhead rates to associate with overhead groups. Overhead rates and groups add costs to a transaction to account for an organization’s overhead expenses.

**Fig. 6.37**
Add Overhead Rates Process Flow




1 Determine overhead rates data needed.

2 Add overhead rates.

3 Update overhead groups.

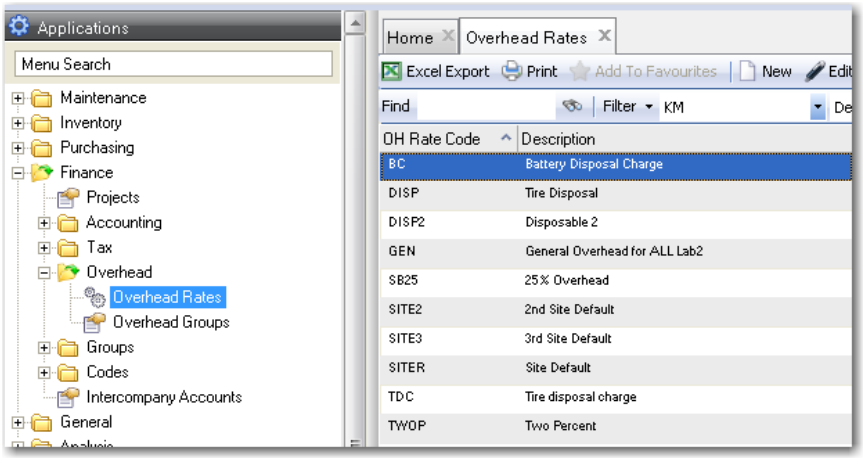
4 Maintain overhead group options.

5 Deploy overhead groups.

## Overhead Rates Browse

Access this browse from Finance|Overhead|Overhead Rates. Use it to organize and display records, to access supporting functions, and to edit or create new records.

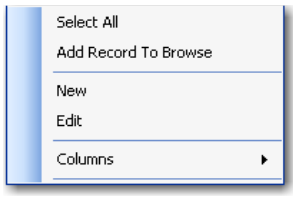
**Fig. 6.38**
Overhead Rates Browse




### Overhead Rates Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.39**
Overhead Rates Right-Click Menu




### New

Use New to open the overhead record detail to create a record.

### Edit

Use Edit to open the overhead record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

#### Creating a New Overhead Rate

1. Click New.
2. Enter an overhead rate code and description.

#### Editing an Overhead Rates Record

1. Double-click a record from the browse or click Edit to open the overhead rates record detail.
2. Enter or edit an overhead rate description.

## Overhead Groups

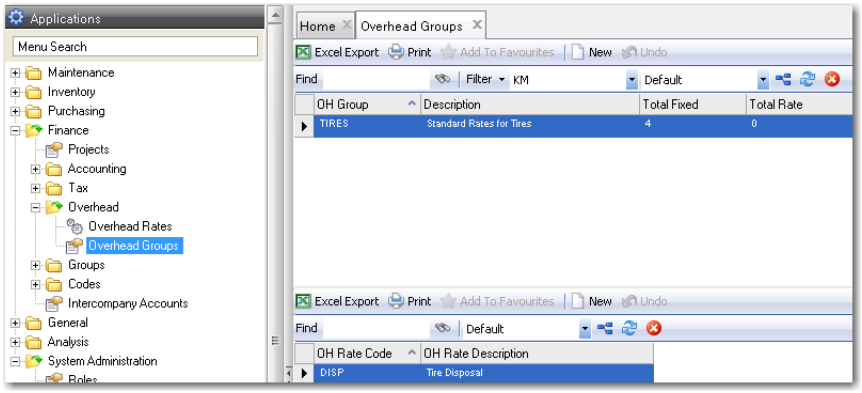
Use overhead groups to recover overhead expenses from operational cost centers and departments.

You can apply overhead groups (composed of overhead rates) to part issue and labor posting transactions. Overhead rates can be fixed monetary unit amounts or percentages of the total transaction cost. Build as many overhead rates and overhead groups as you need. You can set default overhead groups per site, part, and employee. You control whether users can modify overhead groups on transaction screens.

## Overhead Groups Browse

Access this browse from Finance|Overhead|Overhead Groups. Use it to organize and display records, to access supporting functions, and to edit or create new records.

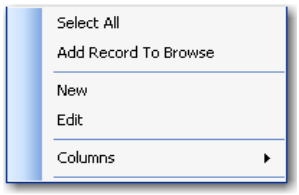
**Fig. 6.40**
Overhead Groups Browse




## Overhead Groups Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.41**
Overhead Groups Right-Click Menu




## Creating a New Overhead Group

1. Click New in the upper browse.
2. Enter the overhead group name and a description.
3. Click New in the lower browse.
4. Select an overhead rate code from the lookup. Add as many overhead rates as required to build up the group's fixed amount or total rate.

## Editing an Overhead Group

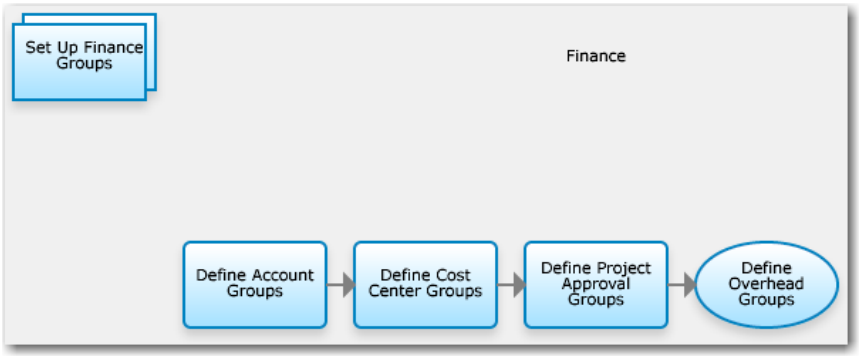
1. Double-click a record from the upper browse.
2. Enter or edit the overhead group description.
3. Click New or Delete in the lower browse.
4. Add or subtract associated rates.

# Groups

Use groups to restrict purchase requests to valid accounts and cost centers. You can develop groups of users with project approval limits.

## Setting Up Finance Groups

**Fig. 6.42**
Finance Group Process Flow




1. Define account groups.
2. Define cost center groups.
3. Define project approval groups.

## Account Group

Use account numbers with the account group. Use the account group code with the user ID.

Create and name an account group, typically generalizing the type of users that are associated with it. Add a list of account numbers to that group on the lower browse.

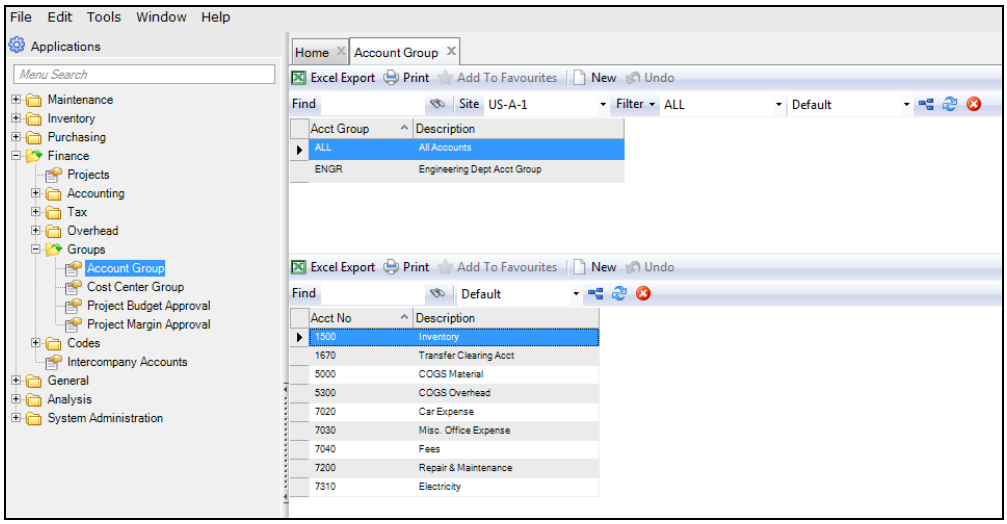
Associate the account group with any selected user IDs, under System Administration|Users|Account Groups. You can associate multiple account groups with the user ID.

When the user selects the Authorize action in Requisitions, the system validates the associated account group or cost center group in the requisition with the user permissions. If the system finds the proper permissions, the requisition approval process begins.

### Account Group Browse

Access this browse from Finance|Groups|Account Group. Organize and display records, access supporting functions, edit, or create new records, and export to Excel.

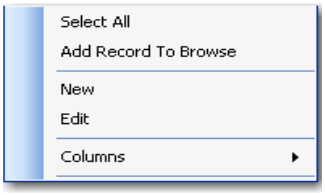
**Fig. 6.43**
Account Group Browse




## Account Group Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.44**
Account Group Right-Click Menu




### New

Use New to open the account group record detail to create a record.

### Edit

Use Edit to open the account group record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

## Creating a New Account Group

1. Click New in the upper browse.
2. Enter the account group name and description.
3. Click New in the lower browse.

4 Select an account code from the lookup. Add as many accounts as you need.

### Editing an Account Group Record

1 Double-click a record from the browse to update the account group description.

2 Enter or edit the account group description.

3 Click New or Delete to add or remove accounts from the group.

## Cost Center Group

Use cost centers with the cost center group. Use the cost center group code with the user ID.

Create and name a cost center group, typically generalizing the type of users to associate with it. Add a list of cost centers to the group on the lower browse.

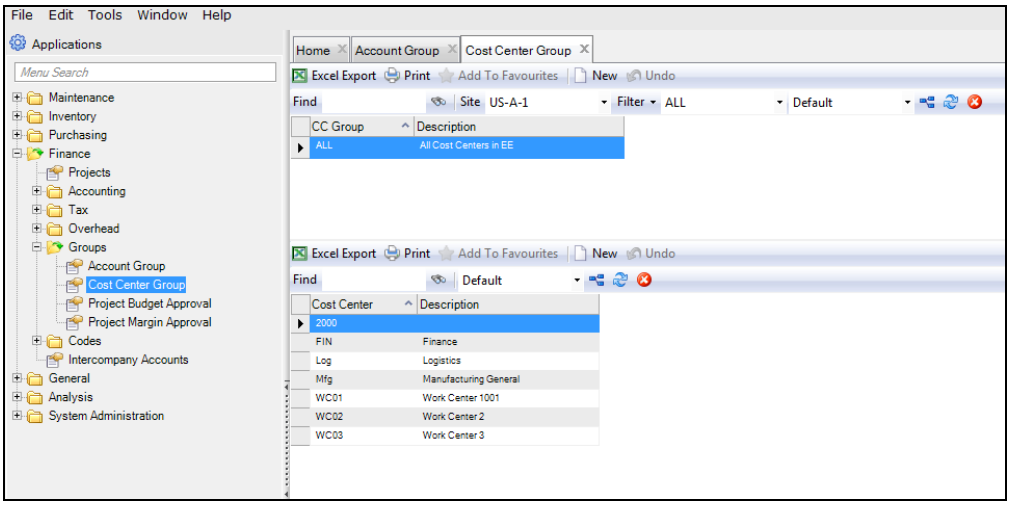
Associate the cost center group with selected user IDs, under System Administration|Users|Cost Center Group. You can associate multiple cost center groups with a user ID.

When the user selects the Authorize action in Requisitions, the system validates the associated account group or cost center group in the requisition with the user permissions. If the system finds proper user permissions, the requisition approval process begins.

### Cost Center Group Browse

Access this browse from Finance|Groups|Cost Center Group. Use it to organize and display records, to access supporting functions, and to edit or create new records.

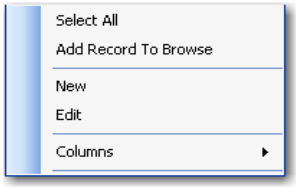
**Fig. 6.45**
Cost Center Group Browse




### Cost Center Group Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.46**
Cost Center Group Right-Click Menu




### New

Use New to open the cost center group record detail to create a record.

### Edit

Use Edit to open the cost center group record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

#### Creating a New Cost Center Group

1. Click New in the upper browse.
2. Enter the cost center group name and description.
3. Click New in the lower browse.
4. Select a cost center from the lookup. Add as many cost centers as you need.

#### Editing a Cost Center Group

1. Double-click a record from the browse or click Edit to open the cost center group record detail.
2. Enter the cost center group name or description.
3. Click New or Delete in the lower browse to add or remove cost centers from the group.

## Project Budget Approval Group

Use Project Budget Approval Groups to represent a group of users who can approve projects.

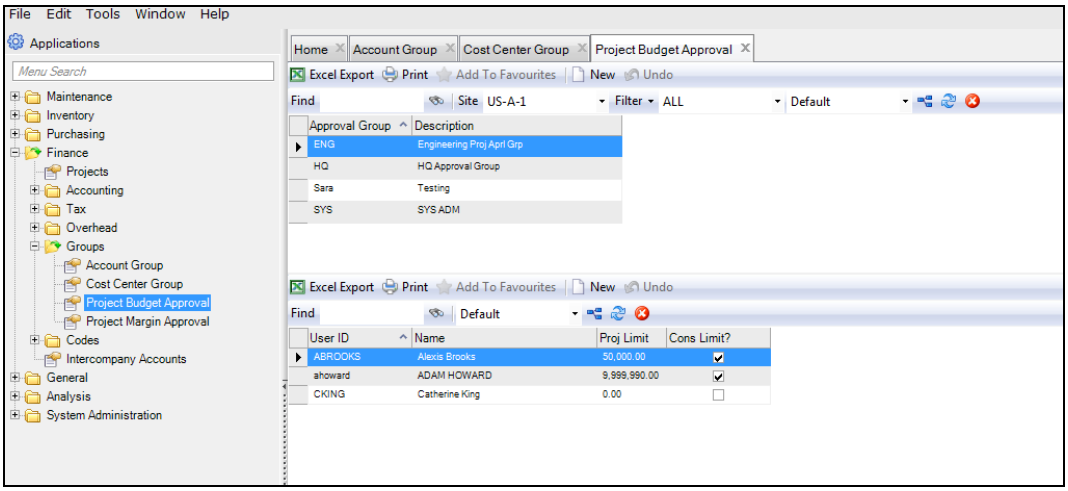
#### Project Budget Approval Group Browse

Access this browse from Finance|Groups|Project Budget Approval. Use it to organize and display records, to access supporting functions, and to edit or create new records. Assign a project approval group to a project.

When a user approves a project, EAM validates the user's spending limit. If the spending limit is equal to or greater than the project cost, the project is approved and authorized. If the project cost exceeds the spending limits, then the action is approved but not authorized. Someone with sufficient spending limits must authorize it.

The settings for a user under System Admin|Users|Detail tab determine user spending limits and amounts for approval of projects.

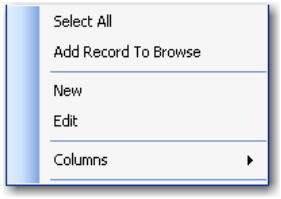
**Fig. 6.47**
Project Budget Approval Group Browse




## Project Approval Group Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.48**
Project Approval Group Right-Click Menu




### New

Use New to open the project approval group record detail to create a record.

### Edit

Use Edit to open the project approval group record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a New Project Approval Group

1 Click New in the upper browse.

2 Enter an approval group and description.

3 Click New in the lower browse.

4 Select a user from the lookup. Add as many users as you need.

### Editing a Project Approval Group

1 Double-click a record from the browse to update the project approval group description.

2 Enter or edit an approval group description.

3 Click New or Delete in the lower browse to add or remove users from the group.

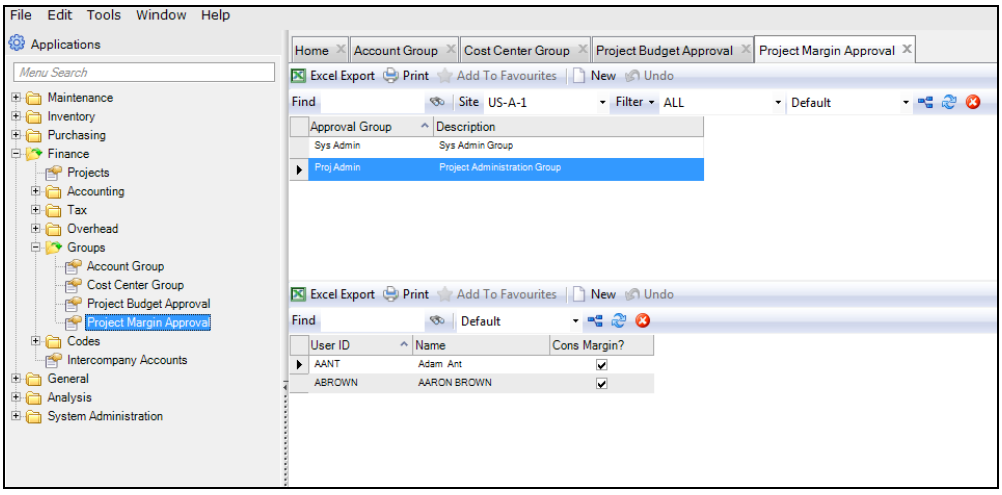
## Project Margin Approval Group

Use Project Margin Approval Groups to represent a group of users who can approve customer-funded projects when margin approval is used.

### Project Margin Approval Group Browse

Access this browse from Finance|Groups|Project Margin Approval. Use it to organize and display records, to access supporting functions, and to edit or create new records. Assign a project margin approval group to a project.

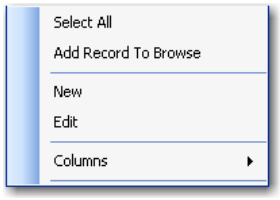
**Fig. 6.49**
Project Margin Approval Group Browse




### Project Margin Approval Group Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.50**
Project Approval Group Right-Click Menu




### New

Use New to open the project margin approval group record detail to create a record.

### Edit

Use Edit to open the project margin approval group record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a New Project Margin Approval Group

1. Click New in the upper browse.
2. Enter a margin approval group and description.
3. Click New in the lower browse.
4. Select a user from the lookup. Add as many users as you need. You can only add users that have the Margin Approver? check box selected in the System Administration|Users|Detail tab. The Margin Approver? setting indicates if a user can be added to a project margin approval group. See Chapter 10, “Users,” on page 675.

### Editing a Project Approval Group

1. Double-click a record from the browse to update the project approval group description.
2. Enter or edit an approval group description.
3. Click New or Delete in the lower browse to add or remove users from the group.

## Codes

Use Codes to view or add supporting data to lists of codes, such as project, status, type, and others critical to the Finance module.

Code forms in this section contain records for lookups on tabs within projects. Depending on your permissions, you can add or edit existing records.

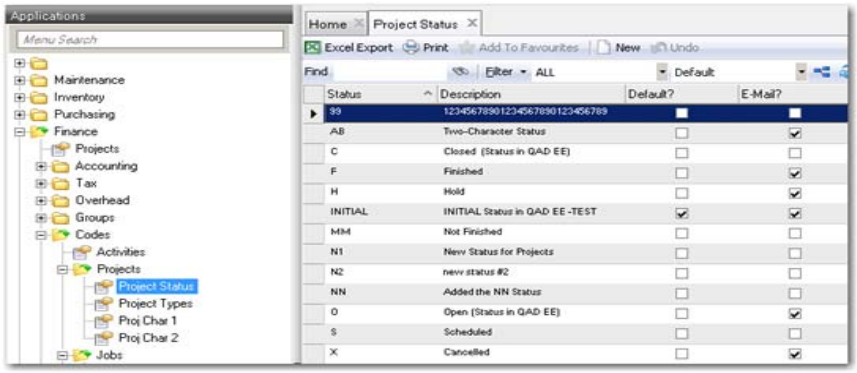
## Project

Project codes include Statuses, Types, User-defined Character 1 and Character 2.

### Statuses

Access the Statuses lookup from Finance|Codes|Projects|Project Status. You can add or edit codes from the code form, and also designate project status changes that trigger system-generated e-mail to a Notify.

**Fig. 6.51**
Codes: Statuses




#### Adding a Status Code

1. Click New.
2. Enter the status and description.
3. Select defaults and notifies. The system automatically saves the new code.

#### Editing a Status Code

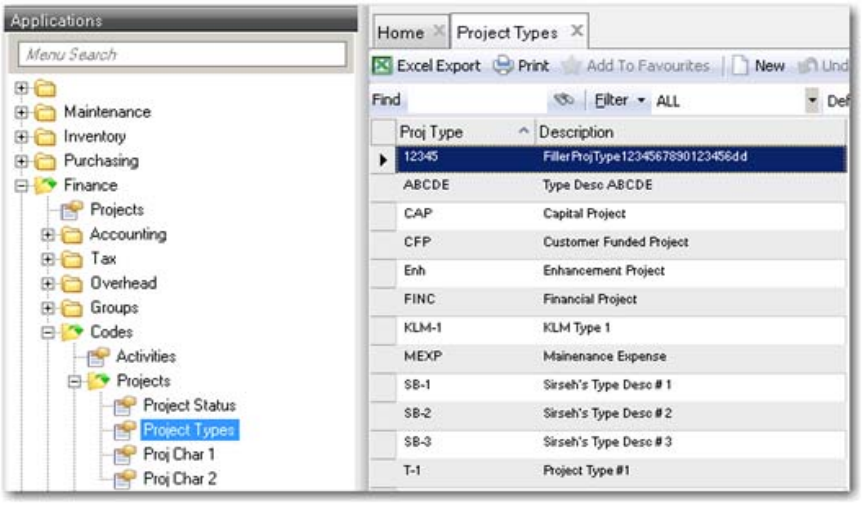
1. Double-click the code to edit.
2. Enter or edit the status description.
3. Select defaults or notifies. The system automatically saves the updated code.

### Types

Access the Types lookup from Finance|Codes|Projects|Project Types. You can add or edit codes from the code form.

Use Project Types to add, view, or edit project types.

**Fig. 6.52**
Codes: Type




### Adding a Type Code

1 Click New.

2 Enter the project type and description. The system automatically saves the new code.

### Editing a Type Code

1 Double-click the code to edit.

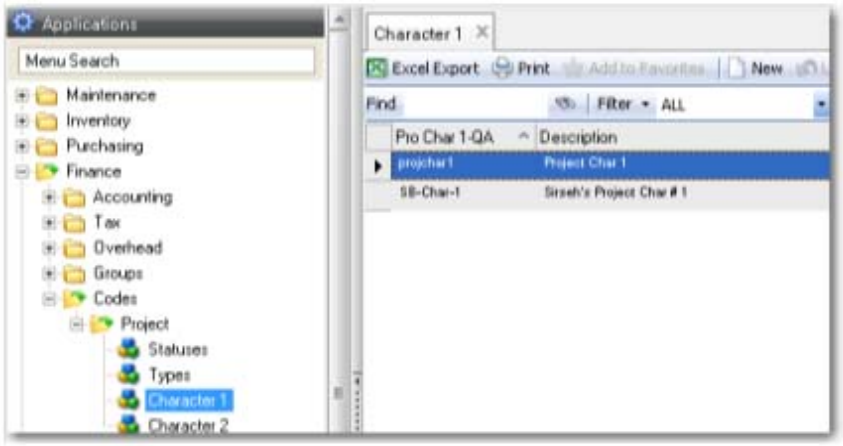
2 Enter or edit the project type description. The system automatically saves the updated code.

## Project Character 1 and 2

Access the Proj Character 1 lookup from Finance|Codes|Projects|Proj Char 1. You can add or edit codes from the code form.

Use (user-defined) Proj Character 1 and 2 to access your organization's validation tables for data entry and selection in the project module. The system administrator or implementation team defines the labels for these two fields.

**Fig. 6.53**
Codes: Proj Character 1




Adding a Proj Char 1 or Proj Char 2 Code

1 Click New.

2 Enter the project character 1 or 2 code and description. The system automatically saves the new code.

Editing a Proj Char 1 Code

1 Double-click the code to edit.

2 Enter or edit the project character 1 or 2 description. The system automatically saves the updated code.

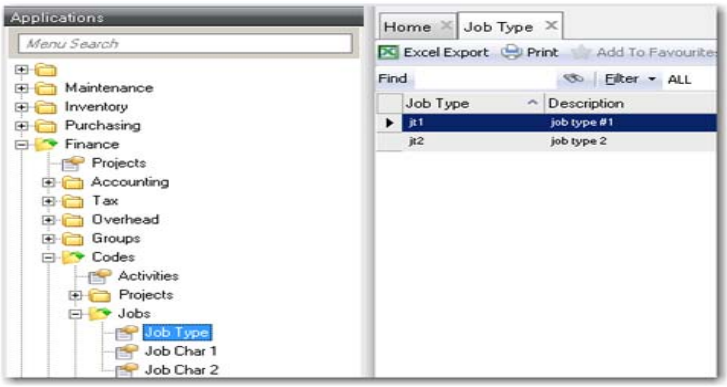
## Jobs

Job codes are Types, User-defined Character 1, and User-defined Character 2.

### Types

Access the Types lookup from Finance|Codes|Jobs|Job Type. You can add or edit codes from the code form. Use Types to add, view, or edit job types.

**Fig. 6.54**
Codes: Job Type




Job Char 1 and 2

Access the Character 1 lookup from Finance|Codes|Jobs|Job Char 1 or Job Char 2. You can add or edit codes from the code form.

Use (user-defined) Character 1 and 2 to access your organization's validation tables for data entry and selection in the project module on the Jobs lower browse. The system administrator or implementation team defines the labels for these two fields.

# Intercompany Accounts

Use intercompany accounts when GL transactions must go between sites (for example, inventory transfer between site A and site B), and you cannot use the default transfer cost center, account, and sub-account.

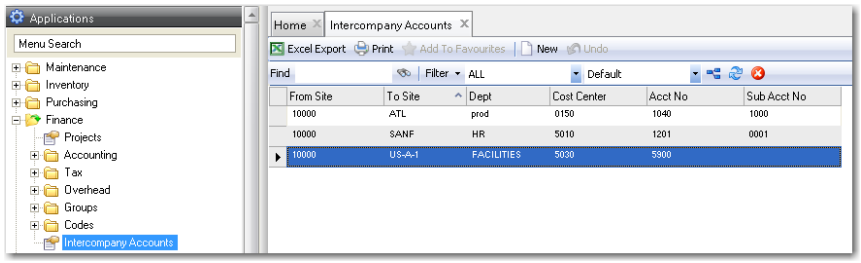
When a part relocates from one site to another, EAM credits the inventory from which it was removed, and debits the transit location. Use EAM System Administration|System Control Maintenance|System Site Maintenance|More Inv tabbed page to set up cost center, account number, and sub-account.

Define a unique default intercompany cost center, account, and sub-account to use when GL transactions go between the user's primary site and other sites in EAM.

## Intercompany Accounts

Access this browse from Finance|Intercompany Accounts. Organize and display records, access supporting functions, access existing or create new records, and export to Excel.

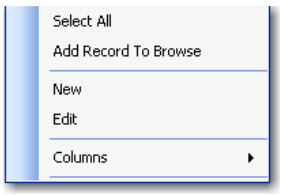
**Fig. 6.55**
Intercompany Accounts Browse



### Intercompany Accounts Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 6.56**
Intercompany Accounts Right-Click Menu




New

Use New to open the intercompany accounts record detail to create a record.

Edit

Use Edit to open the intercompany accounts record detail to edit the selected record.

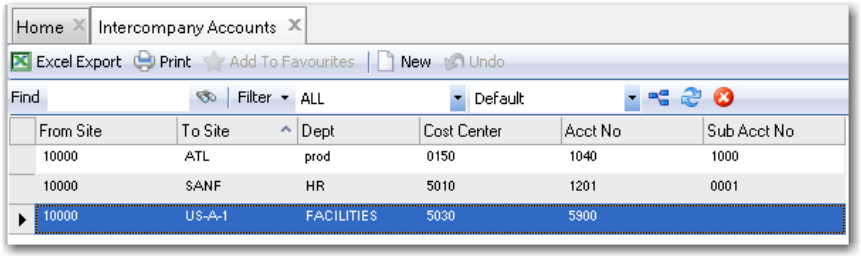
Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

## Intercompany Accounts Record Detail

The record detail contains the information about this site's Intercompany Accounts default cost center, account, and sub-account to be debited any time GL transactions go between this site and the highlighted other site.

**Fig. 6.57**
Intercompany Accounts Record Detail




*From Site.* EAM enters the current user's primary site. This value cannot be changed.

*To Site.* Select the site by using the lookup table available in the To Site field. Any other site that is involved in intercompany transactions and cannot use your site's default transit accounting data should be set up here.

*Dept.* The department to use in any intercompany transaction between the site listed in the To Site box and the From Site. Select the department through the Dept field's lookup.

*Cost Center.* The cost center to use in any intercompany transaction between the site listed in the To Site box and the From Site. Select the cost center using the Cost Center field lookup.

*Acct No.* The account to use in any intercompany transaction between the site listed in the To Site box and the From Site. Select the account using the Acct No field lookup.

*Sub Acct No.* The sub-account to use in any intercompany transaction between the site listed in the To Site box and the From Site. Select the sub-account using the Sub Acct No field lookup.

Chapter 7

# Purchasing

This section discusses the following Purchasing module topics:

***Introduction to EAM Purchasing 418***

***Setting Up Purchasing 418***

***Requisitions 450***

***Purchase Orders 485***

***Blanket Orders 512***

***Quotes 535***

# Introduction to EAM Purchasing

In the Purchasing module, you can create and maintain requisitions, purchase orders, quotes, and blanket orders. You can create standard clauses and approval groups, revise vendors, and add routing substitutions.

The Purchasing module includes the following submenus:

- Purchase Orders
- Requisitions
- Blanket Orders
- Quotes
- Vendor
- Routing Substitutions
- Standard Clauses
- Currency
- Exchange Rates
- User Approval Groups
- Codes
- All PO/Requisitions Lines Browse
- All BO Lines Browse

# Setting Up Purchasing

## Routing Substitutions

Use a Routing Substitution to replace a user for all requisition, purchase order, and project approvals for a specified time period.

If purchase authorization is required and an individual is out of the office, that person can substitute another user to authorize purchases until the person returns. The system uses the start and end dates to automatically send approvals to the substitute person.

The Substitute person takes on the spending authority for the user that is away. When viewing a routing list of users, the substitute person is identified in the group as a substitute user.

### Creating a Routing Substitution

To create a routing substitution, click New. Enter the following information:

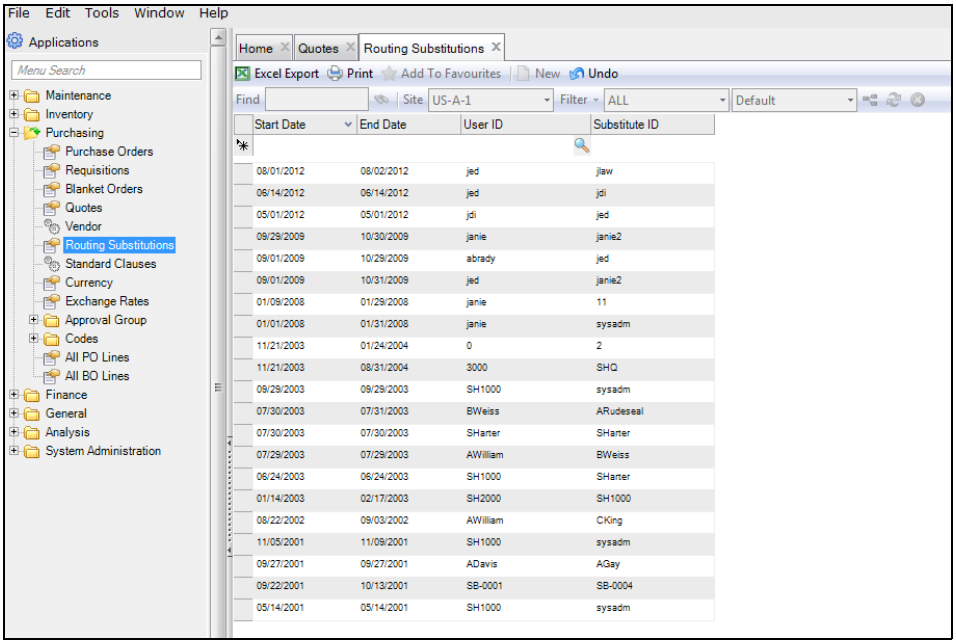
*Start Date.* Enter the date the routing substitution begins.

*End Date.* Enter the date the routing substitution ends.

*User ID.* Enter the user ID of the person who is being replaced.

*Substitute ID.* Enter the user ID of the person who is replacing the original person.

**Fig. 7.1**
Routing Substitutions




## Vendor

Use vendor records to store supplier information, including address, contacts, tax information, shipping data and terms, and currencies. Inventory and Purchasing use vendor records. Equipment, Physical Inventory, and Stores Requisition files also can include a vendor number.

Vendor records can be downloaded from the ERP. It is recommended that you download vendor records from the ERP to maintain data integrity.

The process to create a vendor record includes the following steps:

1. Identify sourcing channels.
2. Add vendors to the QAD ERP application.
3. Download vendors to EAM.
4. Download languages to EAM.
5. Download required currency to EAM.
6. Add new vendor codes.

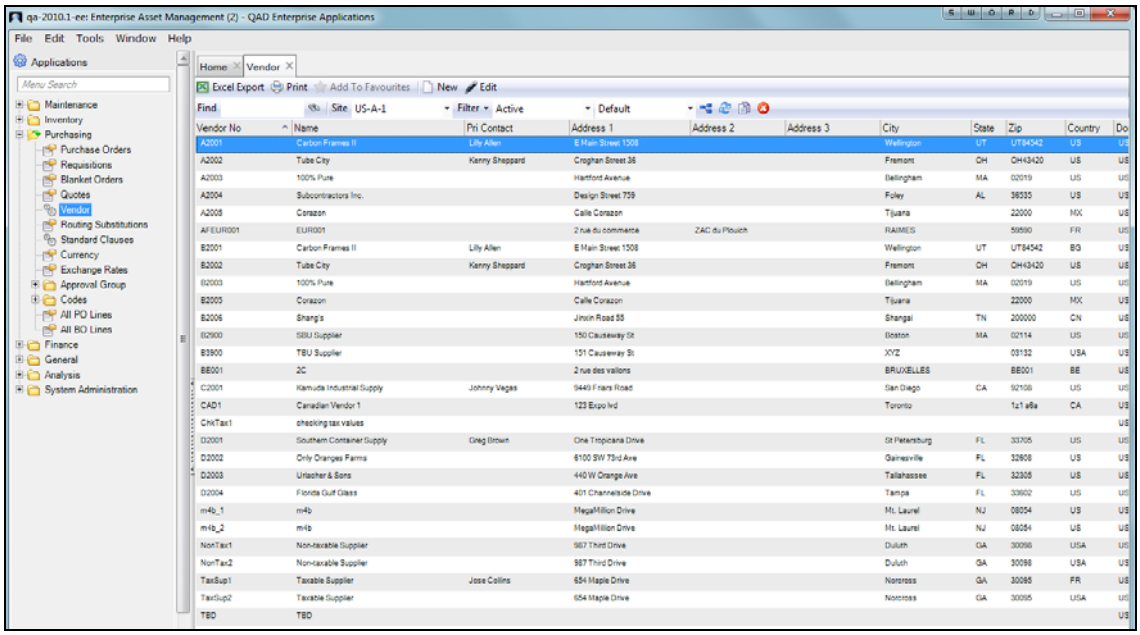
### Adding a Vendor Record

***Important*** Vendor records are populated from ERP during implementation. It is not recommended that you create new vendor records in EAM.

## Editing a Vendor Record

To edit a vendor record, open the record from the Vendor browse, located in Purchasing|Vendor. Make the necessary changes to the Address, Detail, Codes, Remit, and User Defined tabs. See “Vendor Record Tabs” on page 420. When you finish, click Save.

**Fig. 7.2**
Vendor Browse

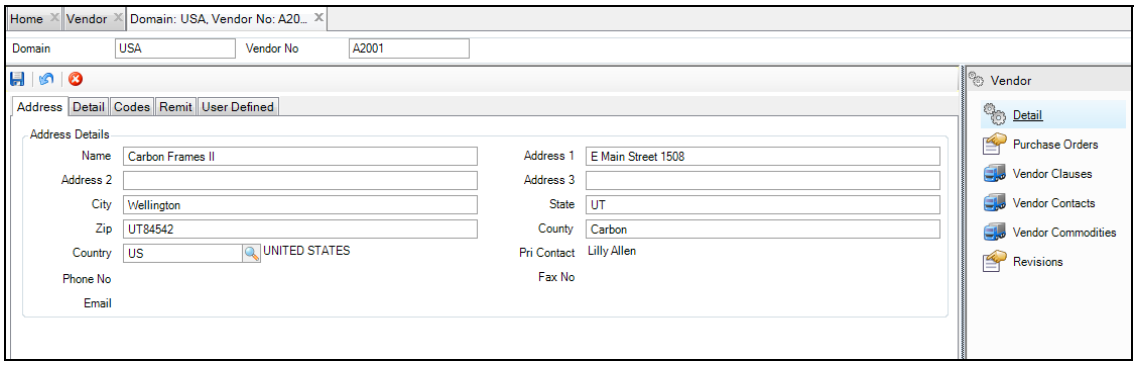



## Vendor Record Tabs

A vendor record consists of the Address, Detail, Codes, Remit, and User Defined tabs.

Vendor: Address Tab

**Fig. 7.3**
Vendor: Address Tab




### Address Details

*Name.* The vendor’s name that appears on purchase orders and quotations.

*Address 1, Address 2, Address 3, City, State, Zip, County, and Country Address2.* The vendor's address.

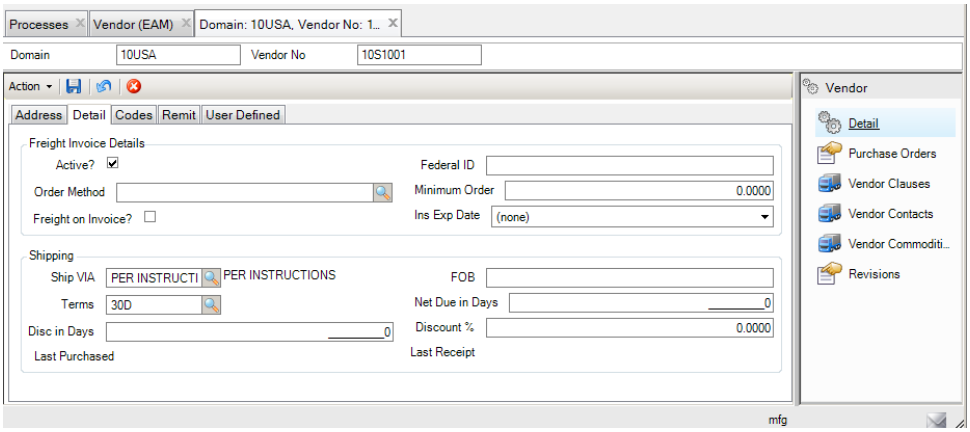
*Pri Contact.* The primary contact name for the vendor.

***Note*** The primary contact cannot be updated directly from this field. The contact information can only be added or updated from the Vendor Contacts submenu. See "Add/View Vendor Contacts" on page 428.

*Fax No, Phone No, and E-Mail.* The vendor's contact information.

Vendor: Detail Tab

**Fig. 7.4**
Vendor: Detail Tab




## Freight Invoice Details

*Active.* Select this check box to use this vendor. If this check box is not selected, the vendor lookup excludes the vendor. Validation for the vendor number on Purchase Order, Requisition, and Vendor Part Maintenance screens prevents users from entering an inactive vendor. EAM notifies you about any open records that use a vendor that could cause problems when you change vendor status to inactive.

*Federal ID.* The vendor's federal tax ID.

*Minimum Order.* A minimum total cost to meet or exceed on a purchase order for this vendor. The value is in terms of the vendor's currency. If the total cost of the PO is not greater than or equal to the vendor's minimum order, EAM stops the order when you select the PO Order action.

*Order Method.* The preferred method to order goods from a vendor such as fax, telephone, or e-mail.

*Freight on Invoice.* Select the check box to include freight on the invoice. Otherwise, the system does not include freight on the invoice. There is no receiver for freight for any parts received from this vendor. Typically, you still pay for freight, but the shipper charges separately from the supplier.

*Ins Exp Date.* The date the vendor's insurance expires.

## Shipping

*Ship Via.* The preferred method to ship goods to this vendor.

*FOB.* Free on Board (FOB) denotes whether freight charges are part of the PO price or are billed separately after the invoice, and who pays for freight (buyer or vendor). For example, if the buyer lives in Des Moines and buys a product FOB New York, the buyer must pay the shipping charges from New York to Des Moines.

*Terms.* The vendor payment terms.

*Net Due in Days.* The number of days before you must pay the vendor's invoice.

*Disc in Days.* The number of days a vendor allows you to use an invoice discount.

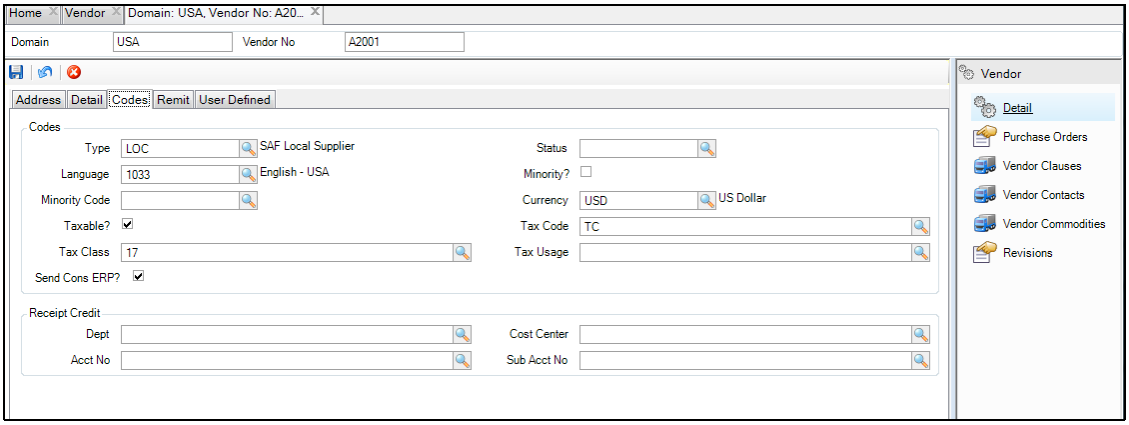
*Discount %.* If you pay the invoice within the number of days specified, this field displays the percentage of that discount.

*Last Purchased.* The last date you placed a PO with this vendor.

*Last Receipt.* The latest date you received an item against a purchase order for this vendor.

## Vendor: Codes Tab

**Fig. 7.5**
Vendor: Codes Tab




### Codes

*Type.* A user-defined field that groups common types of vendors for filtering and sorting.

*Status.* The vendor's status. It is for information only.

*Language.* The supplier's local language.

***Note*** When you print the purchase order document, EAM uses this language code. If no language is specified on the vendor record, the language defaults from General|Codes| Language.

*Minority?* Select this check box if the vendor is minority owned.

*Minority Code.* The minority code for government reporting purposes.

*Currency.* The vendor's currency type.

*Taxable?* Select this check box if the vendor is taxable.

*Tax Class.* The default tax class for the vendor.

*Tax Code.* The vendor's tax code. If an out-of-state vendor does not charge sales tax, you can set a vendor tax code to default to a use tax code. If a part has a tax code or is being purchased for a project that has a tax code, the part or project's tax code is the default tax code on the requisition.

*Tax Usage.* The system copies the default tax usage for the vendor to the requisition.

*Send Cons ERP.* Select the check box to send consignment adjustment GL transactions to the QAD ERP application.

### Receipt Credit

*Dept.* The vendor's receipt credit department.

*Cost Center.* The vendor's receipt credit cost center.

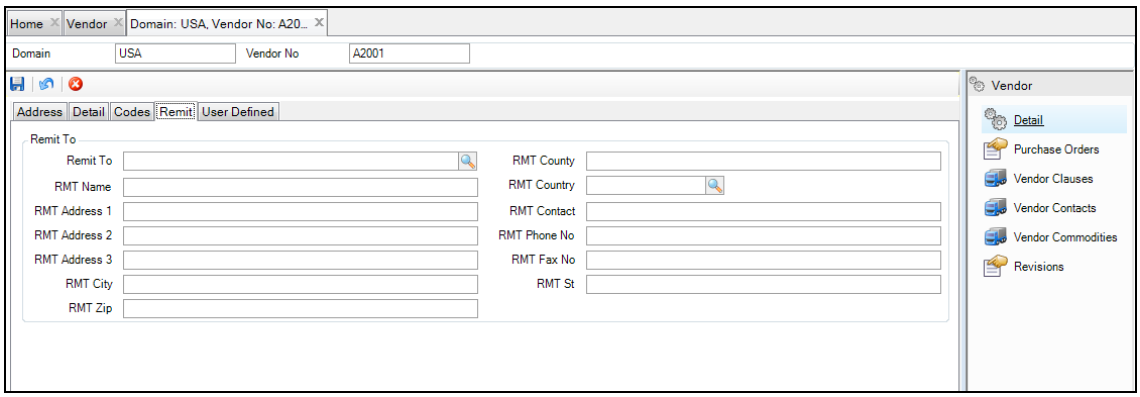
*Acct No.* The vendor's receipt credit account number.

*Sub Acct No.* The vendor's receipt credit sub-account number.

***Note*** Receipt credit department, cost center, account, or sub-account fields are used on receipt and return to vendor (including tax and freight). EAM uses vendor fields on the GL, and not the site's AP credit department, cost center, account, sub-account, or expense items receipt (EIR) from the QAD ERP application.

Vendor: Remit Tab

**Fig. 7.6**
Vendor: Remit Tab




### Remit To

*Remit To.* This field displays a lookup that associates the vendor address to remit payment for invoices.

*RMT County.* The vendor's remit-to county.

*RMT Country.* The vendor's remit-to country.

*RMT Name.* The vendor's remit-to name.

*RMT Contact.* The vendor's remit-to contact name.

*RMT Address.* The vendor's remit-to address information.

*RMT Phone Number.* The vendor's remit-to phone number.

*RMT Fax No.* The vendor's remit-to fax number.

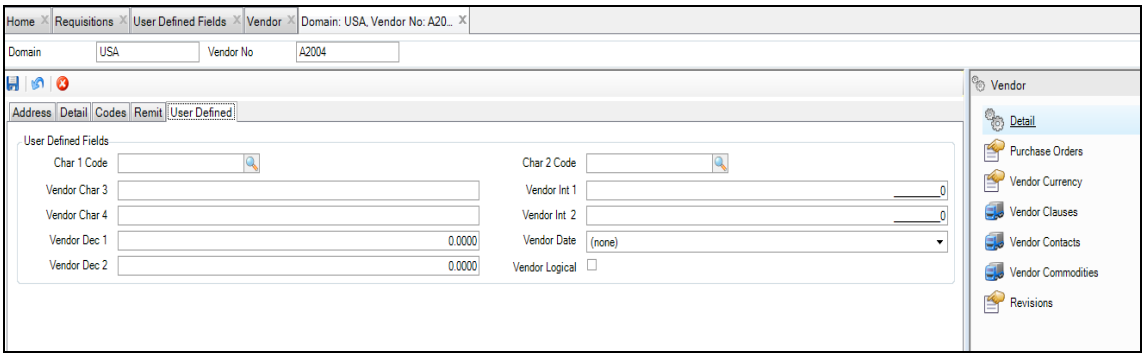
*RMT City.* The vendor's remit-to city.

*RMT St.* The vendor's remit-to state.

*RMT Zip.* The vendor's remit-to postal code.

Vendor: User Defined Tab

**Fig. 7.7**
Vendor: User-Defined Tab




### User Defined Fields

*Character 1/2.* User-defined character fields, validated against tables that you add.

*Character 3/4.* Free-form user-defined character fields, not validated against tables.

*Decimal 1/2.* User-defined decimal fields for vendor.

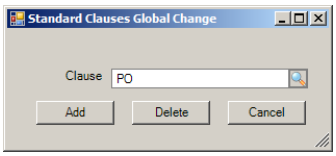
*Integer 1/2.* User-defined integer fields for vendor.

*Enable/Disable Logic.* A user-defined check box.

## Globally Adding or Deleting Standard Clauses

Use Standard Clauses Global Change to globally add or delete a standard clause for more than one vendor. Select multiple vendors on the Vendors browse and then select Standard Clauses Global Change from the Action menu or right-click menu.

**Fig. 7.8**
Standard Clauses Global Change




Select the appropriate clause in the lookup and then click Add or Delete.

## Multicurrency Purchasing

Multicurrency purchasing is used when vendors require that purchase orders be processed and paid in a currency other than the vendor's primary currency. This requirement can occur when the vendor sources an item from a third-party supplier who requires payment in the supplier's local currency.

In general, EAM allows any currency with current exchange rates, downloaded from QAD Financials, to be used for purchasing from vendors. The currency lookup presents the currencies so that they can be selected when creating a purchase requisition, PO, or blanket order.

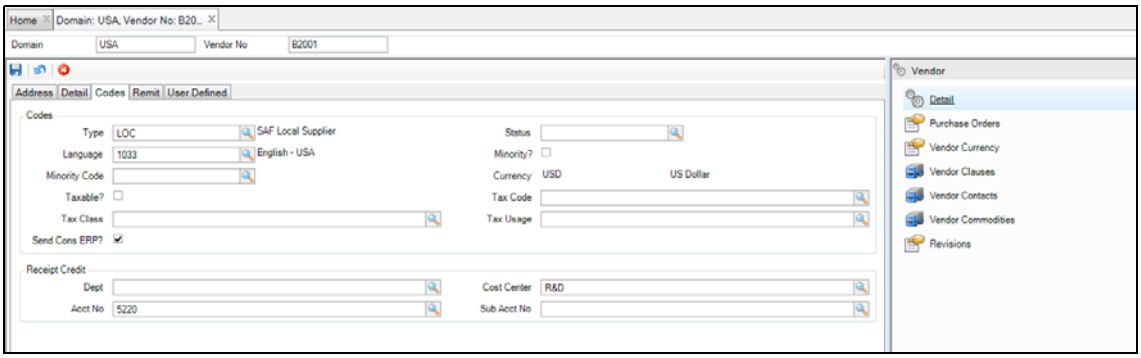
EAM also supports an option to limit the selection of currencies for use in purchasing to only those currencies that are defined for the supplier banking in QAD EE. The Use Only Vendor Currencies option is available in General|Business Units|Domain|PO/Req tab.

***Example*** A vendor located in the US receives materials from their own suppliers in Mexico but the Mexican suppliers want to be paid in Mexican Pesos. To avoid currency exchange rate conversions, it is easier to pay the US vendor in the currency that they pay their supplier. In this instance, the option to Use Only Vendor Currencies is in use.

The following steps illustrate EAM's Multicurrency Purchasing feature:

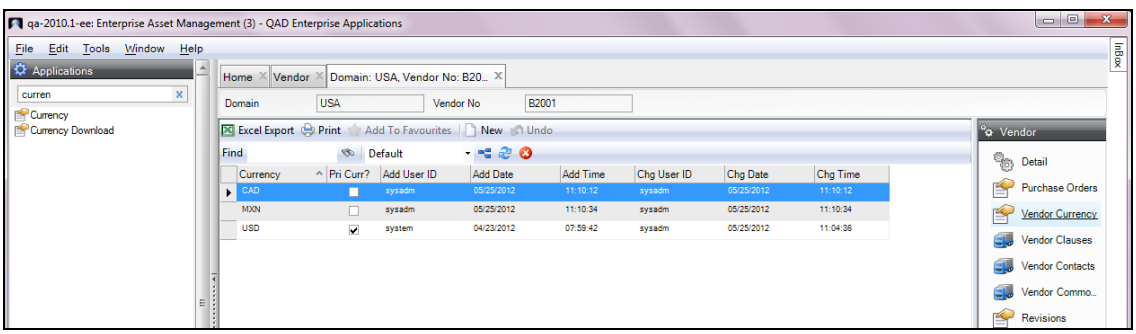
1 In the vendor record on the Codes tab, the vendor's primary currency is set to USD.

**Fig. 7.9**
Vendor's Primary Currency



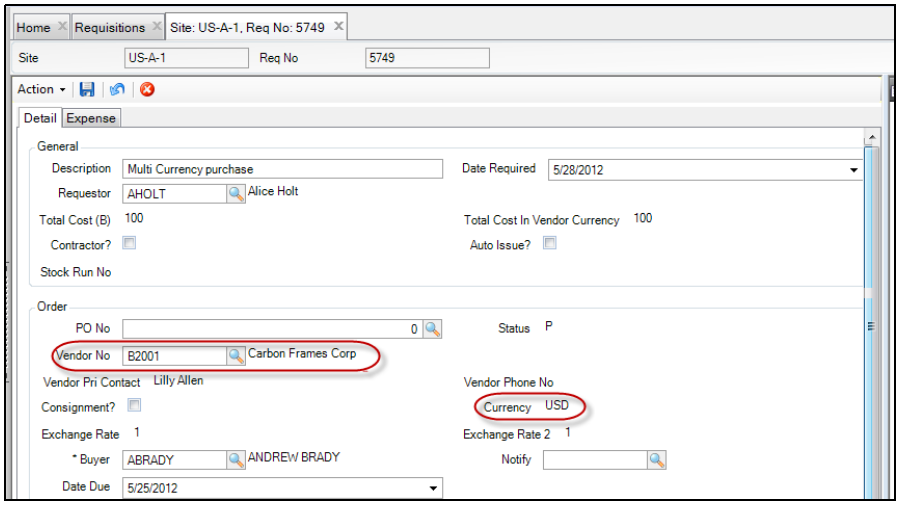

2 The Vendor Currency submenu identifies the valid currencies for this vendor. In Figure 7.10, USD is the vendor's primary currency and the MXN and CAD are alternate supplier bank currencies.

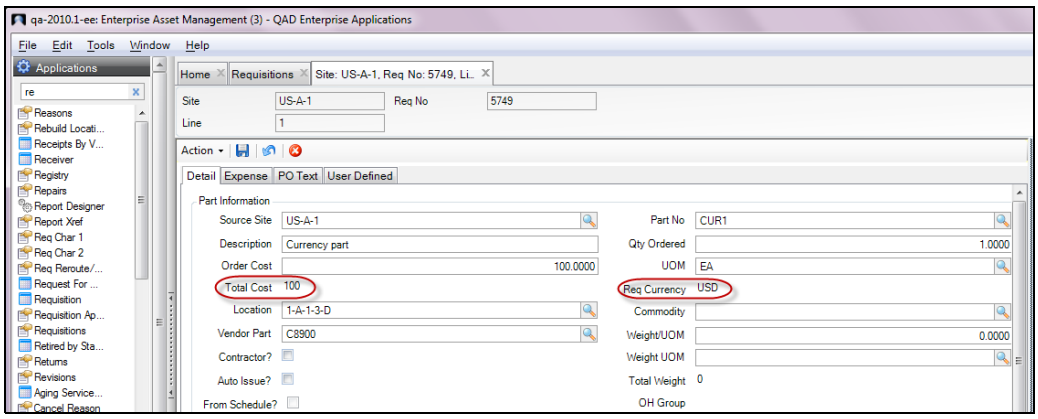
**Fig. 7.10**
Vendor's Currency Submenu



3 When you create a requisition, EAM pulls in the vendor's primary currency for the requisition header and the item cost in the requisition line.

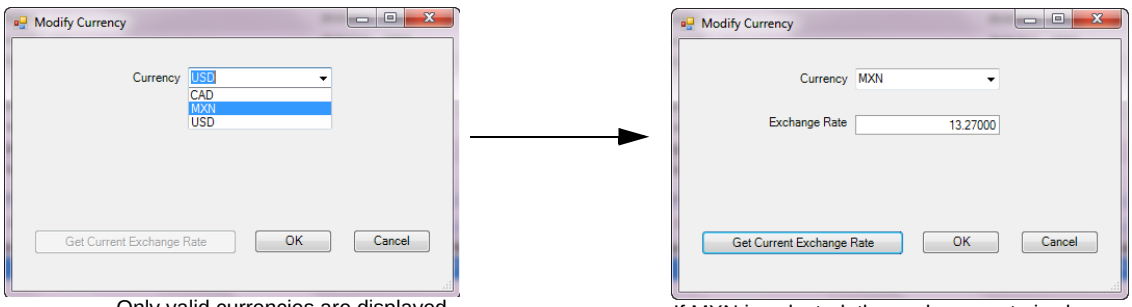
**Fig. 7.11**
Requisition Using the Vendor's Primary Currency




4 To change the currency, select Modify Currency from the Action menu. Use the drop-down menu to select the new currency. The selection in the drop-down is limited to only those currencies from the Vendor Currency submenu. Click Get Current Exchange Rate to view the exchange rate. Click OK.

**Fig. 7.12**
Vendor's Currency Submenu

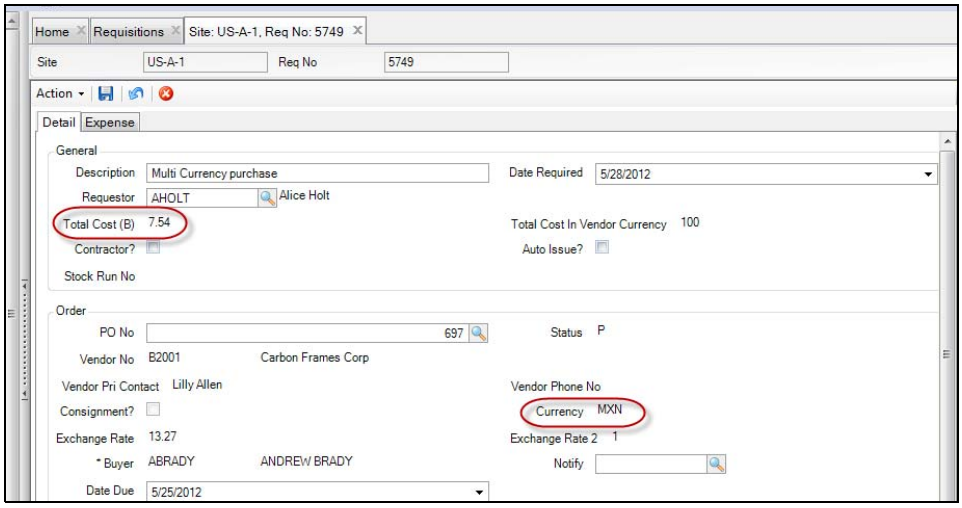



Only valid currencies are displayed.

If MXN is selected, the exchange rate is shown.

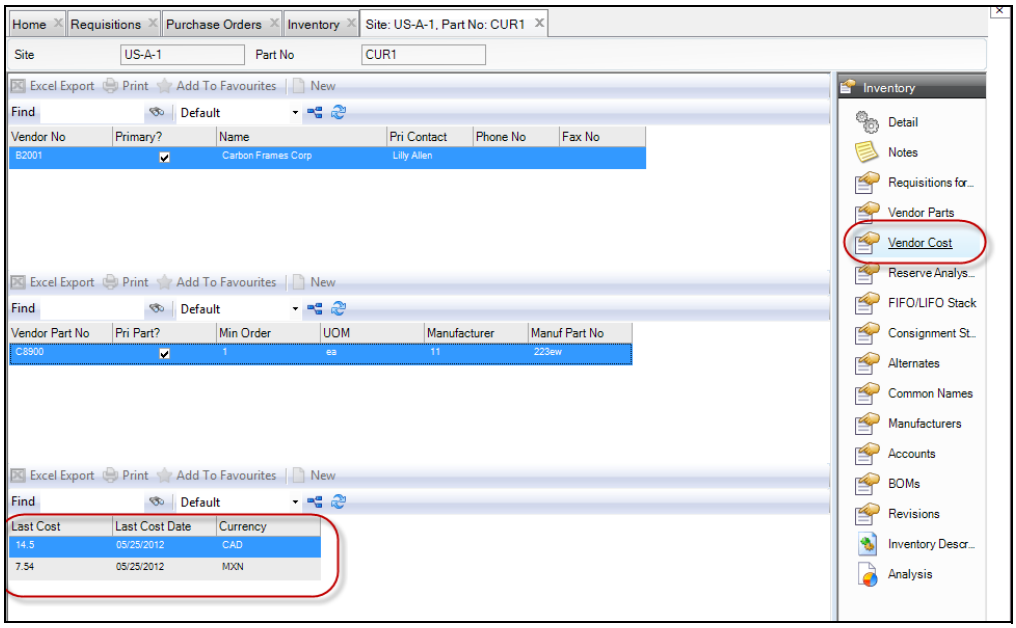
5 If you modify the currency, the requisition reflects the total cost in the new currency. For example, in Figure 7.13, when you select MXN (Peso), the requisition now displays the total cost in MXN (Peso). The Total Cost in the Vendor Currency does not change, but the Total Cost (B) is recalculated using the current exchange rate for the updated currency.

**Fig. 7.13**
New Currency Cost on the Requisition




6 As part of the Multicurrency Purchasing feature, EAM provides the Vendor Cost submenu for the part record. Each time items are received from a vendor, EAM creates a record of the last cost, last cost date, and currency, and displays the records in the Vendor Cost submenu.

**Fig. 7.14**
Vendor Cost Submenu



7 For each part, EAM populates the last cost based on the currency used on the purchase order, by vendor, and the vendor part number. The next time a purchase requisition is used in any one of these currencies, EAM automatically populates the price based on the last received price for that currency.

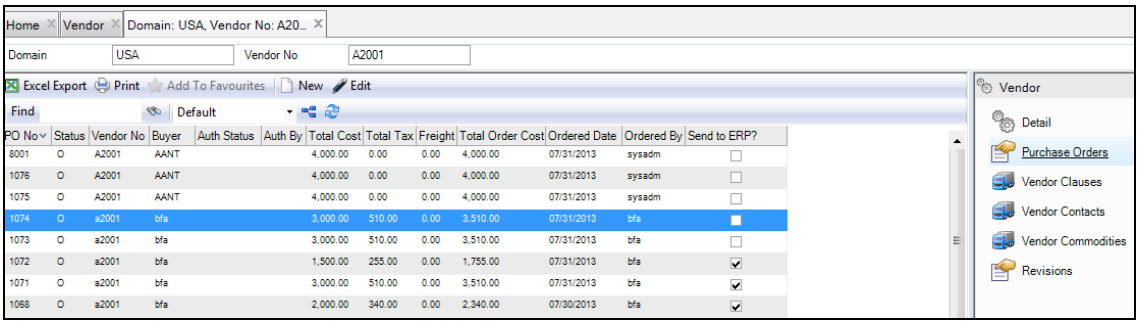
In Figure 7.14, the only two currencies used are Canadian Dollars and Mexican Pesos. If the Use Only Vendor Currencies option is not being used and a user creates a purchase requisition and selects the Euro as the currency, then when the item is received, EAM automatically updates the third browse with the Euro as the third currency. In this scenario, the Euro is the last cost and last cost date for that purchase receipt.

The Last Cost field is automatically populated on new purchase requisitions that equal the currency. If the price is updated on the new purchase requisition, on receipt, EAM updates the last cost here with the newest price for the currency.

## View All Purchase Orders Associated with a Vendor

To view all the purchase orders associated with a vendor, open the vendor record and select the Purchase Orders submenu.

**Fig. 7.15**
Vendor: Purchase Orders Submenu




## Add/View Vendor Contacts

The Vendor Contacts submenu displays a list of vendor contacts. The Primary? check box identifies the vendor's primary contact.

Follow these steps to add a vendor contact:

1 Open the vendor record and select the Vendor Contacts submenu. Click New.

2 Enter the person's name in the Contact field and contact information in the Phone No, Fax No, and Email fields. A valid e-mail address is required before the contact can be saved.

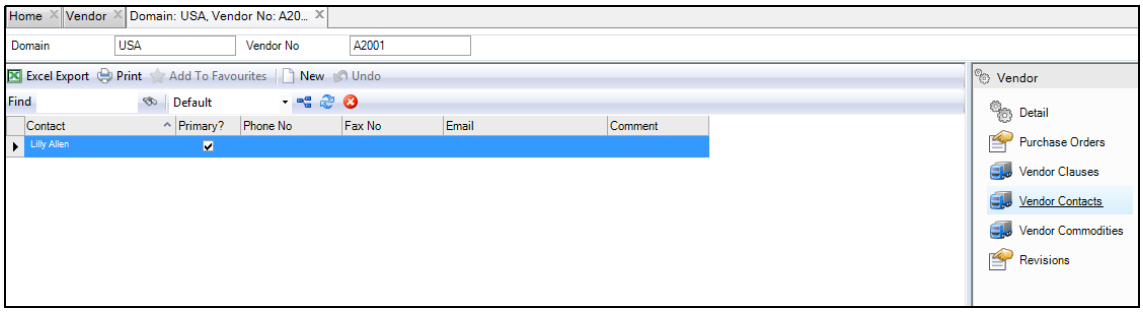
3 If this person is the vendor's primary contact, select the Primary? check box.

***Note*** Only one person on the vendor contact list can be designated as the primary contact.

4 If there is any additional information regarding this contact, enter that information in the Comment field.

5 Press Enter to save.

**Fig. 7.16**
Vendor: Contacts Submenu

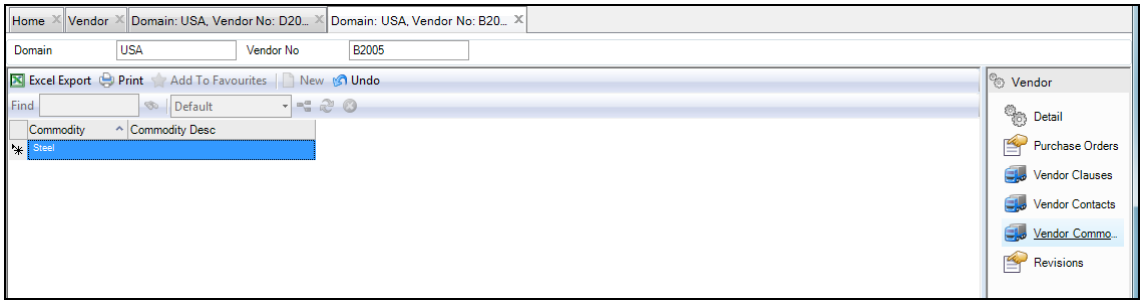



## Add/View Vendor Commodities

The Vendor Commodities submenu displays a list of commodities associated with a vendor.

To add a commodity, open the vendor record and select the Vendor Commodities submenu. Click New and enter the commodity in the Commodity field and a brief description in the Commodity Description field. Press Enter to save.

**Fig. 7.17**
Vendor: Commodities Submenu

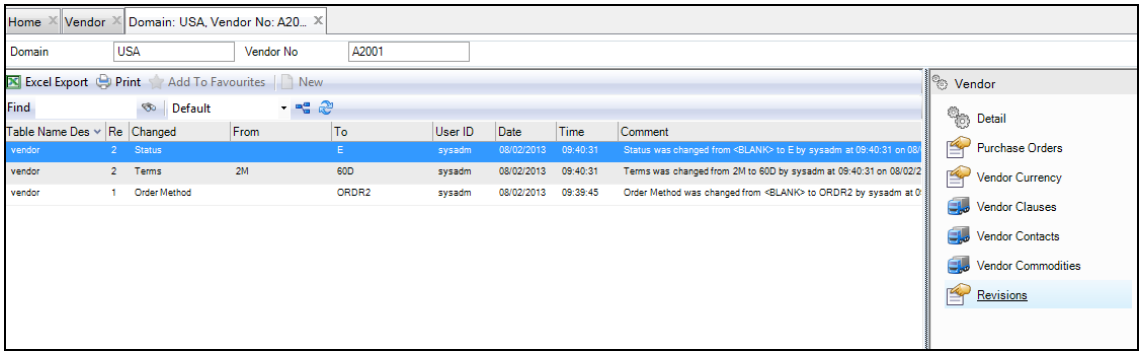



## View the Revision History for a Vendor Record

To view the revision history for a vendor record, open the vendor record and select the Revisions submenu.

***Note*** Revision control for the vendor record is activated in the Revision Control submenu, which is located in General|Business Units|Domain. See “Enable Revision Control for Vendor and Standard Clause Browses” on page 39.

**Fig. 7.18**
Vendor Revisions Submenu

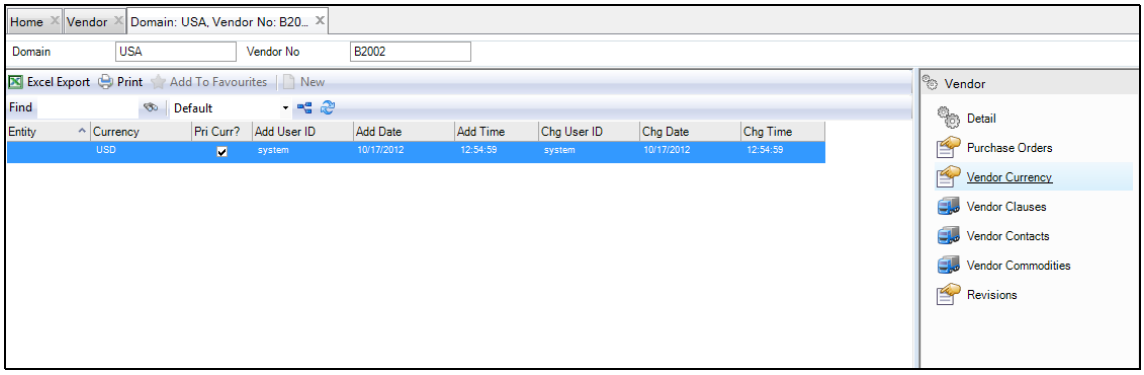



## View Vendor Currency

The Vendor Currency submenu shows detailed information about the currency type the vendor accepts.

***Note*** This submenu may not be enabled for this domain. When the Use Only Vendor Currencies? check box is selected for this domain, this submenu is enabled. The Use Only Vendor Currencies? check box is on the PO/Reqs tab of the domain record. See “Domain: PO/Reqs Tab” on page 36.

**Fig. 7.19**
Vendor Currency Submenu



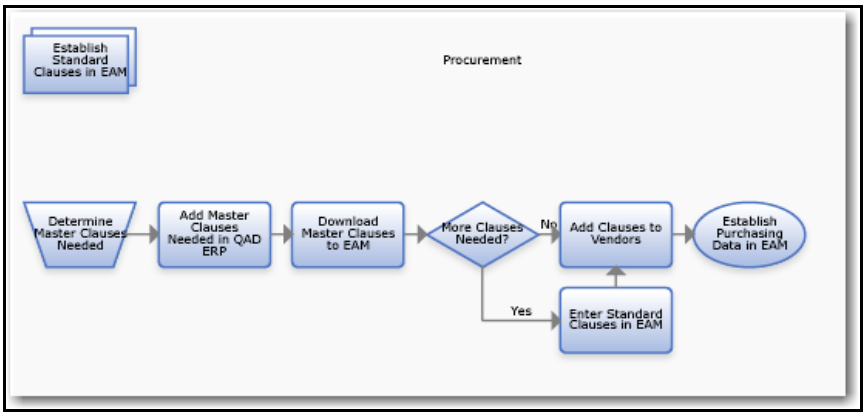

# Standard Clauses

The QAD ERP application uses standard comments, similar to standard clauses in EAM. When a purchase order is copied to the QAD ERP application, EAM’s standard clauses are copied to the standard comments section.

During implementation, you can copy standard comments from the QAD ERP application into EAM. Standard comments in the QAD ERP application are grouped by type. The system administrator must identify the types. Use standard clauses to attach standard terms and conditions or special instructions to a purchase order. Standard clauses can also be attached to a vendor record. Each time a vendor is linked to a purchase order, all of the vendor’s standard clauses are copied to the purchase order. Additional standard clauses can be added as needed and attached to a purchase order.

## Downloading and Adding a Standard Clause Process Flow

**Fig. 7.20**
Establishing Standard Clauses Process Flow



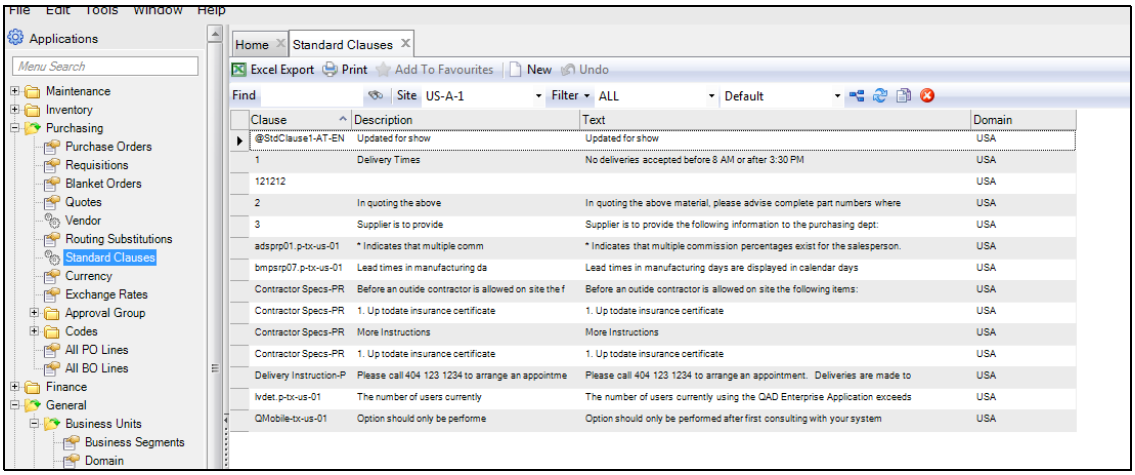

1. Determine the master clauses you need.
2. Add them to the QAD ERP application.
3. Download clauses to EAM.
4. Add other clauses to EAM if you need them.
5. Add clauses to vendors.
6. Add purchasing data to EAM.

## Creating a Standard Clause

Follow these steps to create a standard clause:

1. Open the Standard Clause browse located in Purchasing|Standard Clauses.
2. Click New and enter the following information:
   - **Clause**. Enter the name of the standard clause.
   - **Description**. Enter a short description of the standard clause.
   - **Text**. Enter the full text of the standard clause. The field has a 1140-character limit. Any text beyond character 1140 is cut from the page.
   - **Domain**. Your domain auto-fills in this field.
3. Press Enter to save.

**Fig. 7.21**
Standard Clause Menu




To enable revision control of standard clauses, see “Enable Revision Control for Vendor and Standard Clause Browses” on page 39.

## Currency

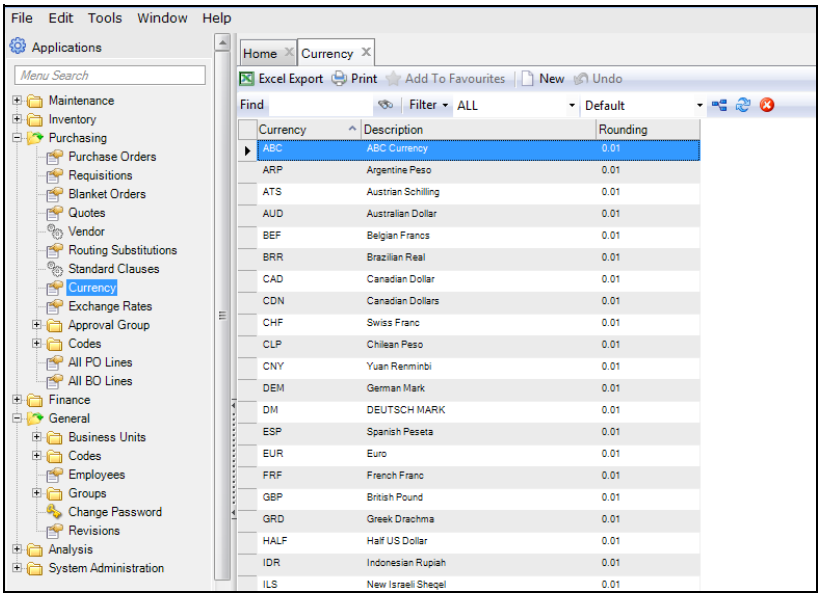
The Currency browse, which is located in Purchasing|Currency, lists the valid, available currency codes. This browse shows the following information:

*Currency.* The currency code.

*Description.* The currency description.

*Rounding.* This number represents the smallest increment that you can have for the currency.

**Fig. 7.22**
Currency Browse



## User Approval Groups

When you create a requisition, purchase order, or blanket order and initiate the routing process using the Authorize action, the system locates the appropriate approval group and sends e-mails to the group requesting their approval.

Approval groups, which consist of individuals who have specific spending authority, allow companies to monitor and control costs across the organization. There are three types of approval groups:

- **Requisition Approval Group**. This group can authorize an expenditure for a specific cost center, sub-account, or a combination of the two.

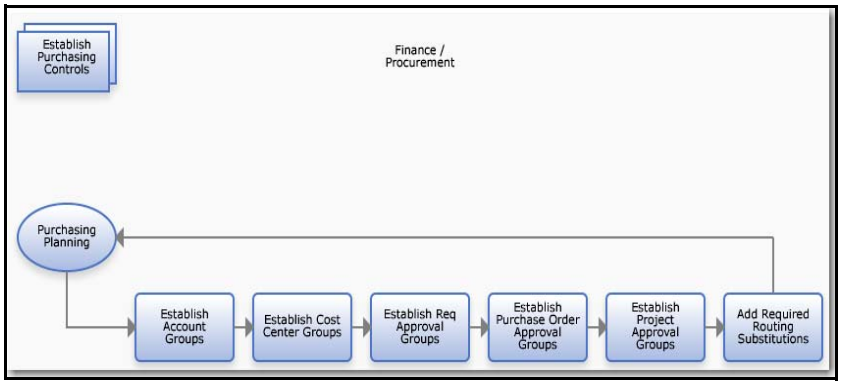
  ***Note*** The group for cost center, sub-account, or the combination of the two is assigned in Chart of Accounts (COA) Requisition Approval. See “COA Requisition Approval” on page 391.

  If that does not apply, a Requisition Approval group can authorize expenditure for a specific cost center and/or account. These groups consist of users with specific spending authority and authorization to spend against cost center or account groups.

  ***Note*** Account and cost center groups are established in Finance|Groups. Associate one or more cost center or account groups per site with a requisition authorization initiator in the initiator’s user profile. When you initiate routing, EAM validates that you can purchase against the account or cost center on the requisition. See “Groups” on page 404.
- **Blanket Order Approval Group**. This group authorizes the expiration amount, which is the total amount that can be spent and discounted on a blanket order.
- **Purchase Order Approval Group**. This group, composed of buyers and buyer managers, evaluates the total expense to the organization. The total expense can include many requisitions associated with one purchase order number.

### Establishing Purchasing Controls Process Flow

**Fig. 7.23**
Establish Purchasing Controls Process Flow




1. Establish account groups.
2. Establish cost center groups.
3. Establish requisition approval groups.

4 Establish purchase order approval groups.

5 Establish project approval groups.

6 Add routing substitutions.

## Requisition Approval Group

The requisition approval group can be associated with any number of account numbers or cost centers.

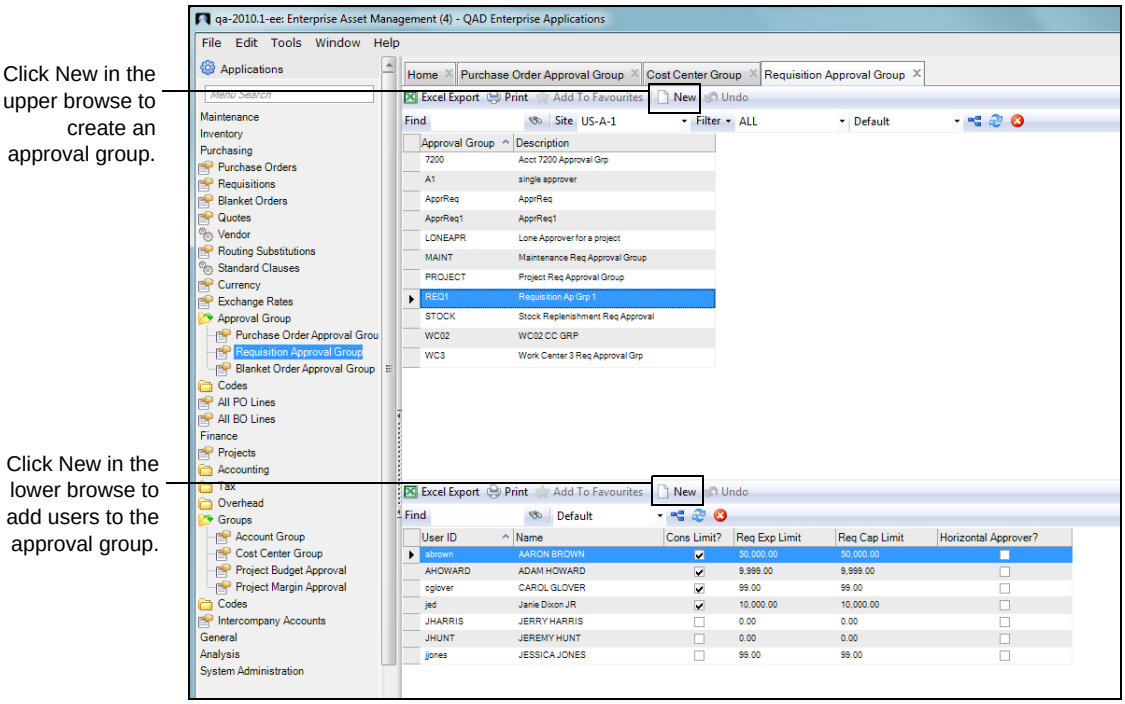
***Note*** Each account number and cost center can have only one approval group for account- or cost center-based routing. You can have only one approval group per site.

Follow these steps to create a requisition approval group:

1 Open the Requisition Approval Group browse in Purchasing|User Approval Groups.

2 Click New in the upper browse.

**Fig. 7.24**
Requisition Approval Group Browse




3 Enter the approval group name and then a short description. Press Enter to save.

4 Add users to the approval group by selecting New in the lower browse.

***Note*** Only users with the Req Limit? check box selected can be added to a requisition approval group. See “User Tabs” on page 678.

5 In the User ID field, use the lookup to select the user to add to the group. Press Enter to auto-fill the other fields with data from the user record:

*Name.* The user’s name.

*Req Exp Limit.* The user's approval limit for requisitions that are not flagged as a capital expense. Enter the value in the currency defined as the system's Approval Limit Currency. See "Approval Limit Currency" on page 689.

*Req Cap Limit.* The user's approval limit for requisitions that are flagged as a capital expense. Enter the value in the currency defined as the system's Approval Limit Currency. See "Approval Limit Currency" on page 689.

*Horizontal Approver?* If this check box is selected, the user is a horizontal approver. Horizontal approvers align with requisition approvers by having the same approval limit. As the requisition approver approves, then the horizontal approver is routed to next for approval. When this option is selected, the final approver is a horizontal approver with the required spending amount.

6 If the user authorizes requisitions based on spending authority, select the Cons Limit? check box.

***Note*** If this check box is not selected, the user is considered a quality approver who can only verify the quality of the vendor, budget, and so on.

7 Continue to add users to the group until it is complete.

### Purchase Order Approval Group

The purchase order approval group is composed of buyers and buyer managers. This group evaluates the total expense to the organization, which can include many requisitions associated with one purchase order number.

The user who initially authorizes the purchase order determines the approval group to which the PO goes:

- If the initial user who authorizes the purchase order has a sufficient PO spending limit, the PO is approved.
- If the initial user does not have a sufficient PO spending limit, EAM verifies the spending limits and routes it to the buyer's PO approval group, which is identified in the employee's record.

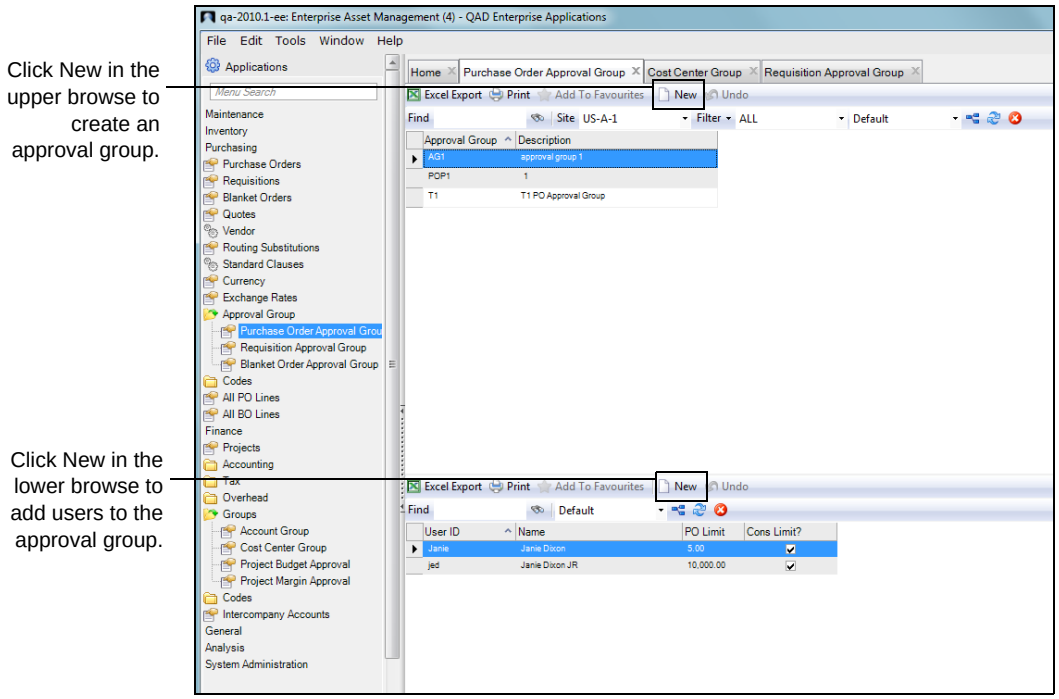
  EAM routes the PO through the group based on individual spending authority. The routing starts with the user with the lowest spending limit. The PO is authorized when it reaches the approver with a sufficient spending limit.

Follow these steps to create a purchase order approval group:

1 Open the Purchase Order Approval Group browse in Purchasing|User Approval Groups.

2 Click New in the upper browse.

**Fig. 7.25**
Purchase Order Approval Group Browse




3 Enter the approval group name and then a short description. Press Enter to save.

4 Add users to the approval group by selecting New in the lower browse.

***Note*** Only users with the PO Limit? check box selected can be added to a purchase order approval group. See “User Tabs” on page 678.

5 In the User ID field, use the lookup to select the user to add to the group. Press Enter to auto-fill the other fields with data from the user record:

*Name.* The user’s name.

*PO Limit.* The user’s PO approval limit. Enter the value in the currency defined as the system’s Approval Limit Currency. See “Approval Limit Currency” on page 689.

***Note*** Exchange rate fluctuations after a PO has been routed could result in an approval group that has no users with a high enough approval limit to authorize a PO. Ensure that the approval limits in the group are high enough to avoid this scenario if the exchange rate changes after the PO is routed.

6 If the user authorizes the purchase order based on spending authority, select the Cons Limit? check box.

***Note*** If this check box is not selected, the user is considered a quality approver who can verify who can verify quality of vendor, budget, and so on.

7 Continue to add users to the group until it is complete.

## Blanket Order Approval Group

The blanket order approval group authorizes the expiration amount, which is the total amount that can be spent and discounted on a blanket order:

- If the initial user who authorizes the blanket order has a sufficient spending limit, the blanket order is approved.
- If the initial user does not have a sufficient spending limit for the blanket order, EAM verifies the spending limits and routes it to the buyer's blanket order approval group, which is identified in the employee's record.

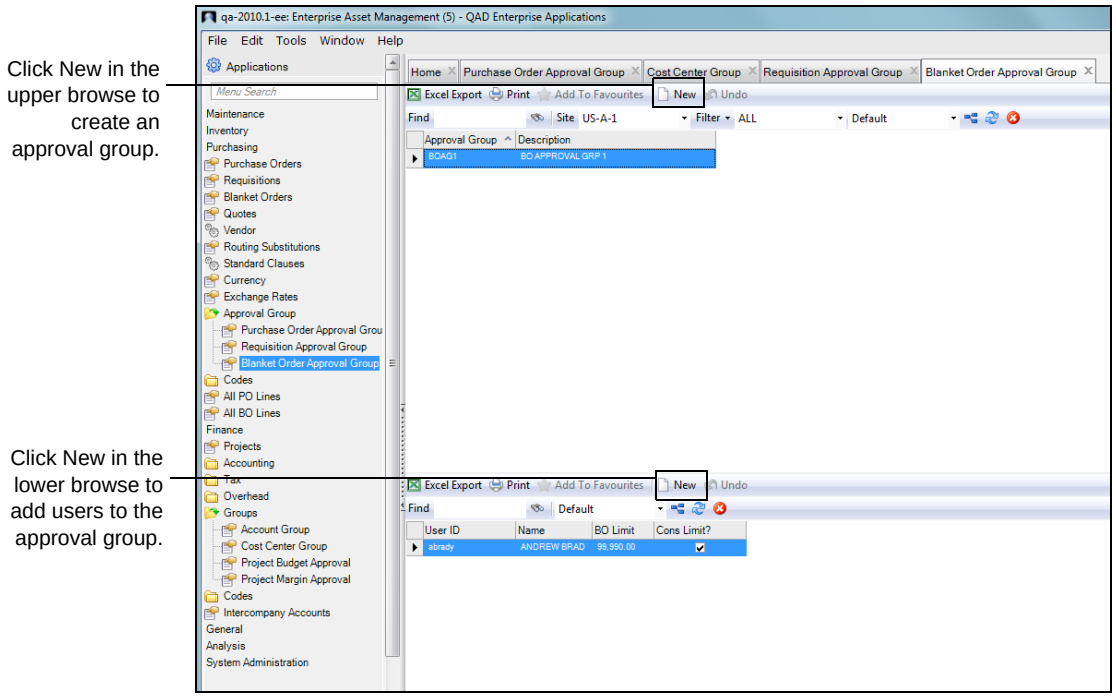
  EAM routes the blanket order through the group based on individual spending authority. The routing starts with the user with the lowest spending limit. The blanket order is authorized when it reaches the approver with a sufficient spending limit.

Follow these steps to create a blanket order approval group:

1 Open the Blanket Order Approval Group browse in Purchasing|User Approval Groups.

2 Click New in the upper browse.

**Fig. 7.26**
Blanket Order Approval Group Browse




3 Enter the approval group name and then a short description. Press Enter to save.

4 Add users to the approval group by selecting New in the lower browse.

***Note*** Only users with the BO Limit? check box selected can be added to a blanket order approval group. See "User Tabs" on page 678.

5 In the User ID field, use the lookup to select the user to add to the group. Press Enter to auto-fill the other fields with data from the user record:

*Name.* The user's name.

*BO Limit.* The user's blanket order approval limit. Enter the value in the currency defined as the system's Approval Limit Currency. See "Approval Limit Currency" on page 689.

***Note*** Exchange rate fluctuations after a BO has been routed could result in an approval group that has no users with a high enough approval limit to authorize a BO. Ensure that the approval limits in the group are high enough to avoid this scenario if the exchange rate changes after the BO is routed.

6 If the user authorizes the purchase order based on spending authority, select the Cons Limit? check box.

***Note*** If this check box is cleared, the user is considered to be a quality approver who can only verify quality of vendor, budget, and so on.

7 Continue to add users to the group until it is complete.

## Codes

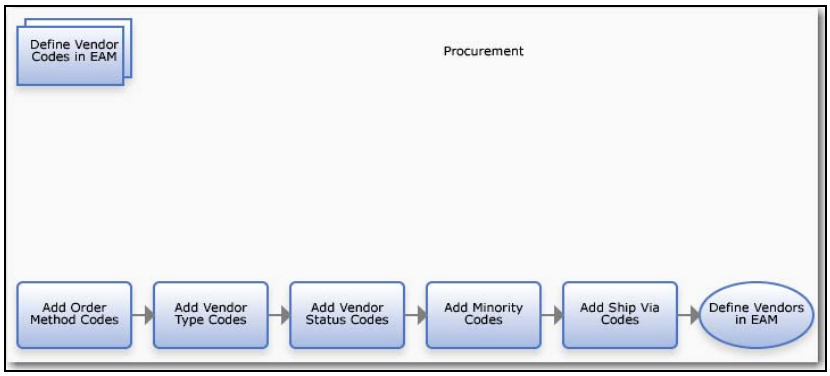
Codes, which serve as the supporting data in the Purchasing module, include the following:

- Bill-To Codes
- Ship-To Codes
- Minority Codes
- Order Method Codes
- Return Codes
- Ship-Via Codes
- Exchange Rates
- Terms Codes
- Purchase Order Codes
- Requisition Codes
- Vendor Codes
- Quote Reason

### Defining Vendor Codes

Vendors, bill-to, and ship-to data codes are downloaded from ERP. Do not update vendor data from EAM, except when noted.

**Fig. 7.27**
Define Vendor Codes Process Flow




1. Add order method codes.
2. Add vendor type codes.
3. Add vendor status codes.
4. Add minority codes.
5. Add ship-via codes.
6. Define vendors in EAM. See “Standard Clauses” on page 430.

## Address Codes

Address codes include the bill-to and ship to codes.

### Bill-To Codes

Bill-to codes are used for the vendor billing address and contact information. The bill-to codes, which are located in Purchasing|Codes|Addresses|Bill Tos, can be downloaded from the QAD ERP application. The purchase order system requires that a bill-to address is specified on each PO.

Follow these steps to manually add a bill-to code:

1. In the Bill Tos browse, click New.
2. Enter the following information in the corresponding fields:

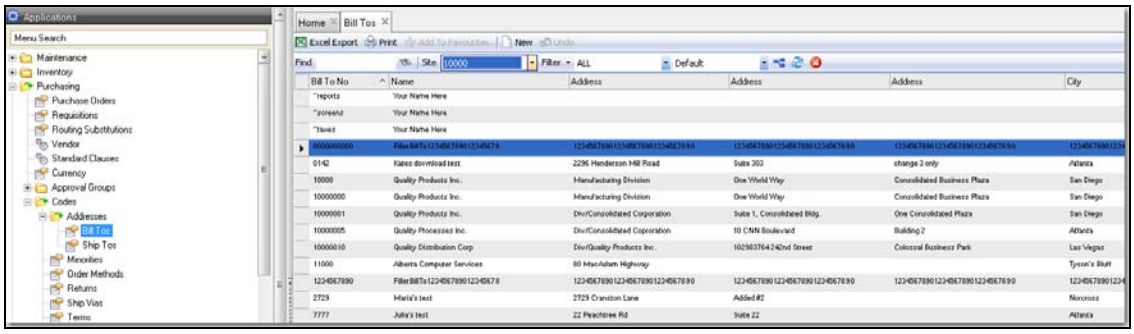
   *Bill To Number.* Enter the bill-to code. Make sure that the code is unique.

   *Name.* Enter the company name.

   *Address.* Enter the street address, city, state, zip code, and country for the vendor’s bill-to address.

   *Contact Information.* Enter the name for the company contact.
3. Press Enter to save.

**Fig. 7.28**
Address Codes: Bill Tos



## Ship-To Codes

Ship-to codes are used for the vendor shipping address and contact information. Use ship-to codes to record shipping address and contact information. The ship-to codes, which are located in Purchasing|Codes|Addresses|Ship Tos, can be downloaded from the QAD ERP application. The purchase order system requires that a ship-to address is specified on each PO.

Follow these steps to manually add a ship-to code:

1. In the Ship Tos browse, click New.
2. Enter the following information in the corresponding fields:

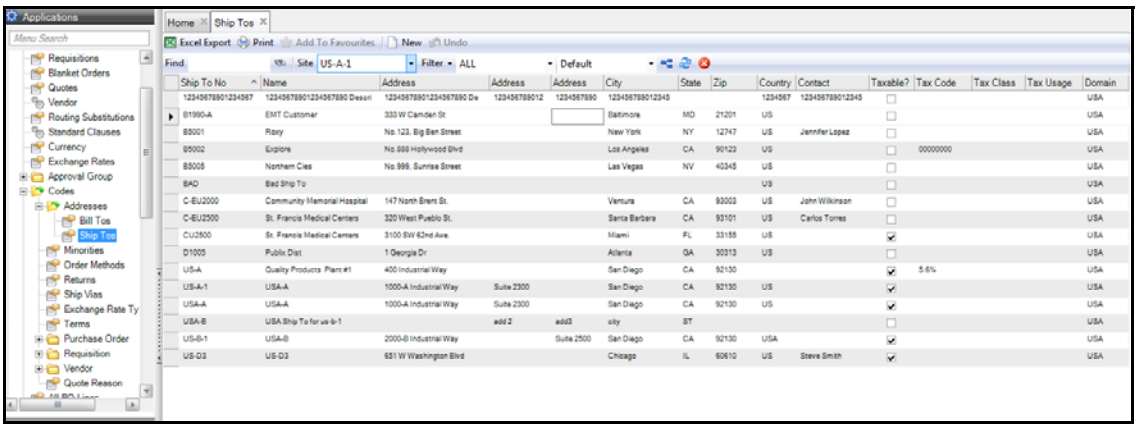
   *Ship To Number.* Enter the ship-to code. Make sure that the code is unique.

   *Name.* Enter the company name.

   *Address.* Enter the street address, city, state, zip code, and country for the vendor's ship-to address.

   *Contact Information.* Enter the name for the company contact.
3. Press Enter to save.

**Fig. 7.29**
Address Codes: Ship Tos



## Minority Codes

The minority codes, which are in Purchasing|Codes|Minorities, allow you to filter and report on vendors based on their minority status

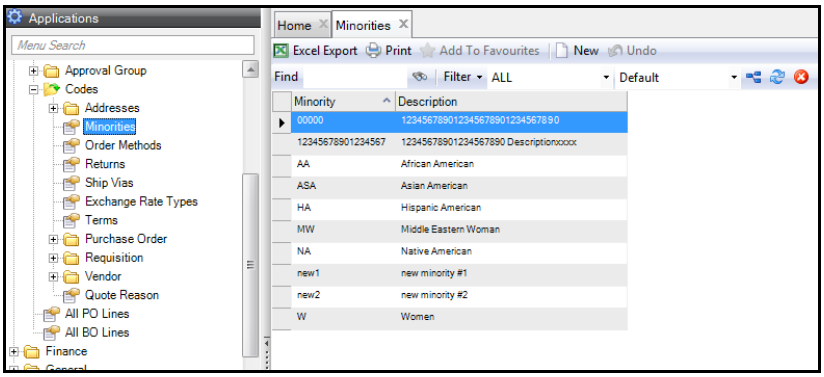
Follow these steps to add a minority code:

1 Open the Minorities browse and click New.

2 Enter the minority code in the Minority field and then a brief description in the Description field.

3 Press Enter to save.

**Fig. 7.30**
Minority Codes




## Order Method Codes

The order method codes, which are in Purchasing|Codes|Order Methods, are valid methods or ways of placing an order with a vendor.

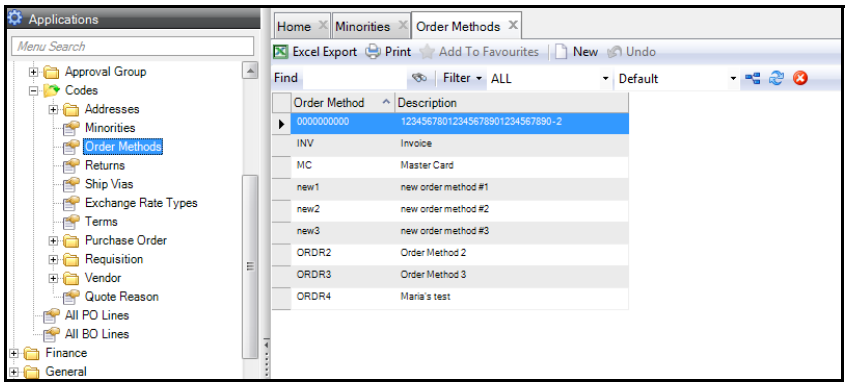
Follow these steps to add an order method code:

1 Open the Order Methods browse and click New.

2 Enter the order method code in the Order Method field and then a brief description in the Description field.

3 Press Enter to save.

**Fig. 7.31**
Order Method Codes




## Return Codes

The return codes, which are in Purchasing|Codes|Returns, explain why an item was returned to the vendor. Return codes provide you with a better view of vendor history and improve the reporting capabilities on vendor performance. These codes allow you to determine the causes and gauge the frequency of the reasons for vendor returns such as quality issues or incorrect parts. EAM also provides an option to have an e-mail automatically sent to the buyer associated with the requisition's PO each time a certain return code is used.

Follow these steps to add a return code:

1 Open the Returns browse and click New.

2 Enter the following information:

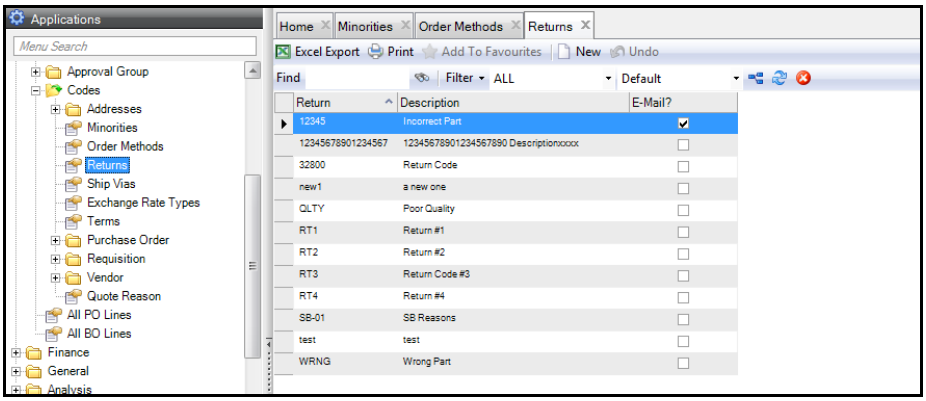
*Return.* Enter the return code.

*Description.* Enter a brief description for this type of return.

*E-Mail?* Select this check box to have an e-mail sent to the buyer associated with the requisition's PO anytime this return code is used.

3 Press Enter to save.

**Fig. 7.32**
Return Codes



## Ship-Via Codes

The ship-via codes, located in Purchasing|Codes|Ship Vias, are methods by which goods can be shipped to a plant. The ship-via code is associated with a vendor record when the vendor is used on a purchase order. The ship-via code from the vendor record is pulled into the purchase order Ship Via field. If necessary, the buyer can override this code.

Follow these steps to add a ship-via code:

1 Open the Ship Vias browse and click New.

2 Enter the following information:

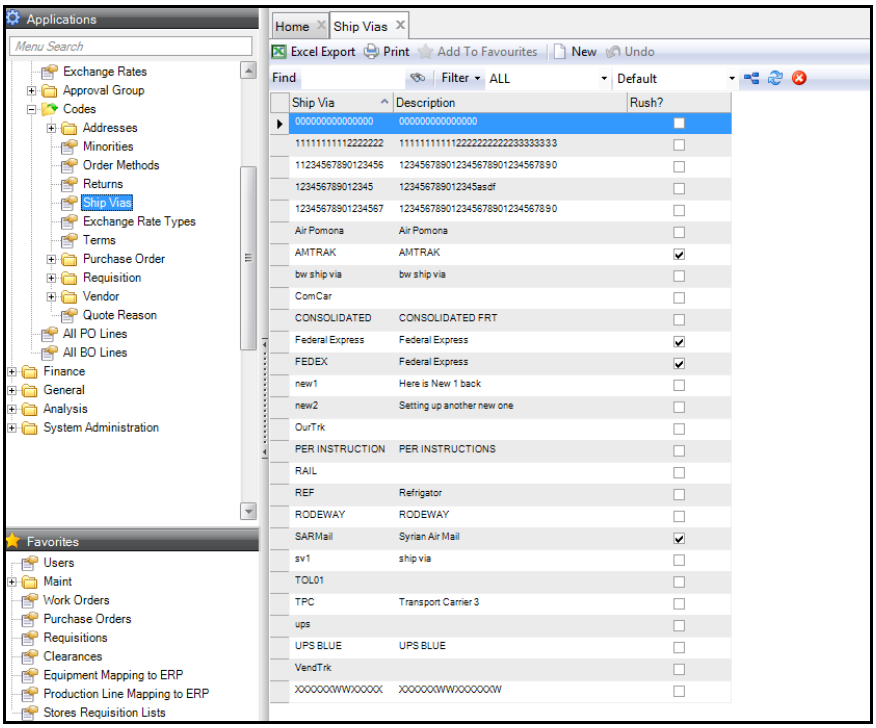
*Ship Via.* Enter the ship-via code.

*Description.* Enter a brief description for this type of shipping method.

*Rush?* Select this check box to identify rush orders. You can use to sort or group rush orders.

3 Press Enter to save.

**Fig. 7.33**
Ship Via Codes

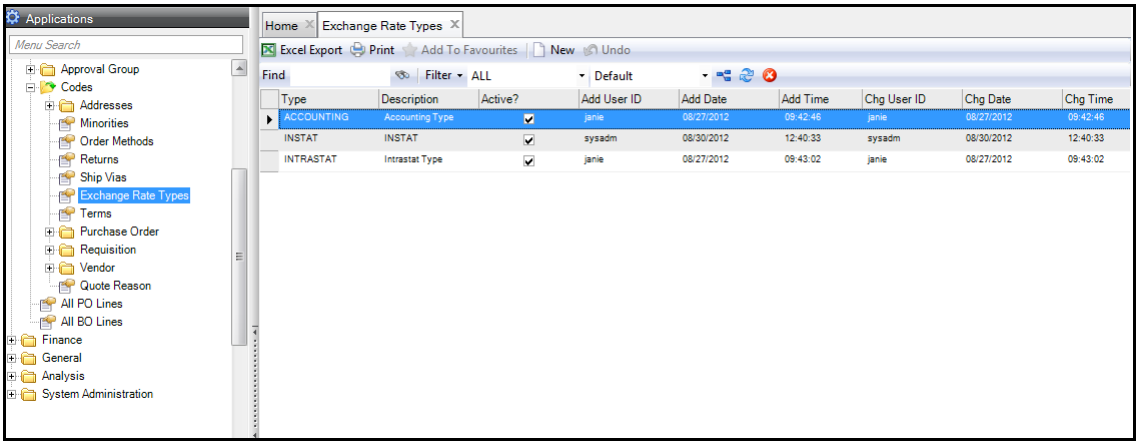



## Exchange Rates

The exchange rate types are updated from System Administration|ERP Interface|Download|Currency Download|Rate Type. The rate types are from ERP exchange rates that are downloaded to EAM. EAM uses the accounting rate types.

***Important*** Exchange rate types are populated from ERP during implementation. Do not create new exchange rate types in EAM.

**Fig. 7.34**
Exchange Rate Types




## Terms Codes

The terms codes, which are in Purchasing|Codes|Terms, represent the vendor's terms for payment. You can download terms from the QAD ERP application at System Administration|ERP Interface|Download|Terms Download.

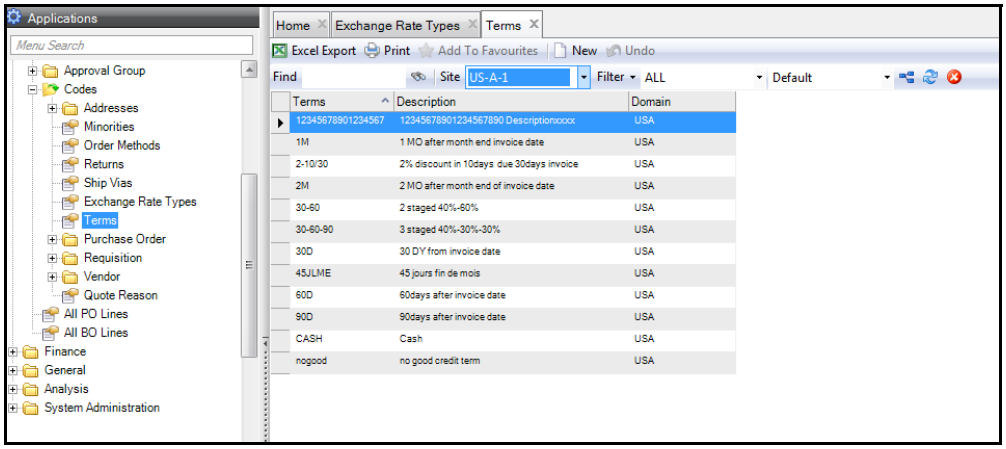
Follow these steps to add a terms code:

1 Open the Terms browse and click New.

2 Enter the terms code in the Terms field and then a brief description in the Description field.

3 Press Enter to save.

**Fig. 7.35**
Terms Codes




## Purchase Order Codes

Purchase order character 1 and character 2 codes are validation tables that are used with the PO Char 1 and 2 user-defined fields. For example, if you click in the PO Char 1 User-Defined field, the lookup allows you to select one of the items in the purchase order character 1 table.

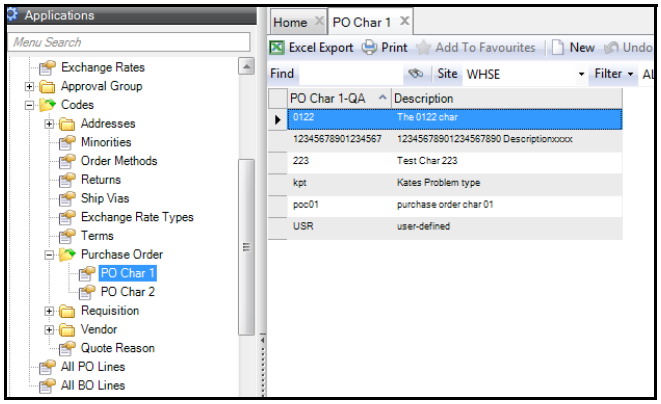
For more information about using user-defined fields, see “User-Defined Fields” on page 701.

### PO Character 1 Codes

The PO character 1 codes, located in Purchasing|Codes|Purchase Order|PO Char 1, are codes that work with PO Character 1 user-defined fields.

To add a PO character 1 code, open the PO Character 1 browse and click New. Enter the code in the PO Char 1 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.36**
PO Character 1 Codes

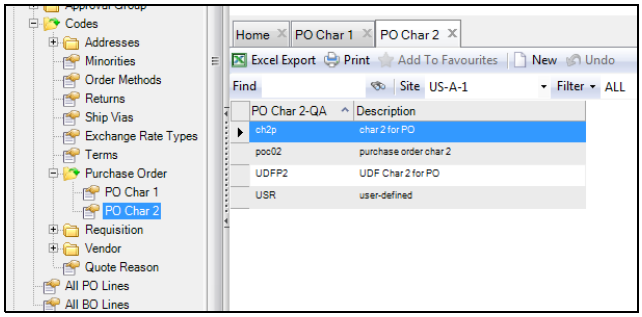



### PO Character 2 Codes

The PO character 2 codes, located in Purchasing|Codes|Purchase Order|PO Char 2, are codes that work with PO Character 2 user-defined fields.

To add a PO character 2 code, open the PO Character 2 browse and click New. Enter the code in the PO Char 2 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.37**
PO Character 2 Codes




## Requisition Codes

Requisition character 1 and character 2 codes are validation tables that are used with the Req Char 1 and 2 user-defined fields. For example, if you click in the Req Char 1 user-defined field, the lookup allows you to select one of the items in the req character 1 table.

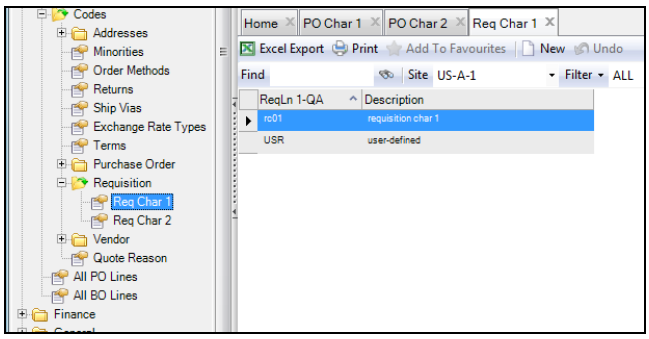
For more information about using user-defined fields, see “User-Defined Fields” on page 701.

### Requisition Character 1 Codes

The requisition character 1 codes, located in Purchasing|Codes|Requisition, are codes that work with Req Character 1 user-defined fields.

To add a requisition character 1, open the Requisition Character 1 browse and click New. Enter the code in the Requisition Char 1 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.38**
Codes: Requisition Character 1

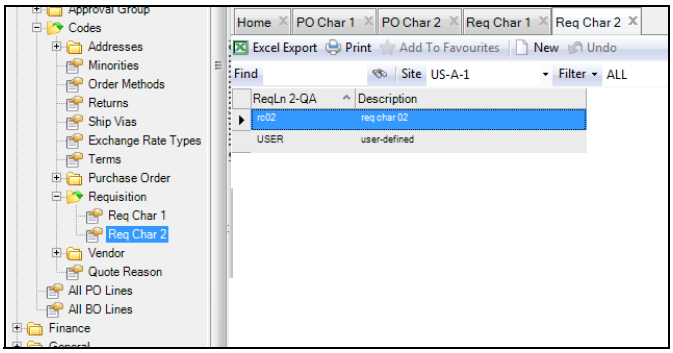



### Requisition Character 2 Codes

The requisition character 2 codes, located in Purchasing|Codes|Requisition, are codes that work with Req Character 2 user-defined fields.

***Note*** To add a requisition character 2, open the Requisition Character 2 browse and click New. Enter the code in the Requisition Char 2 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.39**
Codes: Requisition Character 2




## Vendor Codes

Vendor codes, which include status, type, and the user-defined character 1 and 2 codes, provide you with additional characteristics that you can attribute to a vendor. When used, these codes give you additional sorting and filtering options when searching for specific vendors.

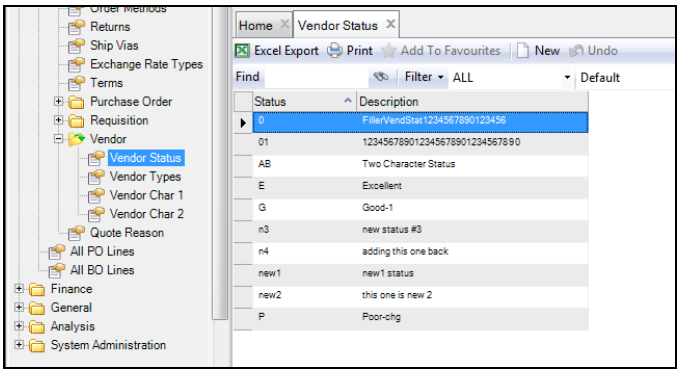
For more information on using user-defined fields, see “User-Defined Fields” on page 701.

## Vendor Status Codes

Vendor status codes are located in Purchasing|Codes|Vendor|Vendor Status. These codes are supporting data for the Vendor Status field, located on the Codes tab in a vendor record.

To add a vendor status code, open the Vendor Status browse and click New. Enter the code in the Status field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.40**
Vendor Status Codes

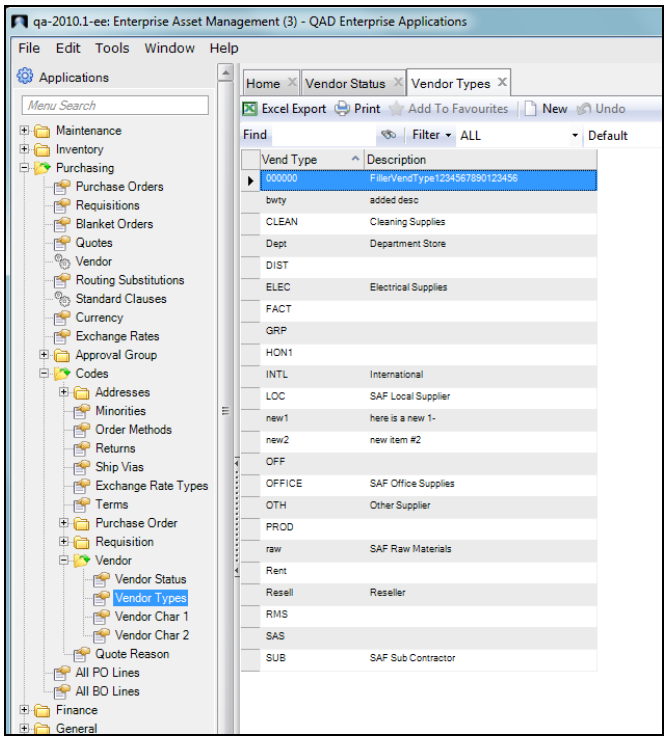



## Vendor Type Codes

Vendor types codes are located in Purchasing|Codes|Vendor|Vendor Types. These codes serve as the supporting data for the Vendor Type field, located on the Codes tab in a vendor record.

To add a vendor type code, open the Vendor Types browse and click New. Enter the code in the Vend Type field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.41**
Vendor Type Codes

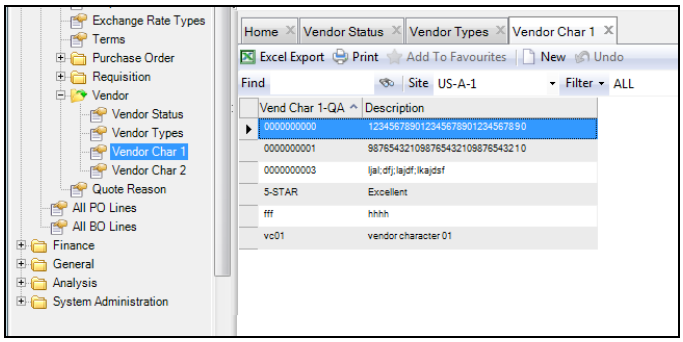



## Vendor Character 1 Codes

Vendor character 1 codes, located in Purchasing|Codes|Vendor|Vendor Char 1, are codes that work with Vendor Character 1 user-defined fields.

To add a vendor character 1 code, open the Vendor Char 1 browse and click New. Enter the code in the Vend Char 1 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.42**
Vendor Character 1 Codes

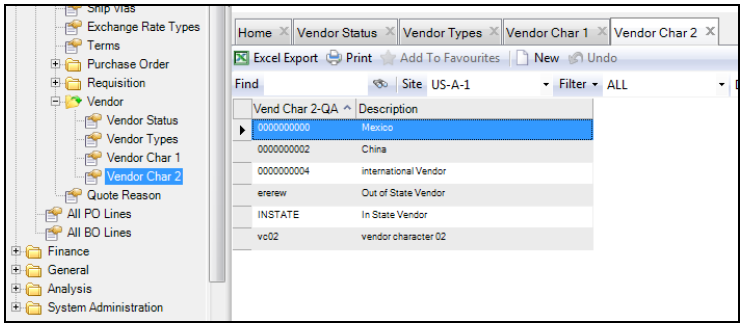



## Vendor Character 2 Codes

Vendor character 2 codes, located in Purchasing|Codes|Vendor|Vendor Char 2, are codes that work with Vendor Character 2 user-defined fields.

To add a vendor character 2 code, open the Vendor Char 2 browse and click New. Enter the code in the Vend Char 2 field and a brief description of the code in the Description field. Press Enter to save.

**Fig. 7.43**
Vendor Character 2 Codes

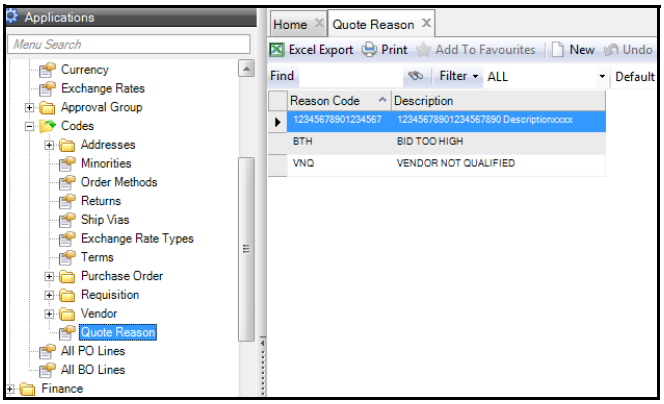



## Quote Reason

The quote reason codes, located in Purchasing|Codes|Quote Reason, are the reasons why a vendor was not awarded the bid on a selected quote line.

To add a quote reason code, open the Quote Reason browse and click New. Enter the quote reason code in the Reason Code field and short description in the Description field.

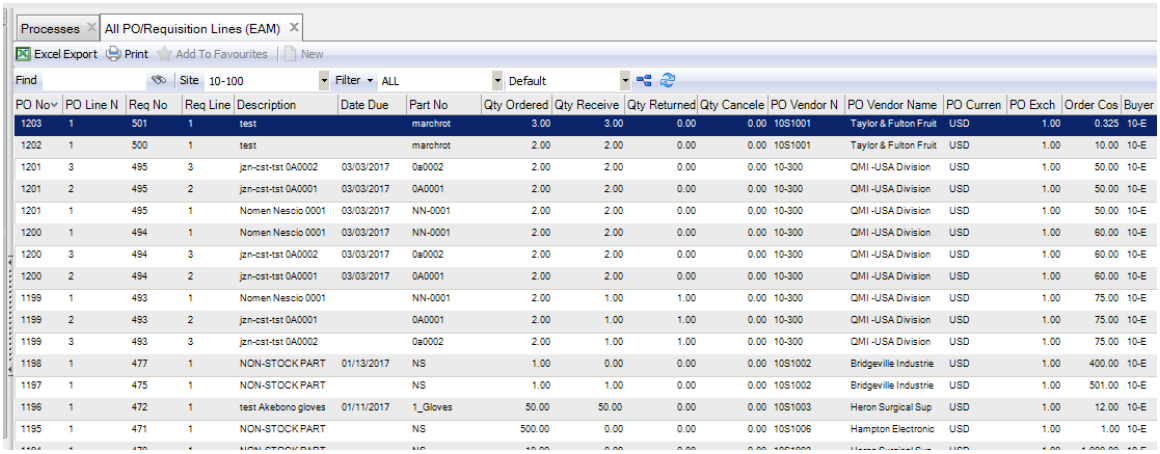
**Fig. 7.44**
Quote Reason Codes




## All PO/Requisitions Lines Browse

The All PO/Requisitions Lines browse, located in Purchasing|All PO/Requisitions Lines, is a consolidated list of all the requisition lines with or without a PO number. You can sort, filter, and print the list, and export it to Excel.

**Fig. 7.45**
All PO/Requisition Lines Browse

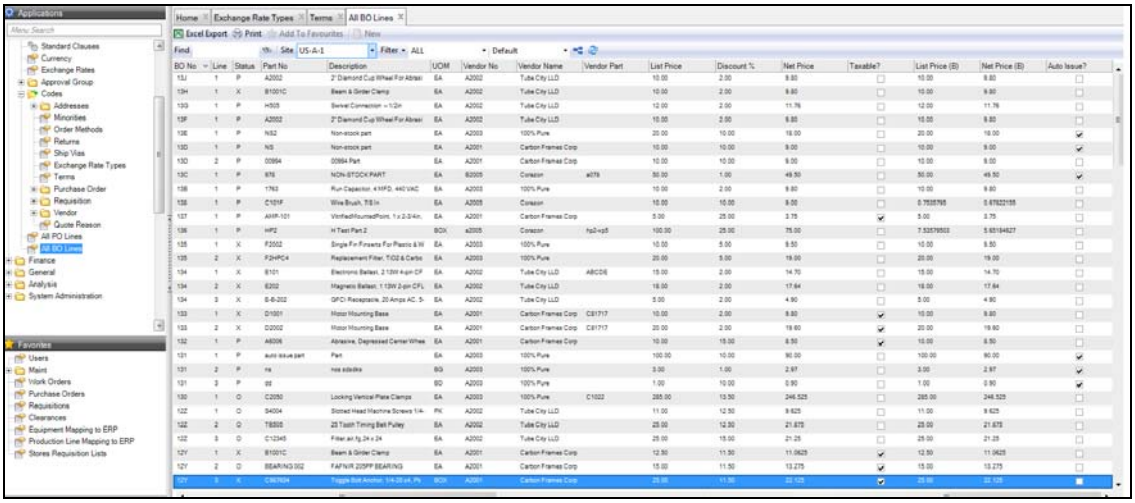



| PO No | PO Line N | Req No | Req Line | Description | Date Due | Part No | Qty Ordered | Qty Receive | Qty Returned | Qty Cancele | PO Vendor N | PO Vendor Name | PO Curren | PO Exch | Order Cos | Buyer |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1203 | 1 | 501 | 1 | test | | marchrot | 3.00 | 3.00 | 0.00 | 0.00 | 10S1001 | Taylor & Fulton Fruit | USD | 1.00 | 0.325 | 10-E |
| 1202 | 1 | 500 | 1 | test | | marchrot | 2.00 | 2.00 | 0.00 | 0.00 | 10S1001 | Taylor & Fulton Fruit | USD | 1.00 | 10.00 | 10-E |
| 1201 | 3 | 495 | 3 | jzn-cst-tst 0A0002 | 03/03/2017 | 0a0002 | 2.00 | 2.00 | 0.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 50.00 | 10-E |
| 1201 | 2 | 495 | 2 | jzn-cst-tst 0A0001 | 03/03/2017 | 0A0001 | 2.00 | 2.00 | 0.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 50.00 | 10-E |
| 1201 | 1 | 495 | 1 | Nomen Nescio 0001 | 03/03/2017 | NN-0001 | 2.00 | 2.00 | 0.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 50.00 | 10-E |
| 1200 | 1 | 494 | 1 | Nomen Nescio 0001 | 03/03/2017 | NN-0001 | 2.00 | 2.00 | 0.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 60.00 | 10-E |
| 1200 | 3 | 494 | 3 | jzn-cst-tst 0A0002 | 03/03/2017 | 0a0002 | 2.00 | 2.00 | 0.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 60.00 | 10-E |
| 1200 | 2 | 494 | 2 | jzn-cst-tst 0A0001 | 03/03/2017 | 0A0001 | 2.00 | 2.00 | 0.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 60.00 | 10-E |
| 1199 | 1 | 493 | 1 | Nomen Nescio 0001 | | NN-0001 | 2.00 | 1.00 | 1.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 75.00 | 10-E |
| 1199 | 2 | 493 | 2 | jzn-cst-tst 0A0001 | | 0A0001 | 2.00 | 1.00 | 1.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 75.00 | 10-E |
| 1199 | 3 | 493 | 3 | jzn-cst-tst 0A0002 | | 0a0002 | 2.00 | 1.00 | 1.00 | 0.00 | 10-300 | QMI -USA Division | USD | 1.00 | 75.00 | 10-E |
| 1198 | 1 | 477 | 1 | NON-STOCK PART | 01/13/2017 | NS | 1.00 | 0.00 | 0.00 | 0.00 | 10S1002 | Bridgeville Industrie | USD | 1.00 | 400.00 | 10-E |
| 1197 | 1 | 475 | 1 | NON-STOCK PART | | NS | 1.00 | 1.00 | 0.00 | 0.00 | 10S1002 | Bridgeville Industrie | USD | 1.00 | 501.00 | 10-E |
| 1196 | 1 | 472 | 1 | test Akebono gloves | 01/11/2017 | 1_Gloves | 50.00 | 50.00 | 0.00 | 0.00 | 10S1003 | Heron Surgical Sup | USD | 1.00 | 12.00 | 10-E |
| 1195 | 1 | 471 | 1 | NON-STOCK PART | | NS | 500.00 | 0.00 | 0.00 | 0.00 | 10S1006 | Hampton Electronic | USD | 1.00 | 1.00 | 10-E |

## All BO Lines Browse

The All BO Lines browse, located in Purchasing|All BO Lines, is a consolidated list of all the blanket order lines in every blanket order. You can sort, filter, and print the list, and export it to Excel.

**Fig. 7.46**
All BO Lines Browse



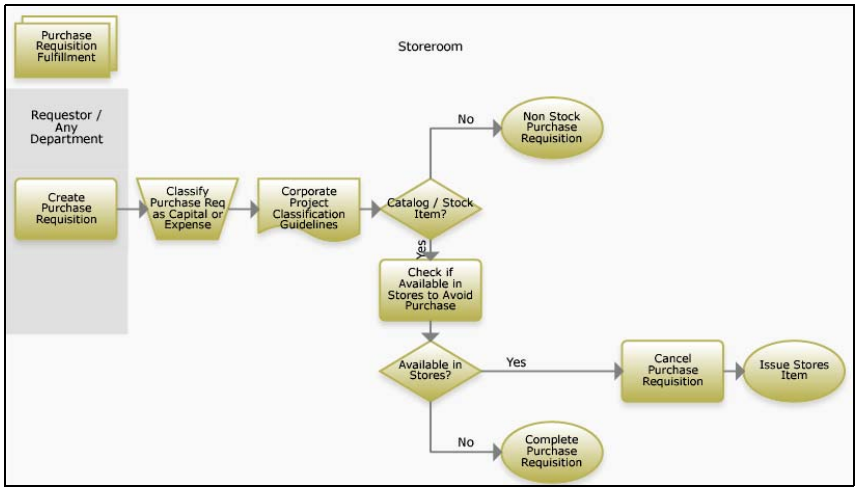

# Requisitions

## Overview

Use requisitions to create and maintain requests in EAM to purchase inventory stock items, non-stock parts, or service work. From this point, requisitions attach to purchase orders. Requisitions represent the detailed line item information on the purchase orders.

Create a header record identifying the expense in terms of cost center, account, sub-account, work order, equipment identification, supplier, and more. The requisition header is unique to the specific supplier entered. EAM automatically manages purchase order consolidation to common suppliers when POs are globally created from multiple requisitions. All the detailed header information copies into the purchase requisition's line items, but you can modify it.

**Fig. 7.47**
Creating a Requisition Process Flow



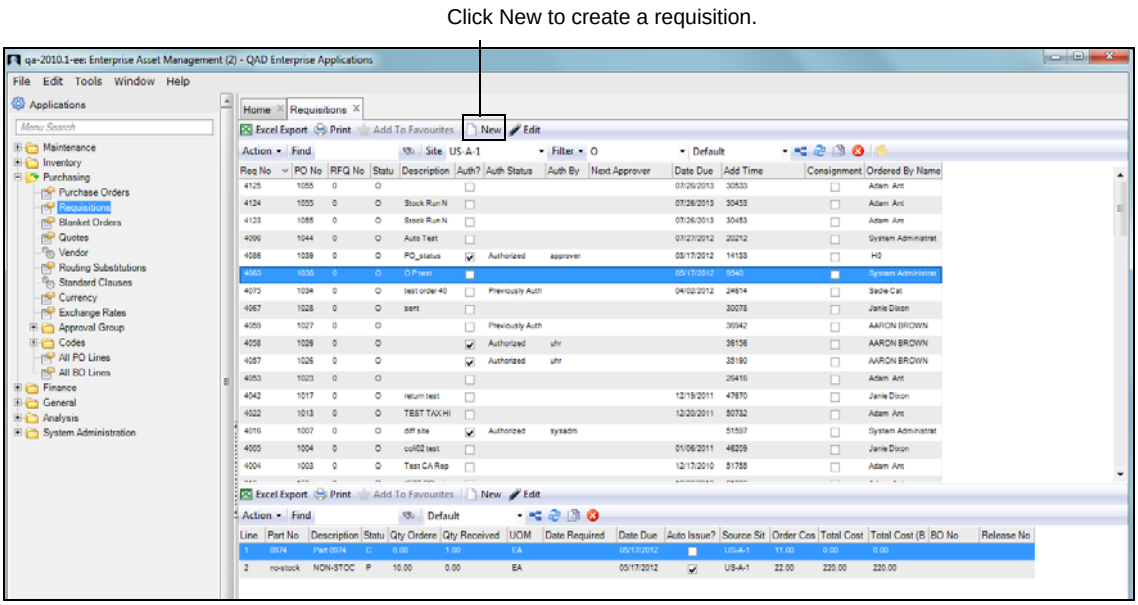

1. Create a purchase requisition.
2. Classify the requisition as capital or expense using corporate guidelines.
3. Indicate a non-stock requisition if you are not going to catalog or stock the item.
4. For an item to catalog or stock, check stores for availability.
5. If the item is available, cancel the purchase requisition and issue the item.
6. If the item is not available, complete the purchase requisition.

## Creating a Requisition

Follow these steps to create a requisition:

1 Open the Requisitions browse in Purchasing|Requisitions.

**Fig. 7.48**
Requisition Browse



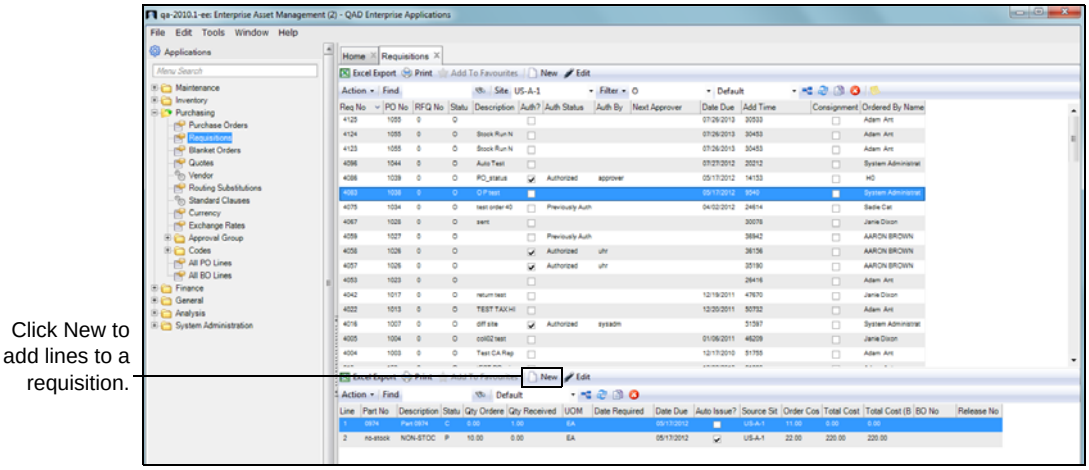

2 Click New. A blank requisition record opens. The system automatically assigns a requisition number, which you cannot modify

3 Enter the necessary information in the Detail and Expense tabs. See “Filling Out the Requisition Header” on page 453.

4 Once all the information has been entered, click Save.

5 Add lines to the requisition. Select the requisition that you created and click New in the lower, requisition lines browse.

**Fig. 7.49**
Adding Lines to a Requisition




6 Enter the necessary information in the Detail, Expense, PO Text, and User Defined tabs. See “Add Lines to a Requisition” on page 459.

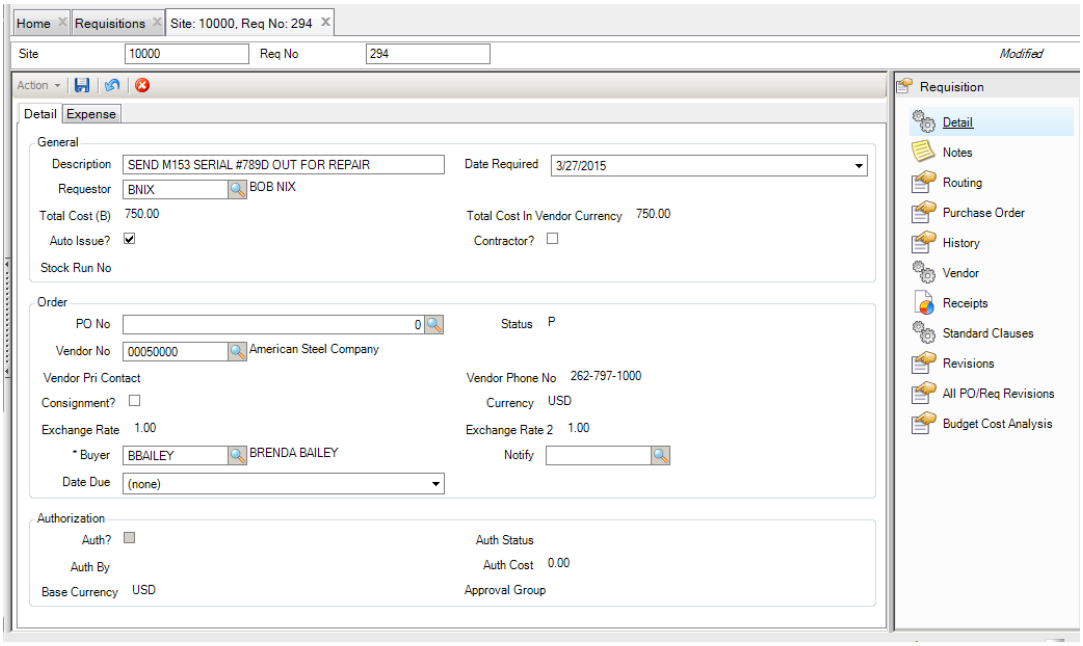
7 Click Save.

## Filling Out the Requisition Header

Enter information about the requisition in the Detail and Expense tabs.

### Requisition: Detail Tab

**Fig. 7.50**
Requisitions Tab: Detail



### General

*Description.* Enter up to a 30-character alphanumeric description of the requisition. You can filter and sort by the description.

*Date Required.* The required date for the material or service, entered by the creator of the requisition. You can enter a date or select a date from the drop-down calendar.

The buyer uses this scheduling information when negotiating with vendors.

*Requestor.* The employee who requested the items, goods, or services associated with the requisition.

When you create a requisition, EAM adds the employee number of the user ID entering the new requisition in the Requestor field. You can override this field using the lookup window.

*Total Cost (B).* EAM calculates the total cost in the base currency by multiplying the quantity times the order cost in the base currency on each line of the requisition, and displays the total.

Requisition routing approval uses the total cost value. EAM compares the total requisition cost to the approving individual's spending limits.

*Total Cost in Vendor Currency.* The cost in the vendor's currency.

*Auto Issue?* This check box denotes whether to directly expense parts or services upon receipt.

If a line item on the requisition is a stock part that is set to auto issue, a non-stock part, or a service, the fields on the Expense tab identify the cost center, account, and sub-account number to charge. The item is received against the PO and expensed to those accounts on the line and EAM credits the accounts payable liability account.

If you select Auto Issue?, you can direct the expense by referencing:

- WO number
- Stores req number
- Equip number
- Rebuild
- Rotable part
- Serial no
- Project number
- Job number
- Cost center/account/sub-account

Select the check box to display expense accounting structure defaults.

The Auto Issue? check box also affects what displays and prints on the purchasing documents:

- Requisition document
  - If Auto Issue? is selected, the department, cost center, account, and sub-account number from the expense section display and print.
  - If Auto Issue? is clear, the inventory dept, inventory cost center, inventory account number, and inventory sub-account display and print.
- Purchase order
  - For each requisition, if Auto Issue? is selected, the cost center, account, and sub-account number from the expense section display and print.

- If Auto Issue? is clear, the inventory cost center, inventory account number, and sub-account display and print.

*Contractor?* This check box denotes whether the requisition is for an outside contractor or services. It is only active when Auto Issue? is selected.

Typically, a work order or equipment identification number links to the requisition. The system uses the contractor cost center, account, and sub-account number from the work order or equipment, instead of the material cost center, account, and sub-account number when the requisition is auto-issued or expensed upon receipt.

*Stock Run Number.* When a requisition is automatically created through a stock run, the system fills this field with the stock run number.

***Note*** If a stock run does not auto create the requisition, the system fills this field with a 0.

**Order**

*PO No.* The requisition is attached to this purchase order. Enter the purchase order number or select one from the lookup.

EAM retains the requisition throughout its entire life. Instead of copying a requisition to a purchase order, EAM attaches a requisition to the purchase order. EAM displays the purchase order number in the PO number field.

*Status.* Status defaults to P (planned). After placing the requisition on order, the system automatically assigns it an O (ordered) status in the PO. From within the requisition, you can select the Change Status action and either cancel (X) or close (C) the requisition.

*Vendor No.* Enter or select the vendor number associated with the requisition. If a PO number has been entered and the PO has a designated vendor, EAM displays that vendor number.

When a purchase order is created for the requisition, the system copies the vendor from the requisition to the purchase order.

***Note*** The vendor name displays next to the vendor number.

*Vendor Primary Contact.* The primary contact designated in the vendor record, copied to the requisition.

*Vendor Phone Number.* The vendor phone number, copied to the requisition from the vendor record.

*Consignment?.* This check box indicates whether this requisition is for parts on the premises that are vendor-owned.

*Currency.* The primary currency the vendor uses. Requisitions for this vendor default to this currency. EAM defaults to the base currency if there is no vendor or PO number.

*Exchange Rate.* The current exchange rate for the requisition currency from the QAD ERP application.

*Exchange Rate 2.* The secondary exchange rate from the QAD ERP application.

*Buyer.* If this is a stock part and a buyer is associated with the part number, the buyer's employee ID and name are pulled into the requisition line. A buyer specified on the requisition copies to line items attached to the requisition.

If the buyer is blank, select one from a lookup of valid buyers. After requisition approval, EAM restricts who can change a requisition. Only the buyer and the person who authorized the expenditure are allowed to change the requisition and its lines.

*Notify.* If a particular type of event occurs that affects the requisition or purchase order, select the individual or group of individuals to e-mail.

The individual or group in this field can consist of a user ID or a group of users, called a mail group. As a requisition goes through the routing approval, ordering, and receipt stages; the system notifies the user or group with updates.

*Date Due.* The date the buyer expects to receive the parts, based upon the vendor's feedback. You can change the date on each line.

**Authorization**

*Auth?* This system check box denotes whether the requisition is authorized.

*Auth Status.* The authorization status of the requisition.

If the authorization has not been started, the status remains blank. If the requisition is in the routing process, the status is Routing. If it is authorized, the status is Authorized.

*Auth By.* The user ID who authorized the expenditure of the requisition.

EAM validates spending limits, cost center group, and/or account group. If you can spend at least the amount required and can approve against the cost center number or account number, the requisition becomes authorized. Your user ID displays in the Auth By field. If you do not meet these criteria, the requisition routes to others for consideration of approval. The quality approver or user ID who meets the spending limit authorizes the requisition.

*Auth Cost.* The current requisition cost at authorization.

The Auth Cost field displays the original approval requisition because it can differ from the final amount.

The buyer and the final authorizer can change the requisition after authorization. In the General|Business Units|Domain|PO/Reqs tab, set a buyer limit (either percentage or amount), limiting the buyer's ability to increase the authorized requisition's cost. If it is required to be incremented in a small amount, the buyer can manage a requisition. If changes exceed the buyer limits, the system also forces the requisition to reroute for approval. EAM enters a new authorized cost every time it changes.

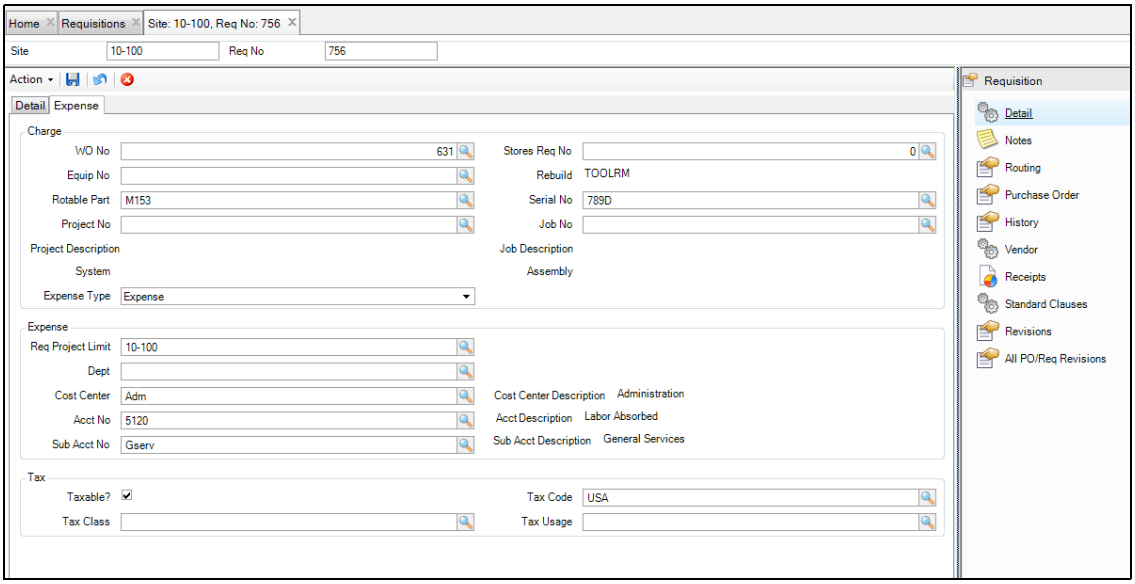
*Base Currency.* The base currency of the site's domain, which is specified on the General|Business Units|Domain|PO/Reqs tab.

*Approval Group.* The group of users to which the requisition is routed for approval.

Requisition: Expense Tab

Enter expense and tax information about the requisition on the Expense tab.

**Fig. 7.51**
Requisitions: Expense Tab




## Charge

*WO No.* If the requisition is associated with a work order number, you can identify it here. It is validated from the work order table and only displays open work orders. Identifying the work order on a requisition has two effects:

- If the requisition is set to auto issue, when the parts, goods, or services are received through the purchasing system, they charge directly to the work order's expense accounting data.
- If the work order is associated with the requisition but Auto Issue? is cleared, these parts are still for the work order. When the parts are received, EAM reserves them for the work order. The parts go into inventory, to be issued to the work order later, and the accounting data reflects the inventory asset data. When the parts are issued, they are charged to the work order's expense accounting data.

*Stores Req No.* When you enter a WO number with an associated stores requisition number, it displays in this field.

*Equip No.* The identifying number for a piece of equipment.

If the requisition is associated with a piece of equipment, identify the equipment in this field. Enter or select the equipment from the lookup.

Identifying the equipment on a requisition creates the expense GL transaction only if Auto Issue? is selected. When purchasing receives the parts, goods, or services, it directly charges the equipment's expense accounting data.

If the equipment is associated with a requisition with no auto issue, the parts are still ordered for the equipment. Inventory receives the parts and the Account Number fields reflect the expense account number. In this case, the equipment number serves only as a note that the parts were ordered for this piece of equipment.

*Rebuild.* Select the rebuild location using the lookup.

*Rotable Part.* Select the rotable part using the lookup. This lookup only displays the rotable parts that are available in the selected rebuild location.

*Serial No.* Use the lookup to select the serial number of the rotable part. This lookup only displays the serial numbers that are available for the selected rotable part.

*Project No.* The identifying number for a project.

When a project number is associated with a requisition, EAM copies the project's primary expense accounting number.

*Job No.* The job number associated with the project to expense for this purchase.

First, identify a project to use a job number.

If Auto Issue? is selected, the cost of the goods and services on the requisition automatically flows to the identified project and job expense accounting structure on the requisition.

*System.* This field is associated with equipment ID, identified on a requisition.

Create a requisition to charge directly or issue upon receipt against a specific piece of equipment. Associate a valid system for more detailed analysis of where this cost was expensed on the equipment.

Each piece of equipment must have an associated BOM type. To reference a system, use the lookup to see a table of valid system codes associated with the equipment through the BOM type. Associate an assembly below the system field for more detailed analysis.

*Assembly.* The assembly associated with the system code, which is associated with a piece of equipment.

If the requisition is a direct charge and identifies a piece of equipment, then the part expenses directly to that equipment. For more detailed analysis of where on the piece of equipment this part goes, associate the part to a specific system code.

*Expense Type.* The requisition expense type: capital or expense.

The default is Expense. Expense type refers to the approval process for a requisition. In User Maintenance, each user has two spending limits for expense and capital requisitions. The Requisition check box determines the kind of spending limit. If you enable the Req Proj Limit? check box in General|Business Units|Sites|Authorization Options tab, EAM uses a third limit value, if it is present.

Implementation Issue: In a facility where people sign approvals for goods and services, they may have two types of spending limits. For example, for regular expenses, an individual has $500 approval. On capital items (typically larger purchases), the same individual has an approval limit of $5000.

**Expense**

*Expense Site.* The site to which to expense this requisition.

*Dept.* The department charged for the requisition upon receipt.

Select Auto Issue? to expense the requisition to a department.

***Note*** If a department, cost center, or sub-account is required and the requisition is not auto issued, the system ignores the required field setting.

*Cost Center.* The cost center, which is an area of the facility that can receive materials or services and can, in turn, be charged for them.

Select the cost center from a table of cost centers, previously created in Finance|Groups|Cost Centers.

If a cost center is required and the requisition is not auto issued, the system ignores the required field setting.

*Acct No.* The account number that receives the auto-issued requisition charges during the purchasing routine.

The account number table validates the account number. If you are using a cost center, the account number must be valid within the cost center.

The system copies the default account number. If an auto-issued requisition identifies a piece of equipment or a work order, then the system copies the work order's account number by default.

***Note*** A stock replenishment purchase automatically uses the part inventory cost center, account, and sub-account number, and if it is blank, then the system uses the site default.

*Sub Acct No.* The sub-account number associated with a specific account number. The PO charges the sub-account number when it receives the requisition.

When a PO receives goods and services specifically for this line item or requisition, the cost charges to the sub-account number.

You can identify a sub-account number only if a sub-account number was previously identified or associated with the requisition.

**Tax**

*Taxable?* The vendor's default tax setting. Click to change this setting.

*Tax Code.* The vendor's default tax code.

*Tax Class.* The vendor's default tax class.

*Tax Usage.* The vendor's default tax usage.

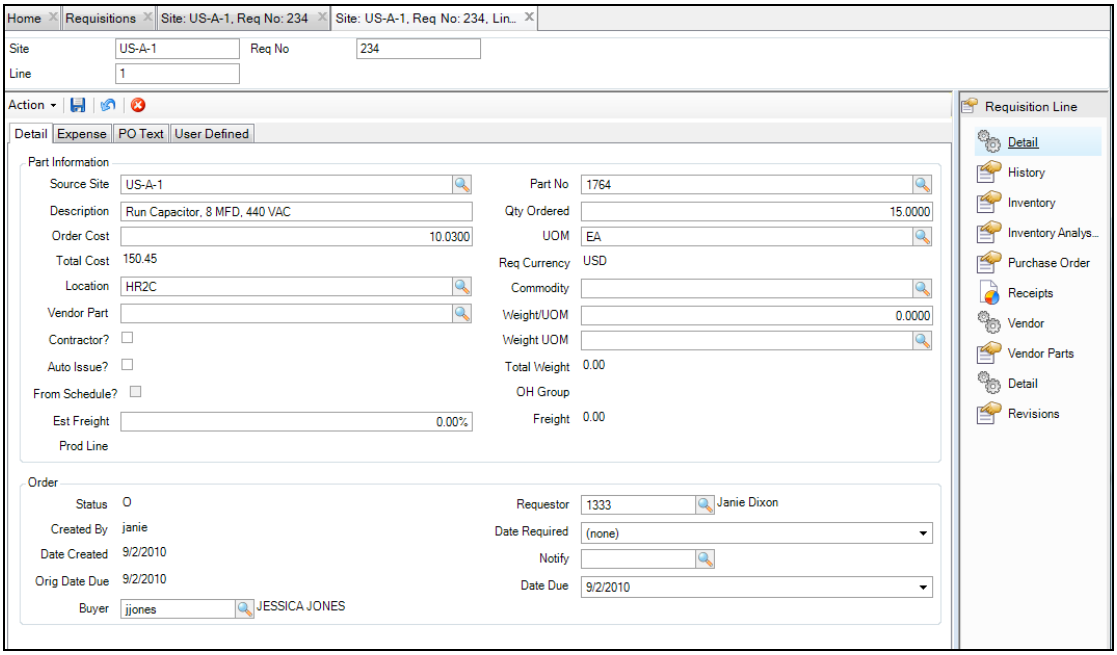
### Add Lines to a Requisition

Create an individual request for purchase of an inventory stock item, non-stock parts, or service work. Access this information from the bottom browse in Requisitions.

Enter information about the requisition line on the Detail, Expense, PO Text, and User Defined tabs.

Requisition Line: Detail Tab

**Fig. 7.52**
Requisition Lines Detail Tab




## Part Information

*Source Site.* The site from which the part number on the requisition is selected. If you need to purchase a part for a site other than the current working site, select a different source site. In the lookup, EAM displays only those parts associated with the identified source site.

*Part Number.* The part number associated with the requisition. Access the lookup at the Part No field. The lookup displays a list of valid part ID numbers. From this list, select the part to order and to replenish stock. If the part number you enter is a valid EAM stock number, the system pulls in all the relevant information such as the description, purchase order text, and account number structure. However, EAM allows you to enter any number, such as a vendor part number, non-stock part, or service description, which allows you to create an auto-issued requisition. If you enter a part number that does not exist in Inventory, EAM treats this as a non-stock purchase and you must identify the expense accounts for expensing on receipt.

*Description.* Enter up to a 30-character alphanumeric description of the requisition. If a stock part number is added to the requisition, the part's description in Inventory|Inventory is copied to this field.

*Qty Ordered.* The quantity to order on the requisition. If the stock replenishment routine creates the requisition, EAM calculates the quantity ordered based on user-defined parameters. Otherwise, you can create a requisition and specify a quantity to order. EAM may also check to see if the vendor has minimum order quantities set up in the vendor part record.

*Order Cost.* The price per unit of measure that the organization pays for the given goods or services. If this is a stock part, the following hierarchy determines which of three prices is used:

- If the vendor has a valid price schedule, that price is pulled into the requisition.

- If no vendor price schedule exists, the system populates the order cost with the last price in the requisition currency charged for this part from the vendor.
- If no price schedule or last price in the requisition currency exists, EAM pulls in the cost established for the part in the Inventory record.

***Note*** While EAM may provide a default, in many cases, the buyer validates this price by direct contact with the vendor and you can enter a new price directly on the requisition. On receipt, for this part and vendor, a new last price is updated for future purchases.

*UOM.* The vendor's specified order unit of measure for the part or service. If this is a stock part, the field is filled in with the part's order UOM as entered in the part record. When parts are purchased and received in inventory, the purchasing unit of measure is automatically converted to the issuing unit of measure. Whenever the listing of available parts is viewed, they are shown in the issue unit of measure.

***Example*** A vendor might sell parts by the box, but your organization uses and issues the parts by Each, meaning one at a time. The Inventory|UOM (Unit of Measure) Conversion module facilitates automatically creating a conversion when transitioning between issue unit of measures and purchase unit of measures.

*Total Cost.* EAM calculates the total cost by multiplying the quantity ordered by the order cost on the requisition.

*Req Currency.* The vendor currency, which defaults from the requisition header.

*Location.* The first bin location found in the part record is defaulted to the requisition. You can override that bin location and identify another valid location within the Location lookup. You can only use locations associated with this part. If the requisition is for a non-stock part or service, you can select any valid location from the Location lookup.

*Commodity.* A user-defined table used to describe the type of part. If the requisition is for a stock part and the part had a commodity code listed in its record, then that commodity code is copied over to the requisition. This field is required when a buyer has been assigned to a commodity code. See "Buyer/Commodity Purchasing?" on page 36.

*Vendor Part.* If a vendor is specified in the requisition and this line is for a stock part, the system searches for a vendor part number associated with the EAM part record. If a vendor part number exists and is set to primary, it copies into the requisition by default. You can override this value and link another vendor part number to a vendor, if available. If the requisition is for a non-stock part, you can enter a vendor's part number if a manufacturer's part number was entered in the Part No field.

*Weight/UOM.* The weight of one order unit of measure for this part. The accompanying UOM field displays the weight's unit of measure such as pounds. By default, the system calculates the weight of one order unit of measure based on data found in the part record. For example, the issue UOM is Each and the order UOM is Box. The system refers to the UOM conversion to calculate how many Eaches (issue unit) are in a Box (order unit). The system multiplies the number of issue units per order unit by the weight of an issue unit, yielding a product that equals the total weight for the order unit. If the issue UOM and order UOM are the same, the system simply displays the weight of the issue UOM as entered in the part record.

*Contractor?* Select this check box if the requisition line is for outside contractor services. If enabled, then the requisition is an auto issue. A work order or equipment identification number is typically noted on the Expense tab of the requisition or this requisition line. The system uses the contractor's expense accounting data from the work order or equipment instead of the material accounting data when the part is auto issued upon receipt.

*Auto Issue?* This field denotes whether to directly expense parts or services upon receipt.

If a line item on the requisition is a stock part set to auto issue, then fields on the Expense tab identify the cost center, account, and sub-account number to charge. Inventory receives the purchase order part directly, then expenses it to the cost center, account, and sub-account on the requisition.

If it is a non-stock part or service, then the designated expense account structure on the requisition is charged, debiting the requisition and crediting the accounts payable liability account.

If this check box is clear, EAM prompts you to select Auto Issue? Fill out any of the following fields:

- WO No
- Stores Req No
- Equip No
- Rebuild
- Project Number/Job
- Cost Center/Account/Sub-account

*From Schedule?* This check box notes whether the default unit price came from the part's price schedule.

*OH Group.* The overhead group code associated with the requisition. This field is available if the Auto Issue? field is selected. Click the field for a lookup of valid overhead group codes. The overhead group code adds either a fixed amount or percentage to the total cost passed on when the part is issued, allowing the organization to recover overhead expenses from operational cost centers and departments.

*Est Freight.* Estimated freight is not meant to be an exact amount but a method for allocating freight to part cost. The estimated freight percentage on the requisition line defaults from the stock part's estimated freight percentage or the site's non-stock freight percentage.

*Freight.* The estimated freight costs for the requisition, also referred to as allocated freight costs.

*Product Line.* Select a product line code from the lookup.

***Note*** The codes entered here are used exclusively for SAF accounting purposes set up in QAD Enterprise Edition Financials. Add and edit product line codes in System Administration|Product Line. The product line codes defined there should match the corresponding product line codes in the QAD ERP.

**Order**

*Status.* Status defaults to P (planned). After placing the requisition lines on order, the system automatically assigns it an O (ordered) status in the PO. From within the requisition, you can select the Change Status action and elect to either cancel (X) or close (C) a requisition line.

*Requestor.* The employee who requested the items, goods, or services associated with the requisition line.

When you create a requisition, EAM adds the employee number and name of the user entering the new requisition in the Requestor field. You can override this field.

*Created By.* The creator's user ID displays in this field.

*Date Required.* The required date for the material or service, entered by the creator of the requisition.

The buyer uses this scheduling information when negotiating with the vendors.

*Date Created.* The date the requisition line was created. The system updates this field.

*Notify.* If a particular event affects the requisition line or purchase order, the system can notify an individual or group of individuals by e-mail. Using the lookup, select the user or mail group to notify.

*Orig Date Due.* The original date the buyer expected to receive the parts before vendor feedback.

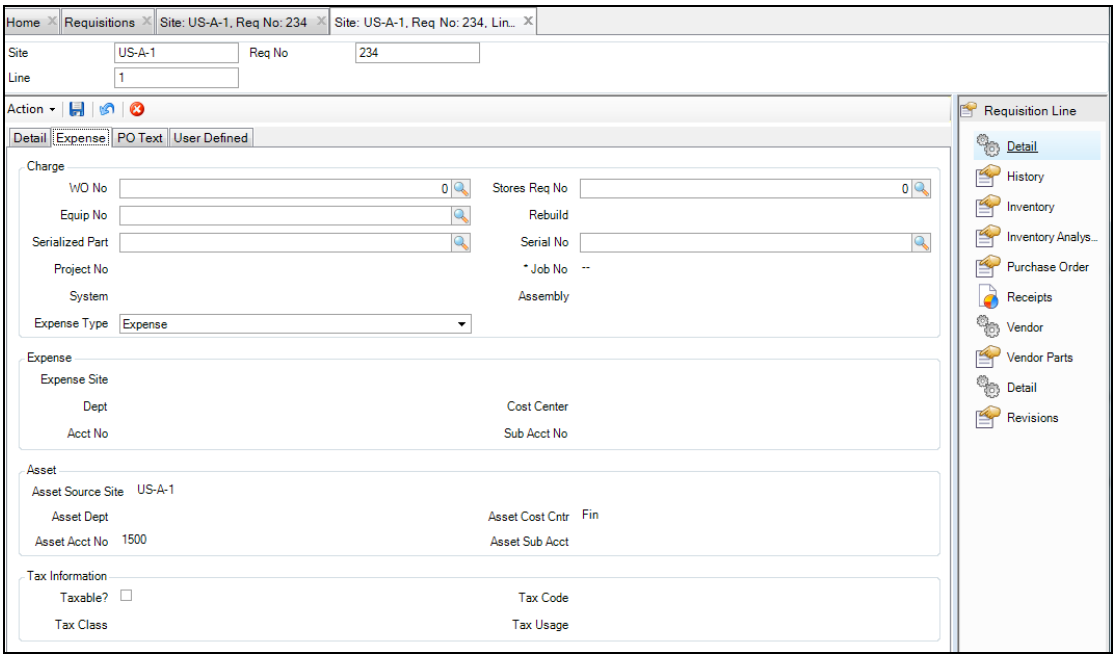
*Date Due.* The date on which the buyer expects to receive the parts, based on the vendor's feedback. The buyer or requisition creator can change the date.

*Buyer.* If this is a stock part and a buyer is associated with the part number, the buyer's employee ID and name are pulled into the requisition line. Additionally, if Buyer/Commodity Purchasing? is selected on the Domain|Inventory tab, Buyer defaults to the buyer associated with the commodity code that in turn is linked to this part. A buyer specified on the requisition copies to line items attached to the requisition.

If the buyer is blank, select one from a lookup of valid buyers. After requisition approval, EAM restricts who can change a requisition. Only the buyer and the person who authorized the expenditure are allowed to change the requisition and its lines.

Requisition Line: Expense Tab

**Fig. 7.53**
Requisition Lines Expense Tab




## Charge

*WO No.* If the part or service on the requisition line is for a work order, identify it in the WO No field. It is validated from the work order table. Linking a work order to a requisition line has two effects:

- If the requisition line is set to auto issue, when the parts, goods, or services are received through the purchasing system, they charge directly to the work order expense accounting data.
- If a work order is associated with the requisition but Auto Issue? is cleared, the parts still belong to the work order. When the parts are received, EAM reserves them for the work order. The parts go into inventory, to be issued to the work order later, and the accounting data reflects the inventory asset data. When the parts are issued, they are charged to the work order's expense accounting data.

*Stores Req No.* The stores requisition number associated with a WO number, if one exists.

You can enter a specific stores requisition number manually or you can select one from the lookup.

*Equip No.* The identifying number for a piece of equipment.

If the requisition line is associated with a piece of equipment, identify the equipment in this field. Select the equipment from the lookup. Identifying the equipment on a requisition line creates the expense GL transaction only if Auto Issue? is selected. When purchasing receives the parts, goods, or services, it directly charges the equipment's expense accounting data.

If the equipment is associated with a requisition line with no auto issue, the parts are still ordered for the equipment. Inventory receives the parts and the Account Number fields reflect the expense account number. The equipment number serves as a note that the parts were ordered for this piece of equipment.

*Rebuild.* Select the rebuild location using the lookup.

*Rotable Part.* Use the lookup to select the rotable part. This lookup only displays the rotable parts that are available in the selected rebuild location.

*Serial No.* Use the lookup to select the serial number of the rotable part. This lookup only displays the serial numbers that are available for the selected rotable part.

*Project No.* The identifying number for a project.

When a project number is associated with a requisition line, EAM copies the project's primary expense accounting data.

*Job No.* The job number associated with the project to expense for the purchase. Identify a project to use a job number.

If Auto Issue? is selected, the cost of the goods and services on the requisition line automatically flows to the identified project and job expense accounting structure on the requisition line.

*System.* This field is associated with equipment ID, identified on a requisition line.

Create a requisition line to charge directly or issue upon receipt against a specific piece of equipment. Associate a valid system for more detailed analysis of where this cost was expensed on the equipment.

Each piece of equipment must have an associated BOM type. Use the lookup to see a table of valid system codes associated with the equipment through the BOM type. Associate an assembly below the System field for more detailed analysis.

*Assembly.* This field displays the assembly associated with the system code, which associates to a piece of equipment.

If the requisition line is a direct charge and identifies a piece of equipment, then the part expenses directly to that equipment. For more detailed analysis of where on the piece of equipment this part goes, associate the part to a specific system code. Beneath the system code, there is a specific assembly code associated with the system.

***Note*** The assembly code table must be valid. It must also be valid for the associated system code. A system code is required to use an assembly code.

*Expense Type.* This field determines the requisition line expense type: capital or expense.

Default is Expense. Expense Type refers to the approval process for a requisition. In User Maintenance, each user has a spending limit for two types of requisitions: expense or capital. The Requisition check box determines the kind of limit you have for that type of requisition.

Implementation Issue: In a facility where people sign approvals for goods and services, they may have two types of spending limits. For example, for regular expenses, an individual has $500 approval. On capital items (typically, larger purchases), the same individual has an approval limit of $5000.

**Expense**

*Expense Site.* The site to which to expense the requisition line.

*Dept.* The department charged for the requisition line upon receipt.

Select Auto Issue? to expense the requisition line to a department.

***Note*** If department, cost center, account, or sub-account is required (in System Administration|Mandatory Fields) and the requisition is not auto issued, the system ignores the mandatory field setting.

*Cost Center.* Select the cost center from a table of cost centers, previously created in Finance|Groups|Cost Centers.

*Acct No.* The account number that receives the auto-issue requisition line charges during the purchasing routine. The account number table validates the account number. If you are using a cost center, the account number must be valid within a cost center.

The system copies the default account number. If an auto-issued requisition identifies a piece of equipment or a work order, then it copies the work order account number by default.

***Note*** A stock replenishment purchase automatically uses the part asset account number or system site default.

*Sub Acct No.* The sub-account number associated with a specific account number. The PO charges the sub-account number when it receives the requisition.

When a PO receives goods and services, specifically this requisition line item, the cost charges to the sub-account number.

You can identify a sub-account number only if a sub-account number was previously identified or associated with the requisition.

**Asset**

***Note*** If you selected Auto Issue?, all the fields under the Asset heading are blank. If Auto Issue? is clear, EAM displays the asset sub-account information under the heading Asset.

*Asset Source Site.* The site to debit when the requisition line is received.

*Asset Dept.* If the requisition line part includes the inventory department (Inventory|Inventory|Cost tab), it is displayed here. If this information in the part record is blank, then the site default (General|Business Units|Sites|Purchase Order tab) is displayed.

*Asset Cost Cntr.* If the requisition line part includes the inventory cost center (Inventory|Inventory|Cost tab), it is displayed here. If this information in the part record is blank, then the site default (General|Business Units|Sites|Purchase Order tab) is displayed.

*Asset Acct No.* If the requisition line part includes the inventory account number (Inventory|Inventory|Cost tab), it is displayed here. If this information in the part record is blank, then the site default (General|Business Units|Sites|Purchase Order tab) is displayed.

*Asset Sub Acct.* If the requisition line part includes the inventory sub-account information (Inventory|Inventory|Cost tab), it is displayed here. If this information in the part record is blank, then the site defaults (General|Business Units|Sites|Purchase Order tab) are displayed.

***Note*** If you change the requisition line part number, the system pulls in new asset account information, along with the other defaults from the part record or System Site Maintenance.

### Tax Information

*Taxable?* Select this check box if the requisition line is taxable.

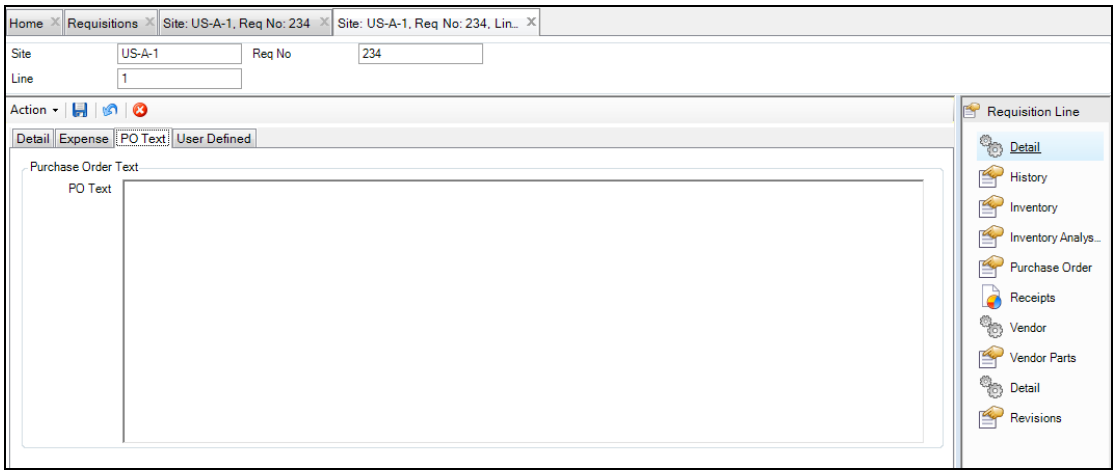
*Tax Code.* The default tax code, copied to the requisition line.

*Tax Class.* The system copies the default tax class to the requisition line.

*Tax Usage.* The system copies the default tax usage to the requisition line.

## Requisition Line: PO Text Tab

**Fig. 7.54**
Requisition Lines PO Text Tab

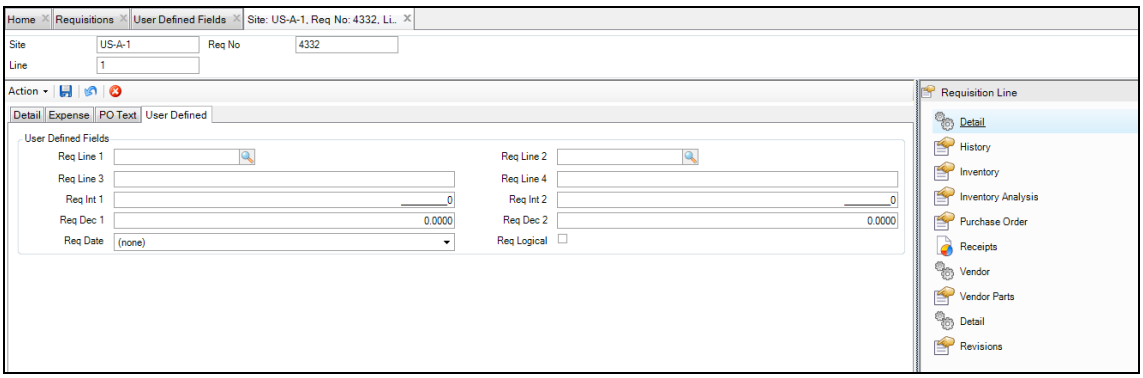



### Purchase Order Text

*PO Text.* Enter an expanded description, specifications, or other data for you and the supplier. The purchase order may contain this information. EAM copies PO text from the stock record for stock parts. You can enter unlimited PO text for a non-stock part. PO text prints on the purchase order.

## Requisition Line: User-Defined Tab

**Fig. 7.55**
Requisition Lines User-Defined Tab



**User Defined Fields**

*Req Line 1 - Req Line 2.* User-defined character fields, validated against tables that you add.

*Req Line 3- Req Line 4.* Free-form user-defined character fields, not validated against tables.

*Req Int 1 - Req Int 2.* User-defined integer fields for requisition lines.

*Req Dec 1 - Req Dec 2.* User-defined decimal fields for requisition lines.

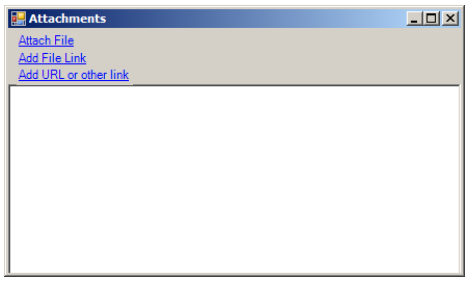
*Req Date.* Enter a date-type field here.

*Req Logical.* User-defined check box.

## Attaching and Linking External Files to a Requisition Line

EAM allows you to attach and link an unlimited number of files and link an unlimited number of files to a requisition line. If you can run the file on your operating system, you can run it from EAM when it is attached or linked.

**Fig. 7.56**
Attach or Link Files to a Requisition Line




### Attach a File

Follow these steps to attach a file to a requisition line:

1. Select the requisition line in the Requisitions browse.
2. Select Attachments from the Requisition Line Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the requisition line.

### Link a File

Follow these steps to link a file to a requisition line:

1. Select the requisition line in the Requisitions browse.
2. Select Attachments from the Requisition Line Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and then click Open. The file is now attached to the requisition line.

### Link a URL

Follow these steps to link a URL to a requisition line:

1. Select the requisition line in the Requisitions browse.
2. Select Attachments from the Requisition Line Action menu.
3. In the Attachments window, select Add URL or other link.
4. Copy and paste the URL in the Link window and then click OK. The link is now attached to the requisition line.

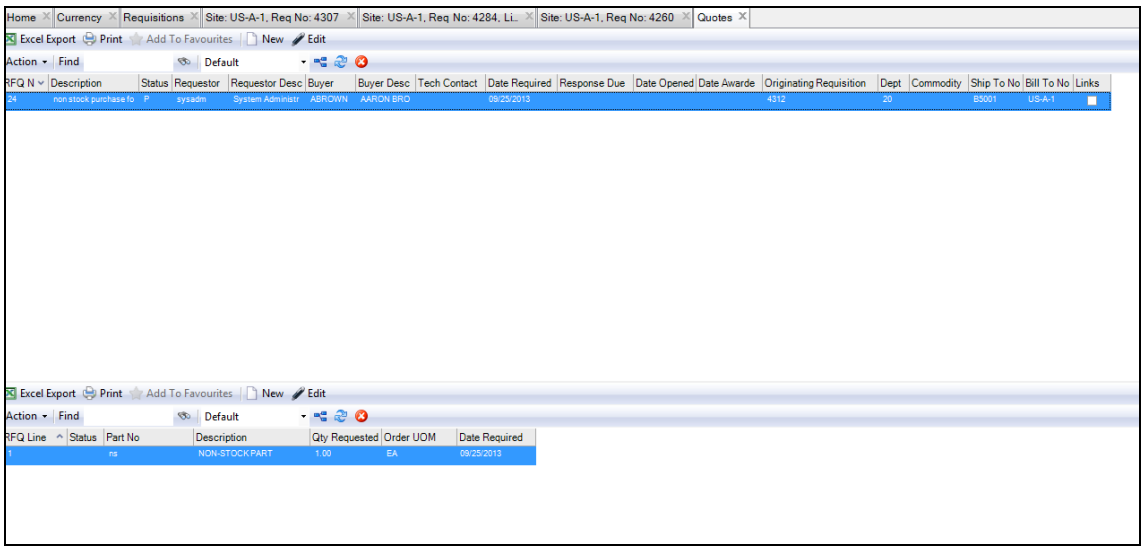
## Creating a Quote from a Requisition

When you create a quote from a requisition, EAM pulls in all the data from the requisition and automatically enters it into the quote. This feature saves you time and ensures data integrity. If a quote has been created from a requisition, the quote is directly tied to the requisition and the associated quote number appears in the RFQ No column in the Requisition browse.

Follow these steps to create a quote from a requisition:

1. Open the Requisition browse and select the requisition.
2. Select Create Quote from the Action menu.
3. A browse opens displaying the Quote record. The system automatically assigns a quote number, which you cannot modify.

**Fig. 7.57**
Requisition: Request for Quote




4. Open the quote and finish entering all the necessary information. See “Creating a Quote” on page 537.

## Entering Notes for a Requisition

To enter internal notes for this requisition, open the requisition header and select the Notes submenu. Enter any notes in the text box.

***Note*** The notes that are entered in the Notes submenu are only in the requisition. If a PO or quote is created from a requisition, the text in the Notes submenu is not copied to the PO or quote.

**Fig. 7.58**
Requisition Header: Notes Submenu




## Adding Standard Clauses to a Requisition

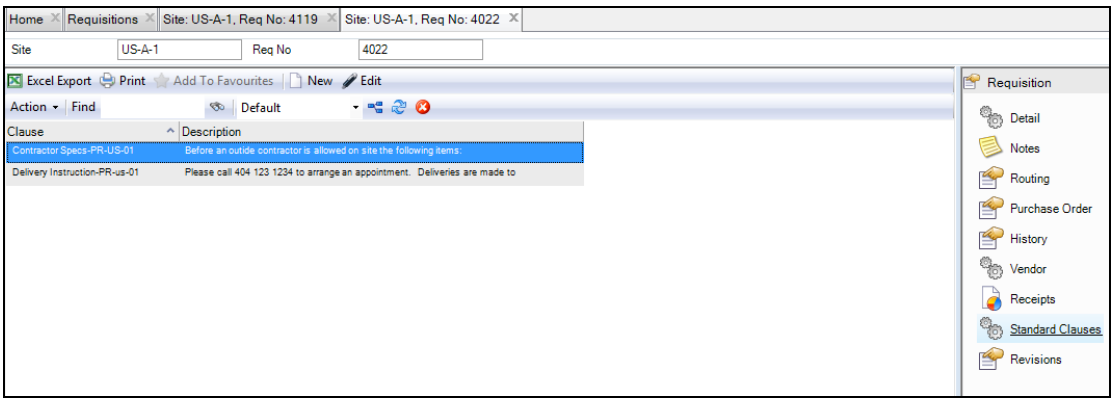
In the Standard Clauses submenu, you can add an existing standard clause or create a clause and add it to the requisition.

### Add Existing Standard Clauses to a Requisition

Follow these steps to add standard clauses to a requisition:

1 Open the requisition and select the Standard Clauses submenu.

**Fig. 7.59**
Requisition Header: Standard Clauses Submenu




2 To add an existing standard clause, select Copy Standard Clause from the Action menu.

A lookup appears that lists all the available standard clauses.

3 Double-click to select the clause that you want to add to the requisition.

The standard clause is added to the requisition.

### Create a Standard Clause and Add it to the Requisition

Follow these steps to create a standard clause and add it to a requisition:

1 Open the requisition and select the Standard Clauses submenu.

2 Click New and enter the following information in the Requisition Clause tab:

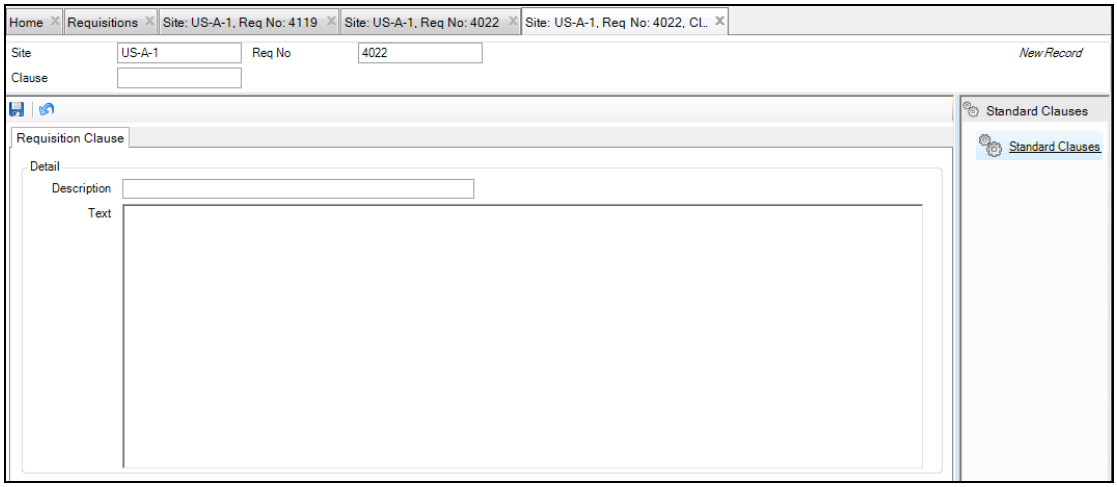
*Clause.* Enter the name of the standard clause.

*Description.* Enter a short description of the standard clause.

*Text.* Enter any detailed information about the standard clause.

***Note*** The Text field has a 1140-character limit. Any text beyond character 1140 is cut from the requisition.

**Fig. 7.60**
Creating a Standard Clause




3 Click Save.

## Printing a Requisition

To print a requisition, select the requisition and select Print Document from the Action menu.

## Analyzing Budget Cost

To analyze your expenses compared with your budget, open the requisition and select the Budget Cost Analysis submenu. You can track a requisition's progress as it moves through the approval process, assessing the requisition's expense versus its budget. You can define what columns are shown by selecting the column header names from the right-click menu. The analysis contains current purchase information for a wide-range of budget considerations, including:

- Site
- Account Number

- Sub Account Number
- Cost Center
- Committed
- Authorized Purchases
- Planned Purchases
- Total Cost in Base Currency
- Budget/YTD Budget

## Authorizing a Requisition

To authorize a requisition, open the requisition. Select Authorize from the Action menu. When you select the Authorize action, the requisition begins the approval routing process.

If you do not have a large enough spending limit, the requisition is routed to the approval group. See “Requisition Approval Group” on page 434.

***Note*** If you have a large enough spending limit and the authority for the associated accounting structure, and the approval group has no quality person, you can authorize the requisition without going through routing.

### Authorize Multiple Requisitions

To authorize multiple requisitions at the same time, select the requisitions and then select Global Authorize from the Requisition Action menu.

***Note*** The Global Authorize option is only active if multiple requisitions are selected.

### Stop Authorization

Only the initiator can stop a requisition during the approval routing. If the initiator stops the routing, an e-mail is sent to the person who is the next in line to authorize the requisition, indicating that the routing has been stopped. When you stop authorization, the routing status on the requisition changes from Routing to blank, the requisition status remains P (Pending), and no routing history is maintained. If you stop authorization and then start it again, the routing starts from the beginning.

To cancel a requisition from being authorized, open the requisition and select Stop Routing from the Action menu.

### Maintain a Budget

You can use a requisition budget to manage authorized requisition spending, to be notified when spending exceeds set limits, and to be e-mailed when requisitions have been approved using over budget allowances.

#### Over Budget Requisition Approvals

To use over budget requisition approvals, set the following criteria.

- Ensure that a requisition budget is defined in Accounting|Requisition Budget.

- Specify YTD or Current Period in the General|Business Units|Sites|Authorization Options tab.
- Define budget options in General|Business Units|Sites|Purchase Order tab.
- Add a Req over Budget Limit amount in System Administration|Users|Detail tab.

***Note*** See “Analyzing Budget Cost” on page 471.

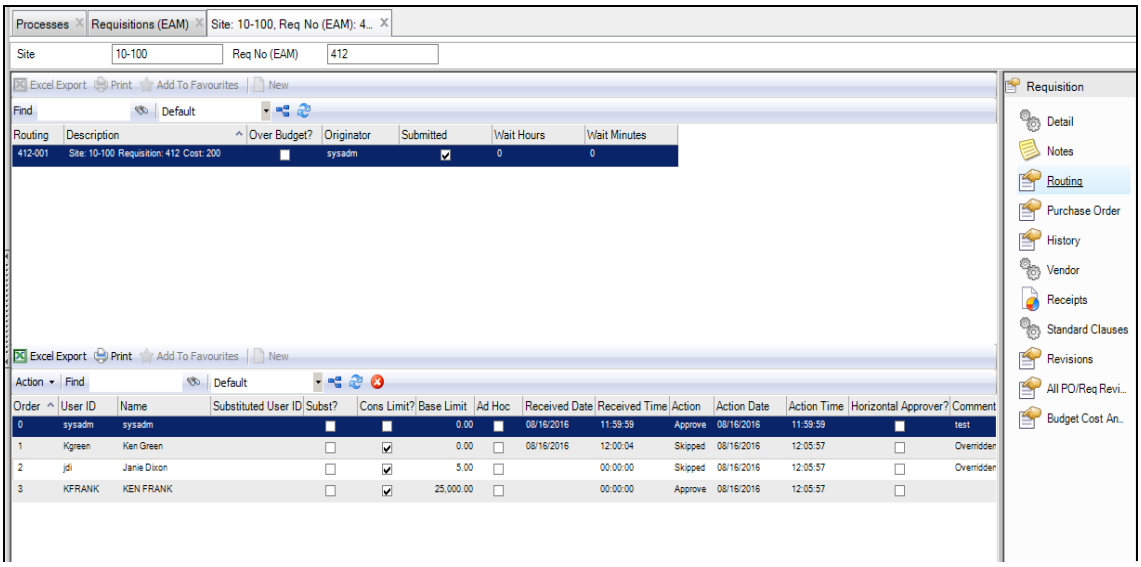
### Approval Routings

When a requisition is routed for authorization through the Action menu, EAM checks the budget limit and over budget limit of the individual user tasked with authorizing the requisition, or the users within the approval group. If the requisition amount does not exceed any limits, it moves to the next step of the authorization process. However, if the budget amount reaches its limit but is within the over budget limit of the specified authorizer or approval group, a routing is created for the requisition and a line is placed in the associated e-mail informing the user that the over budget amount was used. If the requisition amount exceeds all over budget limits, the routing is stopped and the user sees a display message that no one in the approval group has a high enough dollar value to authorize the requisition.

## View Authorization Status

To view the authorization status for the requisition, open the requisition and select the Routing submenu.

**Fig. 7.61**
Requisition Header: Routing Submenu




The upper browse displays the routing records for the requisition. Each time this requisition has been routed for approval, a record of that routing appears in this browse.

The lower browse shows the list of approvers for the selected routing. It displays the users who approved the requisition and those who still need to approve the requisition. It also indicates if anyone has rejected the requisition.

***Note*** If anyone in the approval group had any important notes regarding the requisition, the notes are displayed in the Comment column.

The lower browse also captures any currency conversion that occurred if your domain's base currency is different than the defined system approval limit currency. It displays the approval limit in both base and approval limit currencies, the exchange rate, and the date that a user took action on the requisition.

***Note*** If you take too long to approve a requisition, EAM provides a job in System Administration| Job Control that automatically forwards the routing approval to the next person on the list. See "Job Control Application" on page 703.

## Creating a Purchase Order from a Requisition

When you create a PO from a requisition, EAM pulls in all the data from the requisition and automatically enters it into the PO. This feature saves you time and ensures data integrity. If a PO is created from a requisition, the PO is directly tied to the requisition and the associated PO numbers appear in the Purchase Order submenu. See "Viewing the POs Associated with a Requisition" on page 475.

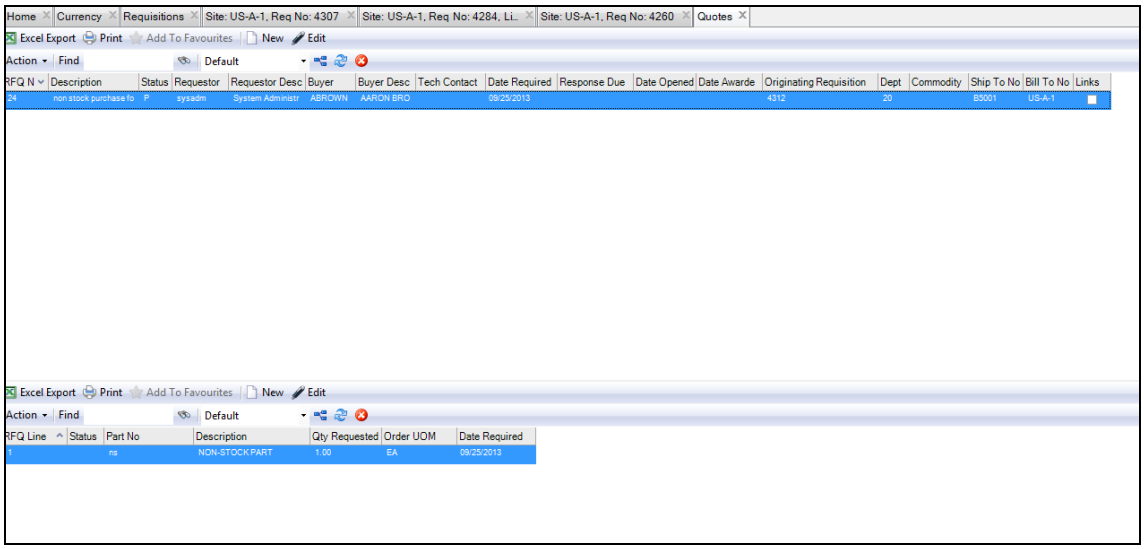
Follow these steps to create a PO from a requisition:

1 Open the Requisition browse and select the requisition.

2 Select Create Purchase Order from the Action menu.

A browse opens displaying the PO record. The system automatically assigns a PO number, which you cannot modify.

**Fig. 7.62**
Creating a PO from a Requisition




3 Open the PO and finish entering all the necessary information. See "Creating a Purchase Order" on page 488.

## Creating POs from Multiple Requisitions

The Global Create Purchase Order action creates purchase orders from multiple requisitions. If there are multiple vendors on the requisitions, EAM consolidates the requisitions so that each PO has its own vendor.

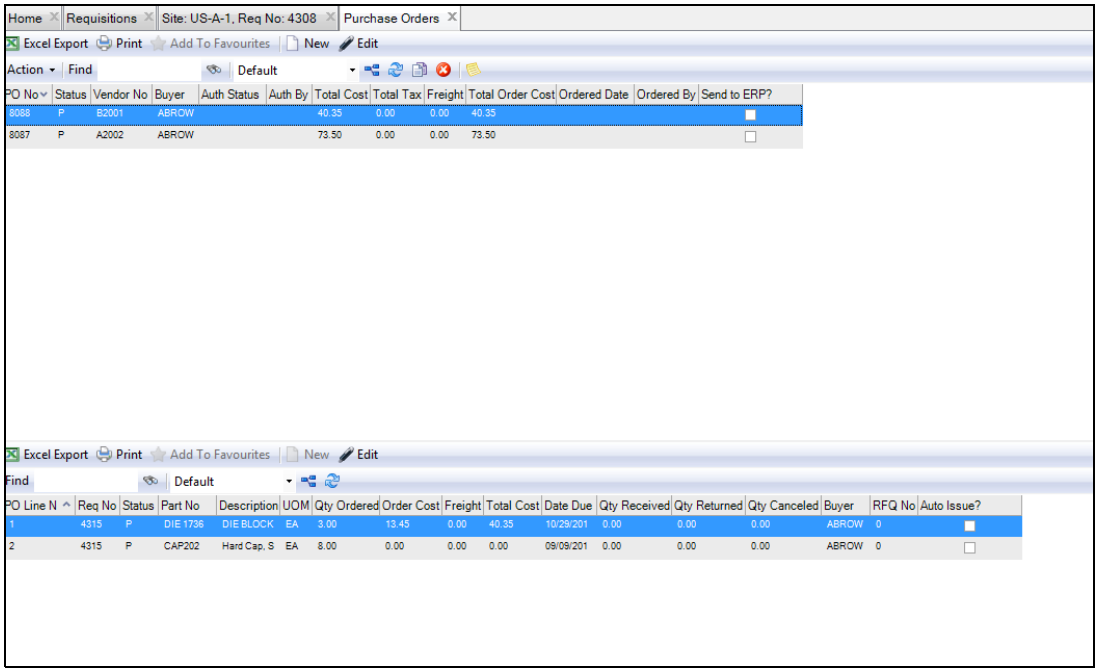
Follow these steps to create a purchase order from multiple requisitions:

1 Open the requisition browse and select the requisitions.

2 Select Global Create Purchase Orders from the Action menu.

A browse opens displaying the POs. The system automatically assigns PO numbers, which you cannot modify.

**Fig. 7.63**
Global Create PO Action

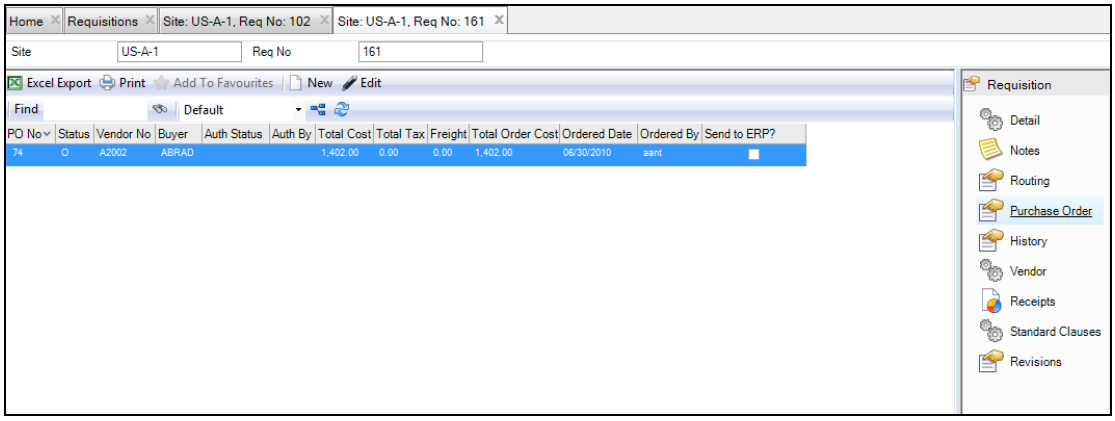



3 Open the PO and finish entering all the necessary information. See “Creating a Purchase Order” on page 488. Repeat this step for any other POs.

## Viewing the POs Associated with a Requisition

To view the POs associated with a requisition, open the requisition. Then, select the Purchase Order submenu.

**Fig. 7.64**
Requisition Header: Purchase Order Submenu




## Editing a Requisition

To edit a requisition header, open the requisition header and make the necessary changes. For information about the fields in the requisition header, see “Filling Out the Requisition Header” on page 453.

### Editing a Requisition After Authorization

***Important*** If you change item cost or quantity on a requisition after it has been authorized, the requisition must be reauthorized. You can select additional fields that, when modified after authorization, require reauthorization of the requisition. See “Req Reroute/Notify Fields” on page 749.

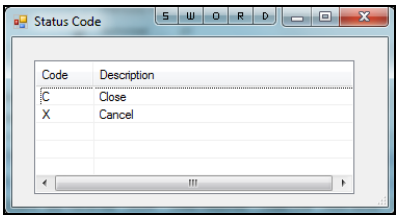
### Change Requisition Status

The Change Status option in the Requisition Action menu allows you to change the status of a requisition to closed (C) or canceled (X). Changing the status of a requisition header changes the status of any requisition lines as well.

Follow these steps to change the requisition status:

1. Select the requisition. Then, select Change Status from the Action menu.
2. The Status Code lookup appears. Double-click to select the new status:
   - **(C) Close.** When you close a requisition, any lines and POs associated with the requisition are also closed.
   - **(X) Cancel.** When you cancel a requisition, any planned orders are also canceled.

**Fig. 7.65**
Change Requisition Status




## Reopening a Canceled Requisition

Any user can reopen a canceled requisition. When the requisition is reopened, the user or mail group specified on the Requisitions Detail tab receives an e-mail.

***Note*** The reopen option only applies if Reopen PO/Reqs? has been enabled in General|Business Units|Domain on the PO/Reqs tab. Users with the required settings in Roles can reopen requisitions when they have been closed. See “Domain: PO/Reqs Tab” on page 36.

To reopen a canceled requisition, select the requisition and then select Reopen Canceled Requisition from the Requisition Action menu.

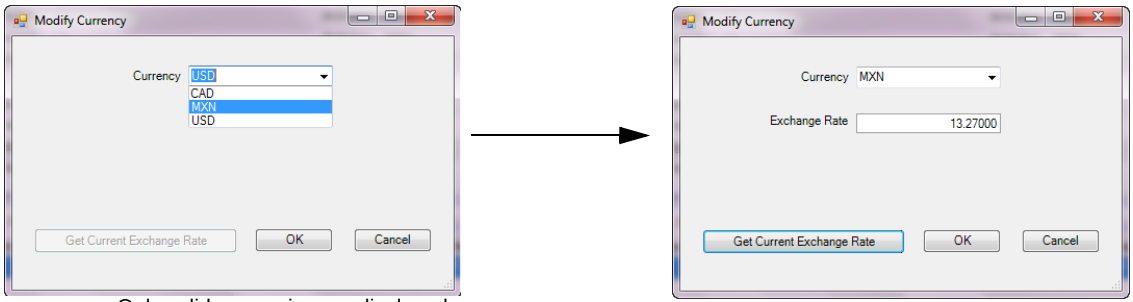
Revisions are updated and track changes when a requisition is reopened, if the setting has been enabled. See “Enable Revision Control” on page 61.

## Modifying Currency on a Requisition

To modify the currency of a requisition, select Modify Currency from the Requisition Action menu.

The Modify Currency option in the Requisition Action menu allows you to select a different currency code for the requisition. If there are receipts against the requisition, you cannot modify the currency. The requisition line items are changed to the new currency and the base currency amount is calculated based on the current exchange rate. Only one currency is allowed per requisition. You can only select currencies valid for this vendor. See “Multicurrency Purchasing” on page 425.

**Fig. 7.66**
Requisition: Modify Currency




Only valid currencies are displayed.

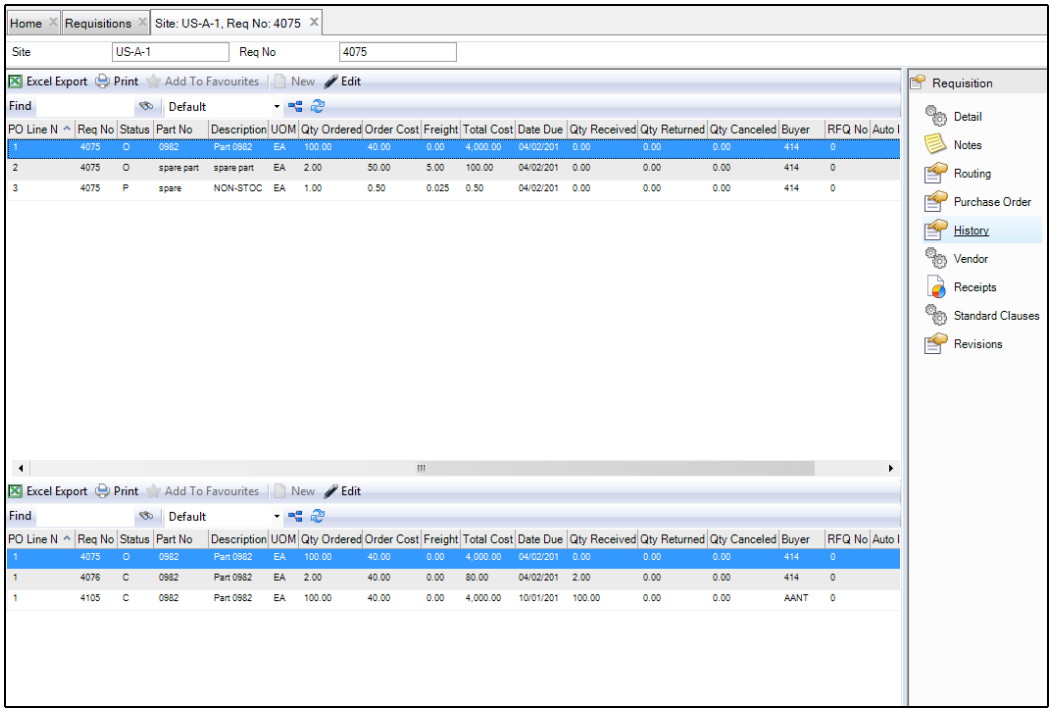
If MXN is selected, the exchange rate is shown.

## Viewing History for a Requisition Line

To view the history of a requisition line, open the requisition and select the History submenu.

The upper browse displays the requisition lines. The lower browse shows the transactional history for the selected line across all POs.

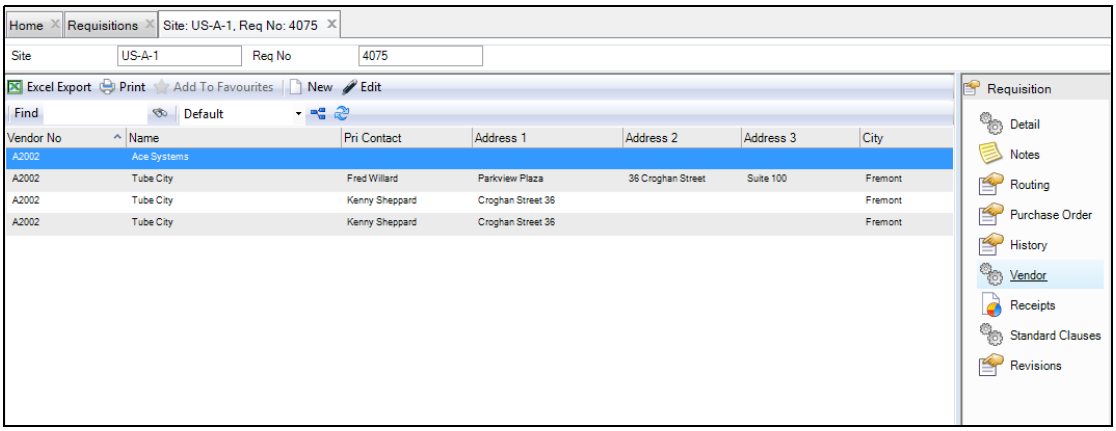
**Fig. 7.67**
Requisition Line History




## View the Requisition Vendors

To view the vendors associated with a requisition, open the requisition and select the Vendor submenu. If you need more information, double-click and drill into the vendor record.

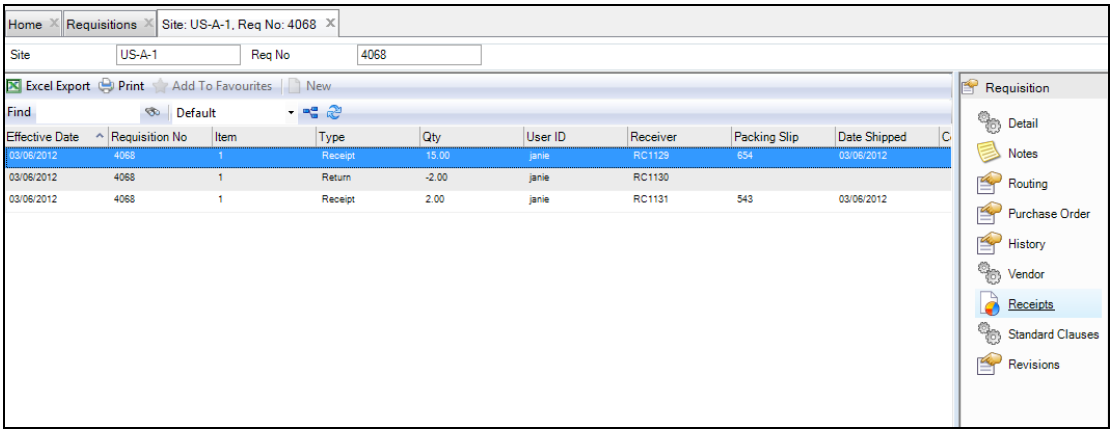
**Fig. 7.68**
Requisition Vendor Submenu



## View Received Requisition Lines

To view the requisition lines that have been received, open the requisition and select the Receipts submenu. This submenu displays the receipt and return history for all the lines associated with the requisition.

**Fig. 7.69**
Requisition Receipts Submenu

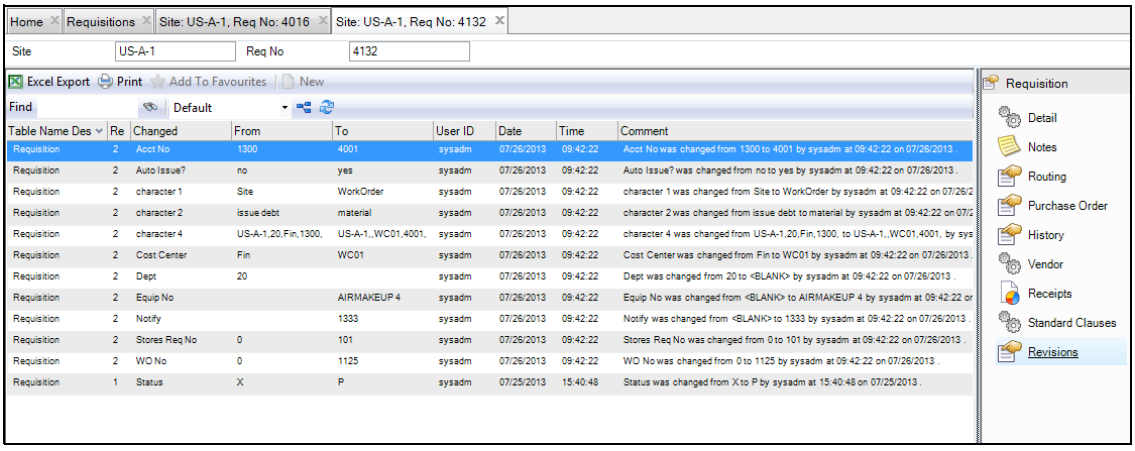



## View a Requisition's Revision History

Because many quality systems call for strict record keeping regarding the revisions made to requisitions, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the requisition.

To view the revision history for a requisition, open the requisition and select the Revisions submenu.

**Fig. 7.70**
Requisition Revisions Submenu



## Editing a Requisition Line

To edit a requisition line, open the requisition line and make the necessary changes in the requisition line tabs. See “Add Lines to a Requisition” on page 459.

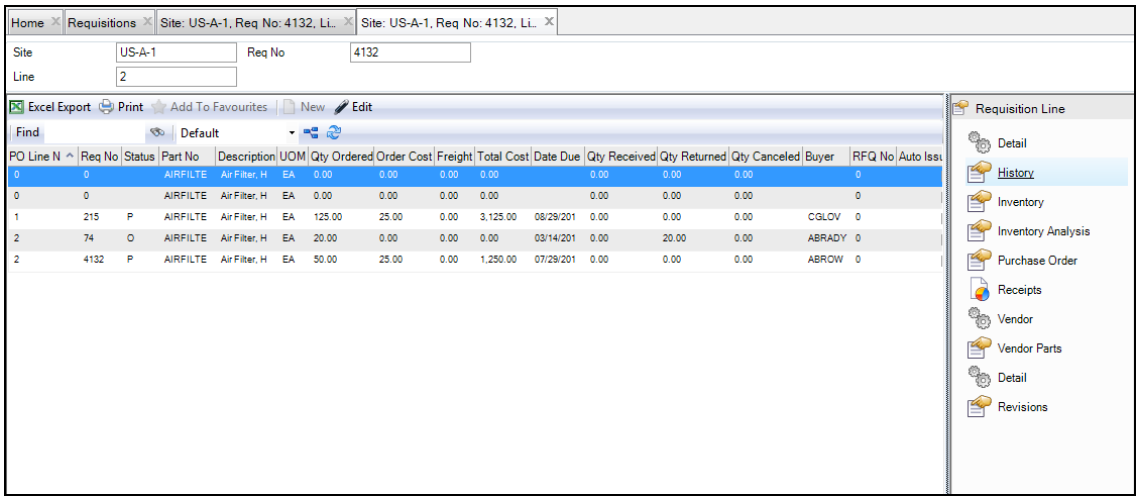
### Editing a Requisition Line After Authorization

***Important*** If you change a requisition line’s item cost or quantity after it has been authorized, the requisition line must be reauthorized. You can select additional fields that, when modified after authorization, require reauthorization of that requisition line. See “Req Reroute/Notify Fields” on page 749.

### Viewing Requisition Line History

To view the history for an item, open the requisition line and select the History submenu. This submenu shows the historical activity for that part across all requisitions.

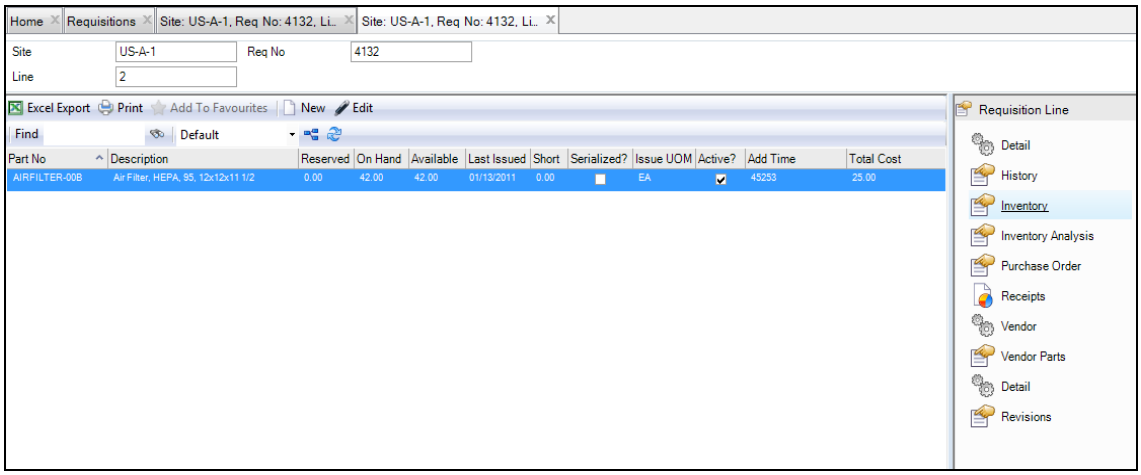
**Fig. 7.71**
Requisition Line History Submenu




### Viewing the Inventory for a Requisition Line

To view the inventory details for a requisition part, open the requisition line and select the Inventories submenu. This submenu displays the reserved, on-hand, and available quantities for the requisition line. If you need more information, double-click and drill into the inventory record.

**Fig. 7.72**
Requisition Line Inventory Submenu




## Viewing Inventory Analysis of a Requisition Line

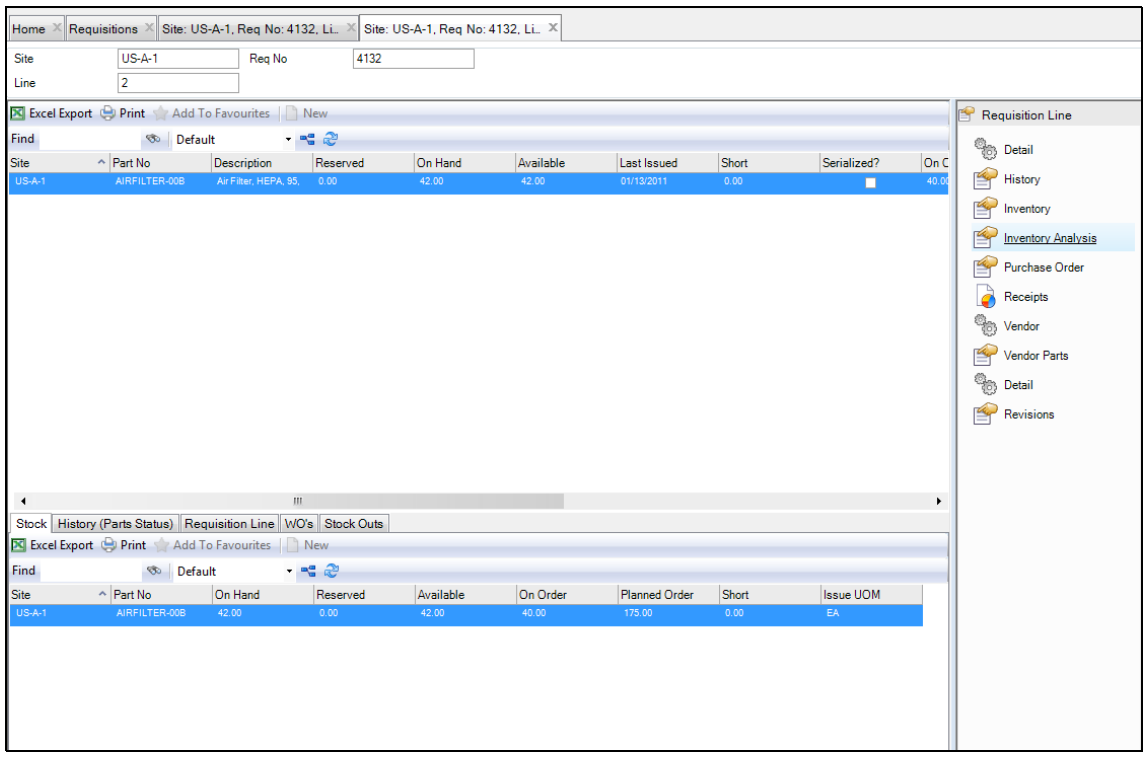
To view EAM's inventory analysis associated with a requisition line, open the requisition line and select the Inventory Analysis submenu. This submenu displays a consolidated view of all transactions that have been performed against a part.

In the upper browse, inventory details appear such as reserved, on-hand, and available quantities.

In the lower browse, the following information is shown:

- **Stock tab**. Inventory details, such as reserved, on-hand, and available quantities.
- **History (Parts Status) tab**. Complete transactional history for a part such as GL description, quantities, and costs.
- **Requisition line tab.** A list of all requisitions that have been created for this part.
- **WO's tab.** All the work orders to which this part has been issued.
- **Stock Outs tab.** This tab is not used.

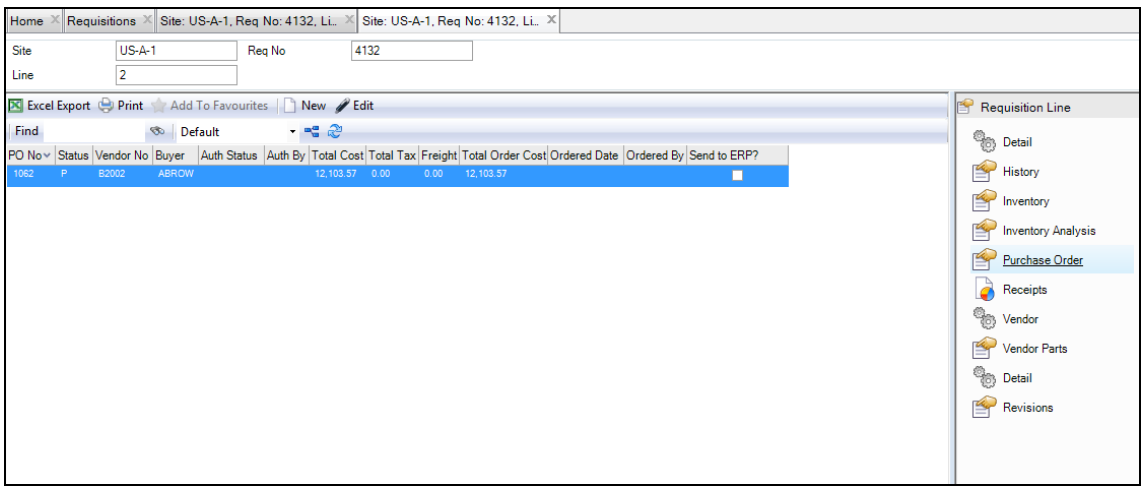
**Fig. 7.73**
Requisition Line Inventory Analysis Submenu




## Viewing Purchase Order Details for a Requisition Line

To view if there are any purchase orders for a requisition line, open the requisition line and select the Purchase Order submenu.

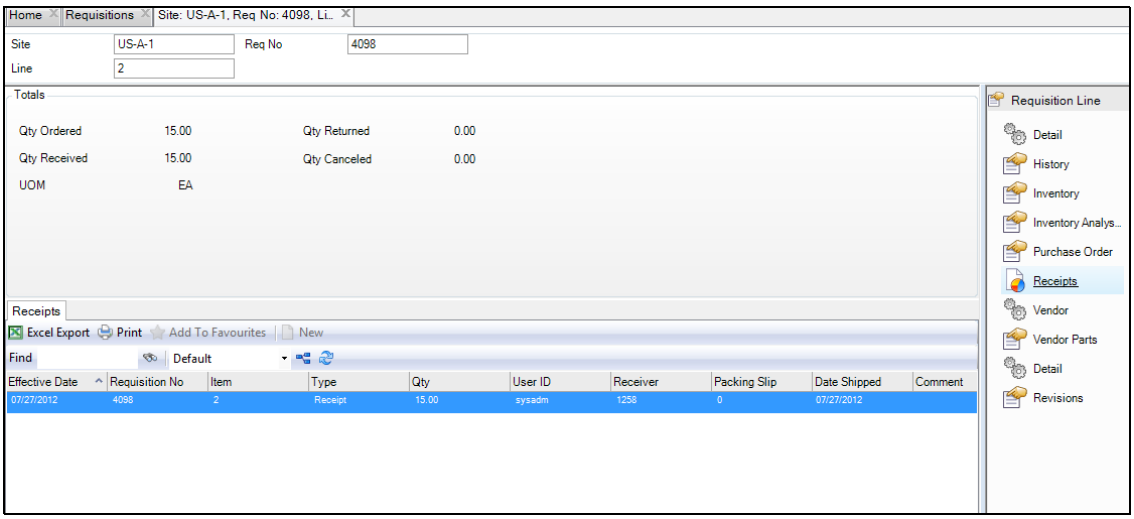
**Fig. 7.74**
Requisition Line Purchase Order Submenu



## Viewing Receipts for a Requisition Line

To view the goods and services received against a requisition line, open the requisition line and select the Receipts submenu. The upper browse shows a summary view of the order details. The lower browse shows the line receipt details.

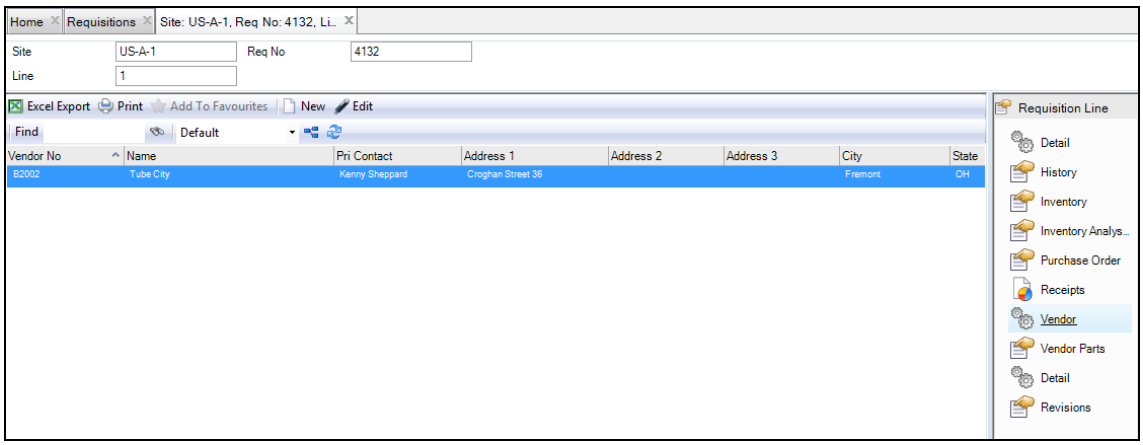
**Fig. 7.75**
Requisition Line Receipts Submenu




## Viewing Vendor Details for a Requisition Line

To view vendor details for a requisition line, open the requisition line and select the Vendor submenu.

**Fig. 7.76**
Requisition Line Vendor Submenu

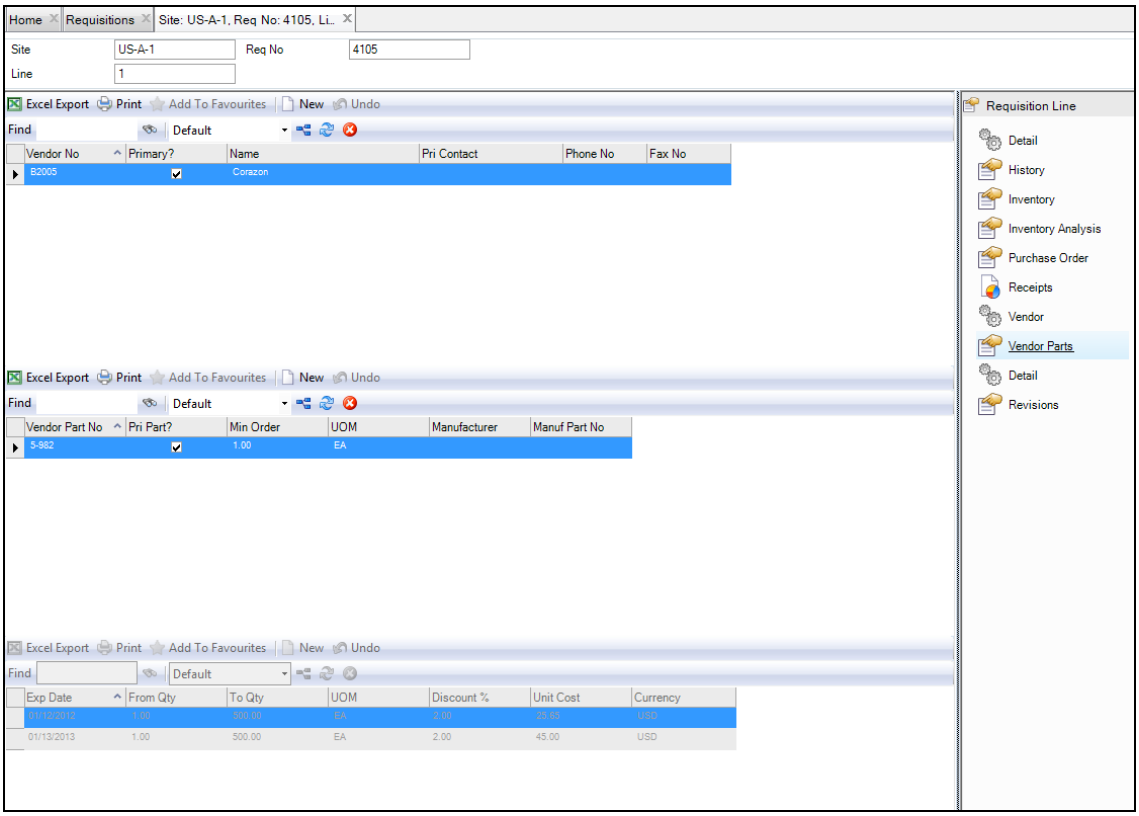



## Viewing Vendor Part Information

If the requisition line is for a stock part, you can view the vendor's part information in the Vendor Parts submenu.

The upper browse shows the vendors that supply this part. The middle browse shows the highlighted vendor's part information. The lower browse shows the price schedules for the part.

**Fig. 7.77**
Requisition Line Vendor Parts Submenu



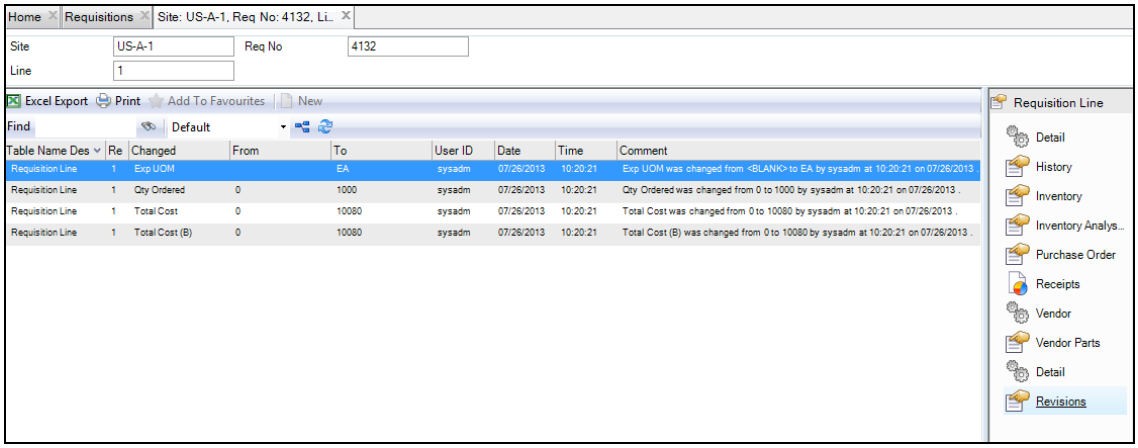

## Viewing the Revision History for a Requisition Line

Because many quality systems call for strict record keeping about the revisions made to requisition lines, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the requisition line.

To view the revision history for a requisition line, open the requisition line and select the Revisions submenu.

***Note*** Revision control is activated in the Purchasing|General|Business Units|Sites menu. See "Enable Revision Control" on page 61.

**Fig. 7.78**
Requisition Line Revisions Submenu




# Purchase Orders

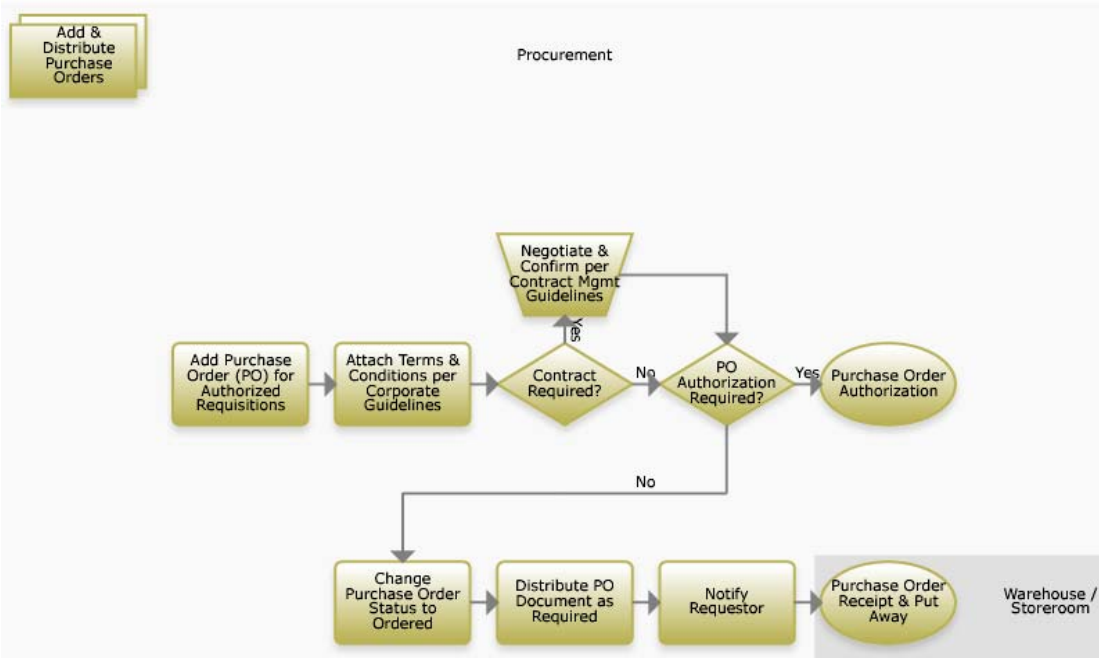
## Overview

Use a purchase order to formalize a purchase transaction with a supplier.

## Purchase Order Process Flows

### Adding and Distributing Purchase Orders

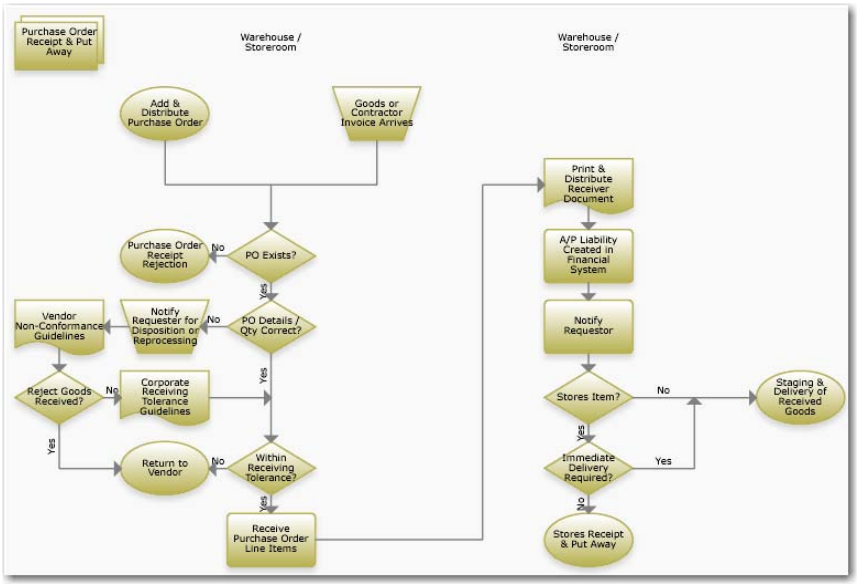
**Fig. 7.79**
Creating a Purchase Order Process Flow




1. Add a purchase order for authorized requisitions.
2. Attach terms and conditions per corporate guidelines.
3. Negotiate required contracts.
4. Authorize the PO.
5. Change the PO status to Ordered.
6. Distribute the PO document as required.
7. Notify the requestor.
8. Receive the PO and put away items.

## Receiving Purchase Orders

**Fig. 7.80**
PO Receipt and Put Away Process Flow




1 When you add and distribute a purchase order, or a goods or contractor invoice arrives, verify that a PO exists. If there is no PO, reject the receipt.

2 Verify that the quantity and details are correct.

   a If the quantity and details are incorrect, notify the requestor for disposition or reprocessing.

   b Review your vendor non-conformance guidelines.

   - If you can receive the goods, review corporate receiving tolerance guidelines.
   - If you cannot receive the goods, return them to the vendor.

3 Return any goods that do not meet corporate receiving tolerance guidelines to the vendor.

4 Receive PO line items for any goods that meet the conditions in steps 1 and 2. When you add and distribute a purchase order, or a goods or contractor invoice arrives, verify that the quantity and details are correct.

5 Print and distribute the receiver document.

6 EAM creates Accounts Payable liability in the Financial system.

7 Notify the requestor that the items have arrived.

8 Receive and put away the stores items.

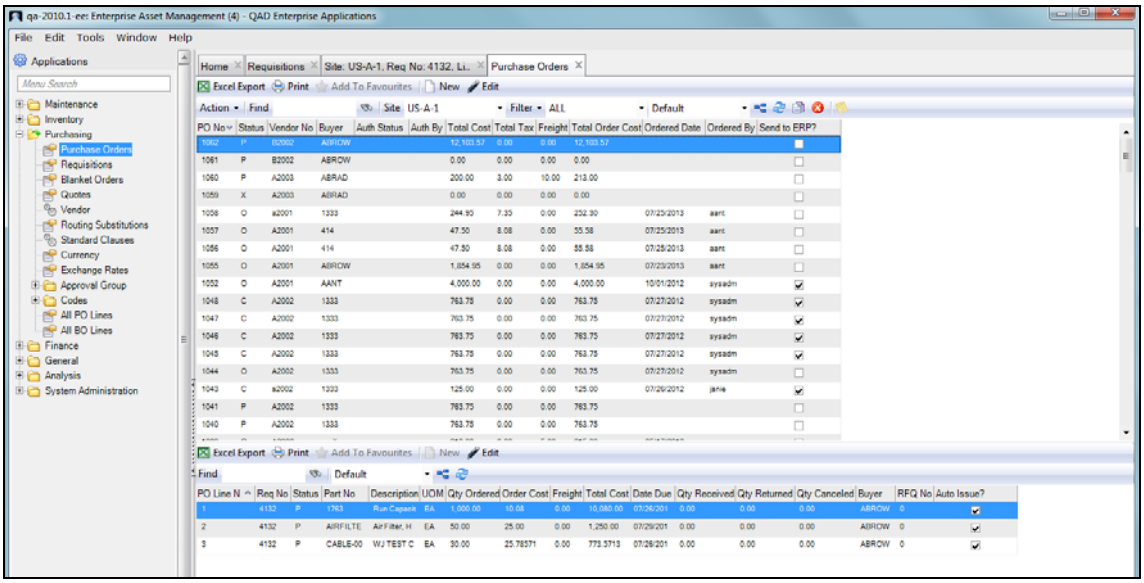
9 Stage and deliver received goods.

## Creating a Purchase Order

Follow these steps to create a purchase order:

1 Open the Purchase Order browse in Purchasing|Purchase Orders.

**Fig. 7.81**
Purchase Order Browse




2 Click New. A blank purchase order record opens. The system automatically assigns a PO number, which you cannot modify.

3 Enter information in the relevant fields on the Order, Misc, User Def, and Intrastat tabs. See “Filling Out the Purchase Order” on page 488.

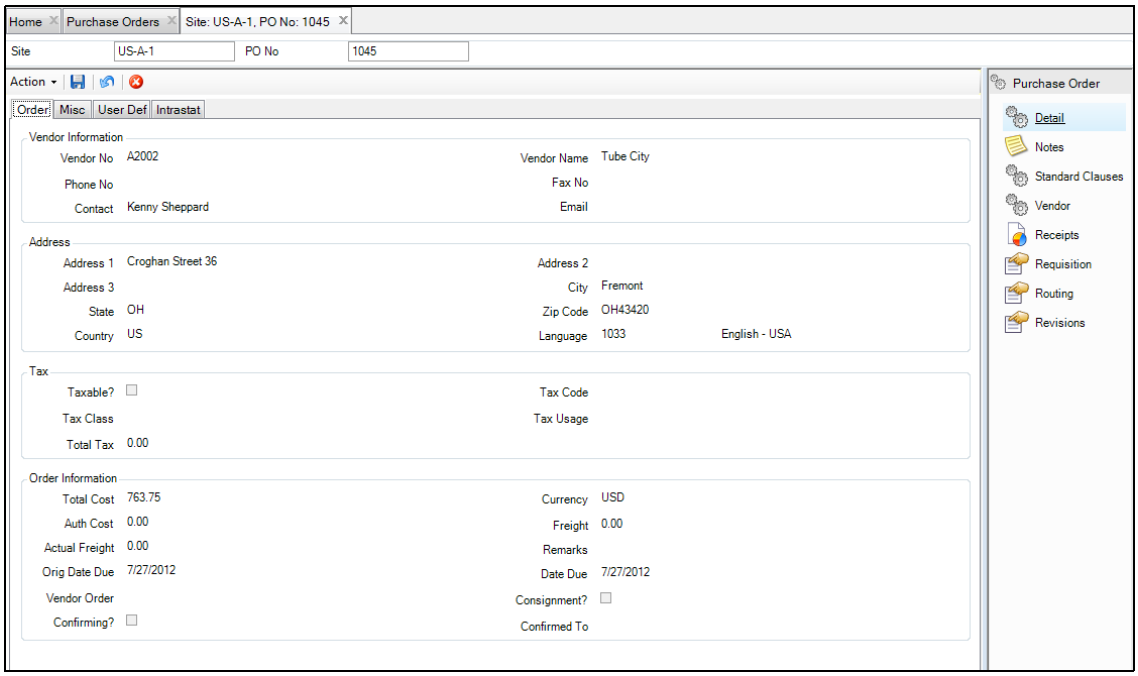
4 When all the information has been entered, click Save.

### Filling Out the Purchase Order

Enter information about the PO on the Order, Misc, User Def, and Intrastat tabs.

Purchase Order: Order Tab

**Fig. 7.82**
Purchase Order: Order Tab




## Vendor Information

*Vendor Number.* Enter the vendor number associated with the PO.

*Vendor Name.* The vendor name associated with the PO. The vendor name, which copies directly from the vendor master record when the vendor number is entered, cannot be edited on the PO.

*Phone Number, Fax Number, Contact, and Email.* The primary vendor's contact information. The phone number, fax number, contact, and e-mail copy directly from the vendor master record when the vendor number is entered. If necessary, you can make changes to these fields on the PO. If you change these fields on the PO, it does not change the information on the vendor record.

***Note*** A valid e-mail address is required to save a new PO.

## Address

*Address 1, Address 2, Address 3, City, State, Zip Code, and Country.* These fields display the vendor's address details. The address details, which copy from the vendor master record when the vendor number is entered, cannot be edited on the PO.

*Language.* The vendor's language code, which copies directly from the vendor master record when the vendor number is entered and can be edited on the PO. If you modify the language code on the PO, the code on the vendor record does not change.

***Note*** When you print the purchase order document, EAM uses this language code. If no vendor or language is specified on the vendor record, EAM uses the language marked as default from General|Codes|Language.

### Tax

The tax information is pulled into the PO based on the following hierarchy:

- **Project**. The system checks if the PO is tied to a taxable project. If the project is not taxable, the PO is not taxed and the Taxable? check box is not selected. If the project is taxable, the system pulls in the project's tax data. If the project is taxable, but the system cannot pull in the tax data, it checks if the part is taxable.
- **Vendor**. The system looks for the vendor's tax information. If the vendor is not taxable, the PO is not taxed and the Taxable? check box is not selected. If the vendor is taxable, the system uses the tax settings from the vendor record. If the vendor is taxable, but the system cannot pull in the tax data, it checks if the site's default ship-to is taxable.
- **Part**. If the PO is not tied to a project, the system looks for the part's tax information. If the part is not taxable, the PO is not taxed and the Taxable? check box is not selected. If the part is taxable, the system uses the tax settings from the part record. If the part is taxable, but the system cannot pull in the tax data, it checks if the vendor is taxable.
- **Ship To**. If the site's default ship-to is taxable, the system uses the tax settings from the ship-to. If the ship-to is not taxable, the PO is not taxed and the Taxable? check box is not selected.

If, at any point in the hierarchy, the system finds that the project, part, vendor, or ship-to is not taxable, the PO is not taxed and the Taxable? check box is not selected. If the system finds that it is taxable, but it is not able to pull in the tax data, the system moves through the hierarchy until it finds the tax data.

*Taxable?* Select this check box if the PO is taxable.

*Tax Code.* The default tax code for the vendor.

*Tax Class.* The default tax class for the vendor.

*Tax Usage.* The default tax usage for the vendor.

*Total Tax.* The total tax associated with the purchase.

### Order Information

*Total Cost.* A non-editable field that displays the total cost of the purchase.

*Currency.* The vendor's currency.

*Authorized Cost.* The amount authorized to spend on this purchase.

*Freight.* The cost to ship goods to the purchaser.

*Actual Freight.* A buyer normally enters this data after all requisitions are attached to the PO.

*Remarks.* This field contains notes relevant to this purchase order. Use this field to enter general remarks pertaining to the vendor, usually about the order or the shipping process. These notes are displayed on the PO.

*Original Date Due.* The date the purchase order was originally due.

*Date Due.* The date that the vendor has committed to deliver the parts or the service to the facility. The buyer enters the due date and uses it to inform the requester of the PO status. If a due date changes after a PO is ordered, EAM can send e-mail to inform the requester of any due date changes.

*Vendor Order.* This is an updatable field that identifies the vendor's corresponding order number, used as a cross-reference for the purchaser to communicate with the vendor when trying to locate a specific order.

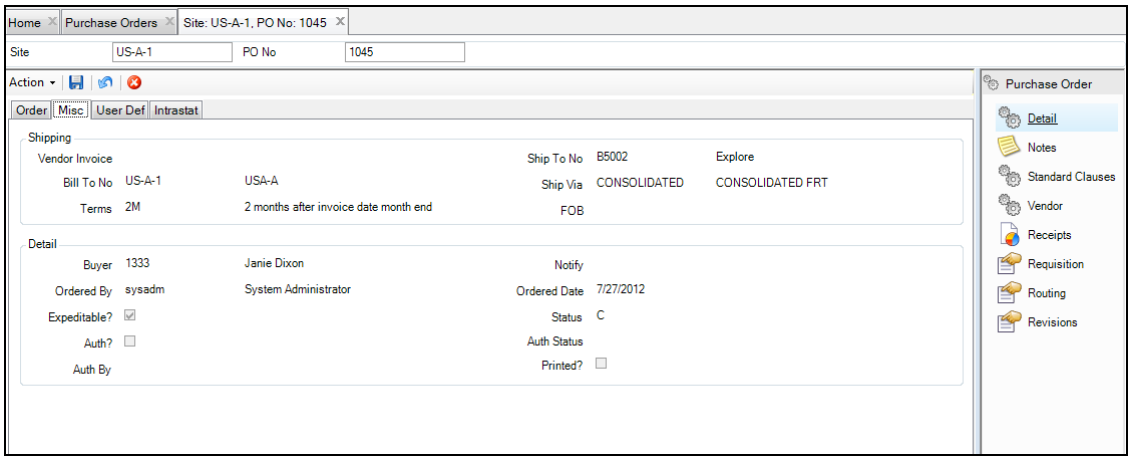
*Consignment.* This field indicates whether this PO is for consigned parts.

*Confirming?* Select the check box to indicate whether the vendor should consider this purchase order entirely new or to confirm it has already been placed.

*Confirmed to.* The vendor representative who confirmed the order.

## Purchase Orders: Miscellaneous Tab

**Fig. 7.83**
Purchase Order: Miscellaneous Tab




### Shipping

*Vendor Invoice.* Enter the vendor invoice number associated with the PO.

*Ship To Number.* The code for the ship-to location. Specify a default ship-to for each PO in General|Business Units|Domain. The buyer can override this code.

*Bill To Number.* The code for the bill-to location. Specify a default bill-to for each PO in General|Business Units|Domain. The buyer can override this code.

*Ship Via.* The preferred method to ship goods from this vendor. You can edit the ship-via method, which copies directly from the vendor master record when the vendor number is entered on the PO.

*Terms.* The vendor payment terms, which copy directly from the vendor master record when the vendor number is entered and can be edited on the PO.

*FOB.* Free on Board (FOB) denotes whether freight charges are part of the PO price or are billed separately after the invoice, and who pays for freight (buyer or vendor). For example, if the buyer lives in Des Moines and buys a product FOB New York, the buyer must pay the shipping charges from New York to Des Moines. The FOB information, which copies directly from the vendor master record when the vendor number is entered, can be edited on the PO.

### Detail

*Buyer.* The buyer associated with the PO. Select the buyer from a lookup of valid buyers.

After requisition approval, EAM restricts who can change a requisition. Only the buyer and the person who authorized the expenditure are allowed to change the requisitions on the PO.

*Notify.* If a particular event affects a requisition or purchase order, EAM can notify an individual or group of individuals by e-mail.

Select the user or group to notify for the PO. As a purchase order goes through the routing approvals, ordering, and receipt process; the system e-mails the user or group with updates.

Some users do not get an e-mail if their Mail Options are not selected. See “User Tab: Mail Opts” on page 680.

*Ordered By.* The name of the person who changed the status to O (ordered).

*Ordered Date.* The date the order was placed.

*Expeditable.* Select the check box if the order can be expedited.

*Status.* The order’s status. PO statuses are P (planned), O (ordered), C (closed), or X (canceled). EAM assigns a new PO a status of P. PO Order Action changes the status from P to O. EAM changes the status of the PO from O to C when 100% of the goods are received, or when the receiver indicates that the order is complete.

*Authorization Status.* The authorization status of the PO. The system updates this field.

The status remains blank if the authorization has not been started or if PO Authorization is not enabled at General|Business Units|Sites. If the PO authorization is in process, the status is Routing.

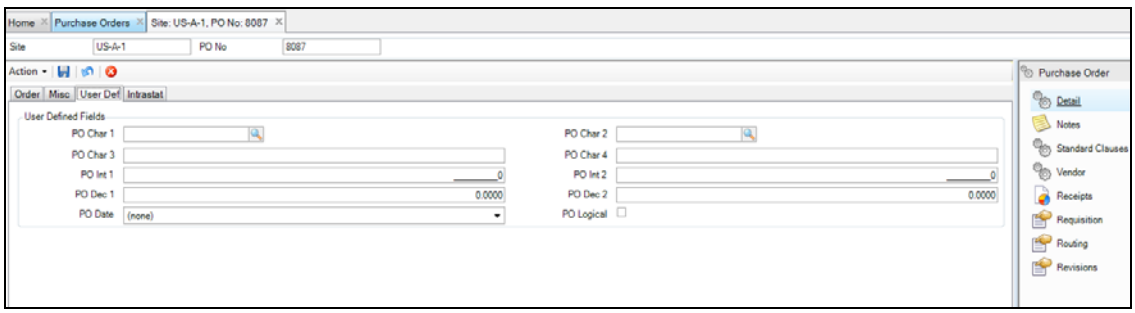
*Authorized?* This field denotes whether the PO is authorized. After a user authorizes the PO, the system selects this field.

*Authorized By.* The user ID who authorized the expenditure of the PO. EAM validates spending limits. If you can spend at least the amount required, the PO is authorized. Your user ID displays in the Authorized By field. If you do not meet these criteria, the PO routes to others for consideration of approval. The user who meets the spending limit authorizes the PO.

*Printed?* EAM prompts you to acknowledge that the PO was printed. The system selects this field after you indicate successful printing.

## Purchase Order: User-Defined Tab

**Fig. 7.84**
Purchase Order: User-Defined Tab



### User-Defined Fields

*PO Char 1/PO Char 2.* User-defined character fields, validated against tables that you add.

*PO Char 3/PO Char 4.* Free-form user-defined character fields, not validated against tables.

*PO Date.* A user-defined date-type field.

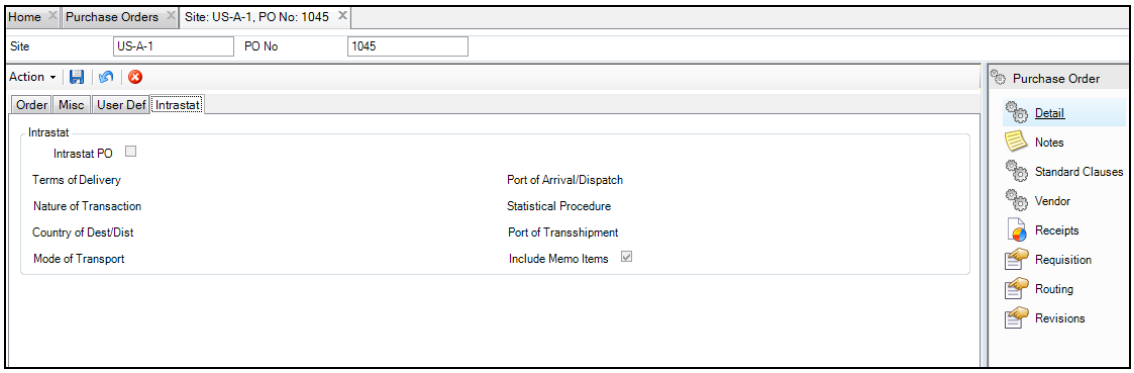
*PO Dec 1/PO Dec 2.* User-defined decimal fields for POs.

*PO Int 1/PO Int 2.* User-defined integer fields for POs.

*Po Logical.* A user-defined check box for POs.

Purchase Order: Intrastat Tab

**Fig. 7.85**
Purchase Order: Intrastat Tab




### Intrastat

If the PO qualifies as Intrastat, you can edit the Intrastat fields. The default Intrastat data is pulled in from the ERP's Intrastat Control record.

*Intrastat PO.* Select the check box if this purchase order and its lines are ones where Intrastat data should be collected.

*Terms of Delivery.* Enter the Intrastat terms of delivery (FOB point) used to calculate the statistical value of the relevant goods at the border for Intrastat purposes.

*Port of Arrival/Dispatch.* When the system creates Intrastat history records automatically, it uses the port of arrival/dispatch code that is recorded for the order line that is associated with the Intrastat history record.

*Nature of Transaction.* Enter a valid code if your country requires this information.

*Statistical Procedure.* When the system creates Intrastat history records automatically, it uses the statistical procedure code that is recorded for the order line that is associated with the Intrastat history record.

*Country of Dest/Dist.* Enter a valid country code.

*Port of Transshipment.* Enter a valid code defined in Port Maintenance use as the default when collecting Intrastat data in supported functions. During order entry, you can override this value.

*Mode of Transport.* Enter a one-character code that identifies the mode of transport used to carry the goods to the border.

*Include Memo Items.* Select the check box if you typically create Intrastat history records for memo items.

***Note*** All of the Intrastat data entered on the PO header defaults to all the lines on the PO. However, the PO line data can be changed on a line-by-line basis. Depending on the requirements of the country where you use Intrastat, some codes are required and others are optional.

***Note*** This browse can only be updated if the requisition lines for the PO have been added. On this tab, designate a purchase order and its lines as ones where Intrastat data should be collected. Click the Intrastat tab to display the Intrastat details on the PO header.

## Adding Standard Clauses to a Purchase Order

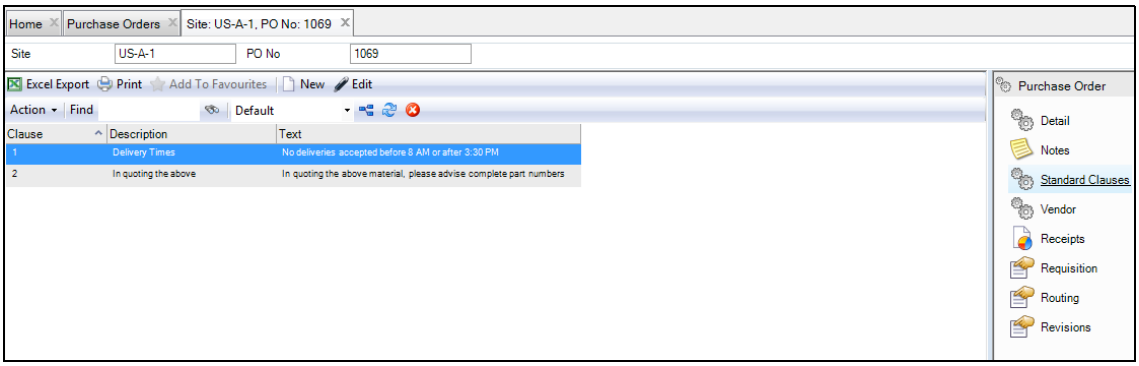
In the Standard Clauses submenu, you can add an existing standard clause or create a clause and add it to the PO.

### Add Existing Standard Clause to a PO

Follow these steps to add standard clauses to a purchase order:

1 Open the purchase order and select the Standard Clauses submenu.

**Fig. 7.86**
Purchase Order Header: Standard Clauses Submenu




2 To add an existing standard clause, select Copy Standard Clause from the Action menu.

A lookup appears that lists all the available standard clauses.

3 Double-click to select the clause you want to add to the PO.

The standard clause is added to the PO.

### Create a Standard Clause and Add it to a PO

Follow these steps to create a standard clause and add it to a PO:

1 Open the PO and select the Standard Clauses submenu.

2 Click New and enter the following information in the PO Clause tab:

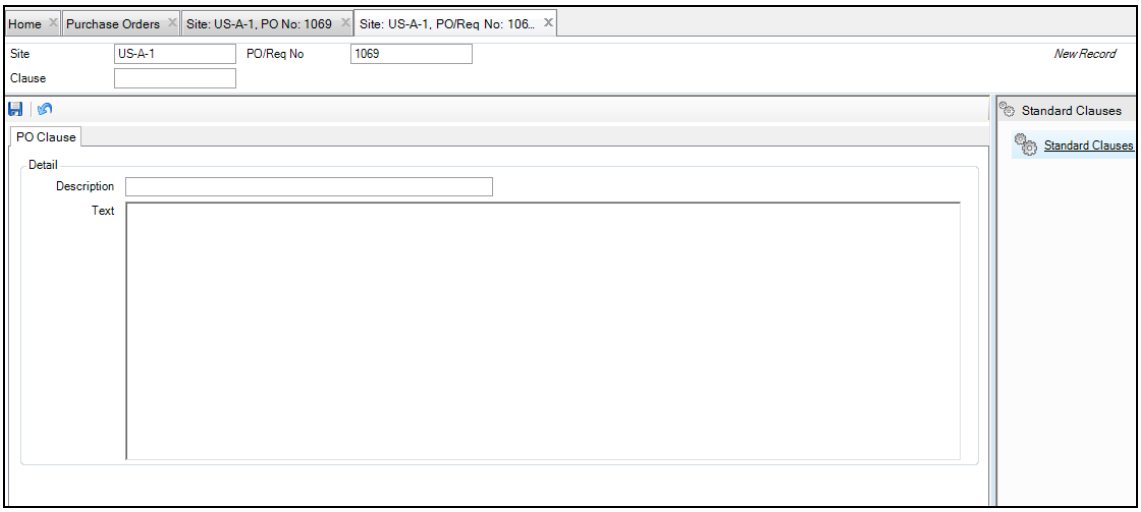
*Clause.* Enter the name of the standard clause.

*Description.* Enter a short description of the standard clause.

*Text.* Enter any detailed information about the standard clause.

***Note*** The Text field has a 1140-character limit. Any text beyond character 1140 is cut from the PO.

**Fig. 7.87**
Creating a Standard Clause



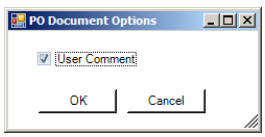

**3** Click Save.

## Printing a Purchase Order

To print a PO, select Print Document from the Purchase Orders Action menu. The purchase order is printed in the language specified on the PO header, which can be the default vendor language. All PO labels are presented in the vendor language. To print multiple POs, highlight those POs and select Global Print Document from the Purchase Orders Action menu.

If you have made revisions to the PO, you can choose to print the user-generated comments. After you select Print Document from the Action menu, the PO Document Options pop-up window appears.

**Fig. 7.88**
PO Print Options




To print the user comments that have been entered during revisions, leave the User Comment check box selected. If you do not want to include those comments, clear the check box before pressing OK to print.

If you have associated external files or URLs with the PO via requisition lines, you can print those attachments as part of the purchase order. After you select Print Document from the Action menu, a pop-up window appears that asks if you want to print the related attachments. Select either Yes or

No to proceed with printing the purchase order or select Cancel to not print the purchase order or the attachments. This feature also works with the Global Print Document action and all attachments associated with the selected purchase orders print.

***Note*** You can only print POs with an Ordered status.

If you print a PO, EAM automatically selects the e-mail option for that PO.

### E-mailing a Purchase Order

To e-mail a PO to a supplier, select Email PO from the purchase order Action menu. The e-mail is sent to the vendor e-mail address defined in the Order tab of a purchase order at Purchasing| Purchase Orders. You can only e-mail POs with an Ordered status.

A duplicate e-mail is sent to the buyer defined in the Miscellaneous tab of a purchase order at Purchasing|Purchase Orders. The e-mail displays the buyer's e-mail address as the From/Reply-To address.

***Note*** You must define both the vendor and the buyer e-mail addresses. If either is undefined, EAM returns an error message and no e-mail is sent.

***Note*** Your DNS name or the IP address of the SMTP server must be specified in the System Control Maintenance screen in order to e-mail purchase orders. See "System Control Tabs" on page 688.

When the e-mail has sent successfully, EAM updates the Printed? and Emailed? columns on the Purchase Order browse by automatically selecting the check boxes in those columns.

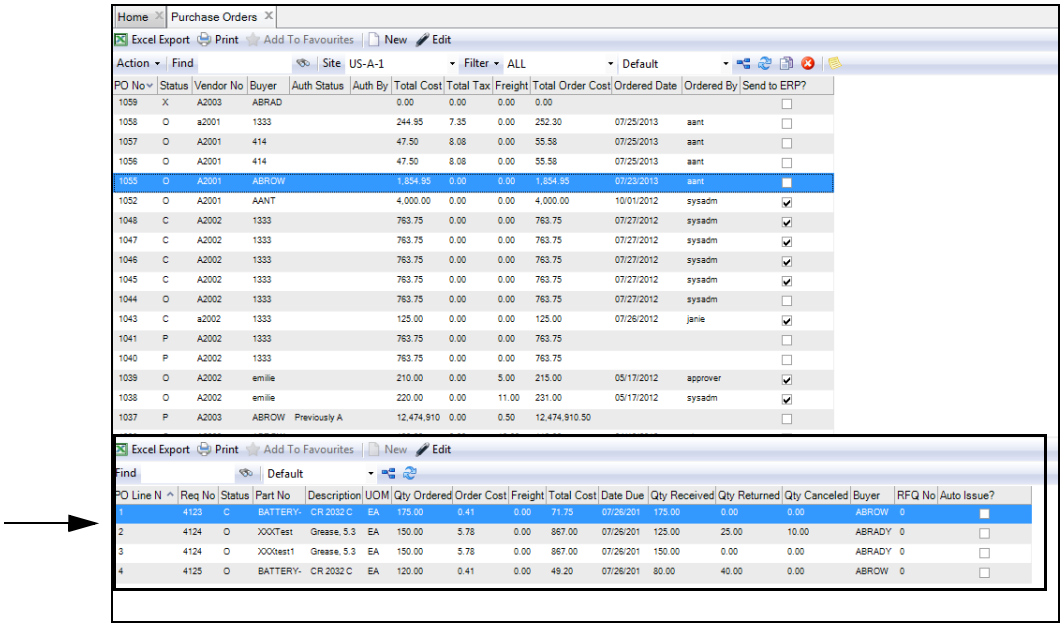
#### Global Email PO

To e-mail two or more POs at once, highlight those POs and select Global Email PO from the purchase order Action menu. If any POs do not meet the requirements of ordered status, vendor e-mail address, or buyer e-mail address, those POs do not send, but all others proceed.

## Purchase Orders Lines

The Purchase Order Lines browse displays the lines on the selected purchase order.

**Fig. 7.89**
Purchase Order Lines Browse

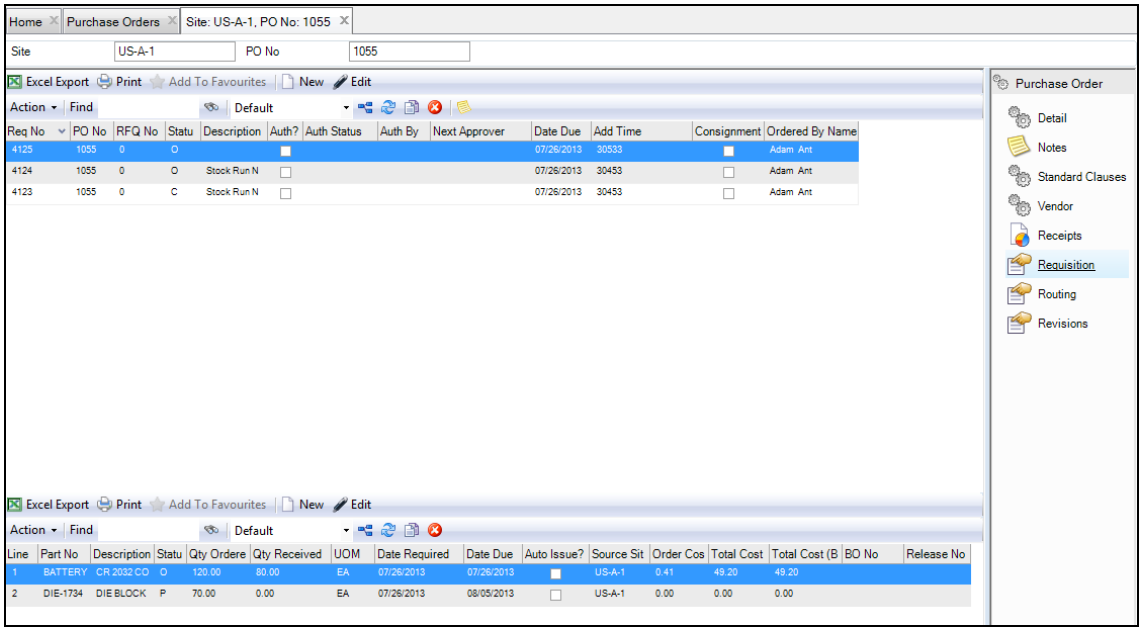



## View Requisitions Tied to the PO

To view the requisitions that are associated with the PO, open the PO and select the Requisition submenu. The upper browse shows all requisitions that are tied to the PO. The lower browse shows the lines that are on the selected requisition.

If necessary, you can add lines to the PO directly from the Requisition submenu. See “Adding Lines to a Purchase Order” on page 498.

**Fig. 7.90**
Purchase Order: Requisition Submenu



### Adding Lines to a Purchase Order

To add lines to a PO, add the lines to the requisition that is associated with the PO. When you add the lines to the requisition, the new lines are automatically added to the PO.

***Note*** When you add a line from the PO's Requisition submenu, the system auto-fills most of the fields with information from the PO. This feature saves you time and ensures data integrity.

Follow these steps to add lines to a PO:

1. Open the PO and select the Requisition submenu.
2. In the upper browse, select the requisition to which you want to add the line. In the lower browse, click New.

   ***Note*** If you need to create a requisition for the new lines, see "Adding a Requisition to a Purchase Order" on page 498.

   A new requisition line record opens.
3. Fill out all the required information regarding the new part. See "Add Lines to a Requisition" on page 459.

### Adding a Requisition to a Purchase Order

In the Requisition submenu, you can add a requisition to a PO. When you create the requisition, you can add lines to the requisition, which are then added to the PO.

***Note*** When you create a requisition from the PO's Requisition submenu, the system auto-fills most of the fields with information from the PO. This feature saves you time and ensures data integrity.

Follow these steps to add a requisition to a PO:

1. Open the PO and select the Requisition submenu.
2. In the upper browse, click New.

   A new requisition record opens.
3. Fill out all the required information in the Requisition tabs. See "Filling Out the Requisition Header" on page 453.

## Authorize a Purchase Order

To authorize a PO, open the PO and select Authorize from the Action menu. Enter your user name and password and click OK.

When you select the Authorize action, the PO begins the approval routing process.

If you do not have a large enough spending limit, the PO is routed to the approval group. See "Purchase Order Approval Group" on page 435.

If you have a large enough spending limit and the authority for the associated accounting structure and the approval group has no quality person, you can authorize the PO without going through routing.

### Authorize Multiple Purchase Orders

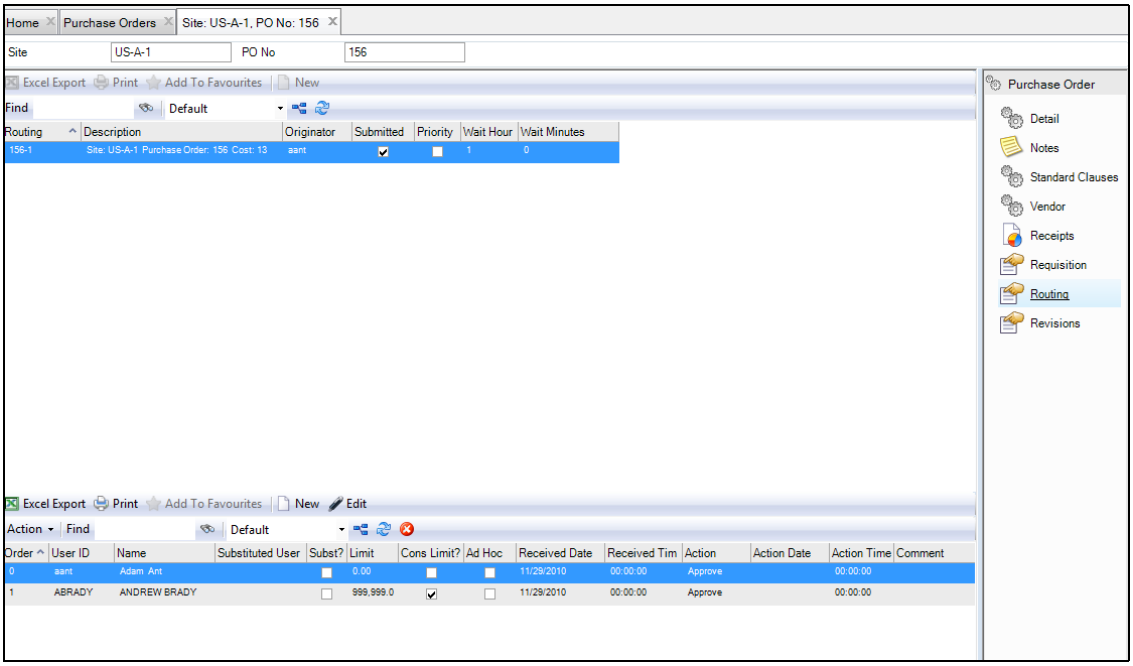
To authorize multiple purchase orders at the same time, select the purchase orders and then select Global Authorize from the Purchase Order Action menu.

***Note*** The Global Authorize option is only active if you select multiple POs.

### View the Approval Status of a Purchase Order

To view the authorization status for the PO, open the PO and select the Routing submenu.

**Fig. 7.91**
Purchase Order: Routing Submenu




The upper browse displays the routing records for the PO. Each time this PO is routed for approval, a record of that routing appears in this browse.

The lower browse shows the list of approvers for the selected routing. It displays the users who approved the PO and those who still need to approve the PO. It also indicates if anyone has rejected the PO.

***Note*** If anyone in the approval group had any important notes regarding the PO, the notes are displayed in the Comment column.

The lower browse also captures any currency conversion that occurred if your domain's base currency is different than the defined system approval limit currency. It displays the approval limit in both base and approval limit currencies, the exchange rate, and the date that a user took action on the PO.

***Note*** If you take too long to approve a PO, EAM provides a job in System Administration|Job Control that automatically forwards the routing approval to the next person on the list. See "Job Control Application" on page 703.

## Approving a PO

Follow these steps to approve a PO:

1. Open the Purchase Order browse and select the PO.
2. Select Authorize from the Action menu. A window opens prompting you for your password. Enter your password and click the green arrow button.

   ***Note*** You may not be prompted to enter your password if the Suppress Password for PO Next Approver option is selected. See “Suppress Password for PO Next Approver” on page 56.

**Fig. 7.92**
Approving a PO




A detail window opens, which contains the important information about the PO and allows you to approve, disapprove, or place a hold on the PO.

*PO No.* Displays the PO number.

*Vendor.* Displays the vendor associated with the PO.

*Total Cost.* Displays the amount of money that is requested for approval.

*Approve.* Click this button to approve the PO. The PO is then routed to the next person on the routing list.

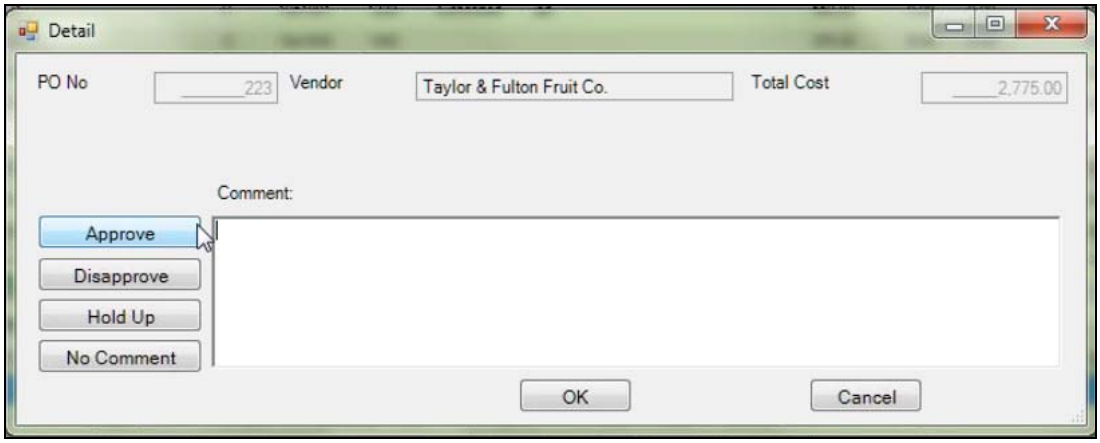
*Disapprove.* Click this button to disapprove the PO.

*Hold Up.* Click this button to stop notifications for this PO. The action stops notifications and causes EAM to display the status Hold Up in the PO Routing submenu, but does not freeze routing. You can still approve or disapprove a PO while it is in the Hold Up status.

*No Comment.* Click this button if you do not have any comments to include with the PO.

*Comment field.* Enter any comments in the Comment field.

**Fig. 7.93**
Approving a PO




3 Click the Approve button to approve the PO. Then, click OK.

## Globally Approving POs

You can approve multiple POs at once using the Global Authorize action on the Purchase Orders browse.

Follow these steps to globally approve multiple POs:

1 Open the Purchase Order browse and select the POs.

2 Select Global Authorize from the Action menu. A window opens prompting you for your password. Enter your password and click the green arrow button.

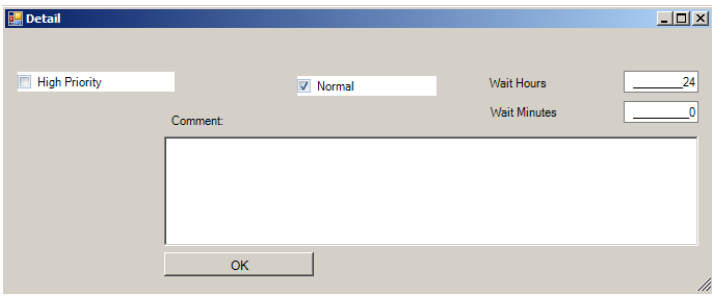
***Note*** When you are logged in to EAM and are listed as the Next Approver for the selected POs, you do not have to enter your password to approve or disapprove the POs. See “Suppress Password for PO Next Approver” on page 56.

**Fig. 7.94**
Approving Multiple POs




A detail window opens.

**Fig. 7.95**
Global PO Approval




*High Priority.* Marks the e-mail with the high priority flag.

*Normal.* Does not mark the e-mail as high priority.

*Wait Hours.* The number of hours a request for purchase order approval waits in an individual's mailbox. Defaults from the setting on System Control|Detail.

*Wait Minutes.* The number of minutes a request for purchase order approval waits in an individual's mailbox. Defaults from the setting on System Control|Detail.

*Comments.* Enter any comments in the Comment field.

3 Click OK to authorize the POs.

## Place a PO on Order

To place a PO on order, select PO Order from the Purchase Order Action menu. When you place a PO on order, the status for the items on the PO change to O (Ordered). Items on a PO cannot be received unless the PO status is O (Ordered).

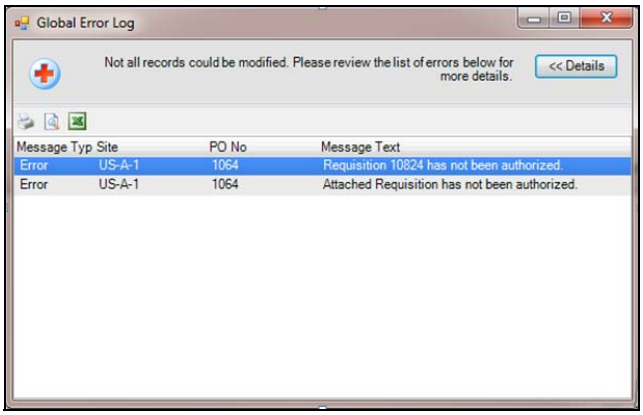
***Note*** If authorization is required for a PO and/or requisitions, the PO cannot be ordered until the authorization is complete. If this condition has not been met, an error message is displayed.

### Place Multiple POs on Order

To place multiple POs on order, highlight the POs and then select Global PO Order from the Purchase Order Action menu. The Global PO Order option is only active if multiple POs are selected. Items on a PO cannot be received unless the status is Ordered (O).

***Note*** If authorization is required for a PO and/or requisitions, you cannot order the PO until the authorization is complete. A Global Error Log is displayed stating that not all POs could be placed on order. The reason for the error is listed in the Message Text field. You can print this log or export it to Excel.

**Fig. 7.96**
Global Error Log




### Place Added or Modified PO Lines on Order

***Note*** The Order Added or Modified Lines action is used when you add lines to a PO that already has parts on order. Any lines that are added must be authorized. When the new lines have been authorized, you can select this action to order the parts.

To place added or modified PO lines on order, select the PO. Select Order Added or Modified Lines from the Purchase Order Action menu. The Order Added or Modified Lines option is only available for POs with an Ordered (O) status. When the changes are reauthorized, this action gives you control over sending the new changes to an existing ordered PO in ERP.

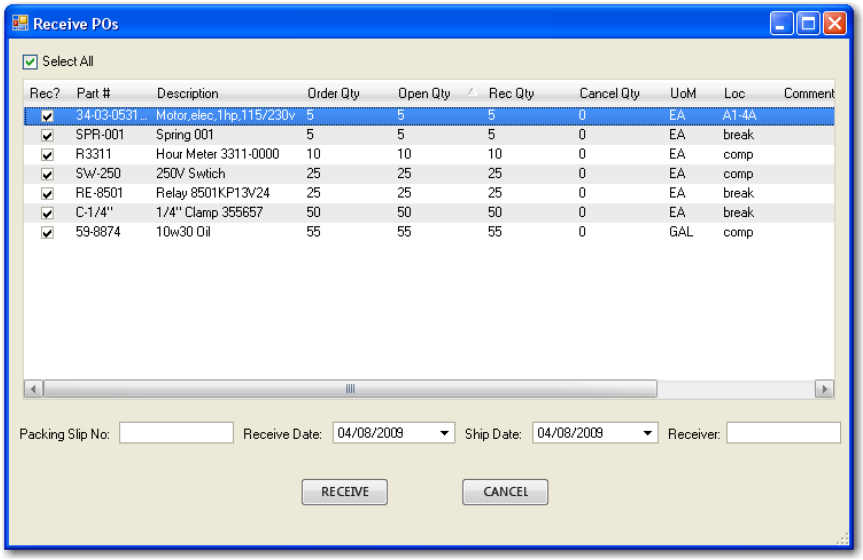
## Receiving Purchase Orders

Follow these steps to receive a purchase order:

1 Open the Purchase Order browse and select the purchase order.

2 Select Receive from the Purchase Order Action menu. The Receive POs window appears.

**Fig. 7.97**
Receive POs Form




3 If you are receiving all items, select the Select All check box. If only a few lines are being received, select the Rec? check box for those line items.

4 Enter the receive quantity for each line in the Rec Qty field.

5 Enter the packing slip number.

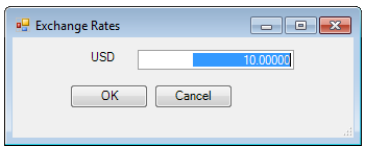
6 Verify the ship and receive dates.

7 If necessary, enter the receiver number in the Receiver field. If you do not enter a receiver number, EAM generates the number for you.

8 Click Receive.

9 The Exchange Rate pop-up window appears if the Update Receipt/Return Ex Rates check box is selected on the Domain|PO/Reqs tab, and if the vendor currency is different than the buyer currency.

**Fig. 7.98**
Exchange Rates Pop-up Window



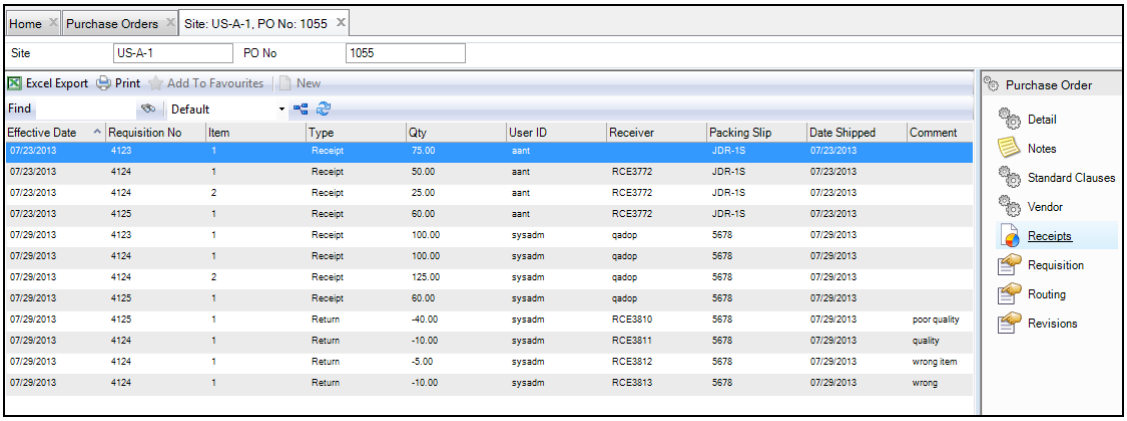

Update the exchange rate if needed. Then click OK.

***Note*** If the Update Receipt/Return Ex Rates check box is clear, you do not see the Exchange Rates option and EAM receives the PO using the currency exchange rate defined in Purchasing| Exchange Rates.

### View Purchase Order Receipts

The Receipts submenu shows detailed information for each receipt and return associated with the PO. To view the receipts associated with a purchase order, open the PO and select the Receipts submenu.

**Fig. 7.99**
Purchase Order Receipts Submenu




## Return to Vendor

If you receive parts that need to be returned to the vendor, use the Return to Vendor action in the Purchase Order Action menu. The Return to Vendor action:

- Reduces the on-hand inventory quantity.
- Creates a general ledger transaction that credits the inventory accounts and debits the accounts payable liability accounts.

Follow these steps to return parts to the vendor:

1 Open the Purchase Order browse and select the purchase order.

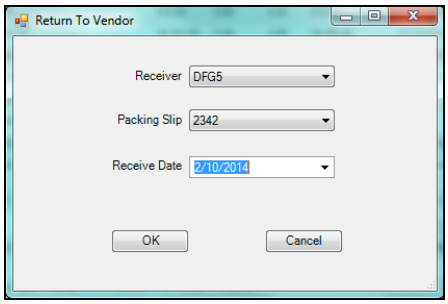
2 Select Return to Vendor in the Purchase Order Action menu.

The Return to Vendor window opens, which allows you to find the items to be returned by selecting the receiver number, packing slip number, or the receive date.

3 Click OK to view all corresponding inventory transactions.

***Note*** If you select All from Receiver and Packing Slip drop-down lists and do not indicate a receive date, you can view all the inventory transactions for the PO.

**Fig. 7.100**
Return to Vendor




The Line Item Returns window opens showing the inventory transactions that match the selections in the previous Return to Vendor window.

4 Select the lines to return. To return all lines, select the Select All check box.

5 In the Quantity to Return field, enter the quantity of items to return.

***Note*** You cannot enter an amount exceeding what was received on this receiver. If this is an inventory part, you cannot enter an amount exceeding the quantity on hand.

6 In the Location field, select the location for the item being returned. The Location field defaults to the original receipt location.

7 In the Return field, use the lookup to select the reason for the return.

8 If necessary, select the Cancel? check box to cancel the balance of the outstanding orders so that the return quantity is not added to the open quantity on the line. If this is the only line on the PO and the PO was already closed, it remains closed.

By default, the Cancel? check box is not selected.

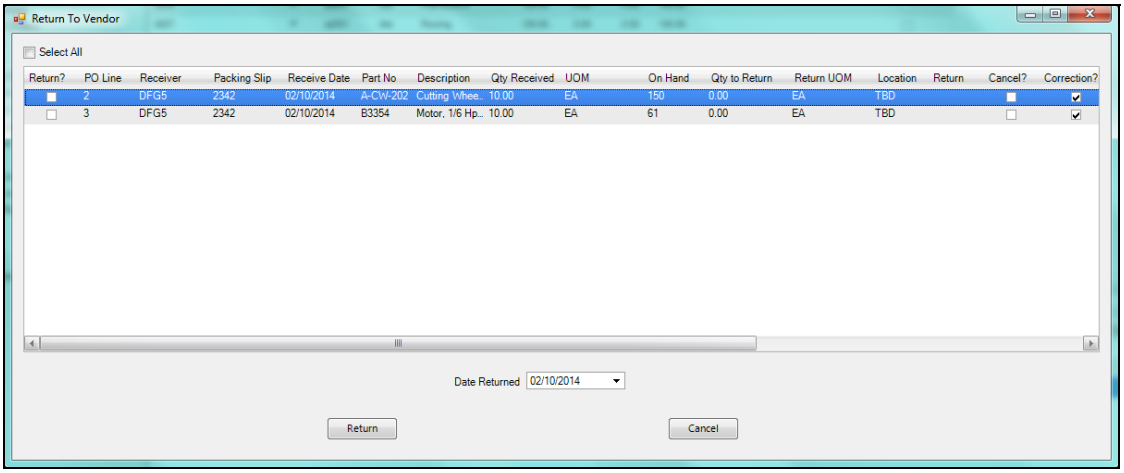
***Note*** If the PO is closed and you do not select this check box, EAM reopens the PO and requisition to re-receive the items that were returned.

9 In the Date Returned field, use the calendar lookup to select the return date. This field defaults to today's date.

10 In the Comment field, enter any additional information regarding the return. This is a required field.

11 Click Return to process the return.

**Fig. 7.101**
Select the Lines to Return




The system prompts you to print the vendor return form.

12 Click Yes to print the form; otherwise, click No.

The system returns you to the Purchase Order browse. The quantity returned or canceled is now reflected in the PO Items browse.

## Submitting the PO/Receipts to ERP

If a transaction fails because of a disconnect between EAM and the ERP, the Submit PO/Receipts to ERP action allows you to manually send the new PO or the PO receipts to the ERP.

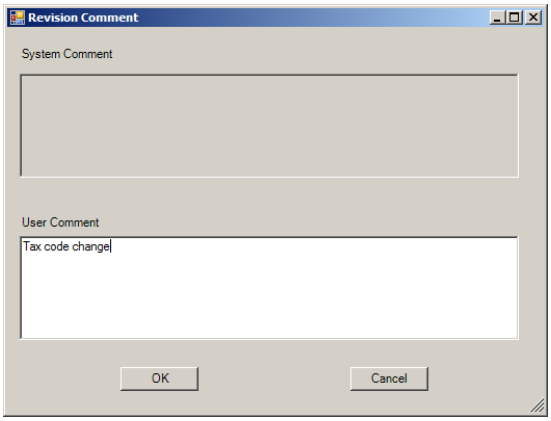
To submit the PO or receipts to ERP, select the Send to ERP? check box on the Purchase Orders browse and then select Submit PO/Receipts to ERP in the Purchase Order Action menu.

***Note*** You can have EAM perform this action automatically using the jobs in System Administration|Job Control. See “Job Control Application” on page 703.

## Editing a Purchase Order

To edit a purchase order, open the PO and make the necessary changes to the PO record. When you have made all the changes, click Save. If you have Vendor Rev? selected on the Purchase Order tab in Sites, EAM displays the Revision Comment window.

**Fig. 7.102**
Purchase Order: Revision Comment




Enter details in the User Comment box about the updates or changes you made to the PO and click OK. You can view the system and user comments in the Revisions submenu, and you can choose to include the user comments when you print the PO. See “Printing a Purchase Order” on page 495.

## Reopening a Canceled Purchase Order

A PO’s buyer can reopen a canceled PO. After the PO is reopened, you can make the same modifications to the PO that you can make to planned requisitions and planned POs.

***Note*** The reopen option only applies if Reopen PO/Reqs? has been enabled in General|Business Units|Domain on the PO/Reqs tab. See “Domain: PO/Reqs Tab” on page 36.

To reopen a canceled PO, highlight the PO and then select Reopen Canceled PO from the Purchase Order Action menu.

***Note*** If the Any Buyer option is enabled for the domain, then any buyer in the system can reopen a canceled PO. The Any Buyer option is set on the PO/Reqs tab in General|Business Units|Domain. See “Domain: PO/Reqs Tab” on page 36.

## Reopening a Closed Purchase Order to Add Lines

A PO’s buyer can reopen a closed PO to add lines to it. Received lines remain closed and cannot be edited or reopened.

***Note*** If the Any Buyer option is enabled for the domain, then any buyer in the system can reopen a canceled PO. The Any Buyer option is set on the PO/Reqs tab in General|Business Units|Domain. See “Domain: PO/Reqs Tab” on page 36.

***Note*** The reopen option only applies if Reopen PO/Reqs? has been enabled in General|Business Units|Domain on the PO/Reqs tab. See “Domain: PO/Reqs Tab” on page 36.

To reopen a closed PO to add lines:

1. Highlight the PO in the browse and select Reopen to Add Line from the Action menu.
2. Select Requisition from the PO browse submenu.

3 Select New to create a new requisition.

   The PO data defaults into the new requisition and you can enter more details into the enabled fields as needed.

4 Save the requisition.

5 Select New to add a requisition line. The new line has a status of P (Planned).

6 Enter details for the new line and then click Save.

   The PO and requisition then proceed through the approval process that is dictated by their authorization settings. See “Place Added or Modified PO Lines on Order” on page 503 for more information.

Revisions and Vendor Revision by site are updated and track changes when a PO is reopened and lines are added, if those settings have been enabled. For more information, see “Enable Revision Control” on page 61 and “View the Revision History for a Vendor Record” on page 429.

### Locking/Unlocking a Purchase Order

For added security, the buyer associated with the PO can lock the purchase order. Only the buyer on the PO can modify or update a locked PO or any attached requisitions.

To lock or unlock a PO, select the PO and then select Lock/Unlock from the Purchase Order Action menu.

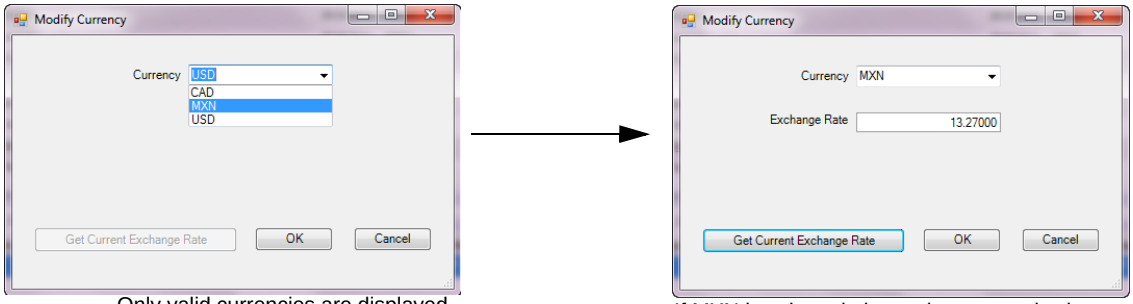
***Note*** If the Any Buyer? check box is selected in General|Business Units|Domain|PO/Reqs, any user set as a buyer is able to make modifications to another buyer’s PO, whether the PO is locked or unlocked. See “Domain: PO/Reqs Tab” on page 36.

### Modifying Currency on the Purchase Order

To modify the currency of a PO, select the PO and then select Modify Currency from the Purchase Order Action menu.

The Modify Currency option allows you to select a different currency code for POs with a Planned (P) status. The PO line items are changed to the new currency and the base currency amount is calculated based on the current exchange rate. Only one currency is allowed per PO. All currencies loaded into EAM are available for selection. If the Use Only Vendor Currency check box is selected in the domain for this PO site, only currencies valid for this vendor are available for selection. See “Multicurrency Purchasing” on page 425.

**Fig. 7.103**
Purchase Order: Modify Currency




Only valid currencies are displayed.

If MXN is selected, the exchange rate is shown.

## Changing PO Status

The Change PO Status option in the Purchase Order Action menu allows you to change the status of a PO to Closed (C) or Cancelled (X). Changing the status of a PO changes the status of any PO lines as well.

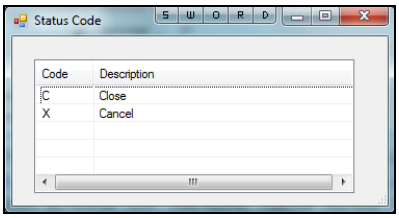
Follow these steps to change the PO status:

1. Select the PO. Then, select Change PO Status from the Action menu.

   The Status Code lookup appears.

2. Double-click to select the new status:
   - **Close (C).** Closes the PO. Users with the required security setting can reopen POs after they have been closed. Reopen the closed PO before you make adjustments such as a return to vendor or additional receipts. See “Reopen PO/Reqs?” on page 37 for information on the required security settings.
   - **Cancel (X).** When you cancel a PO, any planned orders are canceled as well. You cannot cancel a PO that has been received against. You also cannot receive against a PO that has been canceled.

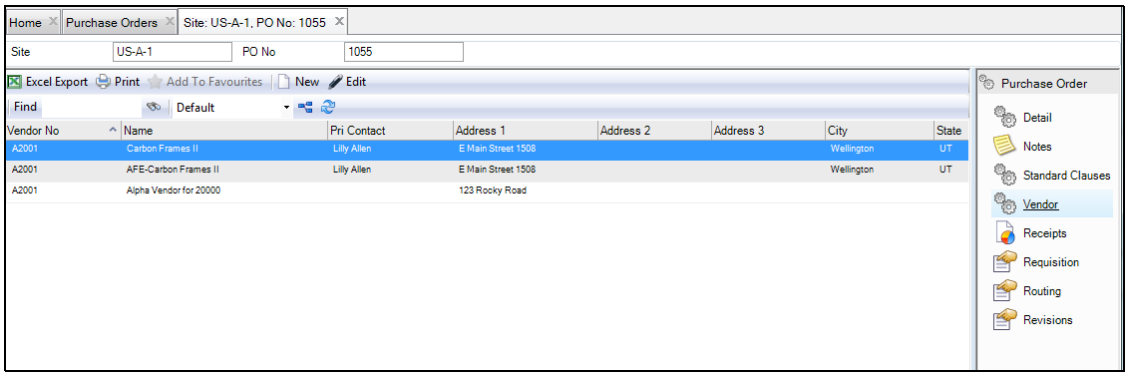
**Fig. 7.104**
Change PO Status




## Viewing the Vendors on a Purchase Order

To view the vendors associated with a PO, open the PO and select the Vendor submenu. If you need more information, double-click and drill into the vendor record.

**Fig. 7.105**
Purchase Order Vendor Submenu



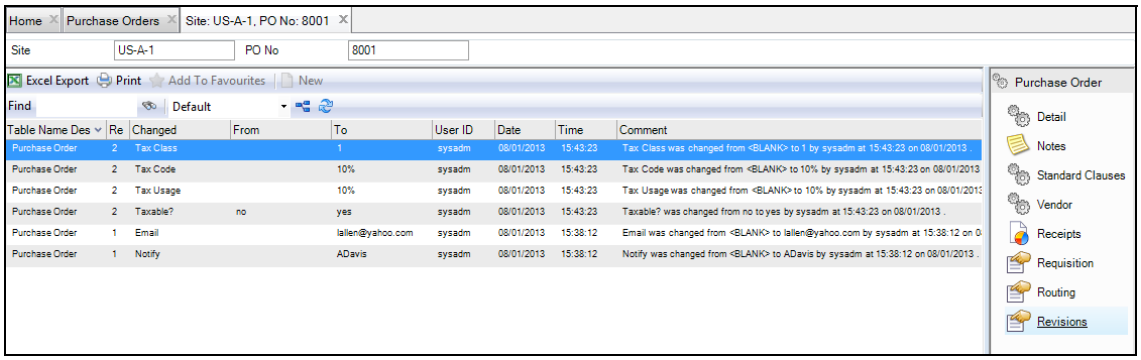

## Viewing Revision History for a Purchase Order

Because many quality systems call for strict record keeping regarding the revisions made to POs, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the PO.

To view the revision history for a PO, open the PO and select the Revisions submenu.

***Note*** Revision control is activated in the Purchasing|General|Business Units|Sites menu. See “Enable Revision Control” on page 61.

**Fig. 7.106**
Purchase Order Revisions Submenu



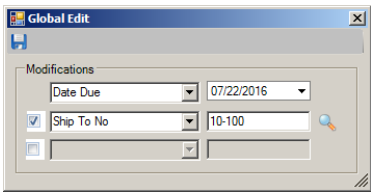

## Globally Editing POs

You can edit multiple POs at once using the Global Edit action on the Purchase Orders browse. Follow these steps to globally edit multiple POs:

1 Open the Purchase Orders browse and select the POs to edit.

2 Select Global Edit from the Action menu.

**Fig. 7.107**
PO Global Edit



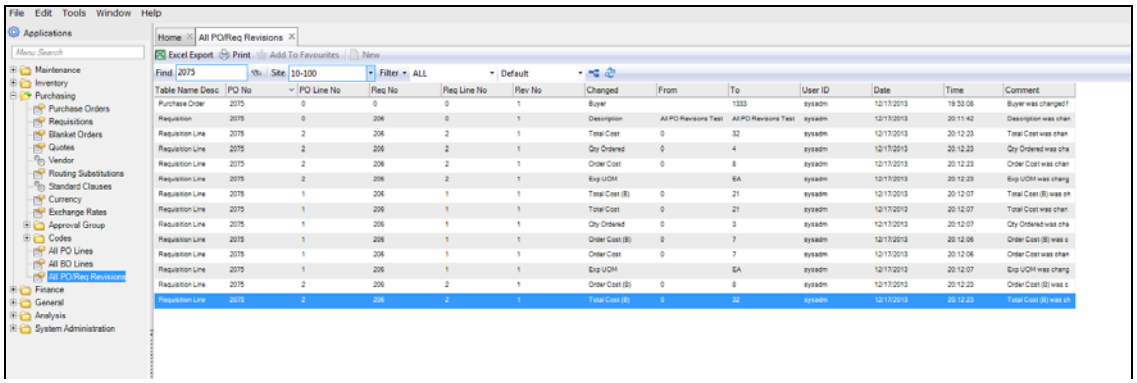

3 In the Global Edit window, define the modifications you want to make. In the first drop-down menu, select the field to update. Then define the new setting in the field to the right. If you have more than one global edit to make on the selected POs, check the box in the second row of fields to make them active and set a second set of changes.

4 When you have defined all of your changes, click the Save icon.

## All PO/Req Revisions Browse

The All PO/Req Revisions browse, located in Purchasing|All PO/Req Revisions, is a consolidated list of all the changes made to POs and requisitions. This browse allows you to easily find all changes that have been made to a PO and its related requisitions, including line detail. This list can be sorted, filtered, printed, and exported to Excel. For example, you can filter by PO number and view all the revisions for that PO, associated requisitions, and requisition lines.

**Fig. 7.108**
All PO/Req Revisions Browse




You must run the PO/Req Revision Rollup Create job program to populate the browse. See “PO/Req Revision Rollup Create” on page 737.

# Blanket Orders

Blanket orders take advantage of negotiated pricing for a set of parts or services that a vendor supplies, and are useful for recurring purchases for expendable goods. The blanket order covers multiple deliveries from the vendor within an agreed-upon range of time. Use blanket orders to create individual releases against an order, without the need to create new purchase orders each time a release is needed.

Some of the advantages of using blanket orders include:

- More efficient order processing for high-volume items

- Better ability to manage negotiated prices and changes from a single contract
- Tighter enforcement of spending controls and expiration dates on vendor contracts
- Automatic change tracking for audit compliance

## Business Use Cases

There are different ways to work with specific vendors and to streamline the purchasing process with them in EAM:

- **Vendor Price Schedules.** A buyer can establish vendor price schedules for specific commodities. This provides buyers with the capability to establish pricing once for a specific period, which eliminates the need for technicians and others to continually seek new pricing each time a part is required or to rely on the last price when received.
- **Stock Replenishment.** For automated stock replenishment, sole source parts are identified in inventory based on pre-approved pricing and stocking levels from a vendor. When these parts are requested for replenishment, the purchasing process is expedited so that the purchase order can be sent to the vendor, without the additional need for confirmation of pricing or fulfillment requirements.

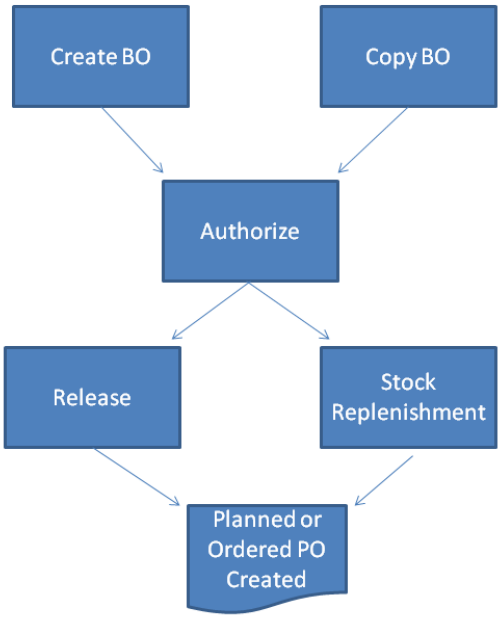
When a buyer periodically negotiates to purchase parts or services from a vendor at agreed-upon pricing or discounts and terms for a specified period, you can create a blanket order to represent the agreement. Blanket orders allow the purchasing process to be streamlined both internally and externally because the planned purchase with the vendor has been authorized and the details are agreed with the vendor ahead of time.

When you initiate discrete purchases, a message is presented to the requestor when the vendor and items are already on a current BO so that a release can be used to fulfill the purchase.

## Blanket Order Process Flow

Figure 7.109 shows the process flow of a blanket order from when it is created to when it becomes a purchase order and parts are ordered from the vendor.

**Fig. 7.109**
Blanket Orders Process Flow




## Setting Up a Blanket Order

The following setup items apply to blanket orders:

- **Set the Status for POs Released from Blanket Orders.** In the site record, specify the status that is automatically assigned to a PO that is released from a blanket order. The status options are Planned (P) or Ordered (O). See “Sites: Purchase Order Tab” on page 44.
- **Blanket Order Approval Group Setup.** Set up the blanket order approval group by:
  - Assigning buyers to the blanket order approval group
  - Setting the blanket order limit for users who approve blanket orders
  - Adding users to the blanket order approval group

  See “Blanket Order Approval Group” on page 436.
- **(Optional) Specify Mandatory Fields for Blanket Order and Blanket Order Lines.** When you specify a field as mandatory in the blanket order header or line, the blanket order cannot be saved until that mandatory field is populated. See “Mandatory Fields” on page 747.
- **(Optional) Enable Revision Control for Blanket Order and Blanket Order lines.** When revision control is enabled for the blanket order header and lines, the revision records are displayed in the Revisions submenus. See “Enable Revision Control” on page 61.

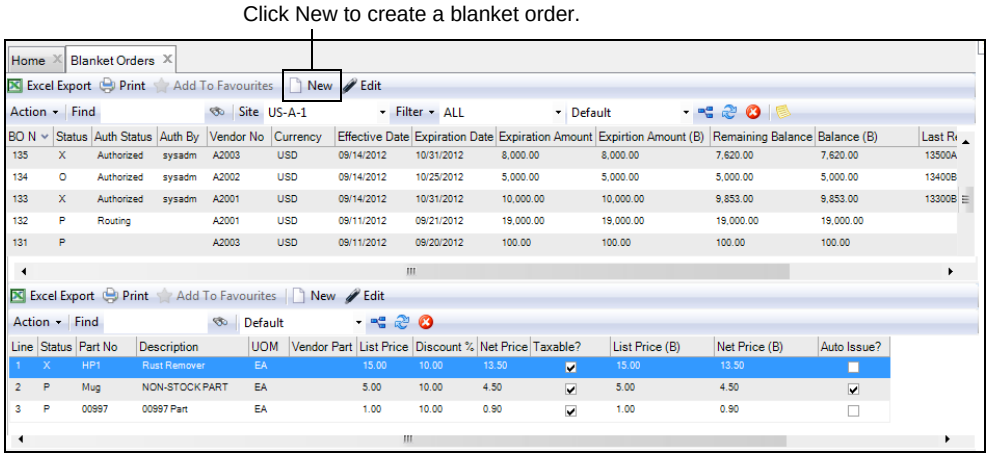
## Creating a Blanket Order

Creating the blanket order is the first step in the blanket order process flow.

Follow these steps to create a blanket order:

1 Open the Blanket Order browse in Purchasing|Blanket Orders.

**Fig. 7.110**
Blanket Orders Browse



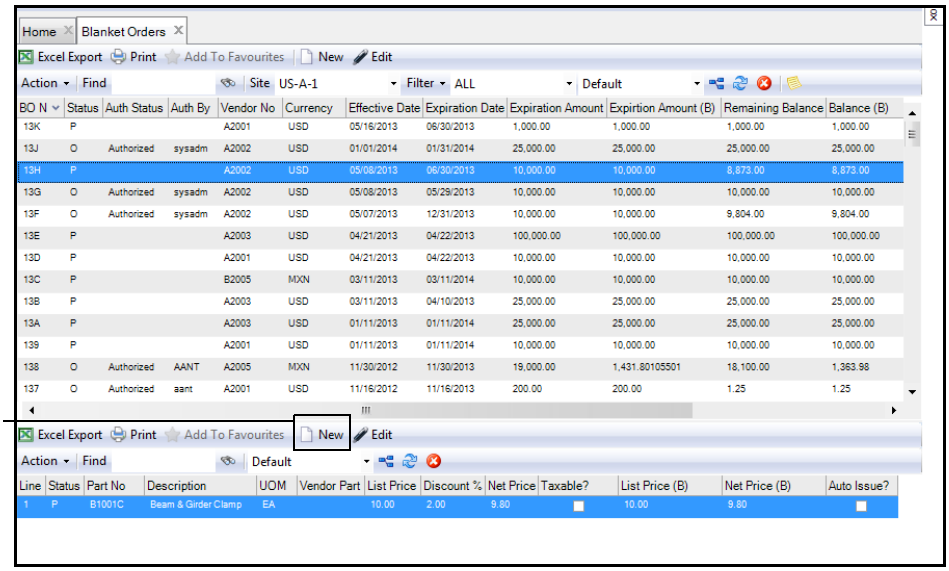

2 Click New. A blank blanket order record opens. The system automatically assigns a blanket order number, which you cannot modify.

3 Enter information in relevant fields on the Detail and User Defined tabs. See “Filling Out the Blanket Order” on page 516.

4 When all the information has been entered, click Save.

5 Add lines to the blanket order. Select the blanket order and click New in the blanket order lines browse.

**Fig. 7.111**
Adding Lines to the Blanket Order




6 Enter the relevant information in the Detail, Codes, and Tax Tabs. See “Add Lines to a Blanket Order” on page 519.

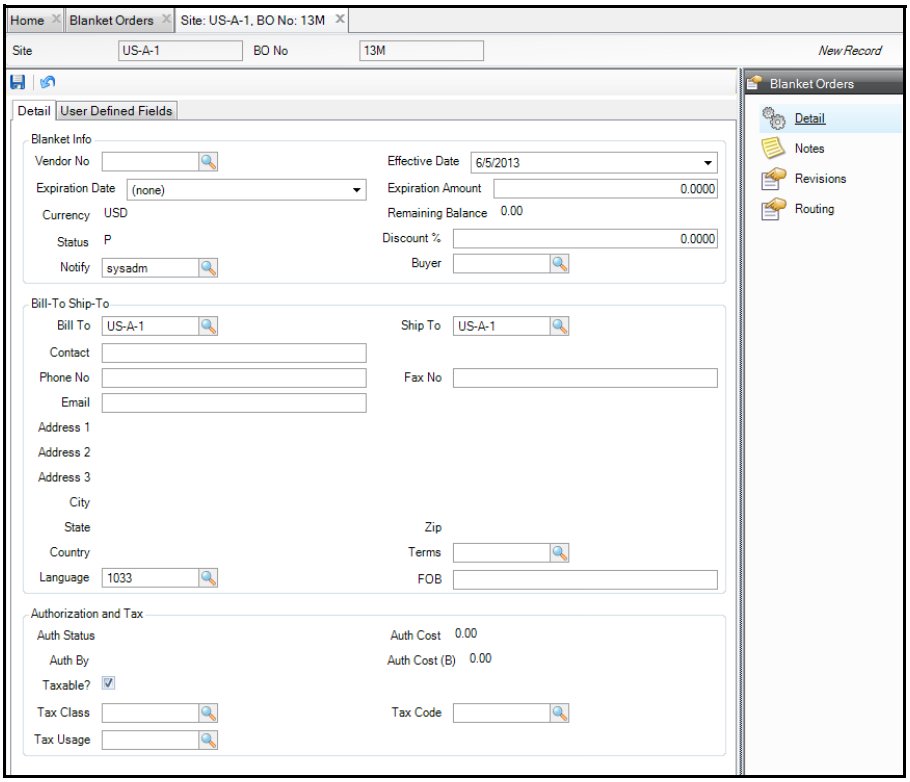
7 Click Save. If you have selected Validate Req/PO Mandatory for BO on Save on the General|Business Units|Sites|Purchase Order tab, then EAM validates that all fields defined as mandatory for POs and requisitions are populated before saving a BO.

## Filling Out the Blanket Order

Enter information about the blanket order on the Detail and User Defined Fields tabs.

### Blanket Orders: Detail Tab

**Fig. 7.112**
Blanket Orders Detail Tab




### Blanket Info

*Vendor Number.* Enter the vendor number of an active vendor associated with the BO. The vendor's contact, phone, fax, e-mail, address, language, terms, and tax data automatically populate the appropriate fields. You can update the vendor's contact, phone, fax, and e-mail from this screen.

*Effective Date.* Set a starting date on which releases from the blanket order can be made. Effective Date is a required field on the blanket order header.

When an item is added to a blanket order, the system checks to see if that item exists on another open blanket order. If it does, you are prevented from adding the item. The only exception to this rule is for non-stock items.

The system also validates items whenever the effective date or expiration date is changed.

An open blanket order is one in which the status is O (Open) and today's date falls between the order's effective date and its expiration date.

When releasing items (using Release on the Action menu), the Effective Date must be greater than or equal to today's date. Once a release has been made from the blanket order, the Effective Date cannot be changed.

*Expiration Date.* Set an ending date before or on which releases from the blanket order can be made. A valid expiration date is required before releases can be made from the blanket order.

If the expiration date is set to today's date, then releases can continue until the end of today, but not tomorrow.

When modifying the expiration date, the system verifies that there is not another open blanket order with any of the same line items, except for non-stock items, in which the new effective date falls between the other blanket order's effective and expiration dates.

If the new expiration date is less than or equal to the current date, the system checks to see if there are any current planned releases from the blanket order that would be canceled due to the change to the expiration date. If so, a warning message is displayed and you can cancel the change to the expiration date. If you proceed with the date change, the planned releases are canceled.

An expiration date change does not affect releases with an Ordered status—the releases can still be modified.

*Expiration Amount.* Set an expiration amount for the blanket order. The blanket order expires and no additional releases can be made from it when this amount is reached.

If the expiration amount is increased from the original amount, then a reroute for approval occurs. The remaining amount is updated by the difference of the increase. There are no threshold ($ or %) options.

Once an expiration amount increase is approved, the Authorized Cost field is updated with the new amount.

The expiration amount can be decreased, but not below the current total spent plus ordered releases.

*Currency.* The vendor currency. The system defaults to the vendor's primary currency, but this definition can be changed.

Only one currency can be defined per blanket order. All items are purchased in the currency displayed on the blanket order header. If multiple currencies are required for a vendor on a blanket order, create separate blanket orders for each currency.

*Remaining Balance.* The expiration amount less the total amount that has been released against the blanket to today's date. The system automatically calculates this amount when releases are made from the blanket order. If a planned or ordered release is canceled or the quantity ordered is reduced, the system increases the remaining balance. Therefore, changing the Discount % field on a planned release also impacts the remaining balance.

*Status.* Status defaults to P (planned). After authorizing the blanket order, the system automatically assigns it an O (open) status.

*Discount %.* Enter the negotiated discount percentage, which is copied to all the blanket order lines. The discount percentage can be changed on the blanket order lines.

An alternative is to leave the Discount % field blank on the blanket order header and enter the Discount % only at the line level. This is most useful when each item has a different Discount %.

Changing the Discount % field in the blanket order header applies the change to all line items. A message indicating this displays and gives the option to proceed or cancel.

In addition, a message displays asking if the new Discount % should be applied to planned releases. Selecting Yes applies the discount to the blanket order and recalculates a new price per UOM and net price.

*Notify.* The individual or group of individuals to e-mail, based on certain events occurring against the blanket order. Select the user or group to notify from a lookup.

The individual or group in this field can consist of a user ID or a group of users called a mail group. As a blanket order goes through the routing approvals, the system e-mails the specified user or group with updates.

*Buyer.* After a blanket order has been approved, only the buyer can:

- Modify the blanket order.
- Cancel a line item.
- Lock or unlock the blanket order. Releases cannot be made on a locked blanket order.

**Bill-To Ship-To**

*Bill To.* Enter the code for the bill-to location. Specify a default bill-to for each blanket order in General|Business Units|Domain. The buyer can override this code.

*Ship To.* Enter the code for the ship-to location. Specify a default ship-to for each blanket order in General|Business Units|Domain. The buyer can override this code.

*Contact.* The primary contact designated in the vendor record, copied from the vendor record to the blanket order.

*Phone Number, Fax Number, and Email.* The primary vendor's contact information.

*Address 1, Address 2, Address 3, City, State, Zip Code, and Country.* The vendor's address details.

*Terms.* The vendor payment terms.

*Language.* The vendor's language code, which you can change on this blanket order.

*FOB.* Free on Board (FOB) denotes whether freight charges are part of the BO price or are billed separately after the invoice, and who pays for freight (buyer or vendor). For instance, if the buyer lives in Des Moines and buys a product FOB from New York, the buyer must pay the shipping charges from New York to Des Moines.

**Authorization and Tax**

*Auth Status.* The authorization status of the blanket order. All blanket orders must be authorized. This is not optional.

The status remains blank if the authorization routing for approval has not been started.

If the blanket order has been routed for approval, the status displayed is Routing.

If it is authorized, the status displayed is Authorized.

Only the buyer or approver indicated in the Auth by field can modify the blanket order once it has been authorized. If the Any Buyer check box is selected in the domain for the BO site, then other buyers can modify the BO as well.

*Auth Cost.* The current blanket order cost at authorization, which is the total amount that has been authorized to spend against this blanket order. If the blanket order currency is different than the base currency, the value here is displayed in the blanket order's currency.

*Auth Cost (B).* The authorized cost amount converted to the base currency for the site.

*Auth By.* The user ID that authorized the expenditure of the blanket order. The Auth by approver and buyer are the only ones able to modify the blanket order after it has been authorized. If the Any Buyer check box is selected in the domain for the BO site, then other buyers can modify the BO as well.

*Taxable?* Select this check box if the BO is taxable.

*Tax Code.* The default tax code for the vendor, copied to the BO.

*Tax Class.* The default tax class for the vendor, copied to the BO.

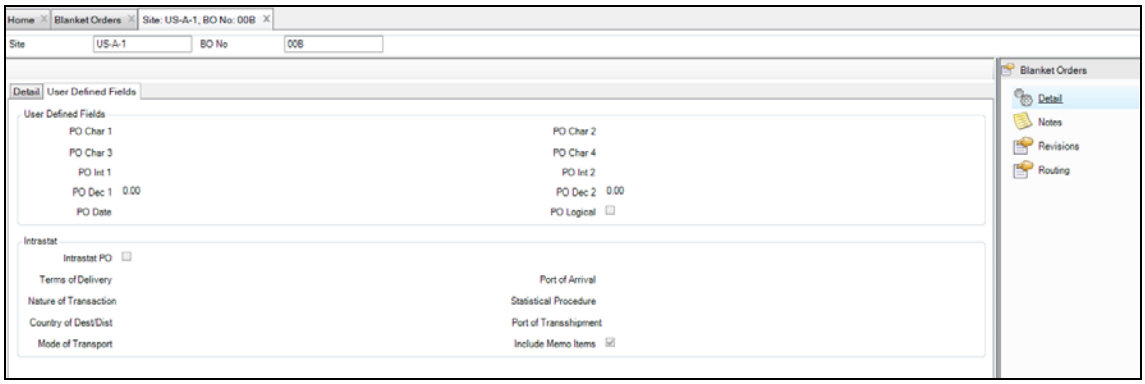
*Tax Usage.* The default tax usage for the vendor, copied to the BO.

### Blanket Orders: User Defined Fields Tab

The Blanket Order User Defined Fields tab contains fields for additional information associated with the blanket order, which you define to suit the requirements of your site. See "Purchase Order: User-Defined Tab" on page 492.

For a description of the Intrastat fields, see "Purchase Order: Intrastat Tab" on page 493.

**Fig. 7.113**
Blanket Orders User Defined Fields Tab



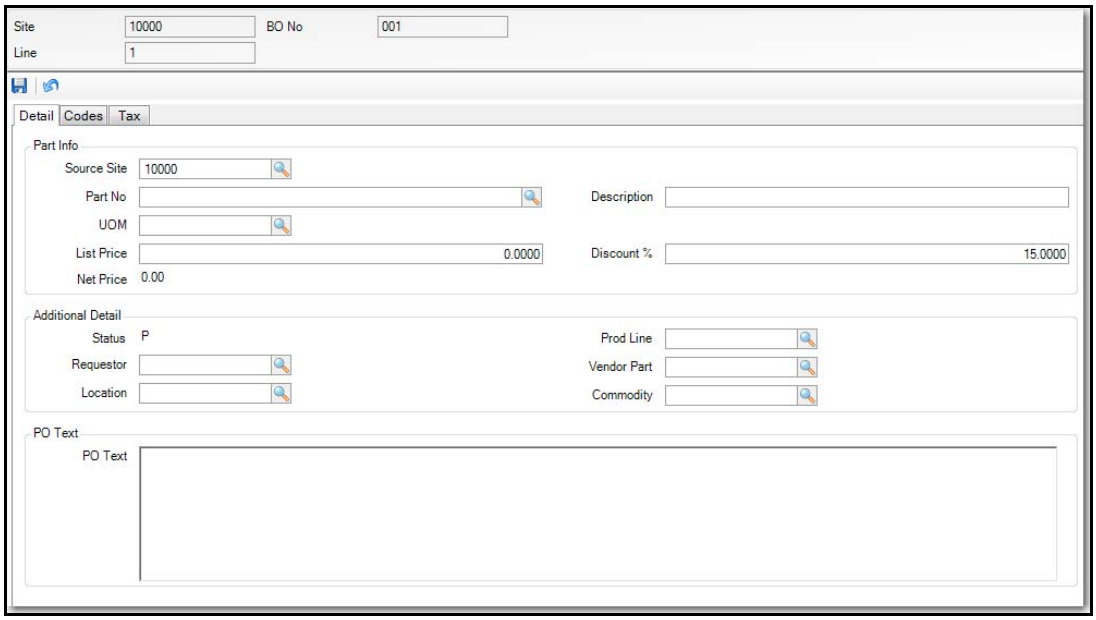

## Add Lines to a Blanket Order

Enter information about the blanket order line on the Detail, Codes, and Tax tabs.

***Note*** If you have selected Validate Req/PO Mandatory for BO on Save on the General|Business Units|Sites|Purchase Order tab, then EAM validates that all fields defined as mandatory for requisition lines are populated before saving a BO line.

Blanket Order Line: Detail Tab

**Fig. 7.114**
Blanket Order Line Detail Tab




## Part Info

*Source Site.* The site from which the part number on the blanket order is selected.

*Part Number.* Use the lookup and select the part number for the blanket order line. If the part is a non-stock item, you can manually enter the part number in this field.

*Description.* The item description associated with the part number selected. If the part is a non-stock item, you can manually enter the part description in this field.

*UOM.* The unit of measurement (UOM) associated with this part number. If the part is a non-stock item, use the lookup to select the correct UOM. For non-stock items, the default UOM is Each (EA).

*List Price.* The list price of the item associated with the part number per unit of measurement. If the part is a non-stock item, you can manually enter the list price in this field.

*Discount.* Enter the discount from the list price on this item.

*Net Price.* The price per unit of measurement of the item when the discount has been applied to the list price.

## Additional Data

*Status.* Shows the status of the blanket order with which this line item is associated: P (planned) or O (opened).

*Requestor.* Select the requestor of the item from the drop-down menu.

*Location.* Select the location of the item from the drop-down menu.

*Product Line.* Select the product line associated with the item from the drop-down menu.

*Vendor Part.* Select the vendor part number associated with the item from the drop-down menu.

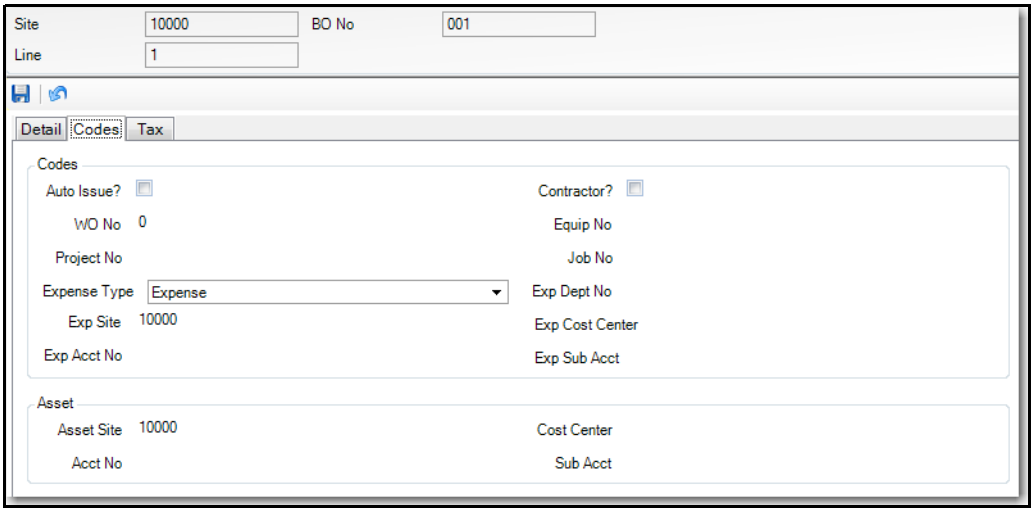
*Commodity.* Select the commodity code associated with the item from the drop-down menu.

### PO Text

*PO Text.* Enter, edit, and view additional text associated with this blanket order line item.

## Blanket Order Line: Codes Tab

**Fig. 7.115**
Blanket Order Line Codes Tab




### Codes

*Auto Issue?* This field denotes whether to directly expense parts or services upon receipt.

If a line item on the blanket order is a stock part set to auto issue or a non-stock or service, fields on the expense tab identify the cost center, account, and sub-account number to charge. The item is received against the BO and expensed to the cost center, account, and sub-account number on the blanket order. EAM credits the accounts payable liability account.

If you selected Auto Issue?, you can direct the expense by referencing:

- WO No
- Stores Req No
- Equip No
- Rebuild
- Project Number/Job
- Cost Center/Account/Sub-account

Select the check box to display expense accounting structure defaults.

The Auto Issue? check box also affects what displays and prints on the purchasing documents:

- Blanket order document
  - If Auto Issue? is selected, the department, cost center, account number, and sub-account number from the expense section display and print.

    - If Auto Issue? is clear, the inventory dept, inventory cost center, inventory account number, and inventory sub-account display and print.
- Purchase order
    - For each blanket order, if Auto Issue? is selected, the cost center, account, and sub-account number from the expense section display and print.
    - If Auto Issue? is clear, the inventory cost center, inventory account number, and inventory sub-account display and print.

*Contractor?* Is the blanket order for an outside contractor or services? A blanket order with Contractor selected is auto issue. Typically, a work order or equipment identification number links to the blanket order. The system uses the contractor cost center, account, and sub-account number from the work order or equipment, instead of the material cost center, account, and sub-account number when the blanket order is auto issued or expensed upon receipt.

*WO No.* If the blanket order is associated with a work order number, you can identify it here. It is validated from the work order table. Identifying the work order on a blanket order has two effects. If the blanket order is set to auto issue, when the parts, goods, or services are received through the purchasing system, they charge directly to the work order's expense accounting data. If the work order is associated with the blanket order but Auto Issue? is cleared, these parts are still for the work order. Inventory receives them and the accounting data reflects the inventory asset data. When the parts are received, EAM reserves them for the work order. They go into inventory, to be issued later to the work order. Then, they are charged to the work order's expense accounting data.

*Equip No.* The identifying number for a piece of equipment.

If the blanket order is associated with a piece of equipment, identify the equipment by selecting it from the lookup.

Identifying the equipment on a blanket order creates the expense GL transaction only if Auto Issue? is selected. When purchasing receives the parts, goods, or services, it directly charges the equipment's expense accounting data.

If the equipment is associated with a blanket order with no auto issue, these parts are still ordered for the equipment. Inventory receives them and the account number fields reflect the expense account number. In this case, the equipment number serves only as a note that the parts were ordered for this piece of equipment.

*Project No.* The identifying number for a project. When a project number is associated with a blanket order, EAM copies the project's primary expense accounting number.

*Job No.* The job number, associated with a project, to expense for this purchase. First, identify a project to use a job number. If Auto Issue? is selected, the cost of the goods and services on the blanket order automatically flows to the identified project and job expense accounting structure on the blanket order.

*Expense Type.* The blanket order expense type: capital or expense.

All blanket orders default to expense. Expense type refers to the approval process for a blanket order. In User Maintenance, each user has two spending limits for expense or capital blanket orders. The blanket order check box determines the kind of spending limit. If you enable the Req Proj Limit? check box in the General|Business Units|Sites|Authorization Options tab, EAM uses a third limit value, if it is present.

Implementation Issue: In a facility where people sign approvals for goods and services, they may have two types of spending limits. For example, for regular expenses, an individual has $500 approval. On capital items (typically larger purchases), the same individual has an approval limit of $5000.

*Exp Dept No.* The department charged for the blanket order line upon receipt. Select Auto Issue? to expense the blanket order line to a department.

If department, cost center, account, or sub-account is required (in System Administration| Mandatory Fields) and the blanket order is not auto issued, the system ignores the mandatory field setting.

*Exp Site.* The site to which to expense this blanket order.

*Exp Cost Center.* Select the cost center from a table of cost centers, previously created in Finance|Groups|Cost Centers.

*Exp Acct No.* The account number that receives the auto-issue blanket order line charges during the purchasing routine.

The account number table validates the account number. If using a cost center, the account number must be valid within a cost center.

The system copies the default account number. If an auto-issue blanket order identifies a piece of equipment or a work order, then it copies the work order account number by default.

A stock replenishment purchase automatically uses the part asset account number or system site default.

*Exp Sub Acct.* The sub-account number associated with a specific account number. The PO charges the sub-account number when it receives the blanket order.

When a PO receives goods or services, specifically this blanket order line item, the cost charges to the sub-account number.

You can identify a sub-account number only if a sub-account number was previously identified or associated with the blanket order. The sub-account must be valid for the previous account number.

If you selected Auto Issue?, all the fields under the Asset heading are blank. If Auto Issue? is clear, EAM displays the asset sub-account information under the Asset heading.

**Asset**

*Asset Site.* The site to debit when this blanket order line is received.

*Cost Center.* If the blanket order line part includes the inventory cost center (Cost tab of the Inventory record), it is displayed here. If this information in the part record is blank, then the site default (POs tab of System Site Maintenance) is displayed.

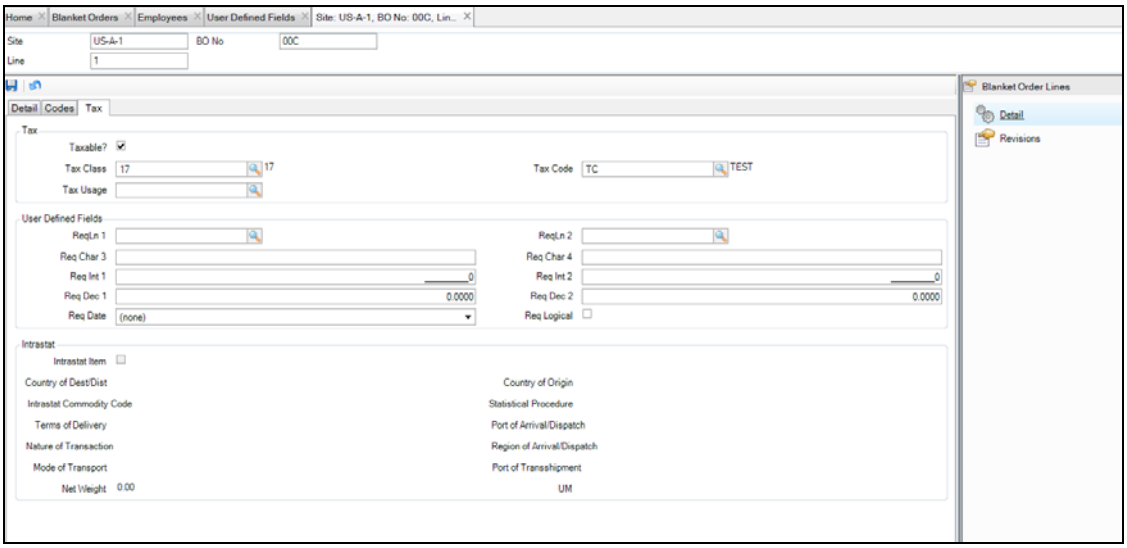
*Acct No.* If the blanket order line part includes the inventory account number (Cost tab of Inventory record), it is displayed here. If this information in the part record is blank, then the site default (POs tab of System Site Maintenance) is displayed.

*Sub Acct.* If the blanket order line part has the inventory sub-account filled out (Cost tab of the Inventory record), it is displayed here. If this information in the part record is blank, then the site default (POs tab of System Site Maintenance) is displayed.

If you change the blanket order line part number, the system pulls in new asset account information along with the other defaults from the part record or System Site Maintenance.

## Blanket Order Line: Tax Tab

**Fig. 7.116**
Blanket Order Line Tax Tab




### Tax

*Taxable?* Select this check box if the blanket order line is taxable.

*Tax Class.* The default tax class, copied to the blanket order line.

*Tax Code.* The default tax code, copied to the blanket order line.

*Tax Usage.* The default tax usage, copied to the blanket order line.

### User Defined Fields

For a description of these fields, see “Requisition Line: User-Defined Tab” on page 467.

### Intrastat

The Intrastat data in these fields defaults from the blanket order header. Use the lookups on the fields to select different data.

*Intrastat Item.* Select this field to have the system automatically create Intrastat history records for the item. For items for which you do not want Intrastat records created, such as intangible goods or items related to motorized vehicles, clear the check box.

*County of Dest/Dist.* Enter a valid country code.

*Country of Origin.* This code indicates the country of origin. The data defaults from Intrastat Control in EE.

*Intrastat Commodity Code.* This code can be entered for the part in EAM so it defaults for the part on this Intrastat PO line. If this code is not defined for an EAM part, then the code from Intrastat Control defaults into the field. You can change the defaulted code using the lookup.

*Statistical Procedure.* When the system creates Intrastat history records automatically, it uses the statistical procedure code that is recorded for the order line that is associated with the Intrastat history record.

*Terms of Delivery.* Enter the Intrastat terms of delivery (FOB point) used to calculate the statistical value of the relevant goods at the border for Intrastat purposes.

*Port of Arrival/Dispatch.* When the system creates Intrastat history records automatically, it uses the port of arrival/dispatch code that is recorded for the order line that is associated with the Intrastat history record.

*Nature of Transaction.* Enter a valid code if your country requires this information.

*Region of Arrival/Dispatch.* A fiscal region code, predefined for each country.

*Mode of Transport.* Enter a one-character code that identifies the mode of transport used to carry the goods to the border.

*Port of Transshipment.* Enter a valid code defined in Port Maintenance to be used as the default when collecting Intrastat data in supported functions. During order entry, you can override this value.

*Net Weight.* The weight of one order unit of measure for this part. By default, the system calculates the weight of one order unit of measure based on data found in the part record. For example, the issue UOM is Each and the order UOM is Box. The system refers to the UOM conversion to calculate how many Eaches (issue unit) are in a Box (order unit). The system multiplies the number of issue units per order unit by the weight of an issue unit, yielding a product that equals the total weight for the order unit. If the issue UOM and order UOM are the same, the system simply displays the weight of the issue UOM as entered in the part record.

*UM.* Displays the weight's unit of measure, such as pounds.

### Copy Blanket Order

When you copy a blanket order, note the following:

- No release history from the original blanket order is copied to the new blanket order.
- The status on the new blanket order is Planned (P).
- The new blanket order is not authorized.

Follow these steps to copy a blanket order:

1. Select the blanket order that you want to copy.
2. Select Copy Blanket Order from the Blanket Order Action menu.
3. Enter a new effective date, expiration date, and expiration quantity for the copied blanket order.

***Note*** The new blanket order must meet all of the following conditions to be created:

- The effective date must be later than the original blanket order's Expiration Date and later than today's date.
- The expiration date must be later than today's date or left blank.
- The expiration quantity must be greater than zero.

4 Make any other changes to the blanket order. For information about the blanket order fields, see "Filling Out the Blanket Order" on page 516.

5 Click Save.

## Adding Standard Clauses to a Blanket Order

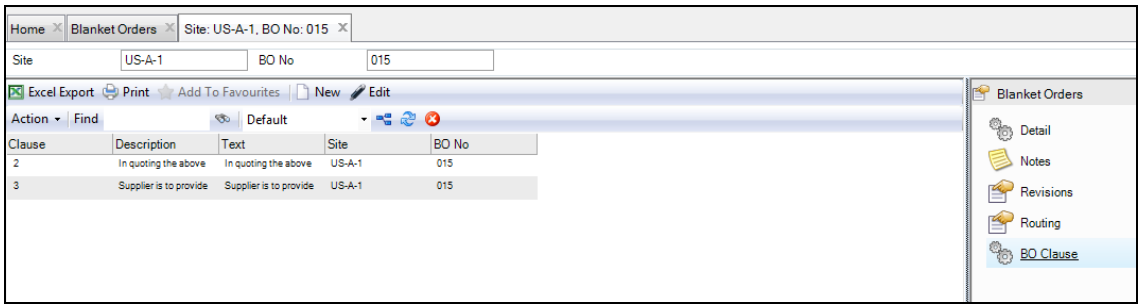
In the BO Clause submenu, you can add an existing standard clause or create a clause and add it to the blanket order.

### Add Existing Standard Clause to a Blanket Order

Follow these steps to add standard clauses to a blanket order:

1 Open the blanket order and select the BO Clause submenu.

**Fig. 7.117**
Blanket Order Header: BO Clause Submenu




2 To add an existing standard clause, select Standard Clauses from the Action menu.

A lookup appears that lists all the available standard clauses.

3 Double-click and select the clause you want to add to the blanket order.

The standard clause is added to the blanket order.

### Create a Standard Clause and Add it to the Blanket Order

Follow these steps to create a standard clause and add it to the blanket order:

1 Open the blanket order and select the BO Clause submenu.

2 Click New and enter the following information in the BO Clause tab:

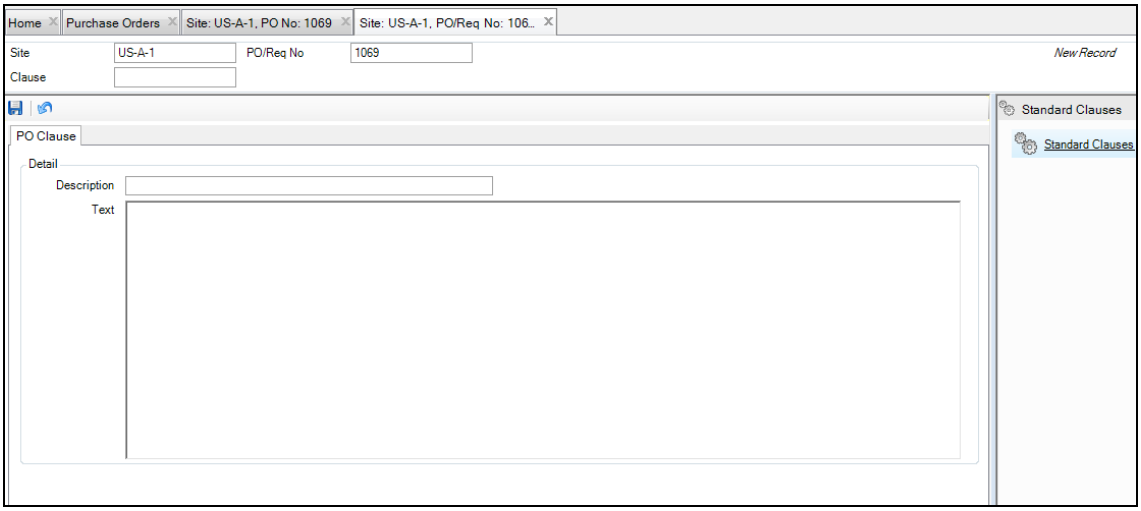
*Clause.* Enter the name of the standard clause.

*Description.* Enter a short description of the standard clause.

*Text.* Enter any detailed information about the standard clause.

***Note*** The Text field has a 1140-character limit. Any text beyond character 1140 is cut from the blanket order.

**Fig. 7.118**
Creating a Standard Clause




**3** Click Save.

### Print Document

To print a blanket order, select Print Document from the Blanket Order Action menu.

## Authorize a Blanket Order

To authorize a blanket order, open the blanket order and select Authorize from the Action menu. Enter your user name and password and click OK.

When you select the Authorize action, the blanket order begins the approval routing process.

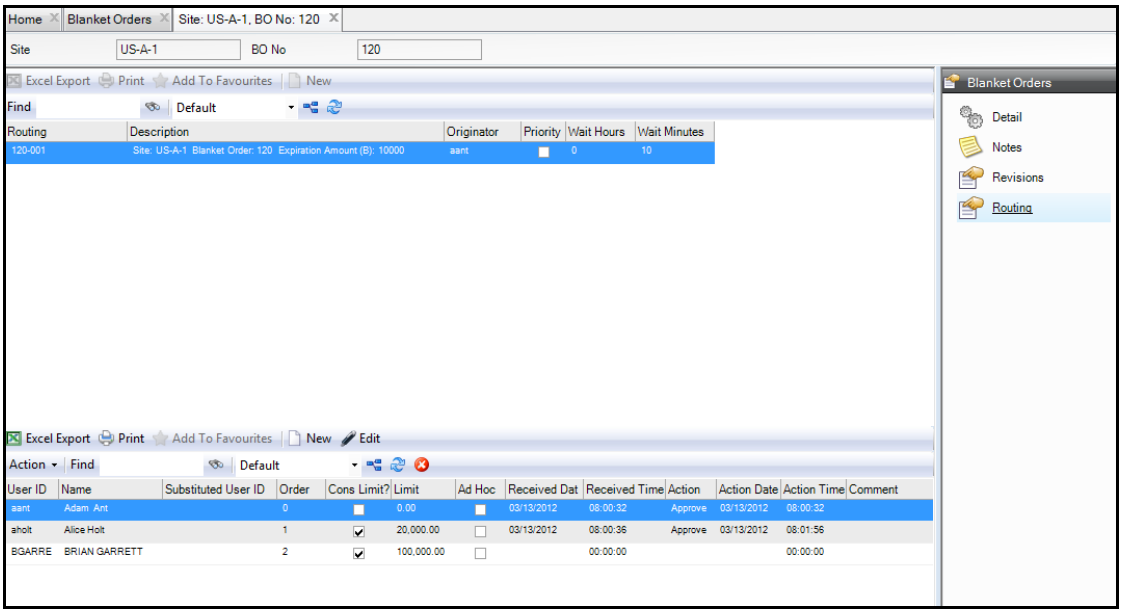
If you do not have a large enough spending limit, the blanket order is routed to the approval group. See “Blanket Order Approval Group” on page 436.

If you have a large enough spending limit and the authority for the associated accounting structure and the approval group has no quality person, you can authorize the blanket order without going through routing.

### View Approval Routing Status of a Blanket Order

To view the authorization status for the blanket order, open the blanket order and select the Routing submenu.

**Fig. 7.119**
Blanket Order Approval Routing Status




The upper browse displays the routing records for the blanket order. Each time this blanket order is routed for approval, a record of that routing appears in this browse.

The lower browse shows the list of approvers for the selected routing. It displays the users who approved the BO and those who still need to approve the BO. It also indicates if anyone has rejected the BO.

***Note*** If anyone in the approval group had any important notes regarding this blanket order, the notes are displayed in the Comment column.

The lower browse also captures any currency conversion that occurred if your domain's base currency is different than the defined system approval limit currency. It displays the approval limit in both base and approval limit currencies, the exchange rate and the date that a user took action on the BO.

***Note*** If you take too long to approve a blanket order, EAM provides a job in System Administration|Job Control that automatically forwards the routing approval to the next person on the list. See "Job Control Application" on page 703.

## Release a Blanket Order

The blanket order release action creates a purchase order to submit to the vendor for the lines and quantities selected. The cost of the lines released updates the remaining balance available for the next release.

### Releasing a Blanket Order

Follow these steps to release a blanket order and create a PO:

1. Select Release from the Blanket Order Action menu.

   The Blanket Order Release Form opens.

2. Select the blanket order items to release. To select all the items to release, select the Select All check box.

3. In the Qty field, enter the release quantity of the selected line items.

   ***Note*** The cost for the items being released is indicated in the Total Cost field. The total cost of items being released cannot exceed the balance amount.

4. Optionally, select the Override Expense Accounting to enable the expense accounting fields to enter different expense accounting for the PO that is created from the release.

   ***Note*** EAM validates that all mandatory fields for requisition lines are populated in the Override Expense Accounting area before it releases the BO. If any information is missing, EAM displays an informational window with a list of the empty fields and does not release the BO.

5. Use the lookups to set the necessary expense account information. See “Blanket Order Release Form” on page 529.

6. When the information has been entered, click Release.

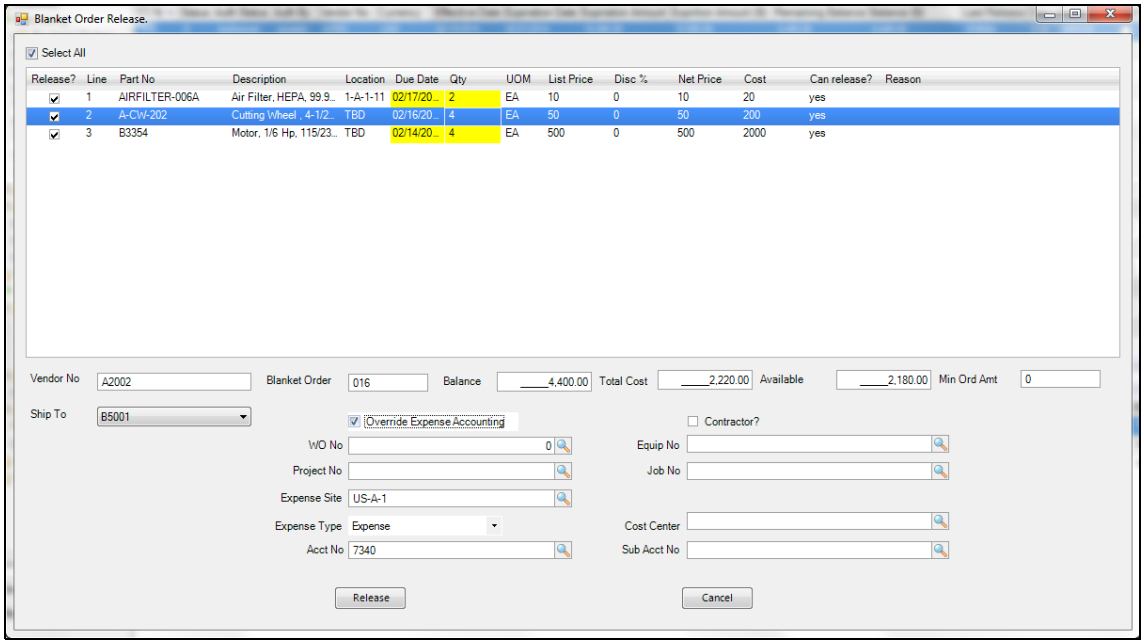
   The system automatically creates a PO for the released items. The expense accounting information that was entered in the release form is automatically entered into the PO.

   ***Note*** The status of the Released PO created is determined by the blanket order’s Status on Release setting in the Site record. See “Sites: Purchase Order Tab” on page 44.

### Blanket Order Release Form

The blanket order release form allows you to release multiple lines at one time as well as override the BO default expense account information for the PO that is created.

**Fig. 7.120**
Blanket Order Release Form




*Select All.* Select this check box to select all the lines for release.

*Release?* Select this check box to release this line for release.

*Line, Part No, Description, Location, UOM, List Price, Disc %, Net Price, Cust, Can Release?, Reason.* General item information. You cannot edit these fields.

*Due Date.* The due date for the blanket order line item. If necessary, use the calendar lookup to select a new due date for the line item.

*Qty.* Enter the item quantity to release and order with the PO. The cost for the items being released is indicated in the Total Cost field. The total cost of items being released cannot exceed the Balance amount.

*Vendor No, Blanket Order.* Displays the vendor and blanket order numbers associated with the release lines. You cannot edit these fields.

*Balance.* The amount of money that is authorized for release.

*Total Cost.* The amount of money that has been chosen to be released. This total is calculated by multiplying the quantity of each item to be released by its net price.

*Available.* The amount of money that is available for release.

*Min Ord Amt.* The minimum order amount for released items.

*Ship To.* Use the drop-down menu to select the ship-to location for the blanket order lines.

*Override Expense Accounting.* Select this check box to enable the expense accounting fields.

- If Override Expense Accounting is selected and expense accounting information is entered, the system uses that information on the PO for all the BO line items being released.

- If Override Expense Accounting is not selected, when the system releases the BO lines, the accounting information is pulled into the PO from the BO lines.

*Contractor?* Select this check box if the blanket order lines are for outside contractor services. If enabled, then the blanket order is an auto issue. A work order or equipment identification number is typically noted on the Expense tab of the blanket order or on this blanket order line. The system uses the contractor's expense accounting data from the work order or equipment instead of the material accounting data when the part is auto issued upon receipt.

**Expense Accounting Fields**

Because the blanket order lines can have difference expense accounting information, by default the expense accounting fields are blank. For detailed information about the expense accounting fields, see "Blanket Order Line: Codes Tab" on page 521.

*WO No.* Use the lookup to select a work order associated with released items on this blanket order. If there is a piece of equipment, project, or job associated with the work order, that information is pulled in and defaulted into the Equip No, Project No, and Job No fields.

*Equip No.* Use the lookup to select a piece of equipment associated with released items on this blanket order.

*Project No.* Use the lookup to select the project associated with released items on this blanket order. If there is a cost center, account, and/or sub-account associated with the project, that information is pulled in and defaulted into the Cost Center, Acct No, and Sub Acct No fields.

***Note*** If you select a project where Use Allocations is selected and the Spend at this Level? option is not selected, it is mandatory that you select a job in the Job No field that has Spend at this Level selected. The Job lookup only presents Jobs where Spend at this Level is selected.

*Job No.* Use the lookup to select the job associated with released items on this blanket order. If there is a cost center, account, and/or sub-account associated with the job, that information is pulled in and defaulted into the Cost Center, Acct No, and Sub Acct No fields.

*Expense Site.* Use the lookup to select the site to which to expense the blanket order lines.

*Expense Type.* Use the drop-down menu to select the expense type for the blanket order lines.

*Cost Center, Acct No, Sub Acct No.* Use the lookups to select the cost center, account, and sub-account information for the blanket order lines being released.

## Editing a Blanket Order

To edit a blanket order, open the blanket order and make the necessary changes to fields. When you have finished, click Save. See "Filling Out the Blanket Order" on page 516.

### Changes that Require a Reauthorization

If the blanket order is authorized, EAM reroutes the blanket order for reauthorization when the following changes are made:

- Adding a blanket order line

  and/or,

- Changing the expiration date

A rerouting confirmation message is displayed when you save a new line. After the message is confirmed, the Auth Status of the BO is changed to Previously Authorized and a notification e-mail is sent to the first person in the authorization sequence.

***Note*** If the Use Enforce Buyer Limits for BO? option is selected in the Domain for the BO Site, changes to the expiration amount are validated against the increase/decrease amount and the percentage limits set for the BO Site's Domain. See "Domain: PO/Reqs Tab" on page 36.

## Lock/Unlock a Blanket Order

For added security, the buyer associated with the blanket order can lock the purchase order. This function enables the buyer to control releases off a blanket order because releases are not allowed off a locked blanket order. Already-ordered releases can continue to be processed after a blanket order is locked. However, released POs that have planned status cannot be placed on order once the blanket order is locked.

To lock or unlock a blanket order, select the blanket order and then select Lock/Unlock from the Blanket Order Action menu.

Blanket order line items that are associated with a project validate the release amount against the project's remaining balance and update the project's cost analysis at the time the release is made.

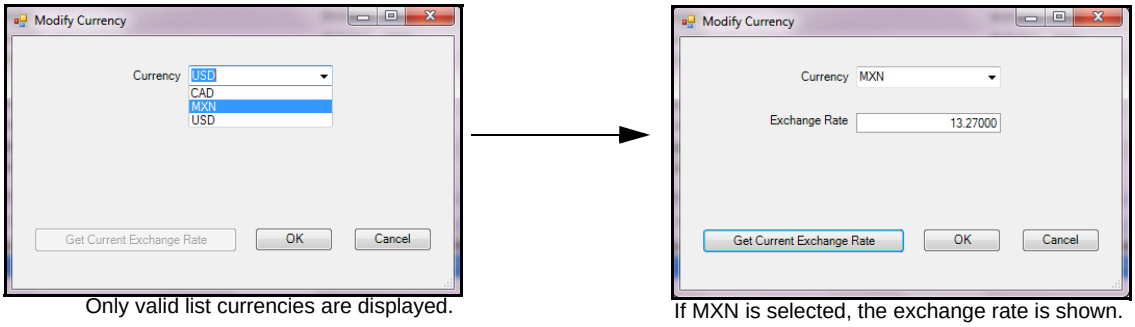
***Note*** If the Any Buyer? check box is selected in General|Business Units|Domain|PO/Reqs, any user set as a buyer is able to make modifications to another buyer's blanket order, whether the blanket order is locked or unlocked. See "Domain: PO/Reqs Tab" on page 36.

## Modify Currency of a Blanket Order

To modify the currency of a blanket order, select Modify Currency from the Blanket Order Action menu.

The Modify Currency option in the Blanket Order Action menu allows you to select a different currency code for the blanket order. The blanket order line items are changed to the new currency and the base currency amount is calculated based on the current exchange rate. Only one currency is allowed per blanket order and, if there are releases against the blanket order, you cannot modify the currency. Only currencies valid for this vendor are available for selection. See "Multicurrency Purchasing" on page 425.

**Fig. 7.121**
Blanket Orders: Modify Currency




Only valid list currencies are displayed.

If MXN is selected, the exchange rate is shown.

### Change the Status of a Blanket Order

The Change BO Status option in the Blanket Order Action menu allows you to change the status of a blanket order to X-Cancel. The blanket order header and line items' status change from Open (O) to Cancel (X). Canceling a blanket order has the same effect as closing it. Unlike requisitions and purchase orders, blanket orders can be canceled, even if there are receipts against them.

Canceling a blanket order cancels any planned releases associated with it. When a blanket order is canceled, the remaining balance on the blanket order header increases the value of the planned releases. Any ordered POs that were created from a blanket order remain ordered and receipts are allowed.

***Note*** The Return to Vendor action is still permitted with canceled blanket orders.

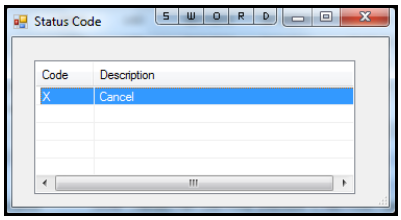
Follow these steps to change the status of the blanket order:

1 Select Change BO Status from the Blanket Order Action menu.

2 Double-click Cancel (X). The status of the blanket order changes to Cancel (X).

***Note*** If the blanket order has expired, you cannot change the status.

**Fig. 7.122**
Blanket Orders: Change BO Status




### Reopen a Blanket Order

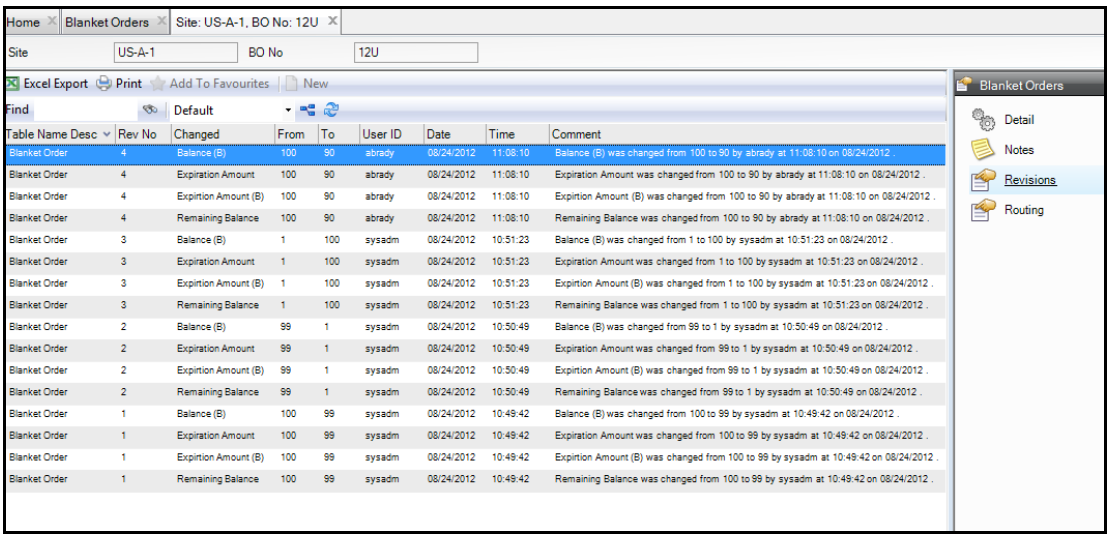
To reopen a blanket order, select the blanket order and then select Reopen from the Blanket Order Action menu.

***Note*** The reopen option only applies if Reopen PO/Reqs? has been enabled in General|Business Units|Domain on the PO/Reqs tab. Users with the required settings in Roles can reopen blanket orders once they have been closed. See "Domain: PO/Reqs Tab" on page 36.

### View Revision History of a Blanket Order

To view the revision history of a blanket order, open the blanket order and select Revisions from the Blanket Order submenu.

**Fig. 7.123**
Blanket Order Revision History

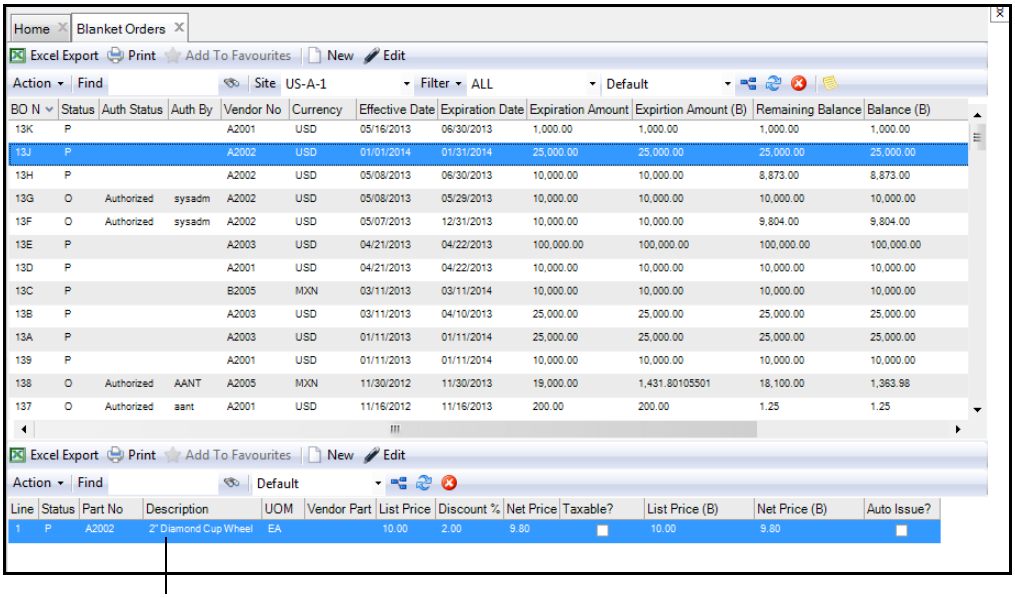



## Editing Blanket Order Lines

To modify a blanket order line, open the line and make the necessary changes. When you have finished, click Save. See “Add Lines to a Blanket Order” on page 519.

***Note*** When you save a blanket order line, an e-mail is sent to the designated buyer. The body of the e-mail notes the change by showing the original and the new value. New lines should be viewed as changes.

**Fig. 7.124**
Editing Blanket Order Lines




To edit a blanket order line, double-click the line or select the line and click Edit.

### Change Status of a Blanket Order Line

The Change Status option allows you to change the status for the blanket order line to Cancel (X). When the status for the line is set to Cancel (X), the line cannot be released.

To change the status of a blanket order line, select Change Status from the Blanket Order Line Action menu. Double-click Cancel (X) and the status of the blanket order line changes to X.

### Reopen a Blanket Order Line

The Reopen option allows you to make the blanket order line available again for use with the blanket order. When you reopen a blanket order line, the status is reset to P. When the blanket order is authorized, the status changes to O and you can select the line for release.

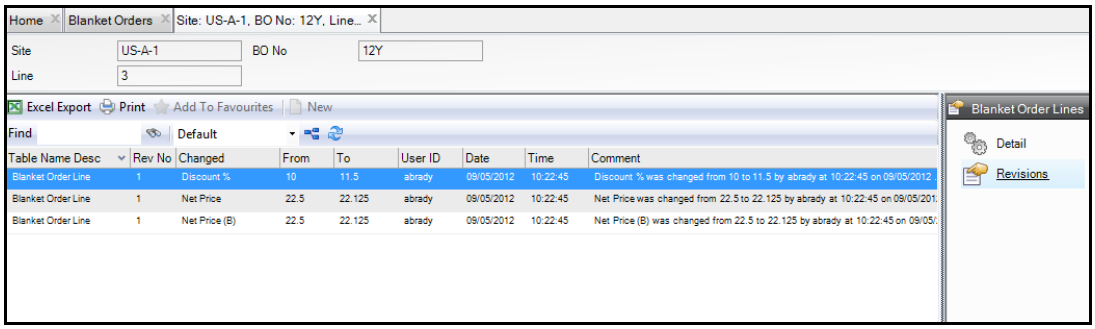
To reopen a blanket order line, select Reopen from the Blanket Order Line Action menu. The status of the blanket order line changes to P.

### View Revision History of a Blanket Order Line

To view the revision history of a blanket order line, select Revisions from the Blanket Order Line submenu.

***Note*** Revision control is activated in the Purchasing|General|Business Units|Sites menu. See “Enable Revision Control” on page 61.

**Fig. 7.125**
Blanket Order Lines: Revision History




# Quotes

## Overview

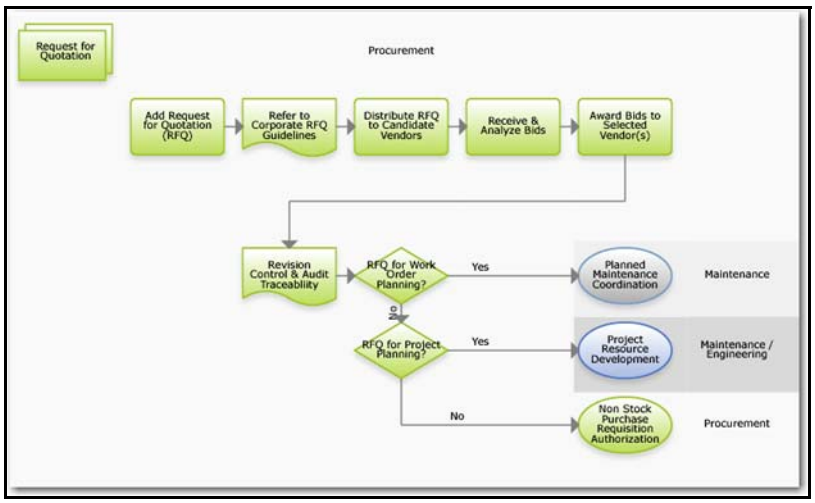
The Quote module, which is also referred to as Request for Quotation (RFQ), is used to allow the organization to request competitive bids on parts or services from various vendors. The Quote module contains a number of components:

- **Quote Header.** This component contains basic information about the quotation such as a general description, requester, assigned buyer, technical contacts, status, dates required, and response due dates by vendors. Requisitions can be turned into quotes or they can be added manually. See “Creating a Quote from a Requisition” on page 469.

- **Quote Line.** This component is where a specific part or service is added. When quotes are created from requisitions, the quote lines are automatically created. Quote lines can also be created manually. See “Adding Lines to the Quote” on page 539.
- **Bids Sub Detail.** This component is where vendors are added, and the buyer enters the vendor’s bid quantities, price, and valid dates to the quote line.

## Quotes Process Flow

**Fig. 7.126**
Creating a Request for Quotation Process Flow




To create a request for quotation:

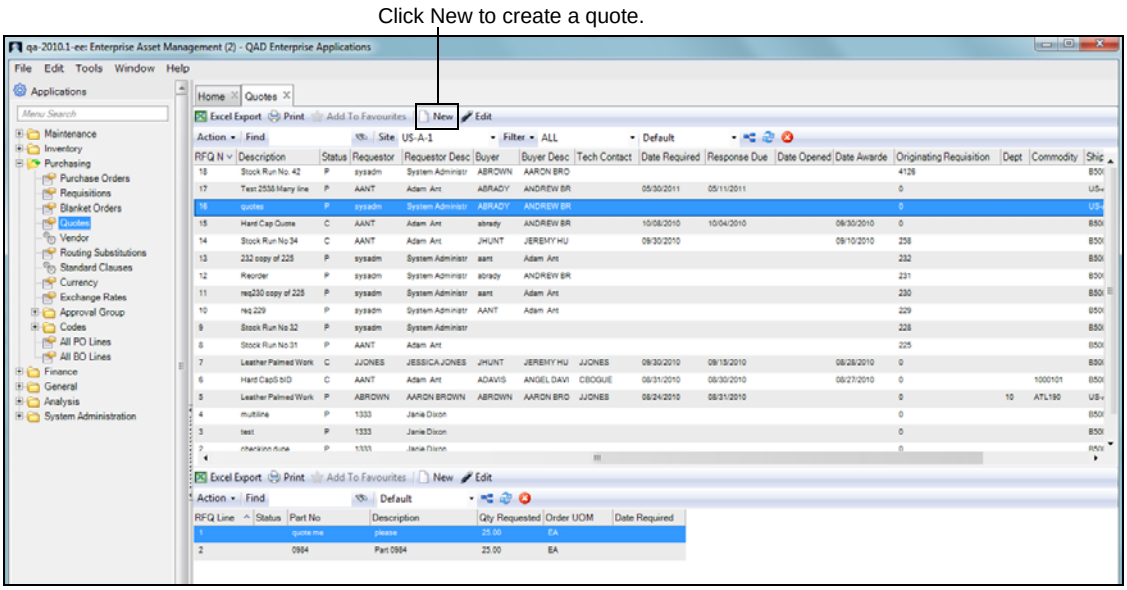
1. Refer to corporate RFQ guidelines.
2. Distribute RFQ to candidate vendors.
3. Receive and analyze bids.
4. Award bids to selected vendor or vendors.
5. If the RFQ is needed for project or work order planning, direct it to that group for authorization.
6. If the RFQ is not needed for project or work order planning, direct it to the proper group for authorization.

## Creating a Quote

Follow these steps to create a quote:

1 Open the Quotes browse in Purchasing|Quotes.

**Fig. 7.127**
Quotes Browse



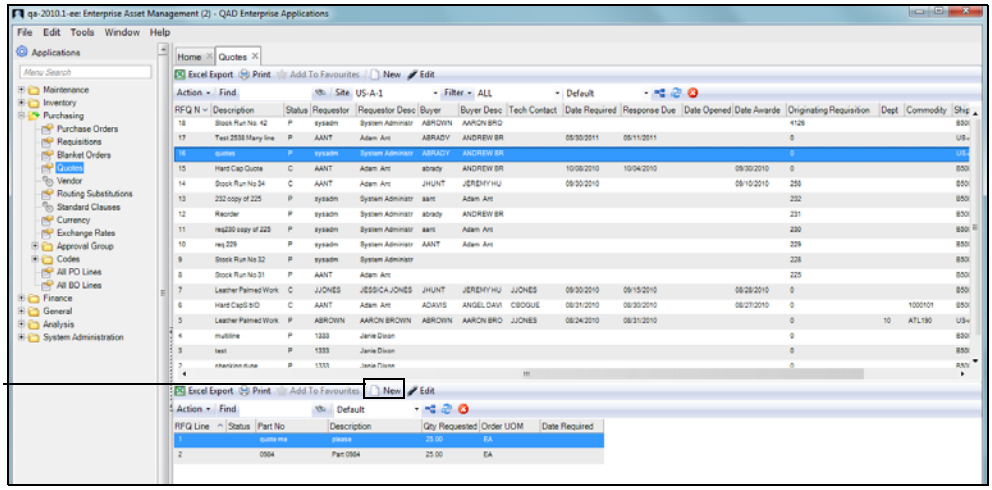

2 Click New. A blank quote record opens. The system automatically assigns a quote number, which you cannot modify.

3 Enter information in relevant fields on the Detail tab. See “Filling Out the Quote Header” on page 538.

4 When all the information has been entered, click Save.

5 Add lines to the quote. Select the quote that you created and click New in the Quote Lines browse.

**Fig. 7.128**
Adding Lines to a Quote



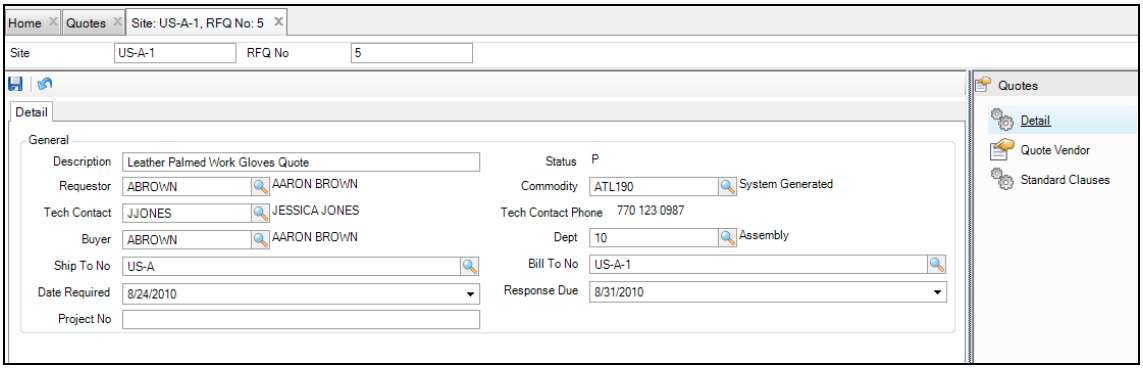

6 Enter the relevant information in the Detail tab. See “Adding Lines to the Quote” on page 539.

7 Click Save.

## Filling Out the Quote Header

Enter the relevant information in the Quotes Detail tab.

**Fig. 7.129**
Quote Header Detail Tab




### General

*Description.* Enter up to a 30-character alphanumeric description of the quote. You can filter and sort by the description.

*Status.* Status defaults to P (planned) on a new quote. From the Action menu on the Quote browse, select Change Status to cancel (X) or close (C) to quote.

*Requestor.* When you create a quote, EAM adds the employee number of the user ID entering the new quote in the Requestor field. You can override this field.

*Commodity.* Specify a commodity code here in the quote header or in the upper browse. This code is not added to the individual lines on the quote. This user-defined code is used in the inventory, requisition, quotes, and vendor modules to group general classifications of parts and services.

*Tech Contact.* The designated employee, identified by an employee ID number, who the vendor is to contact with any technical issues surrounding the quote.

*Tech Contact Phone.* The technical contact's phone number.

*Dept.* Enter the department requesting the goods or services.

*Ship To No.* The address that is used as the ship-to, which is eventually used on the PO created from the quotation header.

*Bill To No.* A bill-to address on the quote header for use when the quote is turned into a purchase order.

*Date Required.* The required date for the material or service, entered by the creator of the quote. The buyer uses this scheduling information when negotiating with the vendors. It is printed on the quotation document sent to the vendor.

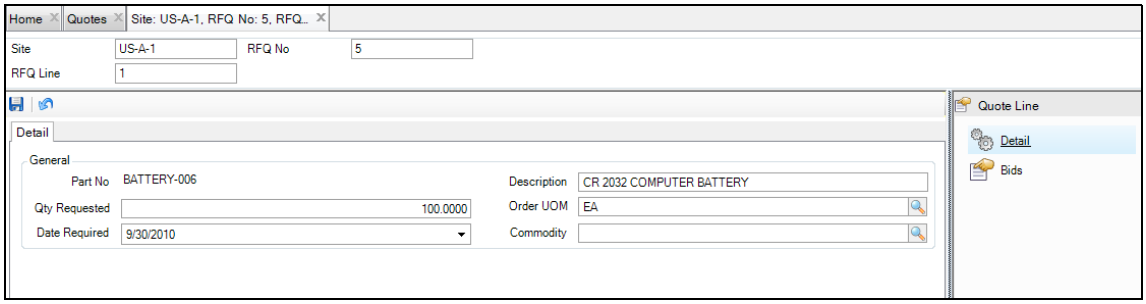
*Response Due.* The date the buyer requires the vendor to have the response to the quote sent back.

*Project.* The project associated with this quote.

## Adding Lines to the Quote

Enter the relevant information in the Quote Line Detail tab.

**Fig. 7.130**
Quote Lines Detail Tab




### General

***Note*** If the quote is generated from a requisition, you cannot update the information on the quote lines. However, you can view the Detail tab by double-clicking a quote line. You can then access the Bids submenu and enter additional vendors and bid data.

*Part Number.* The part number associated with the quote. Access the lookup at the part number field. The lookup displays a list of valid stock part ID numbers. However, EAM allows you to type in any number, such as a vendor part number, non-stock part, or service description. If you enter a valid EAM stock number, the system pulls in all the relevant information such as the description and commodity code.

*Description.* Enter up to a 30-character alphanumeric description of the quote. If a stock part number is added to the quote, the part's description in Inventory|Inventory is copied to this field.

*Qty Requested.* The quantity required on this quote for the specified part.

*Order UOM.* The vendor's specified order unit of measure for the part or service. If this is a stock part, the field is filled in with the part's order UOM, as entered in the part record.

*Date Required.* The required date for the material or service, entered by the creator of the quote. The buyer uses this scheduling information when negotiating with the vendors.

*Commodity.* A user-defined table used to describe the type of part. If the quote is for a stock part and the part had a commodity code listed in its record, the commodity code is copied over to the quote. You can specify a commodity code on each quote line.

## Adding Standard Clauses to a Quote

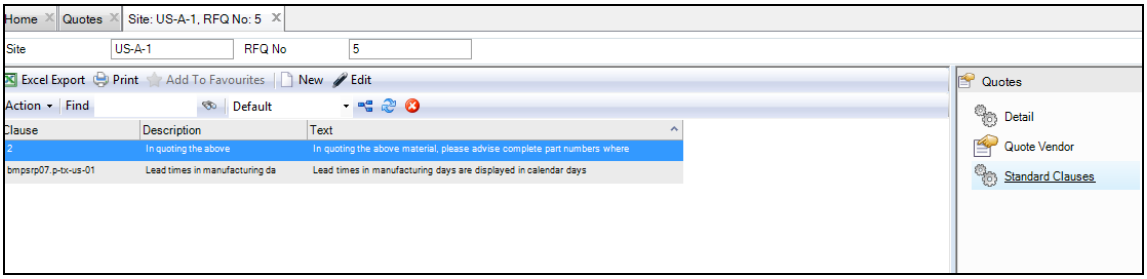
In the Standard Clauses submenu, you can add an existing standard clause or create a clause and add it to the quote.

### Adding an Existing Standard Clause to a Quote

Follow these steps to add standard clauses to a quote:

1 Open the quote and select the Standard Clauses submenu.

**Fig. 7.131**
Quote Header: Standard Clauses Submenu




2 To add an existing standard clause, select Copy Standard Clause from the Action menu.

A lookup appears that lists all the available standard clauses.

3 Double-click and select the clause you want to add to the quote.

The standard clause is added to the quote.

### Creating a Standard Clause and Adding it to the Quote

Follow these steps to create a standard clause and add it to a quote:

1 Open the quote and select the Standard Clauses submenu.

2 Click New and enter the following information in the Quote Clause tab:

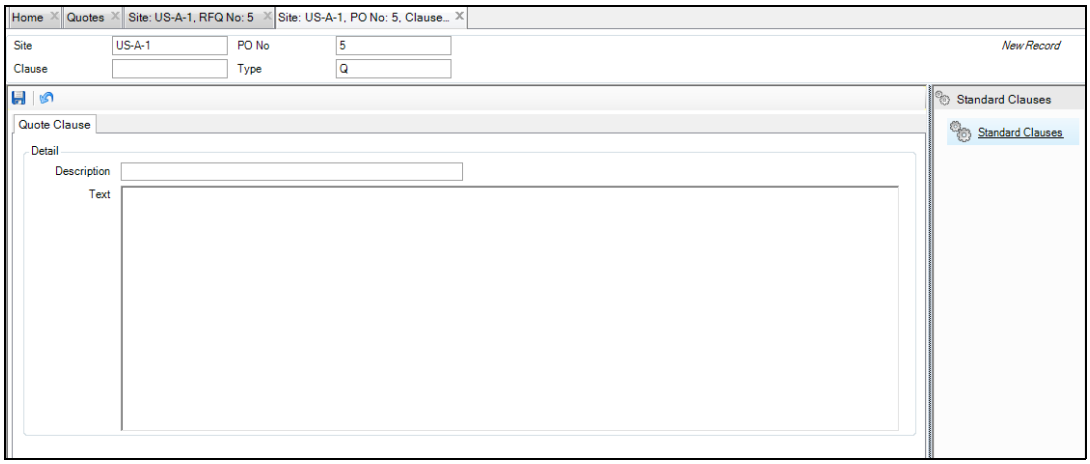
*Clause.* Enter the name of the standard clause.

*Description.* Enter a short description of the standard clause.

*Text.* Enter any detailed information about the standard clause.

***Note*** The Text field has a 1140-character limit. Any text beyond character 1140 is cut from the quote.

**Fig. 7.132**
Creating a Standard Clause




**3** Click Save.

### Printing a Quote

To print a quote, select Print Document from the Quote Action menu.

***Note*** If there are multiple vendors associated with the quote, EAM automatically prints separate quotes for each vendor.

## Entering a Bid

In EAM, you can enter bids in the following submenus:

- **Bids.** Access the Bids submenu from the quote line. This menu allows you to enter the bids for a single item.
- **Quote Vendor.** Access the Quote Vendor submenu from the quote header. This menu allows you to enter the bids for all the vendors and all the lines. See “View the Vendor’s Bidding Details” on page 545.

Follow these steps to enter a bid for a quote line in the Bids submenu:

**1** Open the quote line and select the Bids submenu.

A list of approved vendors for the quote line is displayed.

**2** Update the following information in the bid line.

*Vendor Number.* Defaults from the RFQ line part, if there is one defined for the part. Enter the vendor number associated with the bid. This number must be for a valid vendor in the system.

*Vendor Part Number.* Defaults from RFQ line part if there is one defined for the part. Enter a new number when supplied by the vendor. This field can be left blank.

*Vendor Name.* The vendor name associated with the vendor number entered.

*Bid Quantity.* Enter the quantity of the part that the vendor has indicated it can supply.

*Bid UOM.* Defaults from RFQ line part if there is one defined for the part. Enter the unit of measurement the vendor has indicated it can supply for the quantity of the requested part. For example, requested UOM each may equal bid UOM dozen.

*Bid Price.* Enter the vendor's price for the item.

*Currency.* The currency associated with the vendor number entered. Enter the currency for the vendor's pricing for the quote.

*Bid Price in Base Currency.* Displays bid price for the part converted to the site's base currency.

*Bid Expiration Date.* Enter the date the vendor states that the bid expires.

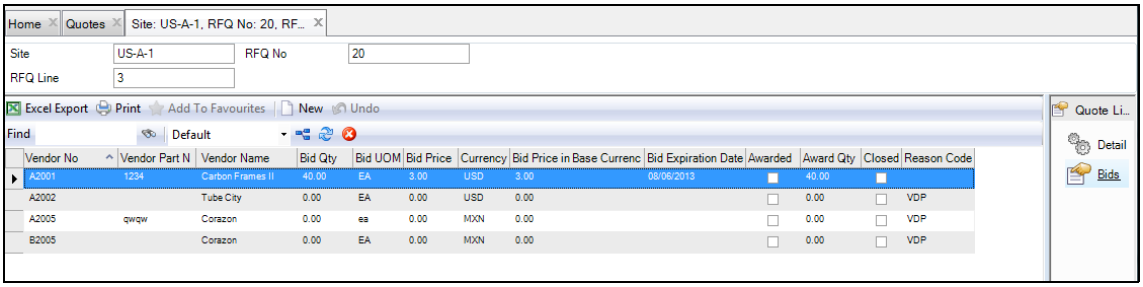
*Awarded.* The system updates this value when the Award action is executed. The bid line cannot be modified once awarded.

*Award Qty.* Specify the amount awarded to the vendor to supply. The amount cannot exceed the bid quantity that the vendor specifies.

*Closed.* The system updates when the Award action is executed. All bid lines are updated whether an amount was awarded or not.

*Reason Code.* If no Award Qty is specified for the bid line, select a user-defined reason from the lookup. For more information, see "Quote Reason" on page 449.

**Fig. 7.133**
Entering a Bid




## Awarding a Quote

The Award action allows you to award bids to vendors that have a positive Award Qty entered on the lower browse. When the bids have been awarded, they can be turned into purchase orders.

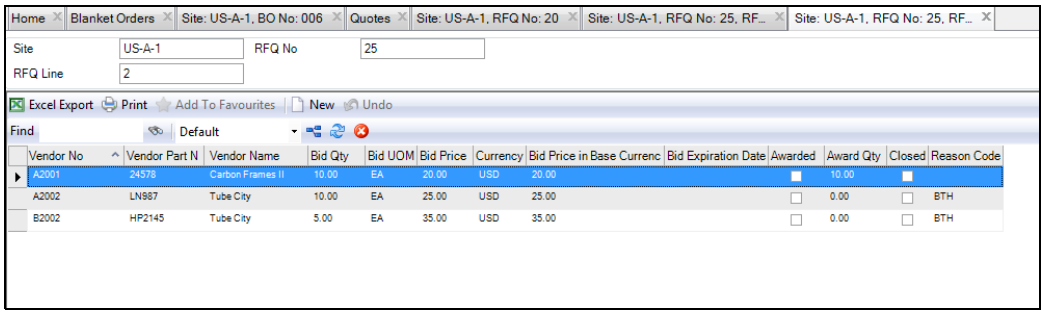
Follow these steps to award bids to a vendor:

1 Open the quote line and select the Bids submenu.

2 For the vendor that won the bid, enter the award quantity in the Award Qty field.

3 If there are vendors that did not win the bid, use the lookup in the Reason Code field and select the reason the vendors did not win the bid.

**Fig. 7.134**
Awarding a Bid




4 For the remaining lines on the quote, enter the award quantities and the reason codes for the vendors that did not win the bid. Before you can award a quote, every line for each of the vendors must have the award quantity or reason code entered.

5 In the Quote browse, select Award from the Quote header Action menu. A message appears saying the quote has been awarded. EAM automatically closes the quote.

## Editing a Quote

To edit a quote, open the quote and make the necessary changes to the Detail tab. See “Filling Out the Quote Header” on page 538.

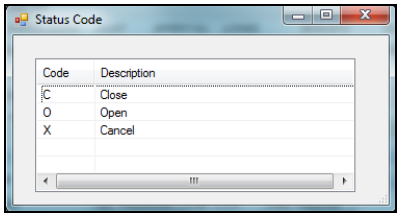
### Canceling a Quote or Quote Line

To cancel a quote, select the quote and then select Change Status from the Action menu. Double-click and select either Close (C) or Cancel (X). If you select Close or Cancel, you cannot reopen the quote. Changing the status of a quote header changes the status of the quote lines as well.

***Note*** When a quote is awarded, the system automatically closes the quote.

To cancel a quote line, select the quote line and then select Change Status from the Quote Line Action menu. Double-click and select Cancel (X).

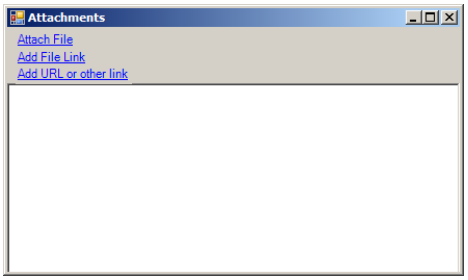
**Fig. 7.135**
Change Quote Status



## Attaching and Linking Files to the Quote

EAM allows you to attach and link an unlimited number of files and link an unlimited number of URLs to an EAM quote record. If you can run the file on your operating system, you can run it from EAM when it is attached or linked.

**Fig. 7.136**
Attach or Link Files to a Quote




### Attach a File

To attach a file to a quote:

1. Select the quote from the Quotes browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the quote.

### Link a File

To link a file to a quote:

1. Select the quote from the Quotes browse.
2. Select Attachments from the Quotes Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and then click Open. The file is now linked to the quote.

### Link a URL

To link a URL to a quote:

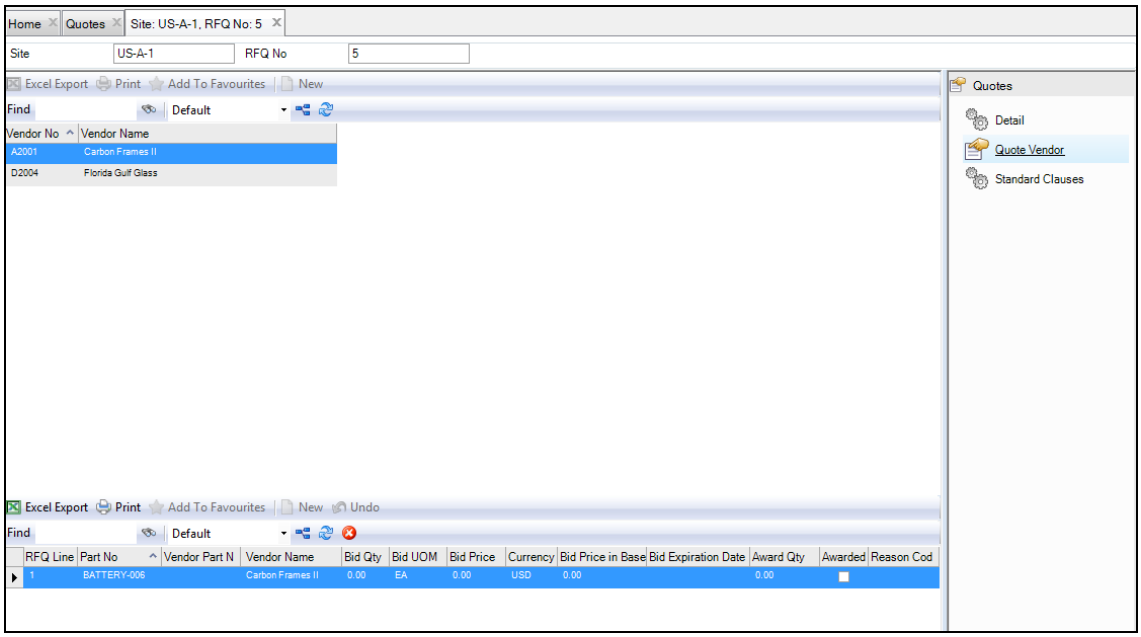
1. Select the quote from the Quotes browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, click Add URL or other link.
4. Copy and paste the URL in the Link window and then click Open. The URL is now linked to the quote.

### View the Vendor's Bidding Details

The Quote Vendor submenu displays the vendors and the parts they are bidding on in this quote. The upper browse lists the vendors associated with this quote. The lower browse displays the bid information for each of the parts for the selected vendor.

***Note*** In the Quote Vendor menu, you can enter bid information including bid quantity, bid price, award quantity, and the reason codes for why a vendor did not win a bid.

**Fig. 7.137**
Quotes Vendor Browse




## Editing the Quote Line

To edit a quote line, select the quote and then open the quote line. Make the necessary changes to the fields. See "Adding Lines to the Quote" on page 539.

***Note*** You can edit any field, except the part number field. To change the part number, delete the quote line and create a line with the new part number.

Chapter 8

# Projects

This section discusses the following Project Accounting module topics:

***Overview 548***

***Setting Up Projects 550***

***Projects 554***

***Jobs 598***

# Overview

Use Project Accounting to track and control expenses associated with projects within facilities and across the organization. Set up budgets, spending estimates, and warning limits. Designate multiple cost centers, departments, accounts, sub-accounts, and charge expense accounting data for a project. Designate a project number and job number on work orders, part and service requisitions, part issues, stores requisitions, and labor postings. Record and track all costs associated with a project or job within a project.

## Project Types

The following project types are available:

- **Expense.** Associated with maintenance and plant work or other organizational activities.
- **Capital.** Related to new equipment acquisitions and installations.
- **Customer Funded.** Customer-ordered project in which the customer may fully or partially fund the project. The company may also contribute to funding.

## Budget and Cost Management

The EAM Project module within Finance provides a view of budgeted and cost amounts for both the project and jobs in a single view on the Cost tab. This tab also includes the rolled up Total Spend through the Project/Job structure. These amounts are also summarized in the associated Cost Analysis submenu for Projects and Jobs, which provides a supporting view of all the detailed transactions for the summarized costs.

### Budget Reallocation

The total budget amounts can be managed among multiple projects using the Reallocate action and tracked on the Requisition Budget tab.

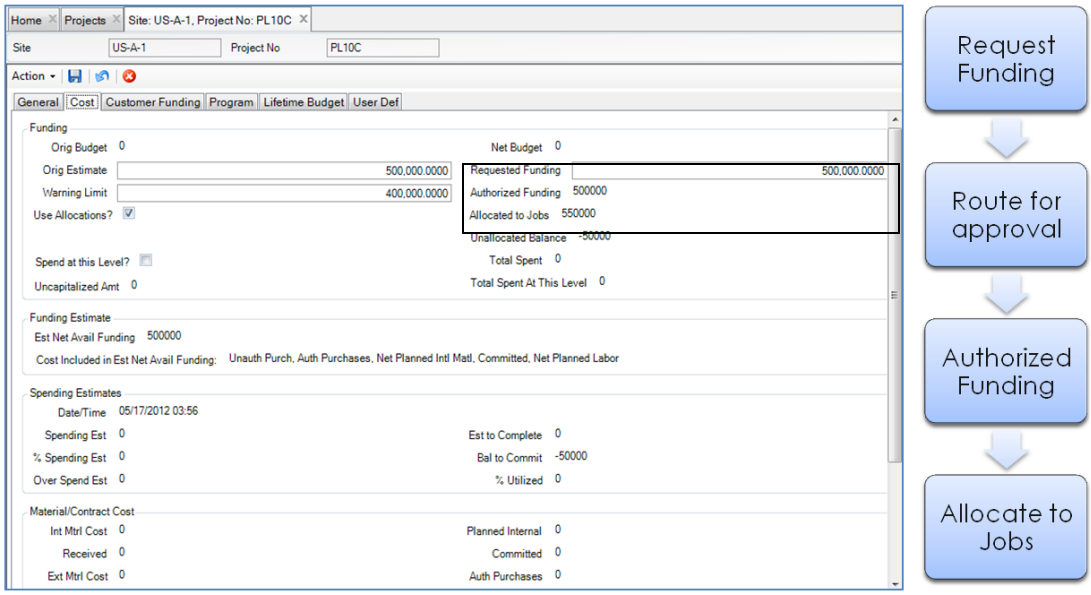
### Funding Allocation

Typically in EAM Projects, you can use authorized funding for jobs throughout the project without specific limits at the job levels. The only limitation is that all costs incurred cannot exceed the authorized funding in total for the project.

Funding Allocation allows you to control the amount of funding at each job level through the project job structure. The funding that is allocated to a job limits how much can be spent for the job or how much can be allocated to sub-jobs.

On the project header, the user requests funds and then submits that request for approval. When you select Use Allocations, the authorized funds are allocated to the jobs once the requested funding is approved. If further funding is required, the user updates the Requested Funding amount again and requests approval. The additional approved funds then are available for further allocation.

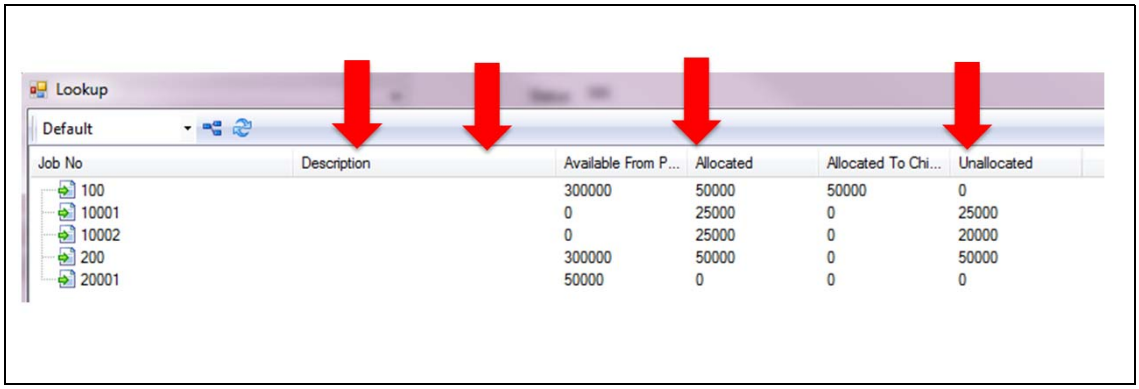
**Fig. 8.1**
Requested, Authorized, and Allocated Funds




Allocate funds by going directly into the job and entering an amount. For multilevel job structures, start allocating the funds at the top-job level. To distribute parent job funds to children sub-jobs, enter an allocated amount in those sub-jobs through the depth of the job structure.

Once the project's funds have been allocated to the jobs, you can use the Job Allocation viewer to view all the jobs for a specific project and where the funds are allocated. This tool gives you a quick view so that you can easily make updates or changes to the allocation amounts for planned spending.

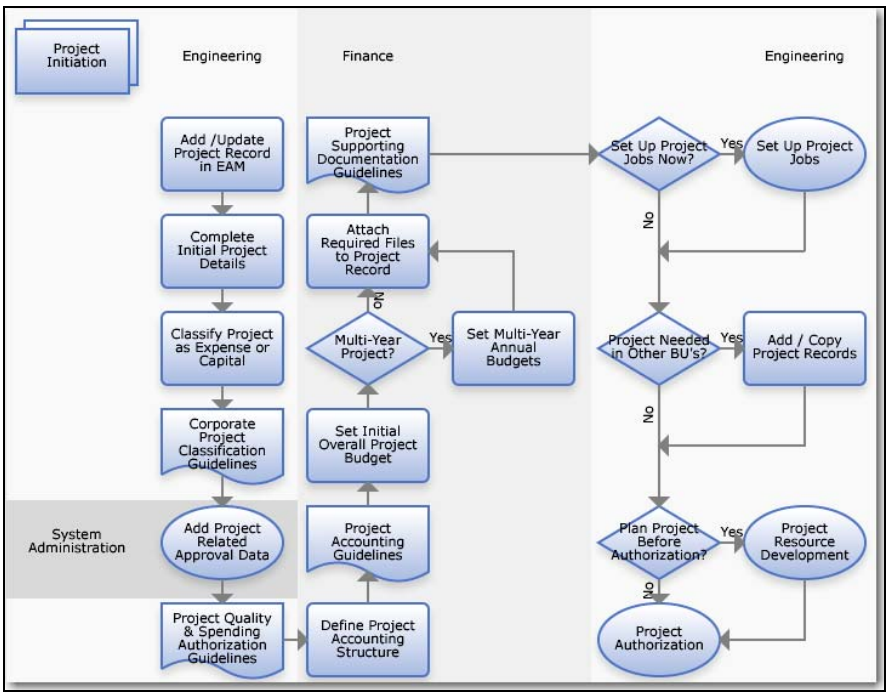
**Fig. 8.2**
Job Allocation Viewer



# Setting Up Projects

## Project Setup Process Flow

**Fig. 8.3**
Set Up Project Process Flow




1 Add or update a project record in EAM.

2 Complete initial project details.

3 Classify the project expense type (expense or capital).

4 Verify compliance with corporate project guidelines.

5 Add project-related approval data.

6 Review and follow quality and spending authorization guidelines.

7 Define the project accounting structure.

8 Review and follow project accounting guidelines.

9 Set the initial overall project budget.

10 Set annual budgets for a multi-year project.

11 Review and follow supporting documentation guidelines for the project.

12 Set up project jobs.

13 Add or copy records if other business units need the project.

14 Develop project resources to plan the project before authorization.

15 Obtain authorization for the project.

## System Administration Module Setup

### ERP Download–Projects

The ERP project download option allows you to either download all projects or to select projects to be used in EAM. Access the Project Download browse from System Administration|ERP Interface|Download|Project Download. See “Project Download Browse” on page 697.

### Registry

Set the database level features for projects in the registry. Access the registry in System Administration|Registry. See “Set Up Registry Data” on page 742.

#### Job Format

Larger projects need to be broken down into many components, called jobs. Sometimes these jobs have smaller jobs, which collectively make up the higher-level job. With EAM, you can add up to eight levels of formatting to the Job No. That provides the flexibility to define the format based on your organization’s requirements. A primary reason for using the job format is to enable cost roll-up of jobs in reporting. In addition to formatting the Job No, the length of the Job No can be selected for a total of up to 15 characters among the eight levels of formatting. See “Set Up Registry Data” on page 742.

#### Business Segment Format

An organization may have specialized Business Segments that operate as distinct units, concentrating on particular interests or tasks. EAM allows managers to track which Business Segments are initiating particular capital projects, and identify the driving Business Segments in the Project module. With EAM, you can add up to eight levels to the Business Segment format. That provides the flexibility to define the format based on your organization’s requirements. In addition to formatting the Business Segment, the length of the Business Segment can be selected for a total of up to 15 characters among the eight levels of formatting. See “Project Business Segments” on page 745.

#### Project Refresh Spending

In System Administration|Registry, configure settings to indicate whether project spending refreshes when a PO is ordered. See “Set Up Registry Data” on page 742.

## General Module Setup

### Domain–Project Options

The reopen project option allows you to indicate whether users with the required role setting can reopen closed projects. This option can be found on the Maintenance tab on the domain record. See “Domain: Maintenance Tab” on page 33.

## Site–Project Options

Setup options for projects can be found in the Maintenance and Authorization Options tabs in the site record.

### Project Options

Set up the project options on the Maintenance tab of the site record. See “Sites: Maintenance Tab” on page 51. The following project setup options are available:

- **Project Authorization.** Determine if a project must be authorized before any expenses are reported against it.
- **Spending Limit Percentage.** Determine the percentage of the project’s spending limit that you can overspend.
- **Project Include Tax.** Determine if tax amounts are included in the cost amounts for the project.
- **Approve by Margin.** Determine if a customer funded project is approved based on planned margin percentage instead of the project requested funding amount.
- **Margin Decrease Total Percentage.** Enter the percentage that determines if a change to the planned margin percentage for a project requires reauthorization.

### Estimated Net Available Funds Options

Set up the estimated net available funds options on the Maintenance tab of the site record. These options allow you to include the authorized purchase, planned labor, unauthorized purchase, planned internal material, and committed costs in the estimated net available amount for a project. See “Sites: Maintenance Tab” on page 51.

### Purchasing Costs on a Project Options

Set up the purchasing costs on a project on the Maintenance tab of the site record. See “Sites: Maintenance Tab” on page 51. These options allow you to include the following costs in the calculation of the percentage of the spending estimate for the project:

- Unauthorized purchase costs
- Authorized purchase costs
- Committed costs

### Calculation Percentage Estimated Spend Option

Set up the authorization option for project requisitions on the Authorization Options tab in the Site record. This option allows you to have the requisition approved based on the user’s setting for requisition project limit rather than the requisition limit or requisition cap limits. See “Sites: Authorization Options Tab” on page 54.

## Finance Module Setup

In the Finance module, you can set up approval groups and codes.

### Groups

You can set up project approval groups and margin approval groups in Finance|Groups. See “Groups” on page 404.

### Codes

You can set up the following codes used in projects and jobs:

- Activities
- Project Status
- Project Types
- Proj Char1/2
- Job Type
- Job Char1/2

Set up these codes in Finance|Codes|Projects and in Finance|Codes|Jobs. See “Codes” on page 410.

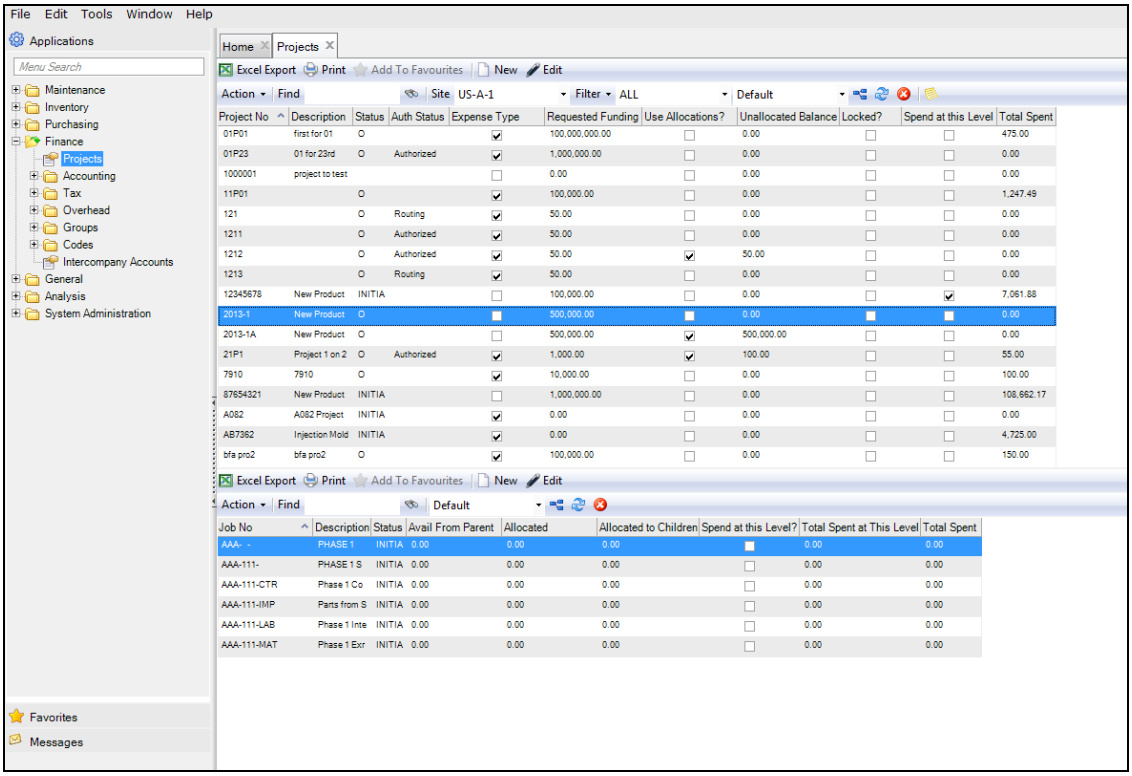
# Projects

## Creating a Project

Follow these steps to create a project:

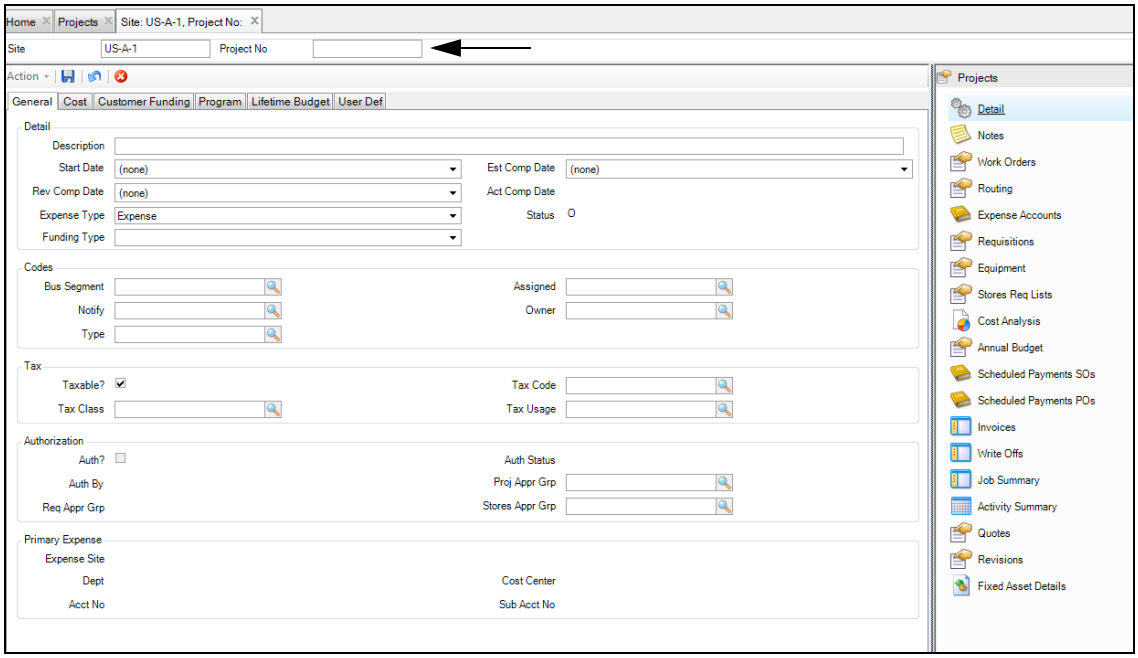
1 Open the Projects browse in Finance|Projects.

**Fig. 8.4**
Projects Browse




2 Click New. A blank project record opens. In the Project No field, enter a unique project number or name.

**Fig. 8.5**
Project Record




3 Enter information in relevant fields on the General, Cost, Customer Funding, Program, Lifetime Budget, and User Defined tabs. See “Filling Out a Project Record” on page 555.

4 Once all the information has been entered, click Save.

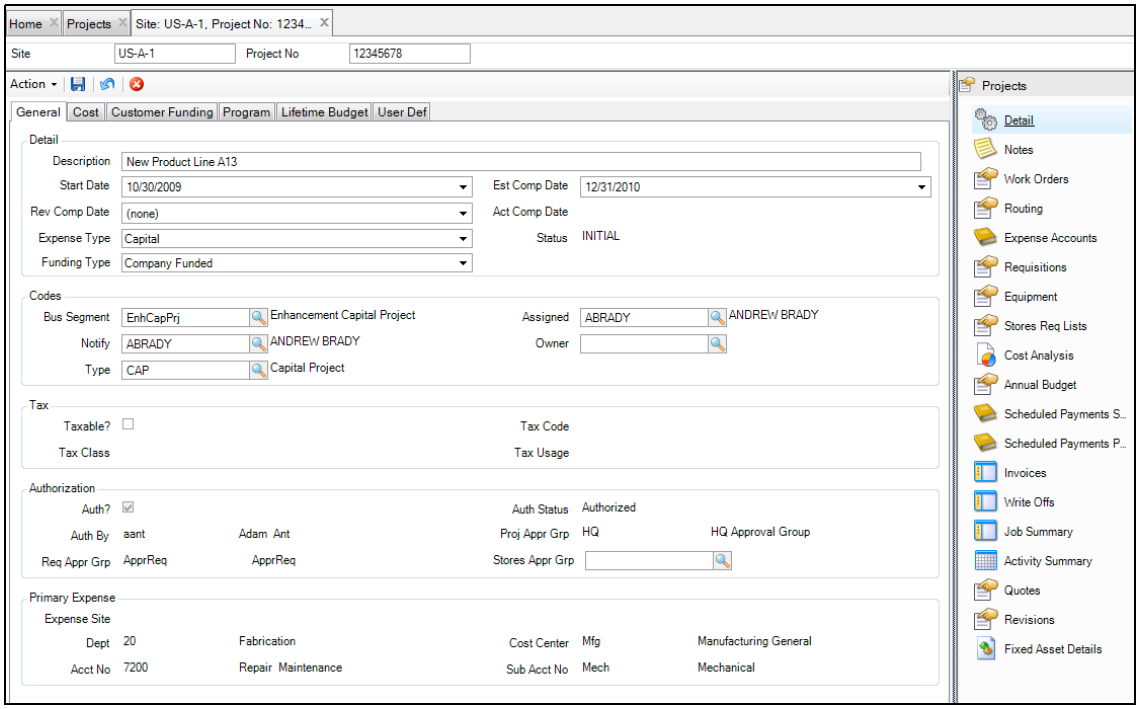
## Filling Out a Project Record

Enter information about the project in the General, Cost, Customer Funding, Program, Lifetime Budget, and User Defined tabs.

### Project: General Tab

Use this tab to define, view, or change information about the project, including details, codes, tax, authorization, and primary expense accounting.

**Fig. 8.6**
Project: General Tab




## Detail

*Description.* Enter an alphanumeric description of the project.

*Start Date.* Enter the planned start date of the project. The project manager uses this data for planning and reference purposes.

*Estimated Completion Date.* Enter the estimated completion date of the project. Use this data for planning and reference purposes. After you complete and close the project, compare this date to the revised and actual completion date to measure success in planning and scheduling.

*Revised Completion Date.* Enter a revised completion date from the estimated completion date.

***Note*** Use this date in reporting, to compare the estimated completion date with the actual completion date.

*Actual Completion Date.* This system-assigned date indicates when the project was completed. Compare the actual completion date to the estimated completion date. Review the completed date to measure success in planning and scheduling.

***Note*** If you reopen a closed project, the system clears the actual completed date field.

*Expense Type.* Select the expense type, Capital or Expense.

All projects default to Expense. If there is requisition authorization, Expense Type specifies the approval process for a project requisition. In User Maintenance, each user has a spending limit for two types of requisitions: expense or capital. The requisition type determines the kind of limit the individual has.

*Status.* The user-defined project status. Initial project status defaults from the Default? check box from Finance|Codes|Projects|Status. Project status cannot be closed or canceled for a work order, stores requisition, or purchase order to reference that project. To receive and issue parts or distribute labor against a project number, the project status cannot be closed or canceled, and must be approved, if authorization of projects is required under General|Business Units|Sites|Maintenance tab|Proj Auth?.

If the e-mail check box is selected on Finance|Codes|Projects|Statuses, the system e-mails users designated to notify of the change.

*Funding Type.* Select the following funding types from the drop-down list:

- **Company Funded.** The company receives an order to make a certain part and the company funds the entire project and negotiates the payment terms.
- **Customer Funded.** The company receives a customer purchase order and places a sales order for the customer, who is invoiced for the project deliverable.
- **Both.** The project is funded partly from customer and by company.
- **Internal.** The project has no external deliverable and is usually expensed.

### Codes

*Business Segment.* Business Segment can represent a plant or group of plants. With customer-funded projects, the business segment may be a client. You may have specialized business segments that operate as units distinct from the financial accounting structure of departments or cost centers. These concentrate on particular tasks. Assign a business segment to a project to track which ones initiate particular capital projects.

*Assigned.* The employee assigned to this project. The assigned employee and the user or group to notify are often the same person.

*Notify.* Enter a user or mail group to receive e-mail notifications about spending limit warnings and changes in status of the project. This user receives e-mail notifications about changes in the status of the project and any spending limit warnings. Typically, the Notify individual is the same person as the Assigned. All individual or group users in this field are notified through e-mail when a project is authorized and open to spending.

*Owner.* The user ID or owner group that owns this project. The owner field adds security to each project record. If the owner field is blank for a given project record, any user with security to update projects can update this project. If the owner is a single user, then only that user can update that project. If the owner is an owner group, then any member of that group can update the project. Owner groups are set up in General|Groups|Owner Group.

*Type.* Use the lookup and select a project type to classify the project. Set up user-defined project codes in Finance|Codes|Project|Project Types.

### Tax

*Taxable?* Select this check box for a taxable project. The Taxable check box overrides all other tax settings for all project purchases.

*Tax Code.* A project's tax code. Assign a project tax code if a project is tax exempt or has a reduced tax rate. All purchases for a project inherit the project tax code, instead of the one from the vendor, inventory, or ship-to record.

*Tax Class.* The system copies the default tax class to the project.

*Tax Usage.* The system copies the default tax usage to the project.

**Authorization**

*Authorized?* The system indicates whether the project has been authorized, if the project required authorization.

*Authorization Status.* The authorization status of the project.

The status remains blank if the authorization has not been started. If the project is in the routing process, the status is routing. If it is authorized, the status is authorized.

*Project Approval Group.* A code identifying a group of users who make up a project approval group. If projects require authorization, select a project budget approval group to designate who receives the request for authorization. The system routes the authorization request to that group. The project approval group receives e-mail about the request and can approve or disapprove the project.

***Note*** This field is required to submit authorization routing for a project.

***Note*** When margin approval is in use, the lookup provides a selection of project margin approval groups defined for the project site

*Authorized By.* The user who was the final project approver.

*Requisition Approval Group.* This code identifies the requisition approval group for this project. Users in this group receive e-mail requests for authorization of all requisitions associated with this project.

If you select the Requisition Project Limit check box, which is on the Authorization tab on the Site record, EAM uses the Req Project Limit value.

*Stores Approval Group.* When the site setting for Stores Auth? is set to Project or All, the system enables this field for a project. You cannot issue parts to a stores requisition list that references the project unless the stores requisition is authorized.

Use the lookup to select the stores requisition approval group for this project. This field designates which approval group to use when authorizing a stores requisition list that references a project.

***Note*** Unlike most fields in Project Maintenance, copying a project does not copy the stores requisition approval group.

***Note*** If project revision control is active, changing the stores requisition approval group field creates a revision record for the project.

**Primary Expense**

*Expense Site.* The site with the costing structure from the project expense accounts subdetail. The primary expense accounting is set up in the Expense Accounts submenu for the project.

*Dept.* The primary department associated with the project.

*Cost Center.* The primary project cost center from the project expense accounts subdetail. The primary cost center copies to various transactions, such as purchasing, labor, and parts issued for this project.

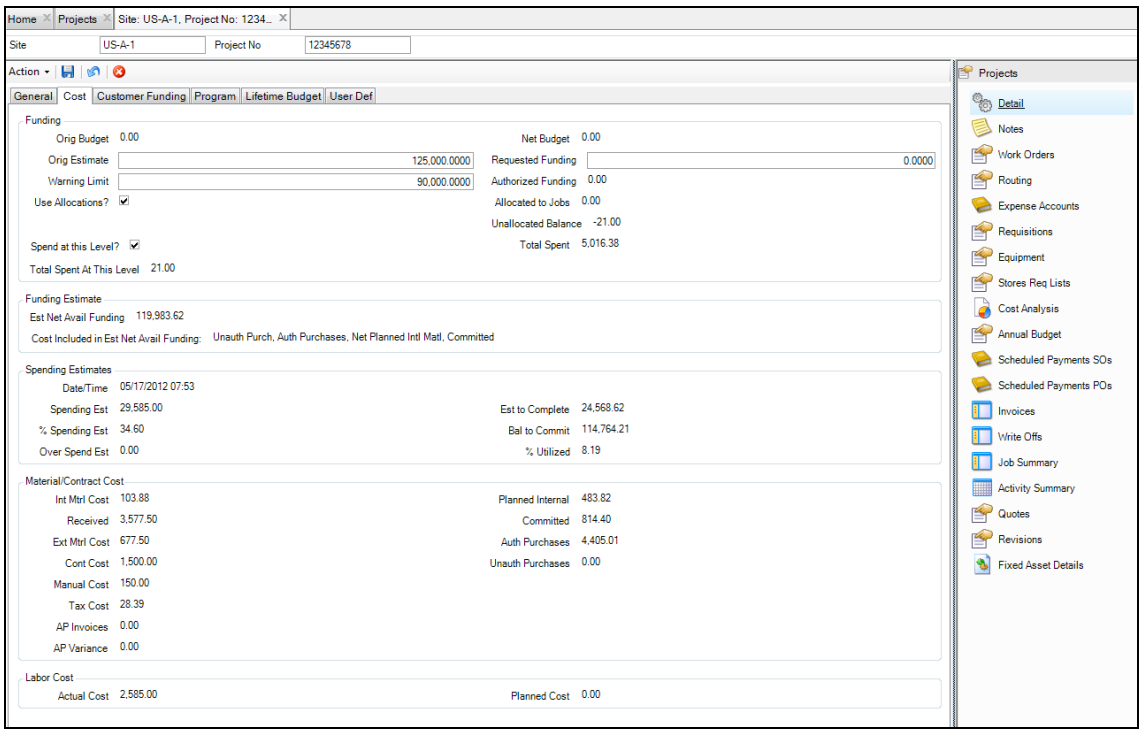
*Acct No.* The primary expense account from the project expense account subdetail.

*Sub Acct No.* The primary expense sub-account from the project expense account subdetail.

## Project: Cost Tab

Use this tab to request funding and view costs charged for the project.

**Fig. 8.7**
Project: Cost Tab




### Funding

*Original Budget.* The value entered in Modify Budget action. This value records the original or updated project budget.

*Net Budget.* This amount includes the original budget plus or minus any reallocations.

*Original Estimate.* The original cost estimate for the whole project. This number is an estimate to reference as the project progresses. At the close of the project, it helps project managers to detect discrepancies in estimates against the actual amount. Managers use the information to better estimate future projects and to investigate reasons for estimate discrepancies.

*Requested Funding.* Funding that is requested for a project. Cost cannot be charged against a project until funding is requested and any approvals are made, if necessary.

If Project Authorization is disabled, the amount entered into the Requested Funding field automatically populates the Authorized Funding field. If Project Authorization is required, the funding amount appears in the Authorized Funding field once electronically approved through EAM.

Additional funding for a project can be requested by increasing the amount in the Requested Funding field to the new required funding level. As with the initial funding, the new funding amount populates the Authorized Funding field based on the project authorization setting.

*Authorized Funding.* EAM only considers the amount in the Authorized Funding field when considering spending limits for a project.

Authorized Funding is automatically populated based on the Requested Funding amount, depending on the Project Authorization site setting. If Project Authorization is disabled, the amount entered into the Requested Funding field automatically populates the Authorized Funding field. If Project Authorization is required, this amount appears in the Authorized Funding field once approved.

*Warning Limit.* An amount the project manager sets as a budgetary warning point. The system issues an e-mail warning to the Notify user or group when expenses reach this amount.

*Total Spent.* The amount spent to date on the project. This amount includes parts issued, services, and labor transactions.

***Note*** The amount in this field equals the sum of all costs for project and rolled-up costs from jobs associated with the project.

*Use allocations?* Select this check box to enable control of funding using allocation for projects and jobs.

*Allocated to Jobs.* Project funding amount allocated to jobs within the project.

*Unallocated.* Amount of project funding not yet allocated from the project to the jobs.

*Spend at this Level?* Select this check box to allow spending at the project level. If this check box is not selected, the cost must be directed to a job and cannot be directed to the project only.

*Total Spent at this Level.* The amount spent to date at the project level. This amount does not include the rolled-up expenses from jobs.

**Funding Estimate**

Estimated Net Available Funding displays an estimated amount of remaining funding after considering a broader range of expected expenditures in addition to actual costs already incurred.

This amount could include the following:

- **Committed.** Ordered purchase orders that represent committed expenditures to suppliers.
- **Authorized Purchases.** Purchase orders that are authorized but not yet placed on order.
- **Unauthorized Purchases.** Purchase orders that are planned but not yet authorized.
- **Planned Internal.** Material from stores lists that has not yet been issued or expensed to the project.
- **Planned Labor.** Estimated labor expense on WO.

The cost categories are selected in General|BusinessUnits|Site|Maintenance tab for Est Net Avail Funding Options. The categories can include any or all of the following: Auth Purch, Unauth Purch, Committed, Planned Labor, and Planned Internal Material.

*Estimated Net Available Funding.* The net amount of funding available for the project calculated by subtracting the costs indicated in the Costs Included in Estimated Net Available Funding field and Total Spent from the Auth Funding amount.

*Costs Included in Estimated Net Available Funding.* The cost categories selected for the project site are listed.

**Spending Estimates**

*Date/Time.* System-updated on each Project Refresh action. Provides a visual reminder to keep this cost page current with Refresh.

*Spending Est.* Enter the estimated amount to spend on the project.

*% Spending Est.* How close expenditures are to the total estimated spending for the project, as a percentage. This value is calculated by dividing the Site's Calc % Spend Est options amounts by estimated spending. The options amounts are found on General|Business Units|Site| Maintenance tab and include Unauth Purch, Auth Purch, and Committed.

***Note*** The system recalculates the value of this field when the following job functions or actions occur:

- Changing the spending estimate of a job
- Canceling a job
- Deleting a job
- Reopening a job

If revision control is active, recalculating field values also creates revisions.

*Over Spend Est.* Expenditures over the total estimated spending for the project, as a percentage.

***Note*** The system recalculates the value of this field when the following job functions or actions occur:

- Changing the spending estimate of a job
- Canceling a job
- Deleting a job
- Reopening a job

If revision control is active, recalculating field values also creates a revision. This figure notifies managers when the project expenditures exceed estimated spending.

*Est to Complete.* The system calculates this value as spending estimate minus total spent. It is updated when the spending estimate changes or when you refresh the project.

***Note*** The system recalculates the value of this field when the following job functions or actions occur:

- Changing the spending estimate of a job
- Canceling a job
- Deleting a job
- Reopening a job

If revision control is active, recalculating field values also creates revisions.

*Balance to Commit.* The total of uncommitted authorized funds. Calculated as Authorized Funding – (Auth Purch + Committed + Total Spent).

*% Utilized.* Calculated as (Auth Purch + Committed + Total Spent)/Authorized Funding.

**Materials/Contract Costs**

*Int Mtrl Cost.* The sum of all direct issues from inventory, not through a requisition, for the project.

*Received.* The system calculates the total sum of all received purchases associated with the project.

*Ext Mtrl Cost.* The project parts total, minus tax, for auto-issue receipt transactions only.

*Contractor Cost.* The project's total for outside contractor services, minus tax. This value represents receipt transactions for all auto-issue requisitions marked as Contractor.

*Manual Cost.* The sum of all manual GL transactions for the project.

*Tax Cost.* Tax associated with any costs from external material and contractor services.

*AP Invoices.* The supplier invoices total for the project's POs.

*AP Variance.* The difference between supplier invoice cost and PO cost.

*Planned Internal.* The total planned cost of material issues from inventory.

*Committed.* The total value of ordered purchase orders minus any receipts against the purchase orders.

*Auth Purchase.* The total cost of all planned, authorized requisitions that reference the project.

*Unauth Purchase.* The total cost of all planned, unauthorized purchase requisitions for the project.

**Labor Cost**

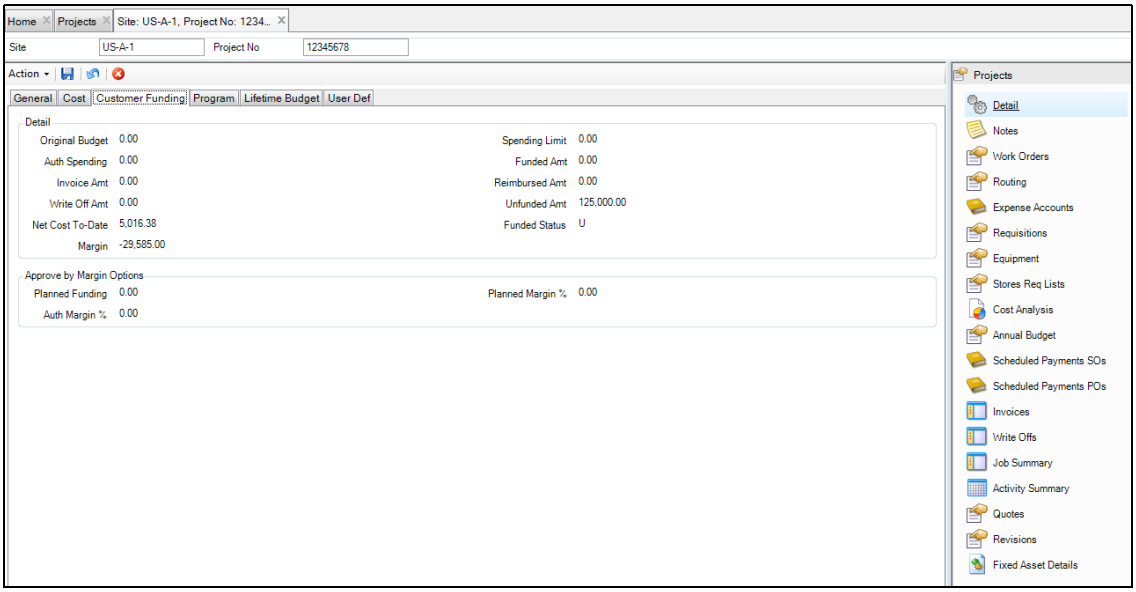
*Actual Cost.* The labor transactions total charged to the project.

*Planned Cost.* The planned labor for work orders for the project.

## Project: Customer Funding Tab

Use the Project Customer Funding tab to track information against customer-funded projects in EAM.

**Fig. 8.8**
Project: Customer Funding Tab




## Detail

*Original Budget.* The original budget estimate from the Cost tab, or updated with the Modify Budget action.

*Spending Limit.* Data from the Requested Funding field on the Cost tab.

*Auth Spending.* The current amount authorized on this project from the Cost tab.

*Funded Amount.* The SO line amount totals from Scheduled Payments SOs on the submenu.

*Invoice Amount.* The amount invoiced to the customer from QAD ERP based on the invoice created from the scheduled SO payments. EAM calculates this amount by totaling all invoiced amounts from the Invoice submenu.

*Reimburse Amount.* The amount received as customer payments against invoices for reimbursement downloaded from QAD ERP.

*Write Off Amount.* The total of write-offs entered in the Write Off submenu.

*Unfunded Amount.* The authorized amount minus (Funded Amt + Write-off amounts).

*Net Cost-to-Date.* EAM subtracts the reimbursement amount from the Total Spent amount on the Cost tab.

*Funded Status.* EAM displays funded, unfunded, or partial. If Funded Amt has a value of 0, the status displays as Unfunded. If the field Unfunded Amt has a value of 0, and the Funded Amt contains a value, the status displays as Funded. If there is a value in both the Funded Amt and the Unfunded Amt fields, the status displays as Partial.

*Margin.* EAM subtracts Requested Funding from the total Funded amount to calculate this field.

### Approve by Margin Options

These fields are used when the project is authorized using Margin Approval. See “Creating a Project” on page 554.

***Note*** These fields are only enabled when the Approve by Margin? check box is selected for the Project site. See “Sites: Maintenance Tab” on page 51.

*Planned Funding.* Enter planned funding amount to represent the selling price to the customer.

*Planned Margin %.* This percentage is calculated as follows:

*Planned Margin % = [(Planned Customer Funding / Authorized Funding) -1] x 100.*

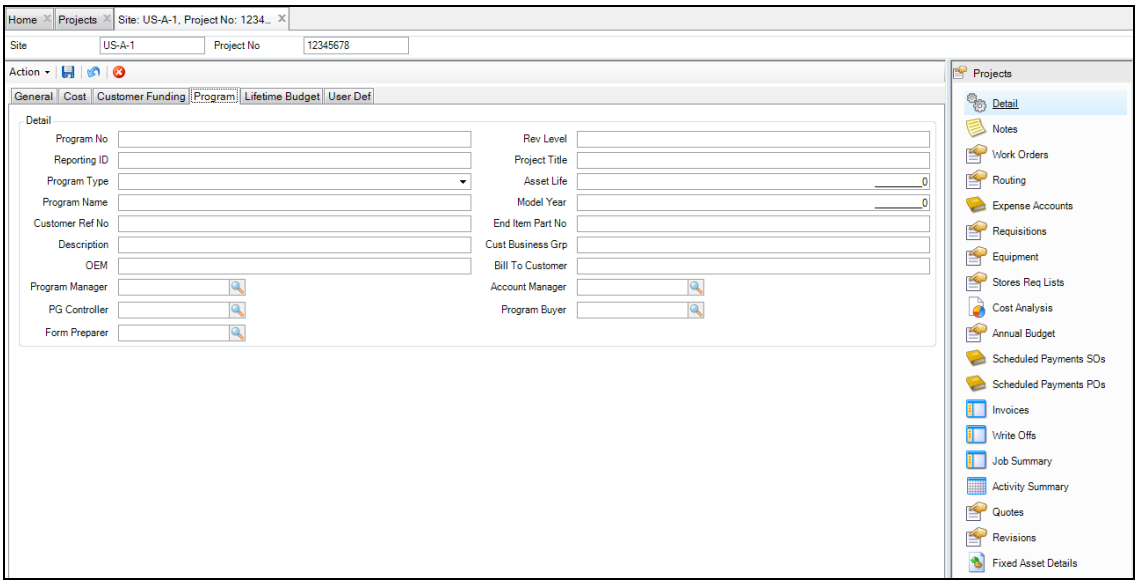
***Note*** The Authorized Funding figure is from the Cost tab.

*Auth Margin %.* The system updates this percentage to equal the Planned Margin% once the project has been authorized.

## Project: Program Tab

Use the Project Program tab to track information against project programs in EAM.

**Fig. 8.9**
Project: Program Tab




*Program No.* Enter the project program number.

*Rev Level.* Enter the revision level.

*Reporting ID.* Use this ID to filter groups of projects.

*Project Title.* Enter the project title. For example, it can be a combination of the OEM, program name, model year, part name, and end item number for customer-funded projects.

*Program Type.* Select Forward or Current model from the list.

*Asset Life.* Enter the remaining life of the program.

*Program Name.* Enter the customer program name.

*Model Year.* Enter the model year for the customer program.

*Customer Ref Number.* Enter the customer reference number.

*End Item Part No.* If this is a customer-funded project, enter the original equipment manufacturer's (OEM) end item part number from the PO.

*Description.* Enter the program description.

*Cust Business Group.* Enter the customer business group with which to work on this program.

*OEM.* Enter the original equipment manufacturer.

*Bill To Customer.* Enter the name of the customer, normally the customer issuing the PO, to whom to bill the project costs.

*Program Manager.* Select the program manager from the list of EAM user IDs.

*Account Manager.* Select the account manager from the list of EAM user IDs.

*PG Controller.* Select the program controller from the list of EAM user IDs.

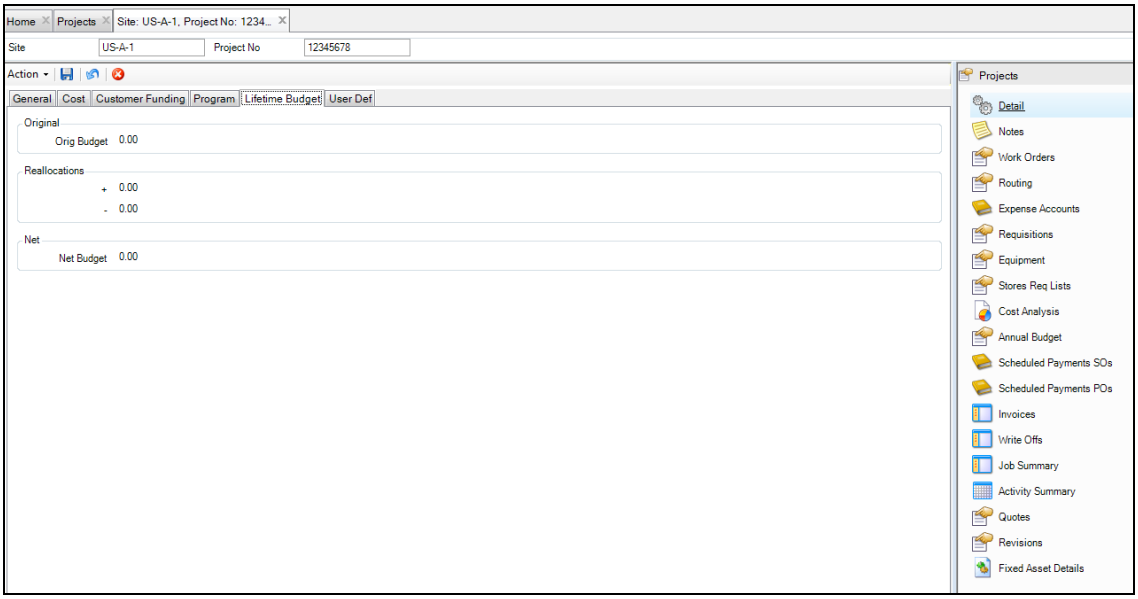
*Program Buyer.* Select the program buyer from the list of EAM user IDs.

*Form Preparer.* Select the form preparer from the list of EAM user IDs.

## Project: Lifetime Budget Tab

Use the Project Lifetime Budget tab to track information against its lifetime budget in EAM.

**Fig. 8.10**
Project: Lifetime Budget Tab




*Orig Budget.* The original budget estimate from the Cost tab or updated using the Modify Budget Action.

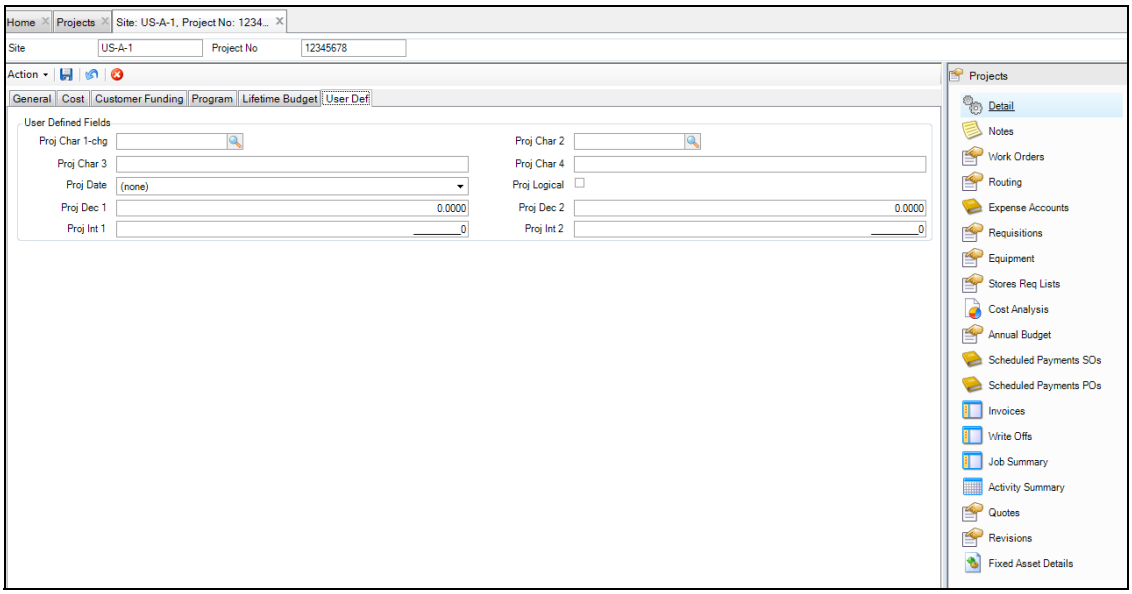
*Reallocations.* The plus (+) value includes additions to the project budget from other projects through reallocation. The value is added to the Orig Budget to calculate the Net Budget. The minus (-) value includes subtractions from the project budget to other projects through reallocation. EAM subtracts reallocated amounts from Orig Budget to calculate Net Budget.

*Net Budget.* EAM displays the original budget recalculated against reallocations.

### Project: User-Defined Tab

Use the Project User-Defined tab to track information against specific projects in EAM. There are ten user-defined fields.

**Fig. 8.11**
Project: User-Defined Tab




*Character 1/2.* User-defined character fields, validated against tables that you add.

*Character 3/4.* Free-form user-defined character fields, not validated against tables.

*Decimal 1/2.* User-defined decimal fields for projects.

*Date.* A user-defined date field.

*Integer 1/2.* User-defined integer fields for projects.

*Logical.* A user-defined check box.

### Project Notes

If necessary, you can add notes to the project record. To add notes, open the project record and select the Notes submenu.

***Note*** The Notes submenu includes notes in a free-form text box that are for internal use only and are not printed on any documents.

## Defining a Primary Expense Account for a Project

In the Expense Accounts submenu, you can define, edit, and view expense accounts associated with the project. To spend against a project, you must define at least one expense account. If you define one expense account, that expense account defaults as the primary site and expense account. The details of the primary expense account default into the General tab for the project. EAM allows you to define multiple expense accounts, which are available for assignment in Purchasing and Work Orders for the project and its jobs.

Follow these steps to define an expense account for a project:

1 Open the project and select the Expense Account submenu.

2 Click New. Enter the information about the expense account in the following fields:

*Expense Site.* Defaults to the project's expense site. If necessary, use the lookup to select a different site.

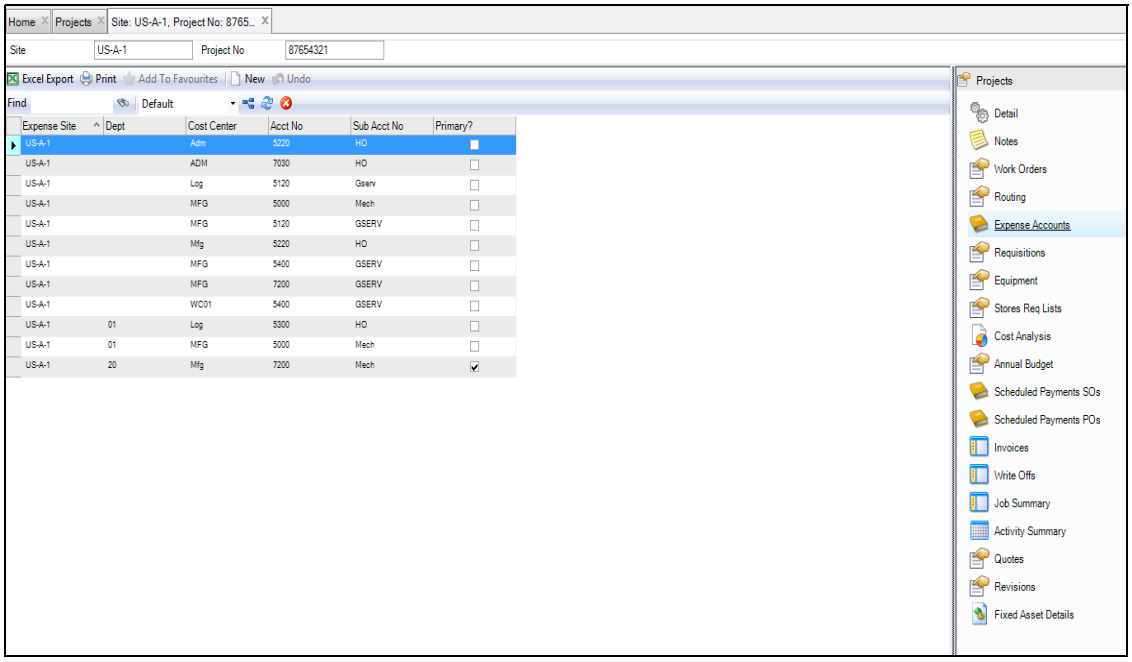
*Department, Cost Center, Account Number, and Sub-Account Number.* Use the lookups in these fields to select the department, cost center, account number, and sub-account numbers to which the expenses are charged.

*Primary?* Select this check box if this expense account is the primary expense account for this project. Only one expense account can be designated as primary.

3 Once the information has been entered in the fields, press Enter to save.

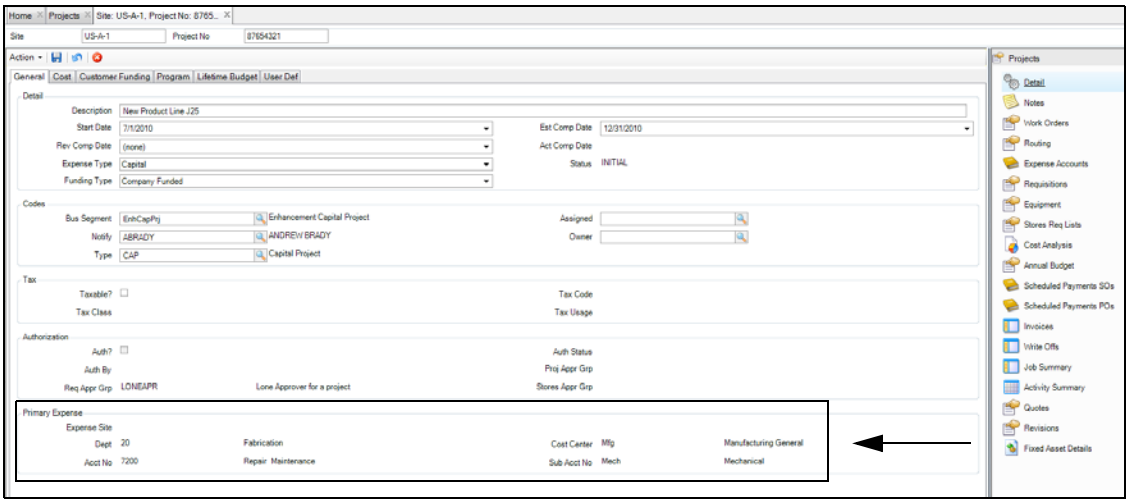
4 If necessary, define additional expense accounts by repeating these steps.

**Fig. 8.12**
Project Notes Submenu




***Note*** The expense account information is displayed on the General tab.

**Fig. 8.13**
Expense Account Information

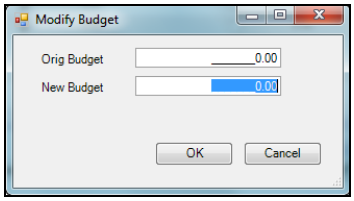



## Defining the Project Budget

Follow these steps to define the project budget:

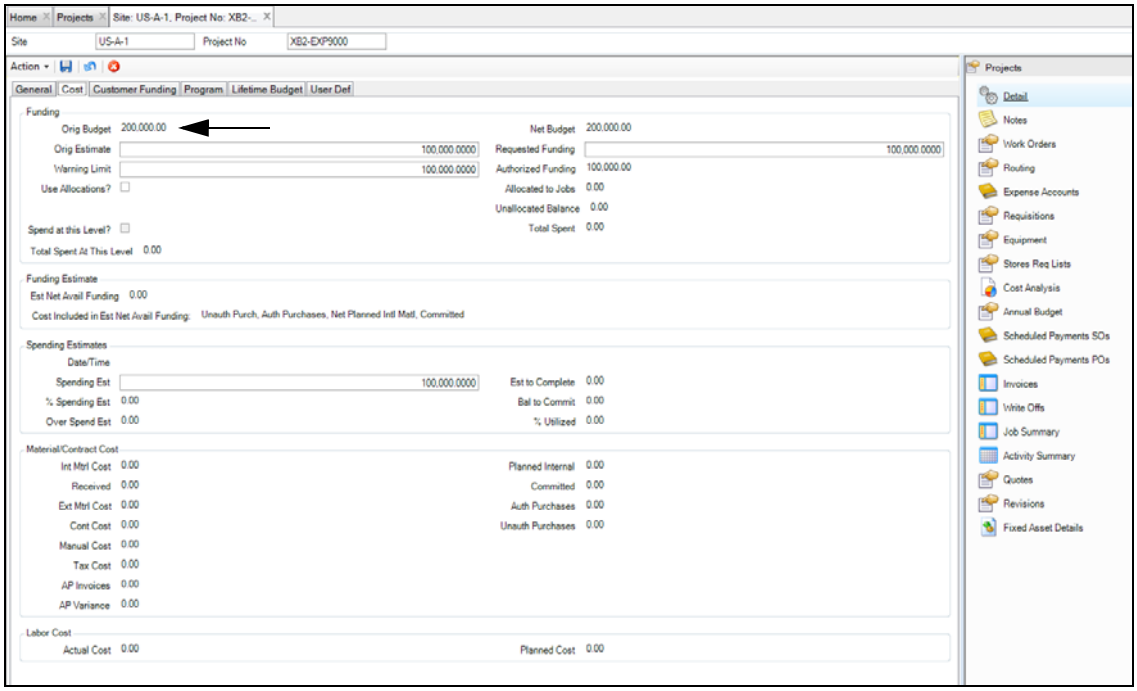
1. Open the Projects browse and highlight the project.
2. Select Modify Budget from the Project Action menu. The Modify Budget window opens.
3. Enter the project budget in the New Budget field and then press OK.

**Fig. 8.14**
Modify Budget




The project budget is displayed in the Original Budget field in the project record.

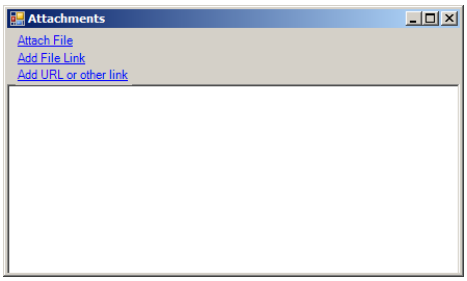
**Fig. 8.15**
Project Budget in Original Budget Field




## Attaching and Linking Files to a Project

EAM allows you to attach and link an unlimited number of files and link an unlimited number of URLs to a project record. If you can run the file on your operating system, you can run it from EAM once it is attached or linked.

**Fig. 8.16**
Attach or Link an External File to a Project




### Attach a File

To attach a file to a project:

1. Select the project from the Projects browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Attach File.
4. Locate the file on your computer and click Open. The file is now attached to the project.

### Link a File

To link a file to a project:

1. Select the project from the Projects browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add File Link.
4. Locate the file on your computer and click Open. The file is now linked to the project.

### Link a URL

To link a URL to a project:

1. Select the project from the Projects browse.
2. Select Attachments from the Action menu.
3. In the Attachments window, select Add URL or other Link.
4. Copy and paste the link into the field and then click OK. The URL is now linked to the project.

## Copying a Project

The Copy Project action allows you to copy the expense data, attachments, jobs, work orders, requisitions, and stores requisitions lists from one project and use it as a template for a new project.

Follow these steps to copy a project:

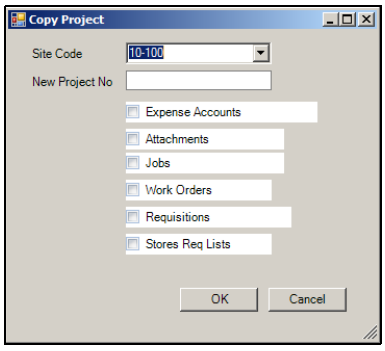
1. Open the Projects browse and highlight the project that you want to copy.
2. Select Copy Project from the Projects Action menu. The Copy Project window opens.
3. The Copy Project window contains the following fields for setting up the new project:

   *Site Code.* If necessary, use the drop-down list and select a new site code.

   *New Project Number.* Enter the project number in this field.

   *Expense Accounts, Attachments, Jobs, Work Orders, Requisitions, and Stores Requisition Lists.* Select these check boxes to copy that item to the new project. If an item is not selected, that item is not copied to the project.

**Fig. 8.17**
Copy Project



4 Click OK to create the project.

## Authorizing a Project

Funding authorization and margin percentage authorization are the two types of project authorizations. The authorize option only applies if Proj Auth? is enabled on the Maintenance tab at General|Business Units|Sites. When this option is enabled, all projects must be authorized before cost can be expensed against them. See “Sites: Maintenance Tab” on page 51.

To authorize a project, open the project and select Authorize from the Action menu. When you select the Authorize action, the project begins the approval routing process. If you do not have a large enough spending limit, the project is routed to the approval group.

### Funding Authorization

Funding authorization is a type of project authorization in which you authorize the requested funding limit. If, as the initiator, you have a large enough project spending limit, and the approval group linked to the project has no quality user assigned, you can authorize the project without going through routing. Otherwise, the authorization request must go through the project approval group.

If the project’s authorized spending requires an increase, a reroute for a new approval is required.

### Margin Percentage Authorization

Margin Approval provides an alternative authorization criteria for customer funded projects. With customer funded projects, the customer agrees to reimburse a specified amount against the cost of the project. Ideally, the customer funding covers or exceeds project costs providing a positive margin compared to company funding required for the project. Margin Approval enables project managers to authorize projects based on the planned margin.

When a project is approved based on funding for the budgeted costs, the higher the total costs are, the higher in the organization the project must be approved. Margin Approval provides an alternate basis to authorize projects based on the planned margin from customer funding. With Margin Approval, the lower the planned margin%, the higher in the organization the project must be approved.

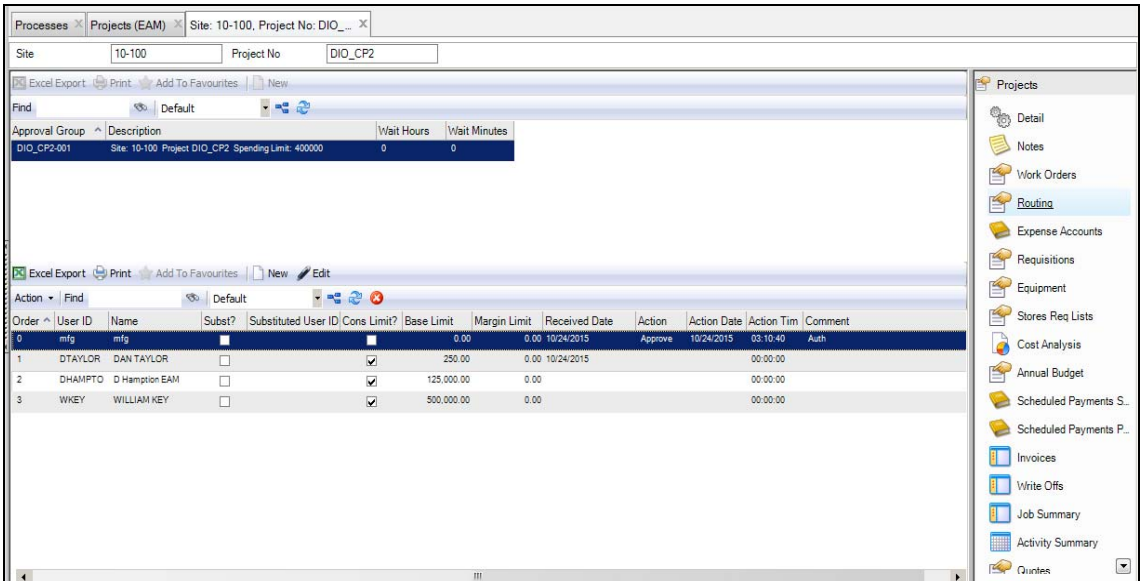
When evaluating required budget for a customer funded project, management is responsible for evaluating planned costs versus customer contribution. EAM calculates the margin based on the funded amount from the customer compared to the authorized funding from within the company. Authorizing a project by margin percentage versus the traditional budget value gives management a clear picture on the level of company investment for a customer funded project. This knowledge enables management to make smart and informed spending decisions.

Set up the option to use Margin Approval for customer funded projects in General|Business Units|Sites|Maintenance tab. See “Sites: Maintenance Tab” on page 51.

### Viewing the Routing Status

To view the authorization status for the project, open the project and select the Routing submenu.

**Fig. 8.18**
Project Routing Submenu




The upper browse displays the routing records for the project. Each time this project has been routed for approval, a record of that routing appears in this browse.

The lower browse shows the list of approvers for the selected routing. It displays the users who approved the project and those who still need to approve the project. It also indicates if anyone has rejected the project.

***Note*** If anyone in the approval group had any important notes regarding this project, the notes are displayed in the Comment column.

The lower browse also captures any currency conversion that occurred if your domain's base currency is different than the defined system approval limit currency. It displays the approval limit in both base and approval limit currencies, the exchange rate, and the date that a user took action on the project.

***Note*** If a user takes too long to approve a project, EAM provides a job in System Administration| Job Control that automatically forwards the routing approval to the next person on the list. See "Job Control Application" on page 703.

## Project Activities – All Project Types

EAM allows you to perform the following activities for all project types:

- Posting Labor on a Project
- Reversing Labor on a Project
- Creating a Work Order for a Project
- Viewing Work Orders Associated with a Project
- Creating a Quote for a Project
- Viewing Quotes Associated with a Project
- Creating a Stores Requisition List for a Project

- Viewing the Stores Requisition List for a Project
- Reviewing Cost Analysis for a Project
- Reviewing the Job Summary for a Project
- Reviewing Activity Summary for a Project
- Reallocating a Budget To or From Another Project

## Posting Labor on a Project

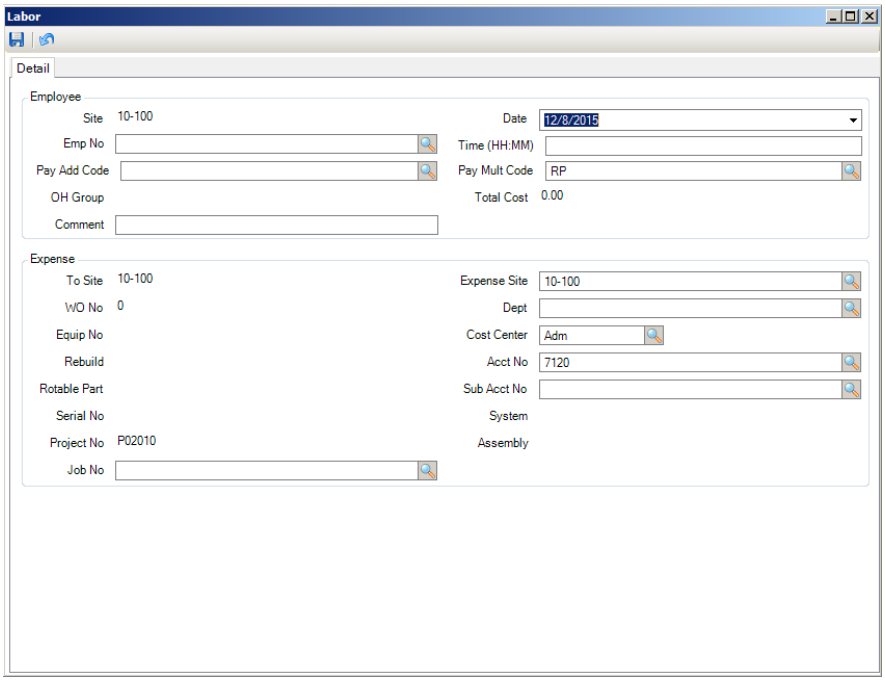
Use the Post Labor action to charge the employees' time against the project.

Follow these steps to post labor on a project:

1 In the Project browse, select the project and then select Post Labor from the Action menu.

2 The Post Labor window opens. Fill out the necessary information in the Detail tab.

**Fig. 8.19**
Post Labor




### Employee

*Site.* The default site for the project.

*Date.* The editable date of the labor transaction defaults to today's date.

*Employee No.* The number of the employee who performed labor on the project. You must identify an employee for a labor transaction. This employee number copies any corresponding information such as pay add rate, employee rate, and overhead group.

*Time.* The amount of time (in hours and minutes, separated by a colon) the employee worked on the activity for which labor is being charged.

*Pay Add Code.* Use the lookup to select a code that specifies an amount of money paid to an employee on an hourly basis, in addition to that employee's regular hourly wage. This code can default from the Pay Add Code field in the General|Employees|Codes tab. See "Employee: Codes Tab" on page 70.

*Pay Multi Code.* This code defaults in or you can use the lookup to select a code that adds a multiplier to the employee's pay rate. Some examples are for regular time (1x the rate) or time and a half (1.5x the rate) for holidays or call-in pay.

*OH Group.* The employee's overhead group. Default information:

- If posting labor from the Employee module, this field defaults from the employee's OH group.
- If it is blank or not posting from the Employee module, the field defaults to the setting in the OH Group field in the General|Business Unit|Sites|Misc tab.

*Total Cost.* EAM calculates the total cost of a particular labor transaction.

*Comment.* Enter text that is attached to the labor record and can display in the Labor History browse.

**Expense**

*To Site.* The source or default site for the project.

*Expense Site.* Defaults to the current expense site for the project.

***Note*** The data in the following fields must have been added to the project to appear on this screen.

*WO Number.* EAM displays the work order number.

*Dept.* The department against which the cost on the labor record is charged.

*Equip Number.* The equipment number linked to the project.

*Cost Center.* The cost center against which the cost on a labor record is charged.

*Rebuild.* Use this field for work orders associated with rebuildable components.

*Acct Number.* The account number associated with a particular labor transaction.

*Rotable Part.* Select if the part is rotable.

*Sub Acct No.* The sub-account number used with an account number to charge the costs on the labor record.

*Serial No.* If the part is marked as rotable, enter the serial number of the part. Otherwise, no data is displayed.

*System.* If the labor transaction is against a piece of equipment and that piece of equipment has corresponding system codes, labor can be charged to this specific system as well as to the piece of equipment. Enter the specific system to which the labor can be charged.

*Project No.* The project associated with the labor transaction.

*Assembly.* If a system code is specified to also identify with a labor transaction associated with a piece of equipment after labor is distributed to that equipment, enter that system code.

*Job No.* This job number is identified in a labor transaction.

3 Once you have filled out the necessary information, click the disc icon to save. The labor charges post to the project and the Labor window reopens with all values reset. You can review posted labor in the Labor History submenu.

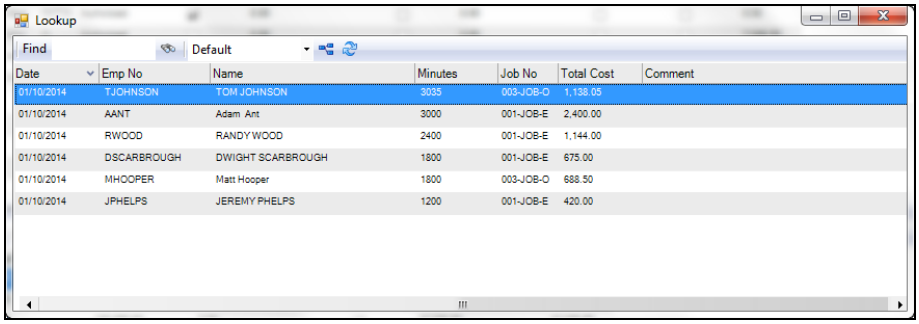
## Reversing Labor on a Project

Follow these steps to reverse the labor that is charged to a project:

1 Open the Projects browse and highlight the project and job. Select Reverse Labor from the Projects Action menu.

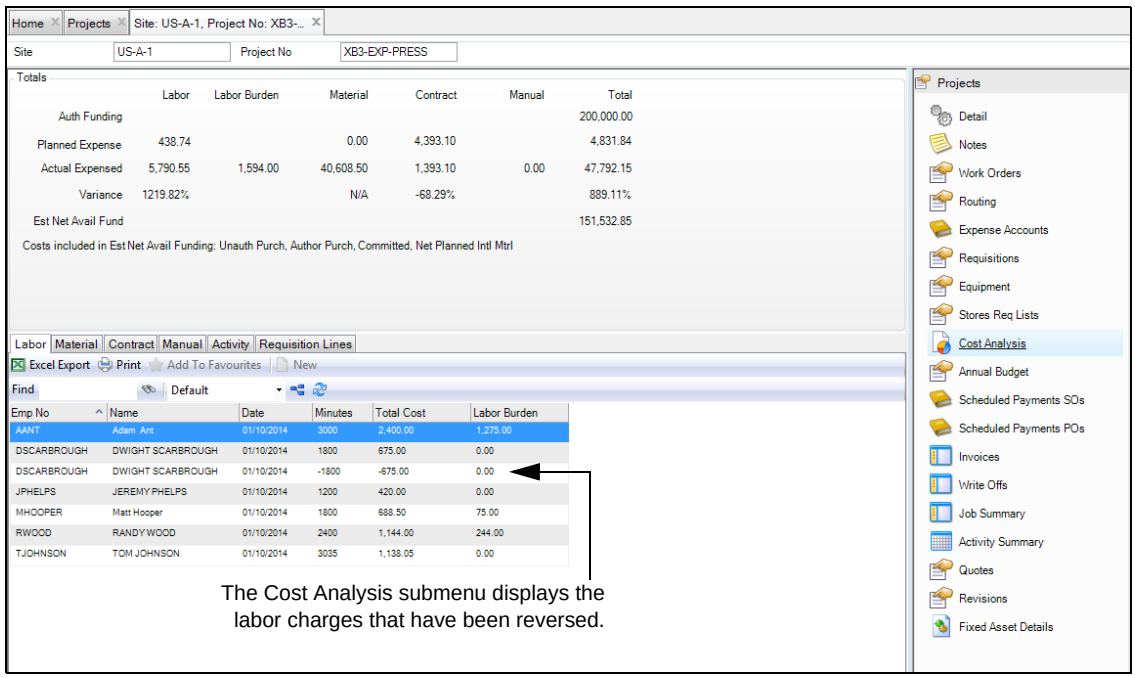
2 A window opens listing the labor that has been posted on the project. Double-click to select the labor charges to reverse.

**Fig. 8.20**
Reversing Labor Charges on a Project




3 The labor charges reverse and the lookup window reopens, displaying the remaining labor that is posted to the project. The Cost Analysis submenu displays the labor charges that have been reversed.

**Fig. 8.21**
Reversing Labor Charges on a Project




## Creating a Work Order for a Project

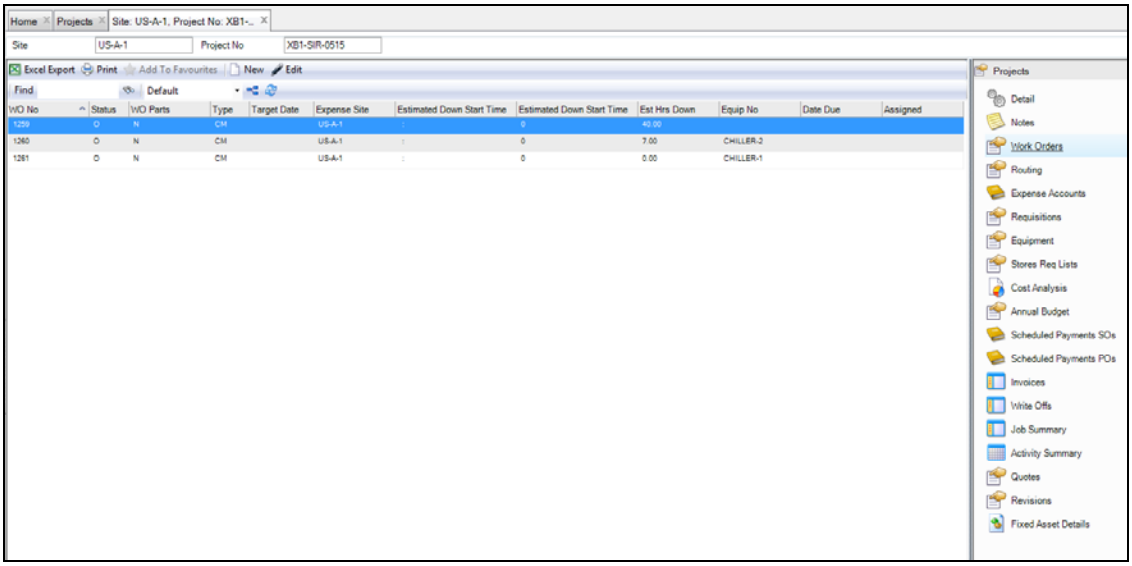
EAM gives you the ability to create a work order from a project. When you create a WO from a project, EAM pulls in all the data from the project and automatically enters it into the WO. This feature saves you time and ensures data integrity. If a WO has been created from a project, the WO is directly tied to the project and the associated WO numbers appear in the Work Orders submenu.

To create a work order from a project, open the project. Select the Work Order submenu and click New. Enter information about the work order in the fields. See “Creating a Work Order” on page 219.

## Viewing Work Orders Associated with a Project

To view the work orders associated with a project, open the project and select the Work Orders submenu.

**Fig. 8.22**
Project: Work Orders Submenu




## Creating a Quote for a Project

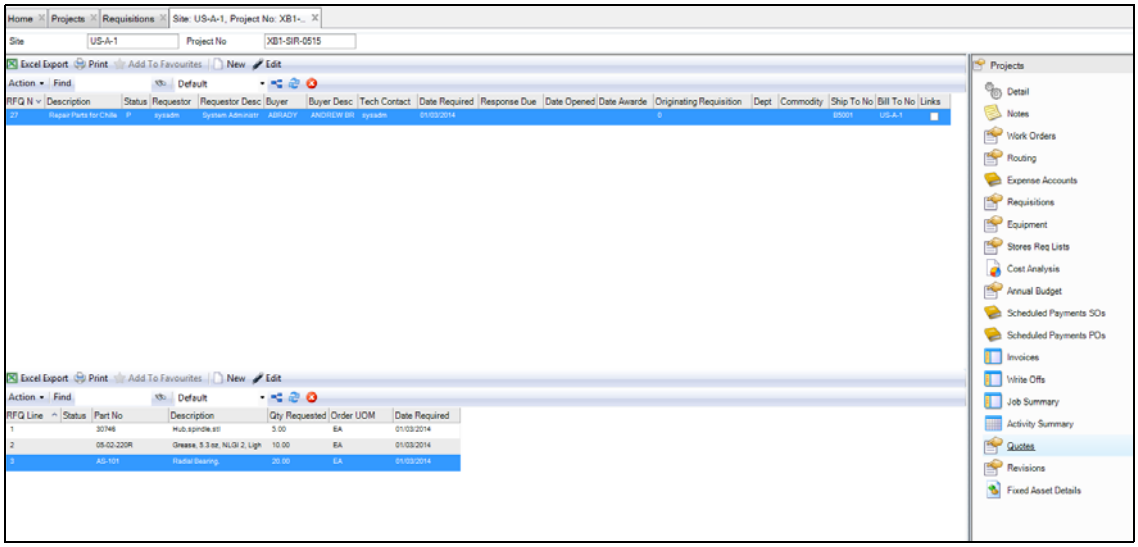
When you create a quote from a project, EAM pulls in all the data from the project and automatically enters it into the quote. This feature saves you time and ensures data integrity. If a quote has been created from a project, the quote is directly tied to the project and the associated quote number appears in the Quotes submenu.

To create a quote from a project, open the project. Select the Quotes submenu and click New. Enter the information in the quote record. See “Creating a Quote” on page 537.

## Viewing Quotes Associated with a Project

To view the quotes associated with a project, open the project and select the Quotes submenu. The quote header is displayed in the upper browse and the quote lines are displayed in the lower browse.

**Fig. 8.23**
Project: Quotes Submenu




## Creating a Stores Requisition List for a Project

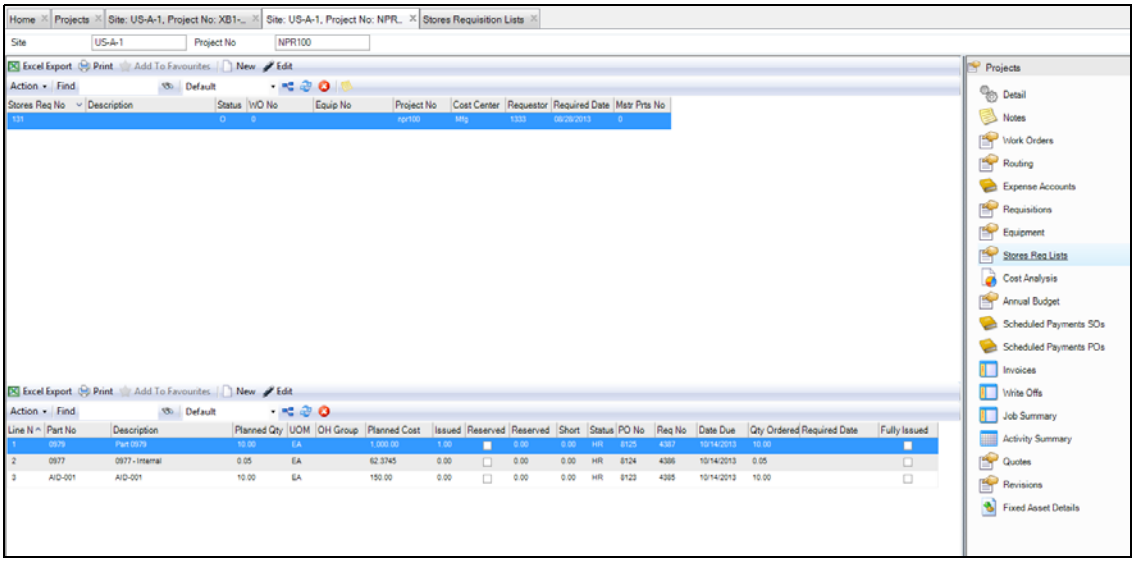
When you create a stores requisition list from a project, EAM pulls in all the data from the project and automatically enters it into the requisition list. This feature saves you time and ensures data integrity. If a requisition list has been created from a project, the list is directly tied to the project and the associated requisition list number appears in the Stores Req List submenu.

To create a stores requisition list for a project, open the project. Select the Stores Req List submenu and click New. Enter the information in the requisition list record. See “Creating a Stores Requisition List” on page 354.

## Viewing the Stores Requisition List for a Project

To view the stores requisition lists associated with a project, open the project and select the Stores Req List submenu. The requisition list header is displayed in the upper browse and the requisition list lines are displayed in the lower browse.

**Fig. 8.24**
Project: Stores Requisition List Submenu

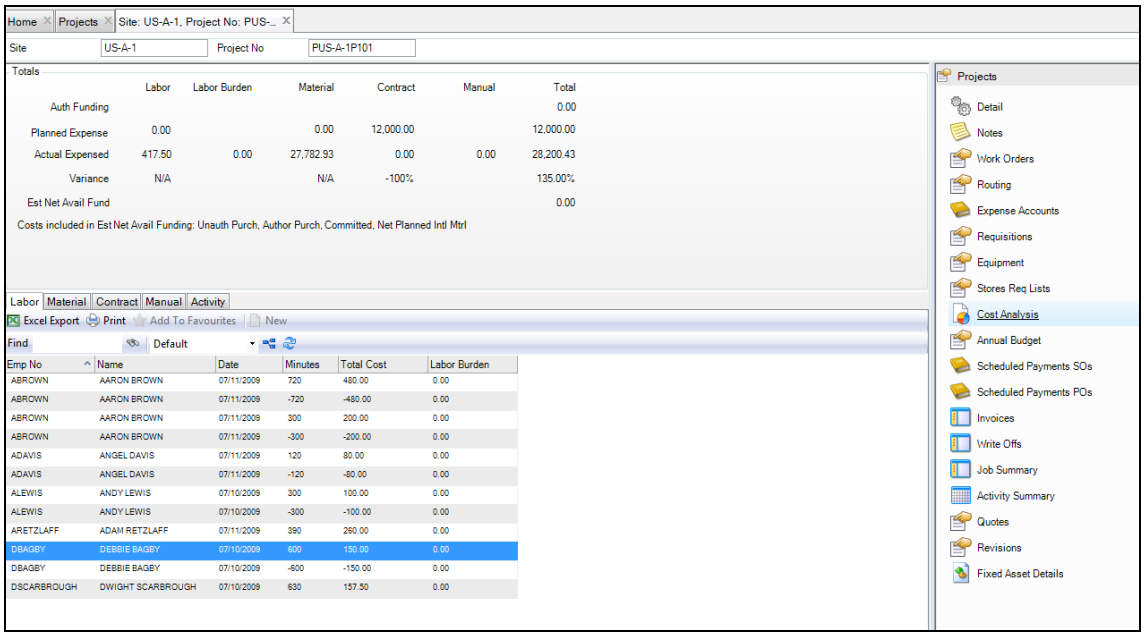



## Reviewing Cost Analysis for a Project

The Project Cost Analysis submenu allows you to view detailed cost analysis for an individual project. At a glance, you can see the accumulated cost for the project and any type of planned cost. You can review cost summaries and totals and by using tabbed pages you can find the details of those costs, such as labor postings, part issues, outside contractor charges, manual GL transactions, and expenses by job activities.

Cost Analysis is updated when you use the Refresh action for the project. Cost analysis amounts for both projects and jobs update to reflect current balances and amount details.

**Fig. 8.25**
Project Submenu: Cost Analysis



### Cost Analysis Totals

The following totals are displayed in the Cost Analysis submenu:

- **Auth Funding.** EAM only considers the amount in the Authorized Funding field when considering spending limits for a project. Authorized Funding is automatically populated based on the Requested Funding amount, depending on the Project Authorization site setting.

  If Project Authorization is required, this amount appears in the Authorized Funding once approved. If Project Authorization is disabled, the amount entered in the Requested Funding field automatically populates the Authorized Funding field.
- **Planned Expense.** Calculated as follows:

  *Planned Expense = Labor Planned + Material Planned + Contract Planned*

  *Labor Planned = Open work orders and craft.req_rate * wo_instr.std_hrs * wo_instr.craft_nbr*

  *Material Planned = Open non-Contract Purchases + Open Stores Reqs (wo_parts.tot_cost)*

  *Contract Planned = Open Contract Purchases*
- **Actual Expensed.** Sum of cost from respective detail tabs on Cost Analysis.
- **Variance.** Calculated as follows:

  *Variance % = (Actual Expense/Planned Expense) – 1*
- **Est Net Avail Fund.** The net amount of funding available for the project calculated by subtracting the costs indicated in the Costs Included in Estimated Net Available Funding field and Total Spent from the Auth Funding amount.

### Cost Analysis Tabs

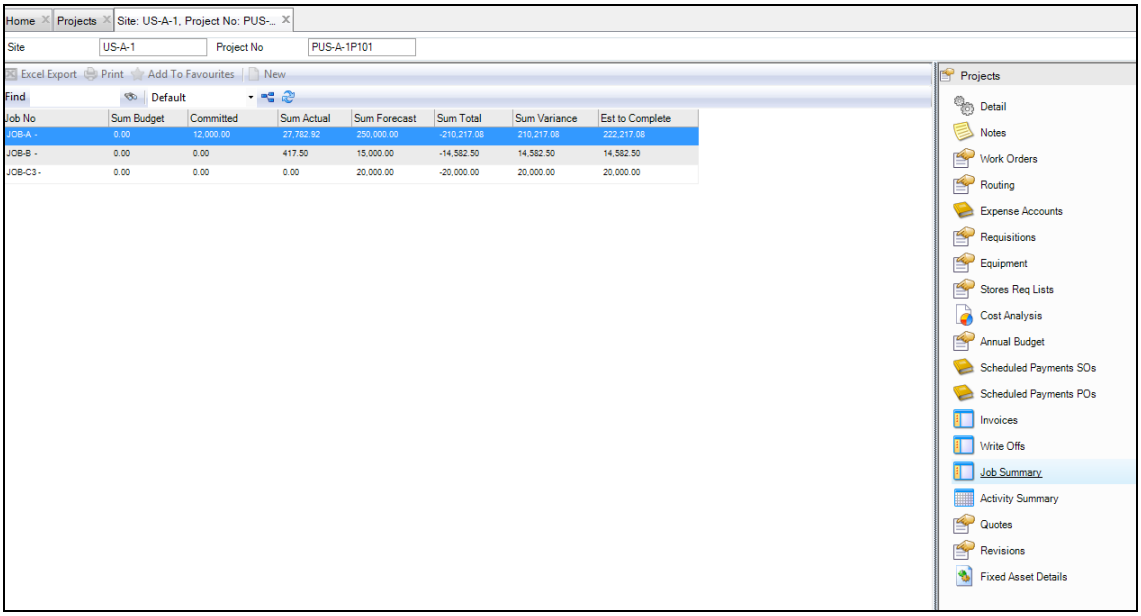
The Cost Analysis submenu contains the following tabs:

- **Labor**. Displays detailed labor cost records.
- **Material**. Displays detailed material cost records.
- **Contract**. Displays any contractor cost records.
- **Manual**. Displays manual GL records. If you have used the project ID in an Unposted GL Transaction, you must post the transaction to have it appear in the project cost analysis.
- **Activity**. Display detailed activity cost records.

## Reviewing the Job Summary for a Project

The Job Summary submenu displays a report listing the jobs and their cost analysis summary associated with this project.

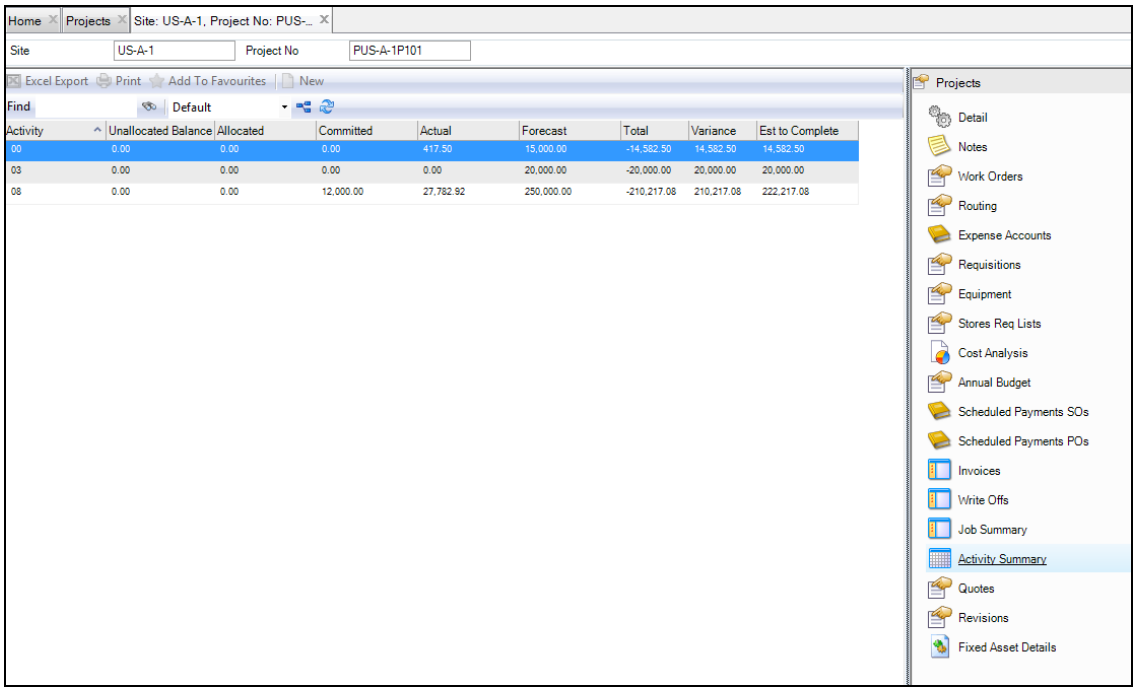
**Fig. 8.26**
Project Submenu: Job Summary




## Reviewing Activity Summary for a Project

The Activity Summary submenu displays a report listing the activities and their cost analysis summary associated with this project.

**Fig. 8.27**
Project Submenu: Activity Summary



## Reallocating a Budget To or From Another Project

Follow these steps to reallocate the budget to or from another project:

1. Open the Projects browse and highlight the project from which you want to reallocate the budget.
2. Select Reallocate from the Projects Action menu.
3. The Reallocate window opens. Enter the necessary information into the following fields:

   *Net Budget.* Displays the budget for the project from which you are reallocating funds.

   *Total Spent.* Displays the total amount spent for the project from which you are reallocating funds.

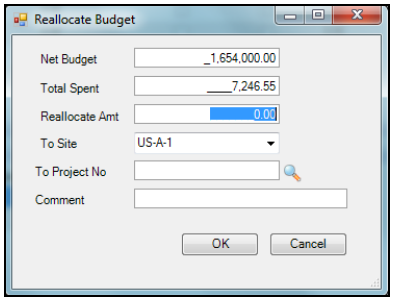
   *Reallocate Amount.* Enter the amount you want to reallocate to the project.

   *To Site.* Defaults to the user's site. If necessary, select a different site from the drop-down list.

   *To Project Number.* Use the lookup and select the project to which you want to reallocate funds.

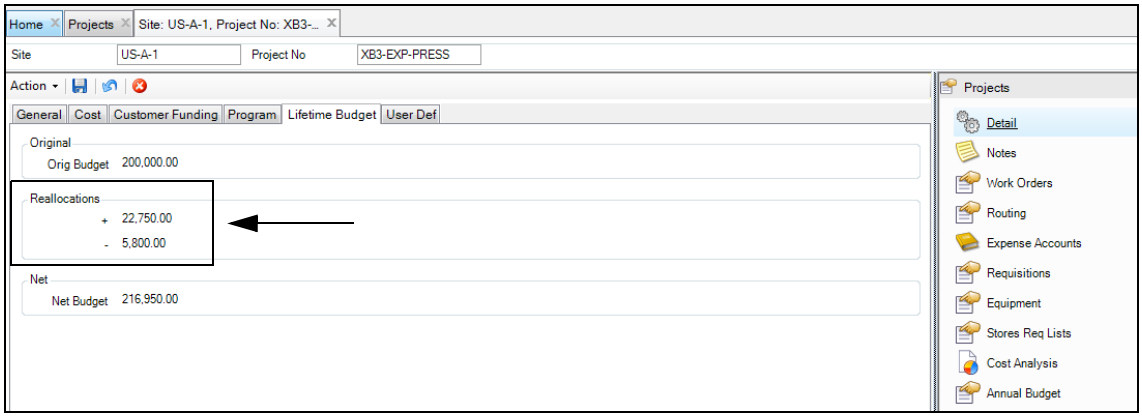
   *Comment.* Enter any necessary comments.

**Fig. 8.28**
Project Submenu: Activity Summary




4. Once you have entered the information, click OK.
5. The reallocation to and from totals are displayed on the Lifetime Budget tab.

**Fig. 8.29**
Project Reallocation Amounts



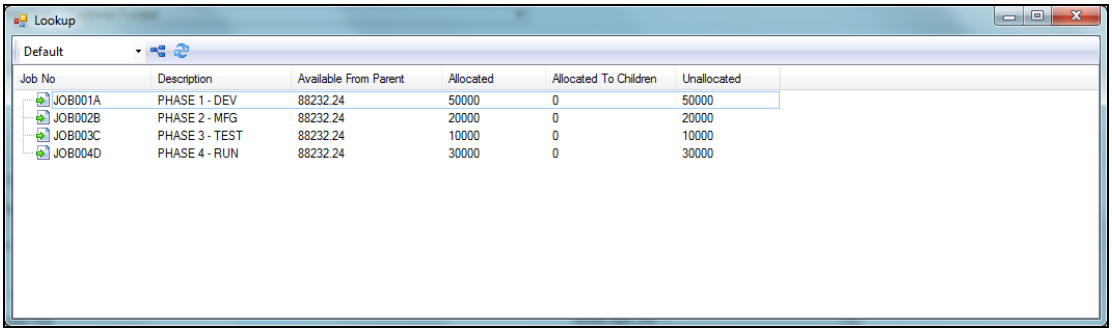
### Job Allocation View

The Job Allocation View action allows you to a view the jobs associated with a project and their funding. This view contains the following fields:

- **Job No and Description.** Displays the job number and description.
- **Available from Parent.** Displays the amount available to this job from a parent job.
- **Allocated.** Displays the amount allocated to this job. Allocated amount cannot exceed the Available from Parent amount.
- **Allocated to Children.** Displays the amount allocated to child jobs of this job. This amount cannot be more than this job's allocated amount.
- **Unallocated Balance.** Displays the amount available to the job that is not yet allocated. This amount is equal to Allocated – (Allocated to Children + Total spent at this Level).

***Note*** The Job Allocation View is only available when the Use Allocations? check box on the Project Cost tab is selected. See "Project: Cost Tab" on page 559.

**Fig. 8.30**
Job Allocation View




## Project Activities – Capital Projects

EAM allows you to perform the following activities for capital projects:

- Creating New Equipment from a Project
- Viewing the Equipment Associated with a Project
- Capitalizing a Fixed Asset from a Project
- Capitalizing Additional Costs to an Existing Asset
- Viewing Capitalized Asset Data for a Project

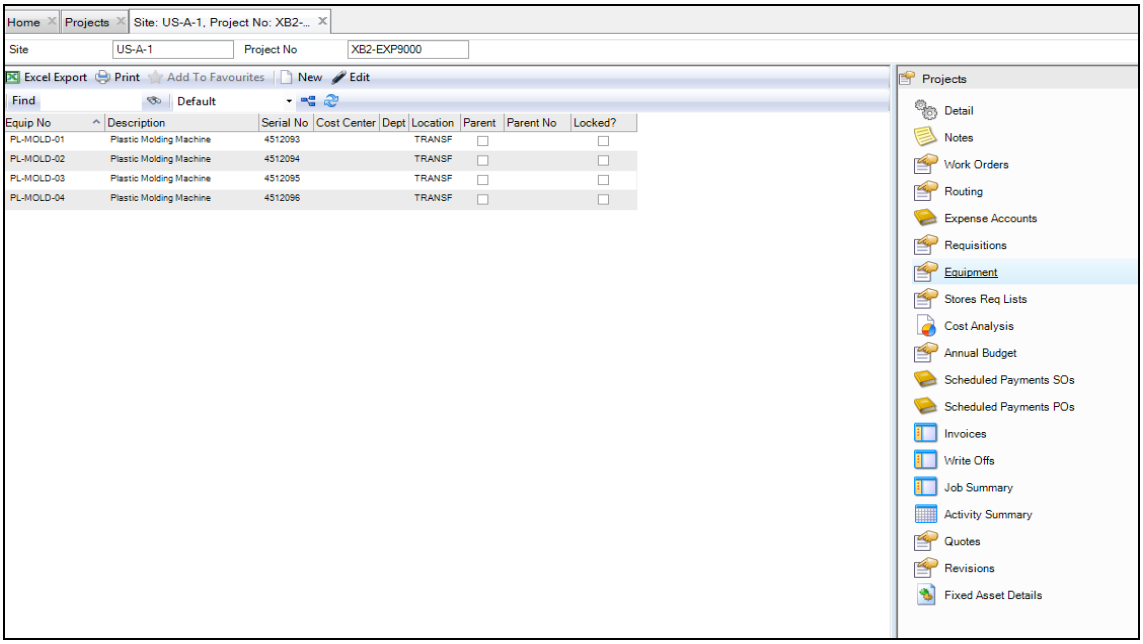
### Creating New Equipment from a Project

With EAM, you can create an equipment record and attach it to a project. To add a piece of equipment to a project, open the project. Select the Equipment submenu, and click New. A blank equipment record opens. Enter the necessary information in the equipment record. See "Creating an Equipment Record" on page 126.

## Viewing the Equipment Associated with a Project

To view the equipment associated with a project, open the project record and select the Equipment submenu.

**Fig. 8.31**
Project Submenu: Equipment




## Fixed Asset Integration

The Fixed Asset integration with Project Accounting gives you the ability to:

- Create an asset from a job
- Include trailing charges
- Enter a fixed asset ID, service dates, asset class, and location
- Easily see the capitalized and uncapitalized amounts associated with a project or job

For projects that have jobs that represent the asset that is being created, you can create an asset and provide the capitalizing function from the job itself.

To ensure data integrity, specific data from the job is automatically populated when you choose this action such as fixed assets class and location codes. Because the cost of the asset is driven to the right job by controlling where the cost can be charged, it ensures that the full value of the asset is contained in that job. If any trailing charges occur after the initial capitalization, you can add cost to the existing fixed asset and send it to the Fixed Asset module.

When you select Capitalize New Job Asset from the Job's Action menu, the Fixed Asset ID, Description, Class, and Location fields automatically populate with the correct data. Class and location are data-driven from the QAD ERP Fixed Assets module and are used to determine how the asset is depreciated. You can then enter the service date and new capitalized amount.

EAM tracks the capitalized amount, which is the total spent against this job. EAM also tracks the uncapitalized amount, which is the amount that has currently been charged to the job but not yet capitalized.

**Fig. 8.32**
Capitalize New Job Asset

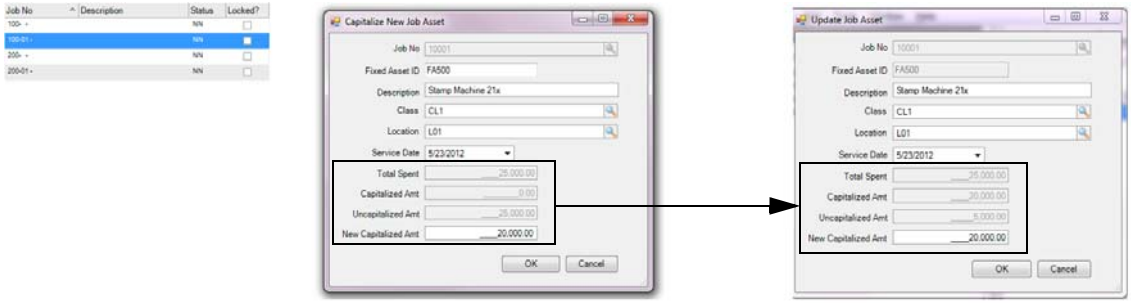



Figure 8.32 is an example where a user is ready to capitalize out $20,000 of the Total Spent value of $25,000. EAM automatically updates the Capitalized Amount of $20,000, leaving an Uncapitalized Amount balance of $5,000.

***Note*** Only one asset can be created from a single job. If a project produces multiple assets, then multiple jobs initiate them or tracking can be done at the overall project level. If tracking is done at the project level, jobs are not used and all costs are driven to the project only. Assets can be capitalized using the same action, but from the project level and not the job level.

## Capitalizing a Fixed Asset from a Project

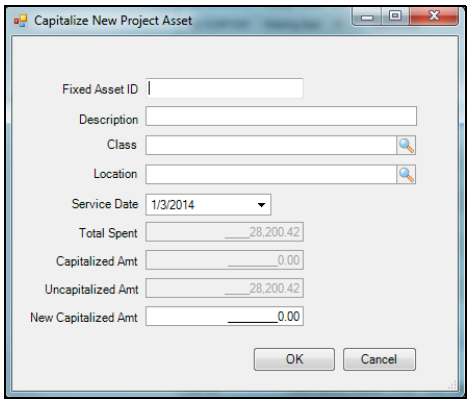
EAM allows you to create a fixed asset from a project. The cost captured in projects is used when capitalizing a new fixed asset from EAM to QAD ERP's Fixed Assets module.

Follow these steps to capitalize a fixed asset from a project:

1 Open the Projects browse and highlight the project record.

2 Select Capitalize New Asset from the Project Action menu. The Capitalize New Project Asset window opens.

**Fig. 8.33**
Capitalize New Project Asset




3 Enter the asset information in the following fields.

*Fixed Asset ID.* Enter the fixed asset identifier of this asset.

*Description.* Enter the text description of this asset.

*Class.* Enter or select the asset class of this asset.

*Location.* Enter or select the location of this asset.

*Service Date.* Enter or select the date this asset is placed into service.

*Total Spent.* Displays the total spent on this project.

*Capitalized Amount.* Because this is a new asset, this field displays the zero capitalized amount.

*Uncapitalized Amount.* Defaults and displays the uncapitalized amount on this project, which is equal to the total spent for a new asset.

*New Capitalized Amount.* Enter the capitalized amount of this asset. This value cannot be greater than the uncapitalized amount of the project.

4 Once you have entered all the information, click OK. The fixed asset has been capitalized for this project.

## Capitalizing Additional Costs to an Existing Asset

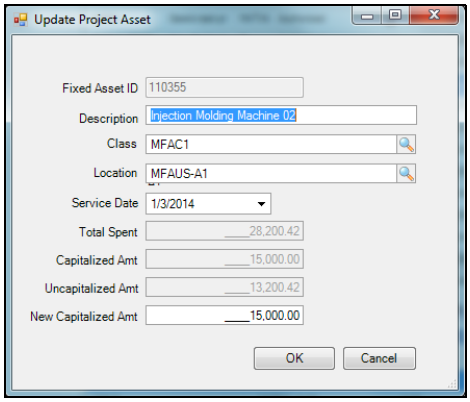
You can capitalize additional costs to an existing asset with EAM. Once a fixed asset is created and additional costs are incurred, the Modify Capital Asset action updates the capitalized amount in EAM Project|Job and sends it back to the asset in QAD's Fixed Assets module.

Follow these steps to capitalize additional costs to an existing asset:

1 Open the Projects browse and highlight the project record.

2 Select Modify Capital Asset from the Project Action menu. The Update Project Asset window opens.

**Fig. 8.34**
Modify Capital Asset




3 Enter the information regarding the asset in the following fields:

*Fixed Asset ID.* The fixed asset identifier of this asset.

*Description.* Enter the text description of this asset.

*Class.* The asset class of this asset.

*Location.* The location of this asset.

*Service Date.* The date this asset was placed into service.

*Total Spent.* The total spent on this project.

*Capitalized Amount.* The capitalized amount on this project.

*Uncapitalized Amount.* The uncapitalized amount on this project, which is the total spent minus the capitalized amount.

*New Capitalized Amount.* Enter the capitalized amount of this asset. This value cannot be greater than the uncapitalized amount of the project.

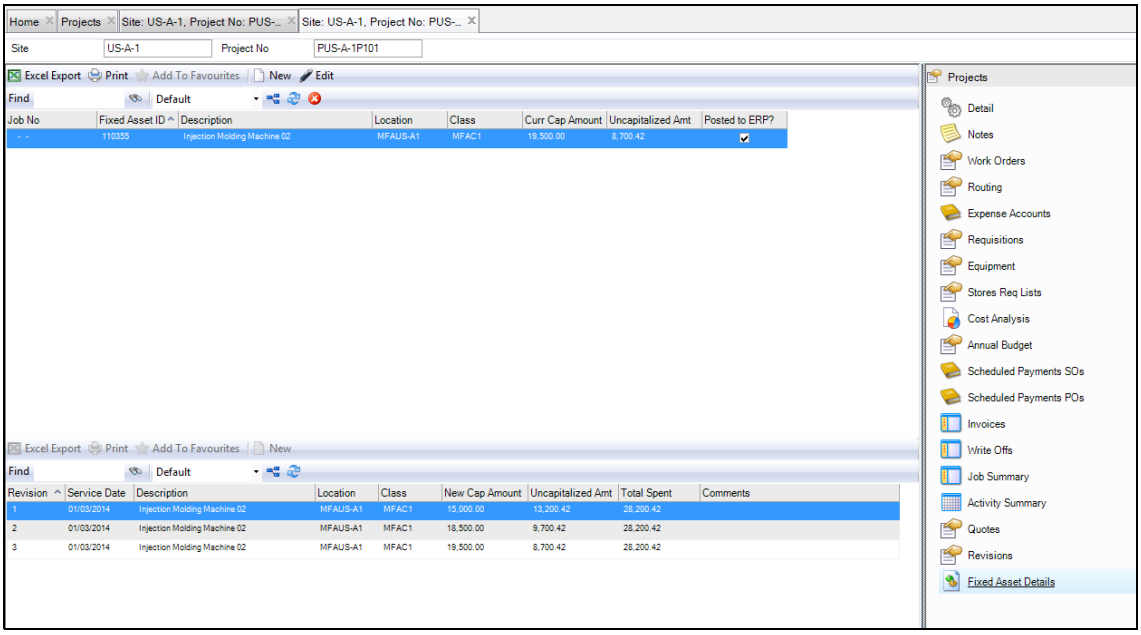
4 Click OK. The fixed asset costs have been updated.

## Viewing Capitalized Asset Data for a Project

The Fixed Asset Details submenu, which is only available for capital projects, allows you to pre-enter fixed asset data to be capitalized or view current capitalized asset data and capitalization changes associated with this project.

To view the capitalized asset data for a project, open the project and select the Fixed Asset Detail submenu. The upper browse displays information about the fixed asset. The lower browse displays the revision history for the fixed asset.

**Fig. 8.35**
Modify Capital Asset



## Project Activities–Customer-Funded Projects

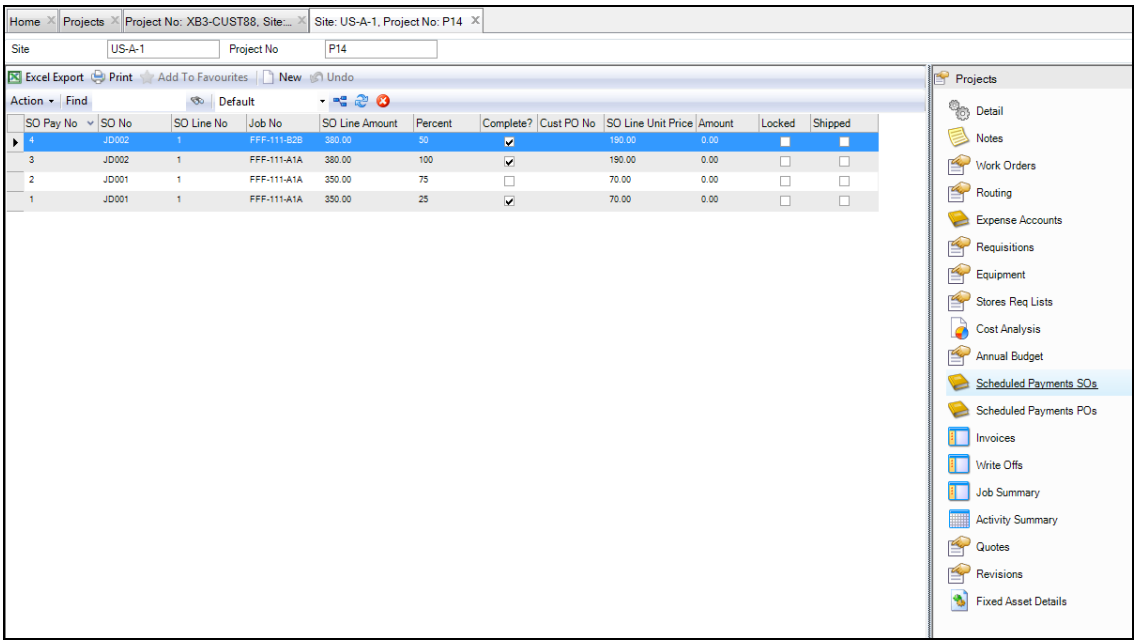
You can perform the following activities for customer-funded projects:

- Creating Scheduled Payments for Sales Orders on a Customer-Funded Project
- Managing the Scheduled Payments for POs on a Customer-Funded Project
- Reviewing Invoices and Reimbursements
- Entering Write-Offs for a Project
- Viewing Write-Offs for a Project
- Creating Scheduled Payments to Vendors for a Project
- Managing the Scheduled Payments for POs on a Customer-Funded Project
- Reviewing Customer Funding Tab

### Creating Scheduled Payments for Sales Orders on a Customer-Funded Project

The Scheduled Payments SOs submenu allows you to create, manage, and view scheduled payments for sales orders for a customer-funded project. You also use this submenu to initiate the invoicing process in the ERP. The ERP generates invoices for the sales orders and invoice payments.

**Fig. 8.36**
Project Submenu: Scheduled Payments SOs




Follow these steps to create a scheduled payment for sales orders on a customer-funded project:

1 Open the project, select the Scheduled Payment SOs, and click New.

2 Enter the payment details in the following fields:

*SO Pay Number.* A system-generated identifier associated with this scheduled payment.

*SO Number.* Use the lookup to select the sales order associated with this scheduled payment

***Note*** Sales orders must be created in the QAD ERP Sale Orders module for use with EAM projects. When the sales order is created in the ERP, the EAM project number must be specified in the SO header and in at least one of the sales order line accounts so that it can be imported and selected here in EAM.

*SO Line Number.* Use the lookup to select the sales order line number based on the sales order selected for the payment schedule line.

*Job Number.* Use the lookup to select the job number to associate with this scheduled payment.

*SO Line Amount.* Displays the amount associated from the selected sales order line.

*Item.* Displays the item associated from the selected sales order line.

*Percent.* Enter the percentage of the SO Line Amount to invoice. This amount is invoiced once the SO Ship action is selected. You can enter either percentages or amounts for the same SO line. You cannot enter an amount on an SO Pay line and a percentage for another SO Pay line for the same SO line.

*Amount.* Enter the amount of the SO Line Amount to invoice. This amount is invoiced once the SO Ship action is selected.

*Estimated PPAP Date.* Select the estimated PPAP (Production Part Approval Process) date or enter the date in the field.

*Actual PPAP Date.* Select the actual PPAP date or enter the date in the field.

*Due Date.* Select the due date or enter the date in the field.

*Estimated Invoice Date.* Select the estimated invoice date or enter the date in the field.

*Complete?* Select this check box to indicate that this pay line is ready to invoice.

*Customer PO Number.* Enter the customer purchase order number in this field.

*SO Line Unit Price.* Defaults from the sales order line into this field.

*Locked.* The system updates this check box once the SO Ship action is complete. If the check box is selected, the record cannot be modified.

*Shipped.* The system updates this check box once the SO Ship action is completed.

3 Once you have entered the necessary information, press Enter to save.

4 If necessary, repeat these steps to add additional pay lines.

### Managing the Scheduled Payments for Sales Orders on a Customer-Funded Project

When a portion of the project work is complete, follow these steps to initiate the sales order invoicing process in ERP:

1 Open the project and select the Scheduled Payment SOs submenu.

2 Select the Complete? check box on the corresponding SO Pay Line. Press Enter to save.

3 Highlight the SO Pay Line and select SO Ship from the Action menu.

4 A date/time dialog box displays, showing default data and time. Make any necessary changes and then click OK.

A message box indicates that the update is complete.

5 Click OK to close the message box.

6 The system updates the Locked and Shipped status.

A pending invoice is created in the QAD ERP that can be selected for Post and Print so it is then available for the AR processing of customer payments.

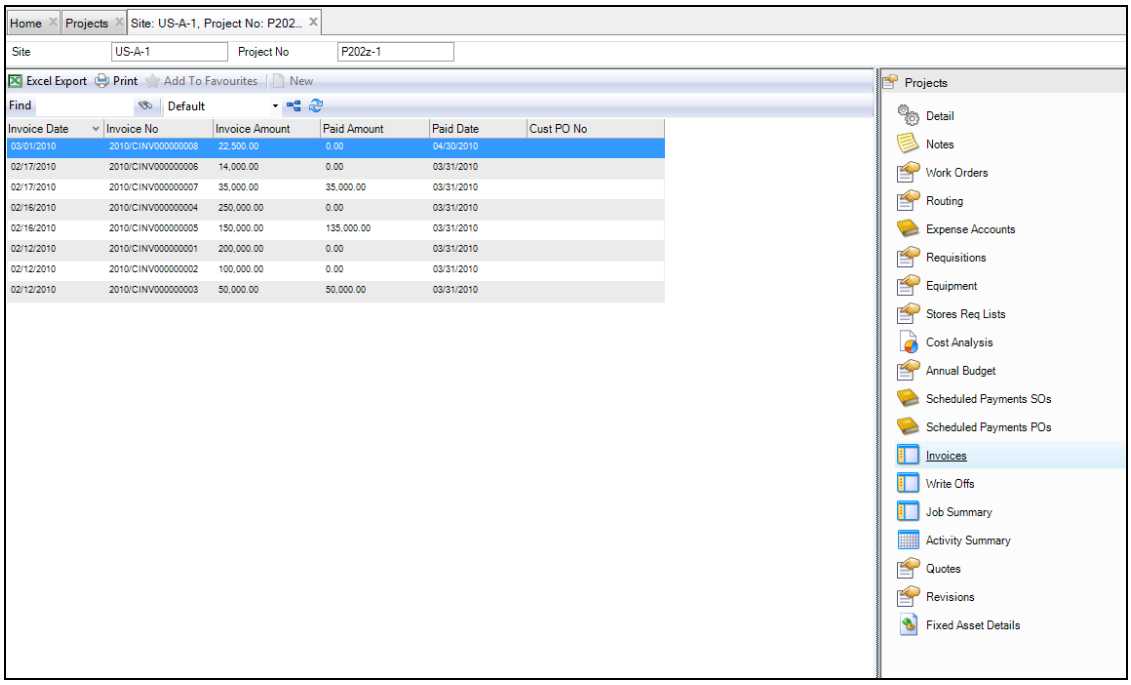
## Reviewing Invoices and Reimbursements

The Invoices submenu displays the invoices created for customer-funded reimbursement for the project. These invoices are created in the ERP from sales order information on SO Scheduled Payments. Invoice No., Invoice Date, and Invoice Amount are updated in the Invoice submenu once the invoice is post and printed in ERP. Click the refresh button to see the most recent updates.

You can sort the list of invoices by selecting the Invoice Date, Invoice Number, Paid Date, or Customer PO Number column header and clicking the up or down arrow to sort by that value in ascending or descending order.

To review the invoices and reimbursement details for a customer-funded project, open the project and select the Invoices submenu.

**Fig. 8.37**
Project Submenu: Invoices




*Invoice Date.* The date of the invoice.

*Invoice Number.* The number of the invoice.

*Invoice Amount.* The total amount of the invoice.

*Paid Amount.* The amount paid for the invoice. This value is updated when a payment is allocated to the invoice in QAD Financials.

*Paid Date.* The date the payment was made.

*Cust PO No.* The customer purchase order number associated with this invoice.

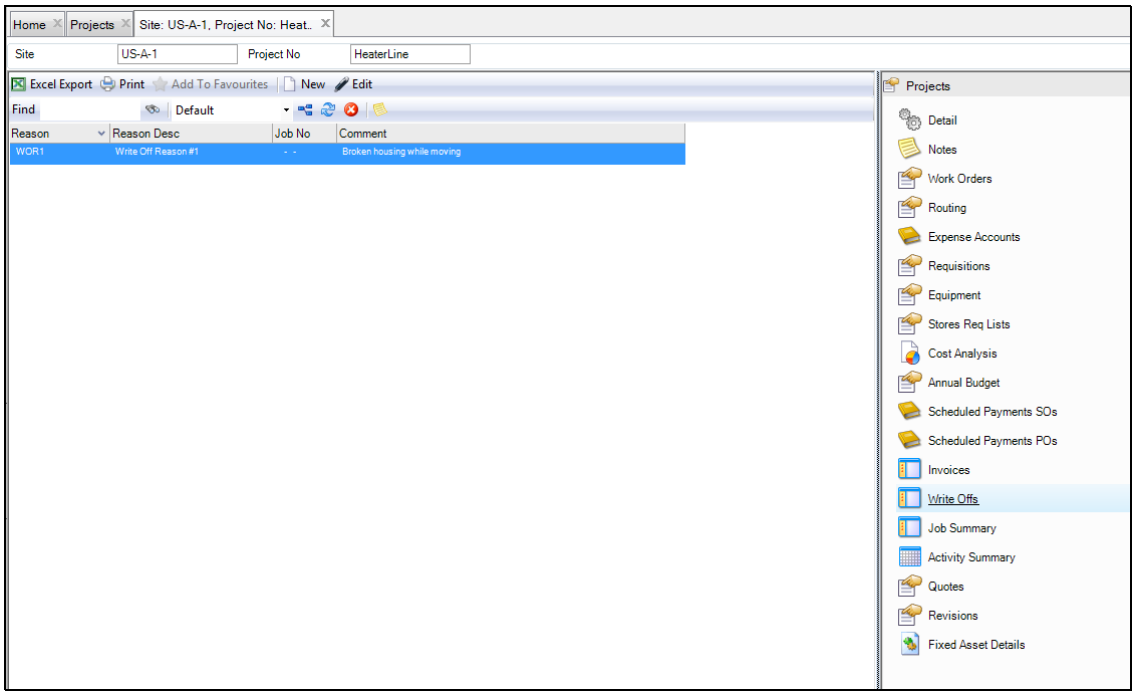
*Job.* The job number to associate with the scheduled payment invoiced.

*Job Description.* The job description.

## Entering Write-Offs for a Project

Write-offs are the amount of money the company pays out on a customer-funded project without reimbursement from the customer. Write-off amounts are manual data entries. Each write-off can have an associated reason code and job number. The total of write-off amounts is automatically updated on the Project's Customer Funding tab, in the Write-off Amt field. See "Project: Customer Funding Tab" on page 562.

**Fig. 8.38**
Project Submenu: Write Offs




Follow these steps to enter write-offs for a project:

1 Open the project and select the Write Offs submenu.

2 Enter the write-off details in the following fields:

*Reason.* Use the lookup to select a reason for the write-off. Reason codes are set up in Finance|Codes|Write Off Reasons.

*Job Number.* Use the lookup to select the job to which the write-off is charged.

*Amount.* Enter the amount of the write-off.

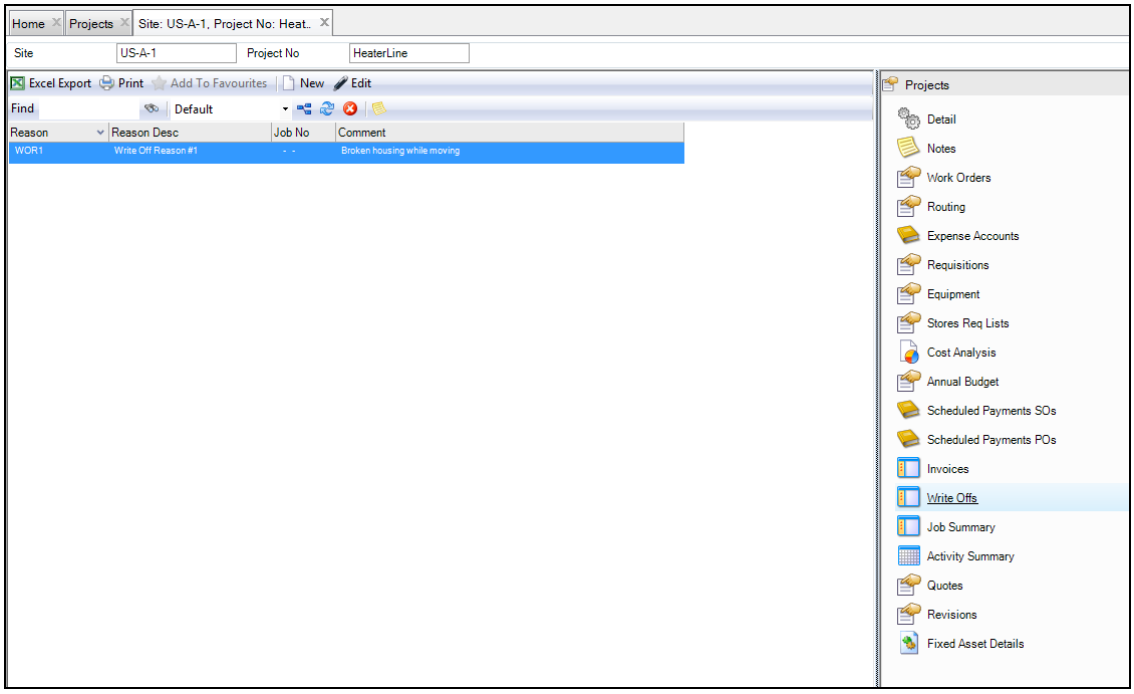
*Comment.* Enter an optional comment.

3 Press Enter to save.

## Viewing Write-Offs for a Project

To view the write-offs for a project, open the project and select the Write Offs submenu.

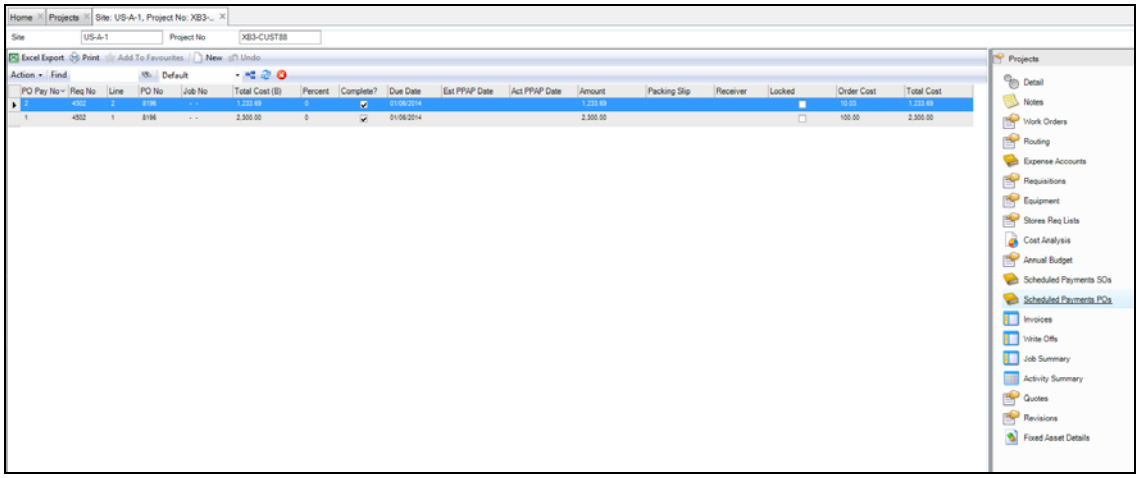
**Fig. 8.39**
Project Submenu: Write Offs Submenu




## Creating Scheduled Payments to Vendors for a Project

The Scheduled Payments POs submenu allows you to create, edit, and view scheduled payments for POs associated with a customer-funded project.

**Fig. 8.40**
Project Submenu: Scheduled Payments PO




Follow these steps to create a scheduled payment for a PO associated with a customer-funded project:

1 Open the project and select the Scheduled Payments POs submenu.

2 Enter the payment details in the following fields:

*PO Pay Number.* A system-generated identifier associated with this payment.

*Req Number.* Select the requisition number associated with this payment.

*Line.* Select the requisition line associated with the requisition on this PO Pay Line.

*PO Number.* Displays the purchase order number associated with this requisition selected for the PO Pay Line.

*Job Number.* Displays the job number associated with this payment.

*Total Cost.* Displays the total cost in requisition/PO currency for the requisition line associated with this PO Pay Line.

*Total Cost (B).* Displays the total cost in base currency for the requisition line associated with this PO Pay Line.

*Percent.* Enter the percentage of the requisition line's total cost to be paid for the supplier invoice.

*Amount.* Enter the amount of the requisition line's total cost to be paid for the supplier invoice.

*Packing Slip.* Enter a Packing Slip. This field can be optional for use with PO Receiving or it can be required if Mandatory has been specified for the Project's Site.

*Complete?* Select this check box to indicate that this PO Pay Line is ready for payment.

*Locked.* Once the Receipt action is complete, the system updates this check box. If this check box is selected, the record cannot be modified.

*Receiver.* After the Complete Payment action is executed, the system automatically updates this field with the Receiver No.

*Due Date.* Select the due date or enter the date in the field.

*Estimated PPAP Date.* Select the estimated PPAP date or enter the date in the field.

*Actual PPAP Date.* Select the actual PPAP date or enter the date in the field.

3 Once you have entered the necessary information, press Enter to save.

4 If necessary, repeat these steps to add additional pay lines.

## Managing the Scheduled Payments for POs on a Customer-Funded Project

Follow these steps to initiate the PO payment process in ERP:

1 Open the project and select the Scheduled Payments POs submenu.

2 Select the Complete? check box on the corresponding PO Pay Line. Press Enter to save.

3 Highlight the PO Pay Line.

4 Select Complete Payment from the Action menu. This action executes a PO Receipt based on the information from the PO Pay Line selected.

The system updates the Locked status on the PO Pay Line.

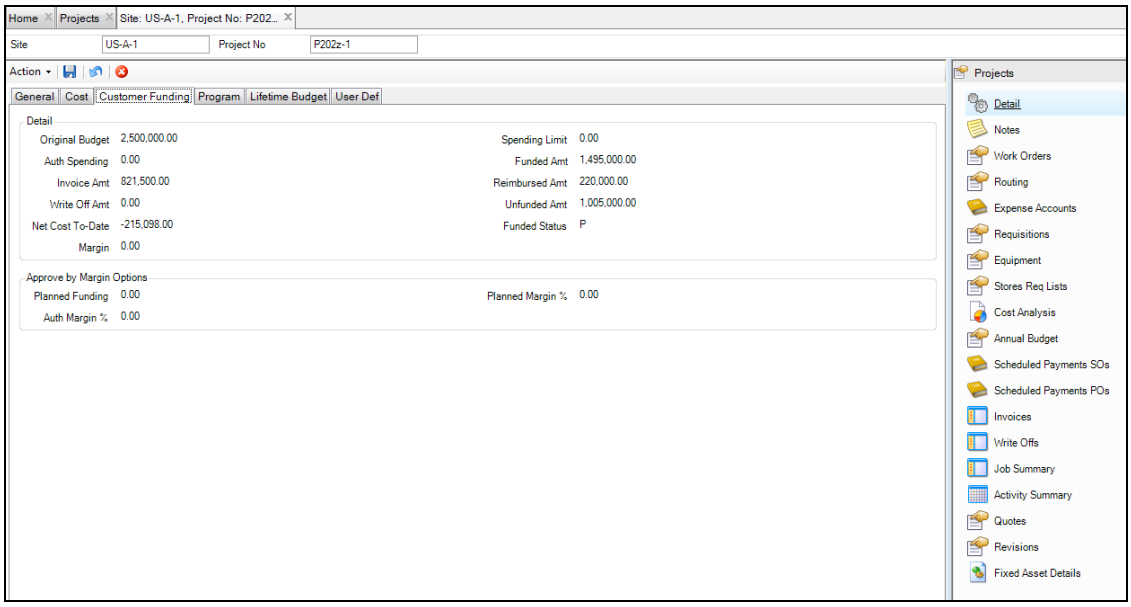
5 A Receipt is created in EAM and the Receiver No is updated on the Schedule PO Pay Line.

The EAM Receipt is sent to ERP Purchasing so that it can be used in AP processing for supplier invoice matching and payment.

## Reviewing Customer Funding Tab

The Customer Funding tab provides a summary of values for the customer-funded activities as the project progresses.

**Fig. 8.41**
Customer Funding Tab



## Editing a Project

You can perform the following actions on a project:

- Refreshing a Single Project or Multiple Projects
- Changing the Status of a Project
- Reopening a Project
- Locking/Unlocking a Project
- Viewing Annual Budget Details of a Project
- Viewing the Revision History of a Project

### Refreshing a Single Project or Multiple Projects

You can update all the changes made to a project and a project's jobs with the Refresh action. You can refresh a single project or multiple projects at the same time.

To refresh a single project, highlight the project and select Refresh from the Projects Action menu.

To refresh multiple projects, highlight the projects and select Global Refresh from the Projects Action menu. The Global Refresh action is only active when multiple projects are selected.

### Changing the Status of a Project

Project status codes are established in Finance|Codes|Projects|Project Status. To change the project status, highlight the project and select Change Status from the Projects Action menu.

***Note*** You cannot cancel a project with posted expenses.

### Reopening a Project

Projects that have been closed or canceled can be reopened to make additional changes or charges. To reopen a project, highlight the project and select Reopen from the Projects Action menu.

***Note*** The reopen option is only available if the Reopen Projects? check box is selected in General|Business Units|Domain on the Maint tab. Users with the required settings in Roles can reopen projects once they have been closed.

### Locking/Unlocking a Project

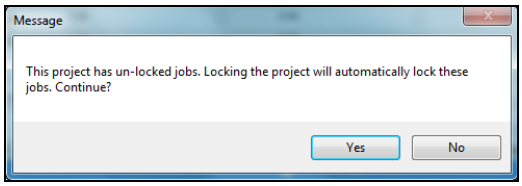
For added security, EAM allows you to lock a project to prevent additional charges against that project. To resume charges against a project, you can unlock the project. If the project has a designated owner or owner group, only the owner or a member of the owner group can lock or unlock the project. If the project does not have an owner, any user can lock/unlock the project.

## Locking a Project

Follow these steps to lock a project:

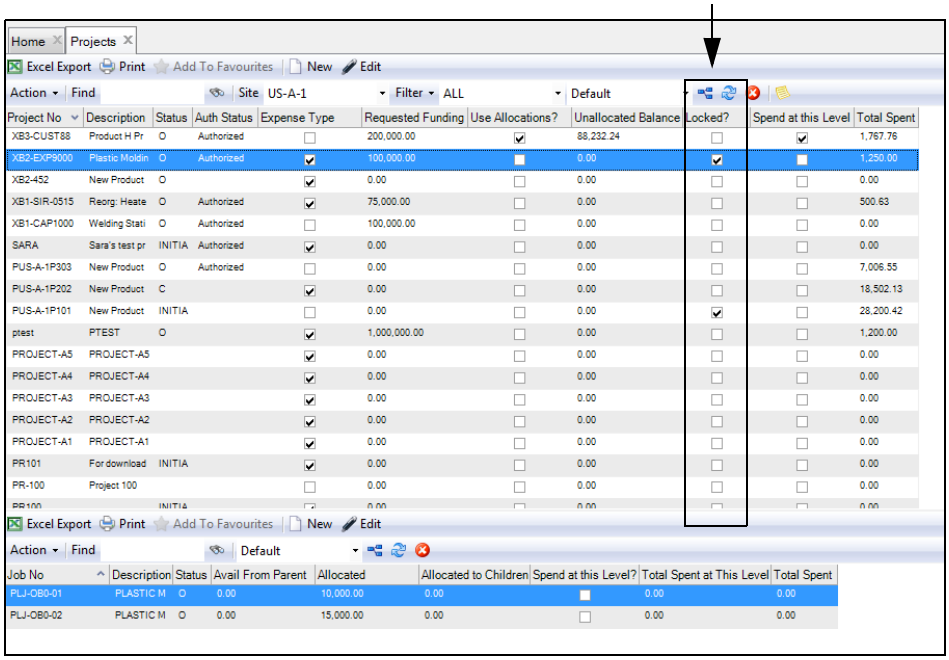
1. Open the Projects browse, highlight the project, and select Lock/Unlock from the Projects Action menu.
2. If any of the project jobs are unlocked, a window appears indicating that locking the project causes any unlocked jobs to be locked as well. Click Yes to continue.

**Fig. 8.42**
Locking a Project




3. The project is locked. When a project is locked, the check box in the Locked? field is selected.

**Fig. 8.43**
Locking a Project




## Unlocking a Project

Follow these steps to unlock a project:

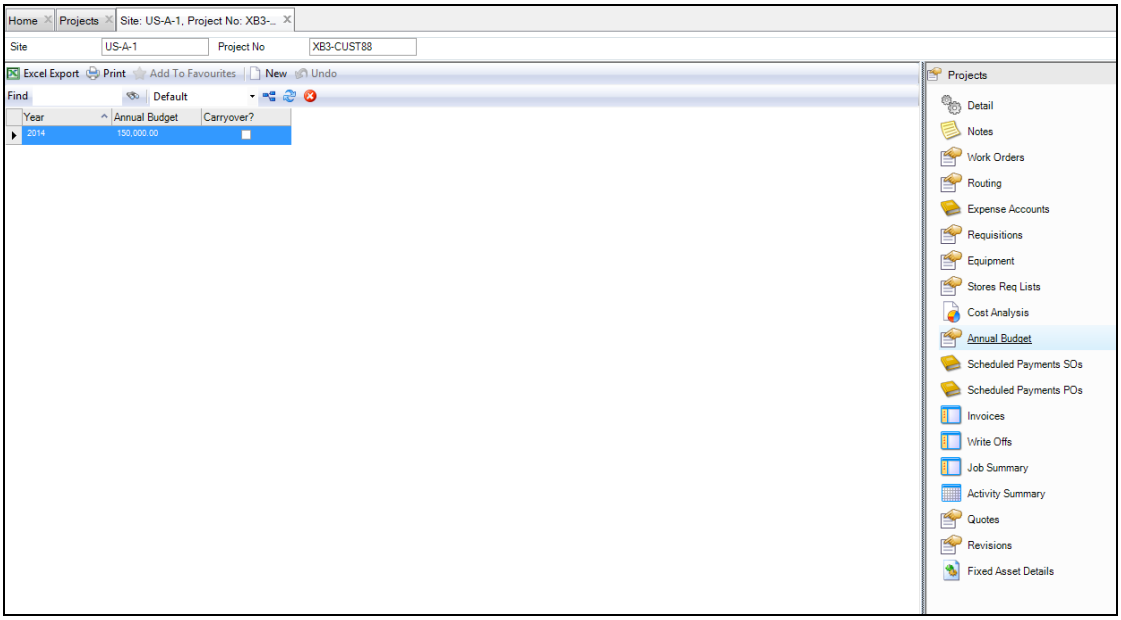
1. Highlight the project and select Lock/Unlock from the Projects Action menu.
2. If the project has jobs, a window opens asking if you want to unlock the jobs. The project is unlocked whether you click Yes or No.
   - **Yes.** Click Yes to unlock the jobs and the project.

- **No.** Click No to keep the project jobs locked and unlock the project.

## Viewing Annual Budget Details of a Project

To view the annual budget details of a project, open the project and select the Annual Budget submenu.

**Fig. 8.44**
Project Submenu: Annual Budget



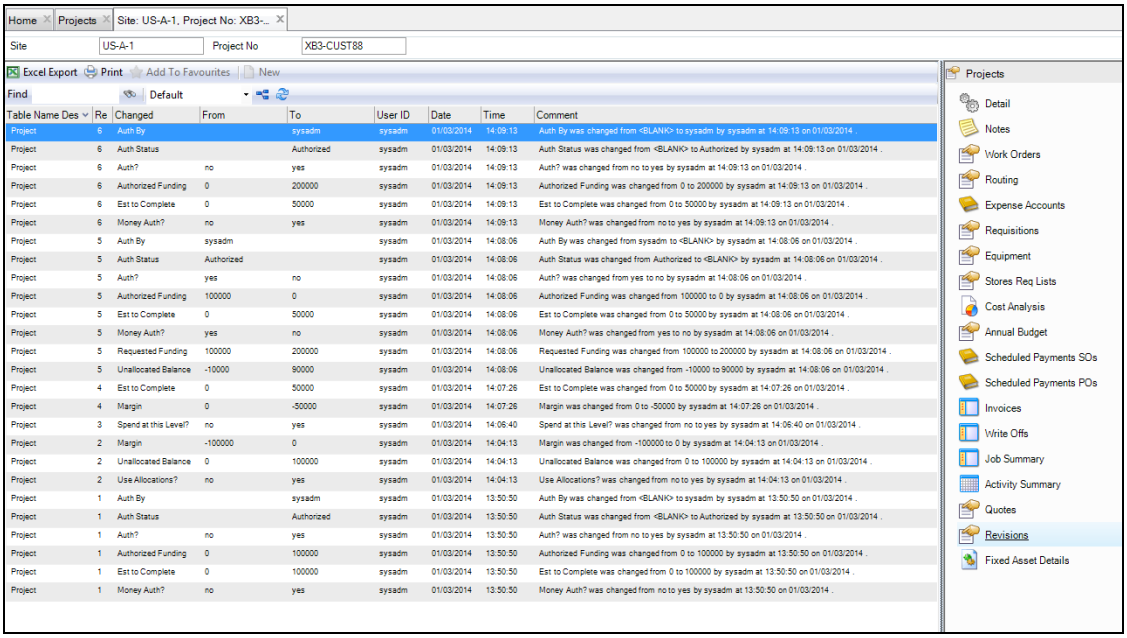

## Viewing the Revision History of a Project

Because many quality systems call for strict record keeping about the revisions made to projects, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the project.

***Note*** Revision control is activated in the Purchasing|General|Business Units|Sites menu. See “Enable Revision Control” on page 61.

To view a project’s revision history, open the project and select the Revisions submenu.

**Fig. 8.45**
Project Submenu: Revisions



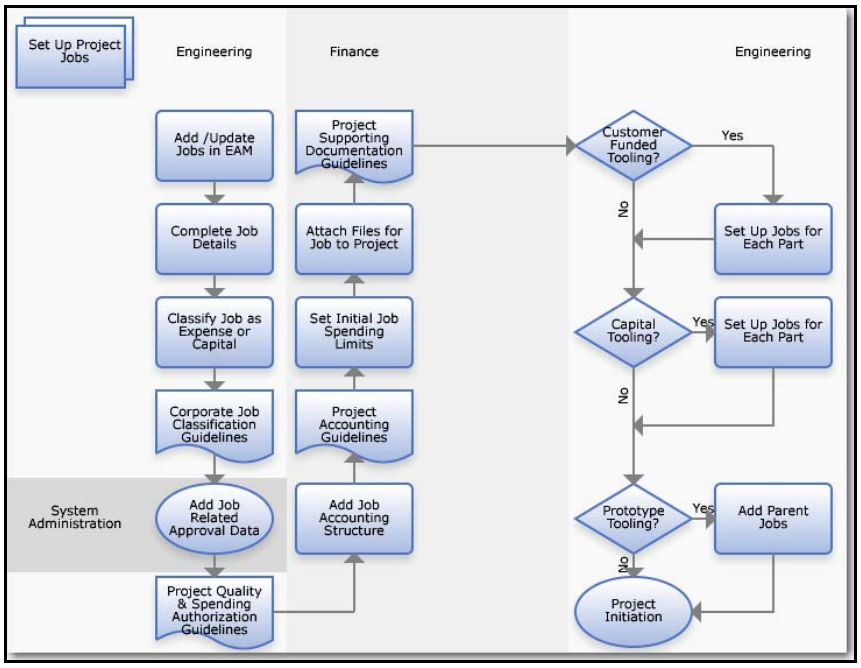

# Jobs

Use Jobs to break down projects into subcategories. An individual job may be a different phase of a project, each with its own estimated amount, planned amounts, and actual costs.

Larger projects need to be broken down into many components, called jobs. Sometimes these jobs have smaller jobs, which collectively make up the higher-level job. That provides the flexibility to define the format based on your organization’s requirements. A primary reason for using the job format is to enable cost roll-up of jobs in reporting. You can add up to eight levels of formatting to the job number.

## Setting Up a Job Process Flow

**Fig. 8.46**
Set Up Job Process Flow




1 Add or edit a job record, if needed.

2 Complete job details.

3 Classify the job expense type (expense or capital).

4 Verify compliance with corporate job classification guidelines.

5 Add job-related approval data.

6 Review and follow quality and spending authorization guidelines.

7 Add the job accounting structure.

8 Review and follow project accounting guidelines.

9 Set the initial job spending limits.

10 Review and follow supporting documentation guidelines for projects and jobs.

11 Set up customer-funded tooling jobs. Set up jobs for each part.

12 Set up capital tooling jobs. Set up jobs for each part.

13 Set up prototype tooling jobs. Set up parent jobs.

14 Initiate the project and the jobs.

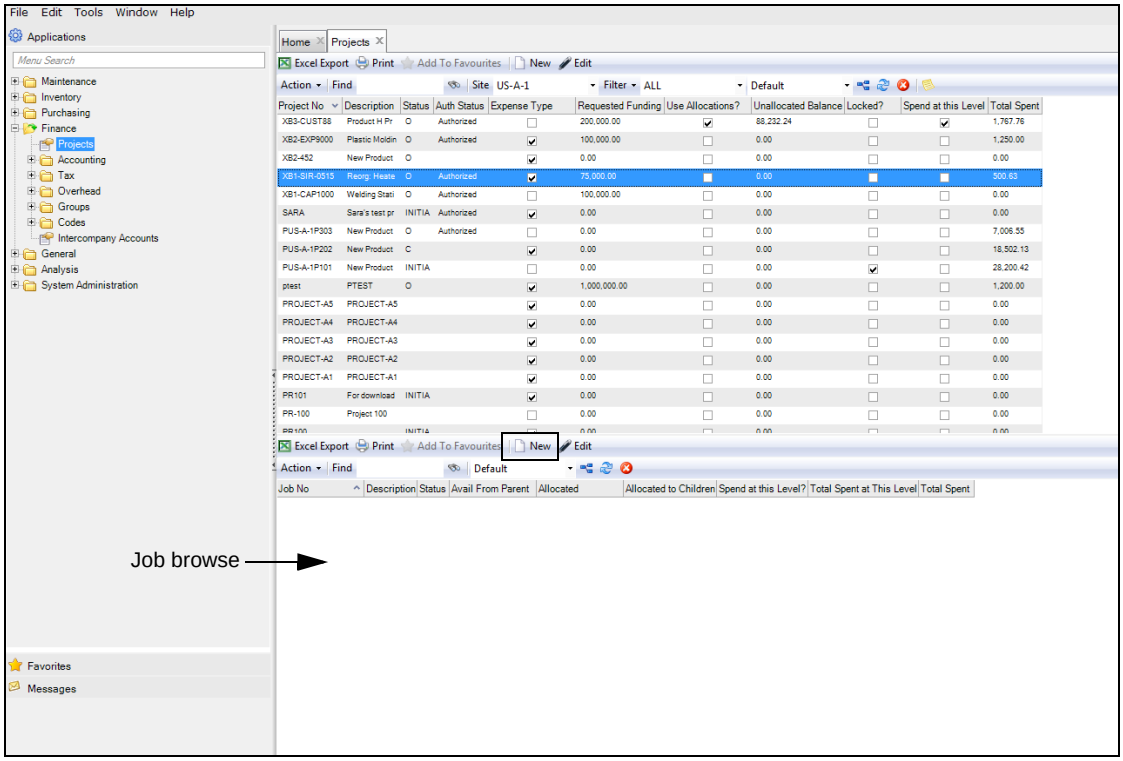
## Creating a Job

Follow these steps to create a job for a project:

1 Open the Projects browse and highlight the project to which you want to add the job.

2 In the lower browse, click New.

**Fig. 8.47**
Job Browse




3 Enter the job number in the Job No field.

**Fig. 8.48**
Job Record




4 Enter the job details in the Detail, Cost, and User Def tabs. See “Filling Out the Job Record” on page 601.

5 Click Save

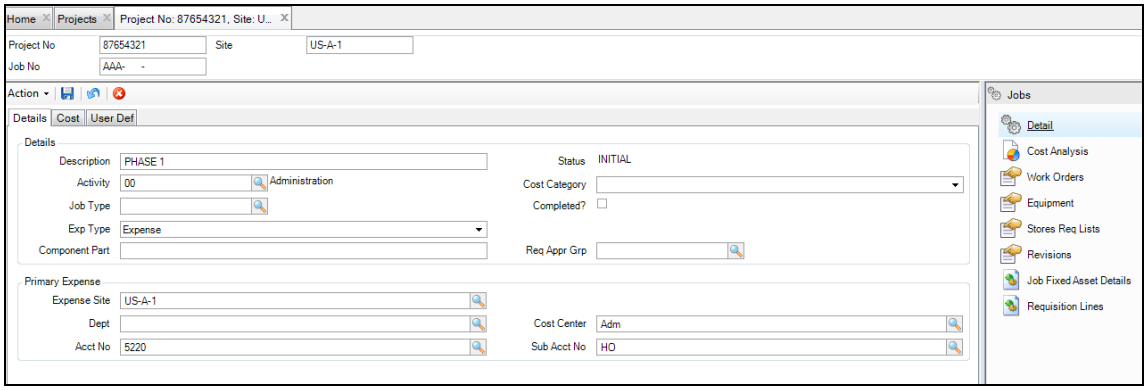
## Filling Out the Job Record

Enter the job details in the Detail, Cost, and User Defined tabs.

### Job: Details Tab

In the Details tab, enter job details and expense accounting information for the job.

**Fig. 8.49**
Job: Details Tab




#### Job Header

*Job No.* Enter the job number.

#### Details

*Description.* Enter a description of the job, to clarify project phases.

*Status.* The current user-defined project status of the job. If the job status is closed or canceled, you cannot expense anything against the job.

*Activity.* Select the activity code for this job. Activity codes are set up to make it easier for the creator of jobs. Since an expense accounting structure can be linked to a pre-established activity code, you do not need to be familiar with accounting information. You simply select the activity and the system pulls in the appropriate expense accounting structure. See Finance|Codes|Activities for Setup definition.

*Cost Category.* Select the cost category from the drop-down: All, Material, Labor, or Contract.

*Job Type.* Use the lookup to select the job type to classify the job. Set up these user-defined job codes in Finance|Codes|Job|Job type.

*Completed?* Select this check box when the project is complete.

*Exp Type.* Use the drop-down list and indicate if this is an expense or a capital job.

*Component Part.* Enter the component part, which is the part number that the tool is building. It is a manually entered field.

*Req Appr Group.* Enter the requisition approval group at a job level. EAM overrides the requisition approval group for the project and uses the one entered at the job level.

### Primary Expense

*Expense Site.* The site with the costing structure that is charged to expense against this job. Use the expense site for this job's project.

*Dept.* Enter the department associated with the job.

*Cost Center.* Enter the default job cost center. The default cost center copies to various transactions, such as purchasing requisitions, labor postings, and parts issued for this job.

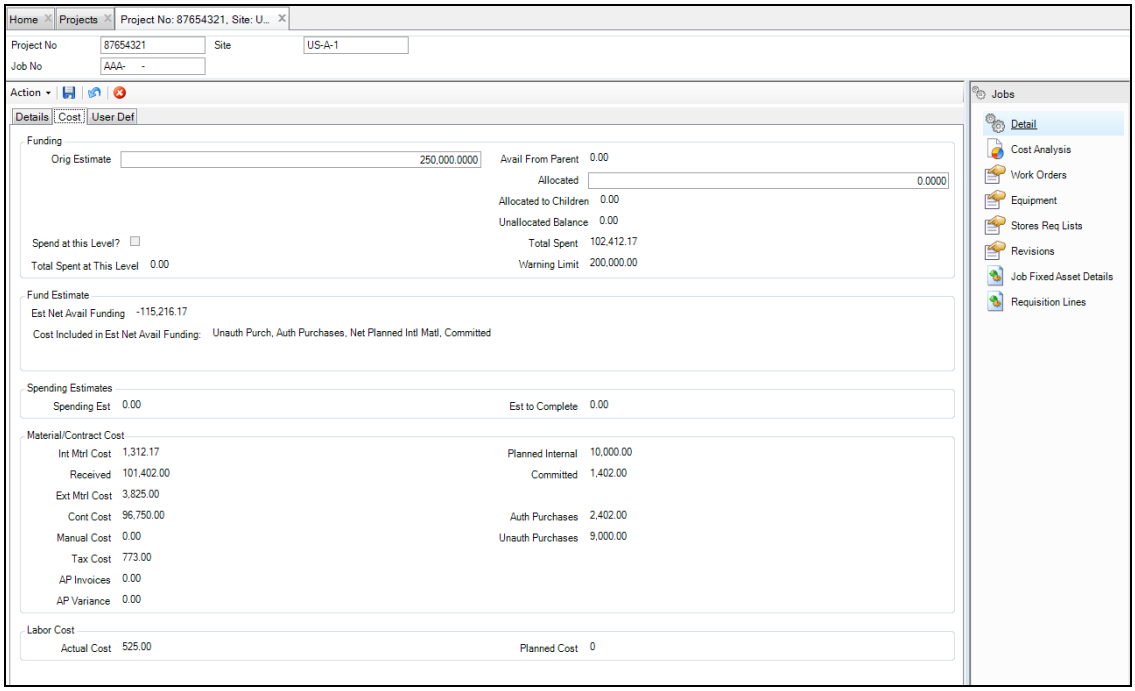
*Acct No.* Enter the expense account for this job. Specifying this account number assigns it all charges for this job. If this field is blank, expenses use project accounts.

*Sub Acct No.* The sub-account to expense for this job. By selecting a sub-account for this project, you restrict expenses to the job to use only this sub-account.

## Job: Cost Tab

In the Cost tab, enter job funding information and funding estimates. This tab also displays the costs incurred for the job.

**Fig. 8.50**
Job: Cost Tab




### Funding

*Orig Estimate.* Enter an original estimate of the total job cost.

*Available from Parent.* Amount available to this job from a parent job.

*Allocated.* Enter amount allocated to this job. Allocated amount cannot exceed the Available from Parent amount.

*Allocated to Children.* The system calculates the amount allocated to child jobs of this job. This amount is not more than this job's Allocated amount.

*Total Spent.* Total spent to date on this job including rolled-up costs from children.

*Unallocated Balance.* Amount available to the job that is not yet allocated. This amount is equal to Allocated – (Allocated to Children + Total spent at this Level).

*Spend at this Level?* Select to allow spending at this job level when Use Allocations is selected for the project. This option provides you with tighter control over which job can be charged against. There may be a parent job, but only a specific lower-level job or child can have cost charged.

*Total Spent at this Level.* The total for parts issued, services, and labor transactions associated with this job. This amount does not include rolled-up costs from children.

*Warning Limit.* An amount the project manager sets as a budgetary warning point. The system issues an e-mail warning to the user or group from the project's General tab to notify when expenses reach this amount.

### Funding Estimate

Estimated Net Available Funding displays an estimated amount of remaining funding after considering a broader range of expected expenditures in addition to actual costs already incurred.

This amount could include the following:

- **Committed.** Ordered purchase orders that represent committed expenditures to suppliers.
- **Authorized Purchases.** Purchase orders that are authorized but not yet placed on order.
- **Unauthorized Purchases.** Purchase orders that are planned but not yet authorized.
- **Planned Internal.** Material from stores lists that has not yet been issued or expensed to the project.
- **Planned Labor.** Estimated labor expense on WO.

The cost categories are selected in General|BusinessUnits|Site|Maintenance tab for Estimated Net Available Funding Options. The categories can include any or all of the following: Auth Purch, Unauth Purch, Committed, Planned Labor, and Planned Internal Material.

*Estimated Net Available Funding.* The net amount of funding available for the job calculated by subtracting the costs indicated in the Costs Included in Estimated Net Available Funding field and Total Spent from the Auth Funding amount.

*Costs Included in Estimated Net Available Funding.* The cost categories used to calculate Estimated Net Available Funding.

### Spending Estimates

*Spend Est.* Enter the estimated amount to spend on the job.

*Est to Complete.* A system-calculated value of spending estimate minus total spent. It is updated when the spending estimate changes or when you refresh the project.

***Note*** The system recalculates the value of this field when the following job functions or actions occur:

- Changing the spending estimate of a job
- Canceling a job
- Deleting a job
- Reopening a job

If revision control is active, recalculating field values also creates revisions.

**Materials/Contract Costs**

*Planned Purchase.* The total cost of all planned, unauthorized purchase requisitions for the job.

*Authorized Purchase.* The total cost of all planned, authorized requisitions that reference the job.

*Committed.* The total value of ordered purchase orders minus any receipts against the purchase order for the job.

*Received.* The system-calculated total sum of all received purchases associated with the job.

*Internal Material Cost.* The sum of all direct issues from inventory (not through a requisition) for the job.

*External Material Cost.* The job parts total, minus tax, for auto-issue receipt transactions only.

*Contractor Cost.* The job's outside contractor services total, minus tax. This value represents receipt transactions for all auto-issue requisitions marked as Contractor.

*Tax Cost.* Tax associated with any costs from external material and contractor services.

*Manual Cost.* The sum of all manual GL transactions for the job.

*Planned Internal.* The total planned cost of material issues from inventory.

*AP Invoices.* The supplier invoices total for the project's POs.

*AP Variance.* The difference between supplier invoice cost and PO cost.

**Labor Cost**

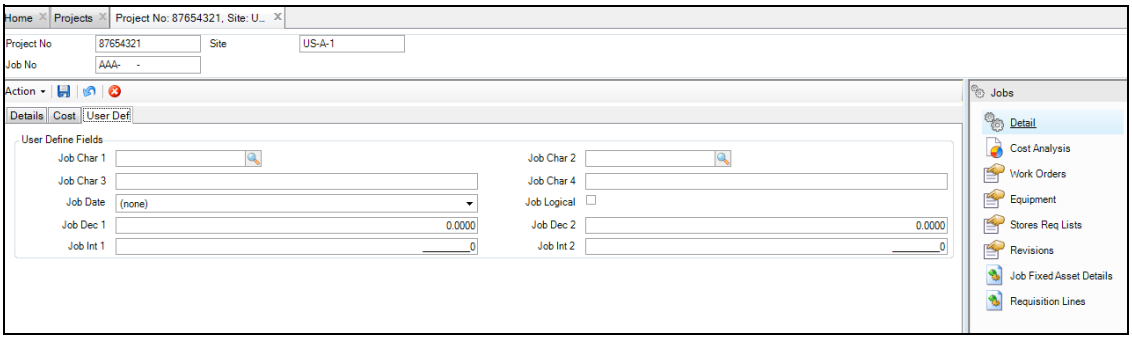
*Actual Cost.* The labor transactions total charged to the job.

*Planned Cost.* The planned labor for work orders for the job.

### Job: User-Defined Tab

In the User-Defined tab, enter data into user-defined fields.

**Fig. 8.51**
Job: User-Defined Fields Tab




*Job Char 1 - Job Char 2.* User-defined character fields, validated against tables that you add.

*Job Char 3- Job Char 4.* Free-form user-defined character fields, not validated against tables.

*Job Date.* Enter a date type field here.

*Job Logical.* User-defined check box.

*Job Dec 1 - Job Dec 2.* User-defined decimal fields for requisition lines.

*Job Int 1 - Job Int 2.* User-defined integer fields for requisition lines.

## Job Activities–All Job Types

You can perform the following activities for all job types:

- Creating a Work Order from a Job
- Creating a Work Order and Reference a Job
- Attaching Existing Equipment to a Job
- Adding New Equipment to a Job
- Creating a Stores Requisition List for a Job
- Reviewing Requisition Lines Associated with a Job
- Reviewing Cost Analysis for a Job

### Creating a Work Order from a Job

With EAM, you can create a work order from a job. When you create a WO from a job, EAM pulls in all the data from the job and automatically enters it into the WO. This feature saves you time and ensures data integrity. If a WO has been created from a job, the WO is directly tied to the job and the associated WO numbers appear in the Work Orders submenu.

To create a work order for a job, open the job. Select the Work Order submenu and click New. Enter information about the work order in the fields. See “Creating a Work Order” on page 219.

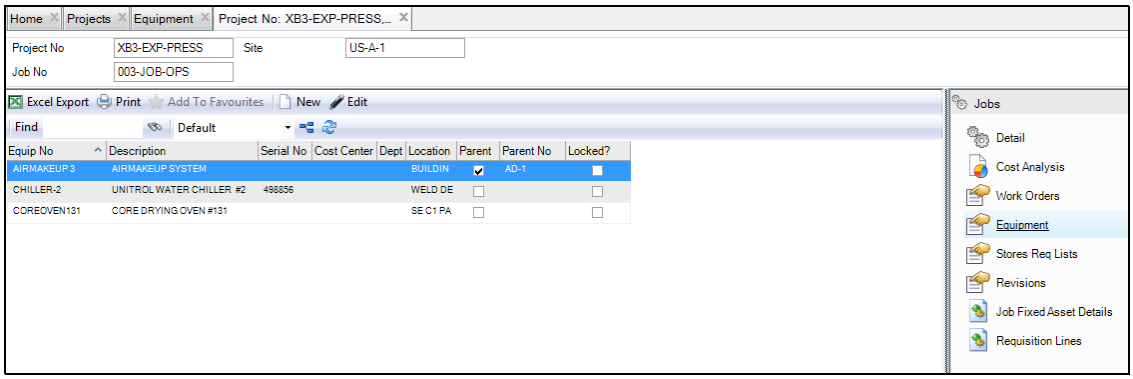
### Creating a Work Order and Reference a Job

If you create a work order and reference a job, the work order appears in the job’s Work Orders submenu. See “Creating a Work Order” on page 219.

## Attaching Existing Equipment to a Job

To attach an existing piece of equipment to a job, open the equipment record and reference the job from the Job No field. See “Equipment: Asset Tab” on page 128. Any equipment that references the job appears in the job’s Equipment submenu.

**Fig. 8.52**
Job: Equipment Submenu




## Adding New Equipment to a Job

To create a piece of equipment for a job, open the job. Select the Equipment submenu, and click New. A blank equipment record opens. Enter the necessary information in the equipment record. See “Creating an Equipment Record” on page 126.

## Creating a Stores Requisition List for a Job

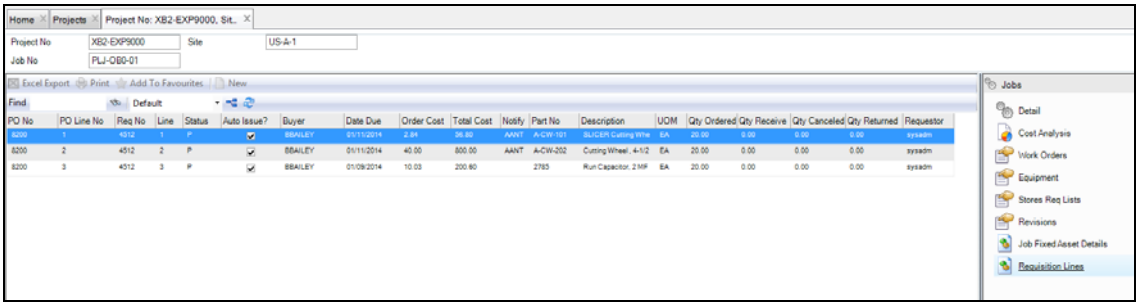
When you create a stores requisition list from a job, EAM pulls in all the data from the job and automatically enters it into the requisition list. This feature saves you time and ensures data integrity. If a requisition list has been created from a job, the list is directly tied to the job and the associated requisition list number appears in the Stores Req List submenu.

To create a stores requisition list for a job, open the job. Select the Stores Req List submenu and click New. Enter the information in the requisition list record. See “Creating a Stores Requisition List” on page 354.

## Reviewing Requisition Lines Associated with a Job

To review requisition lines associated with a job, open the job and select the Requisition Lines submenu.

**Fig. 8.53**
Job Submenu: Requisition Lines

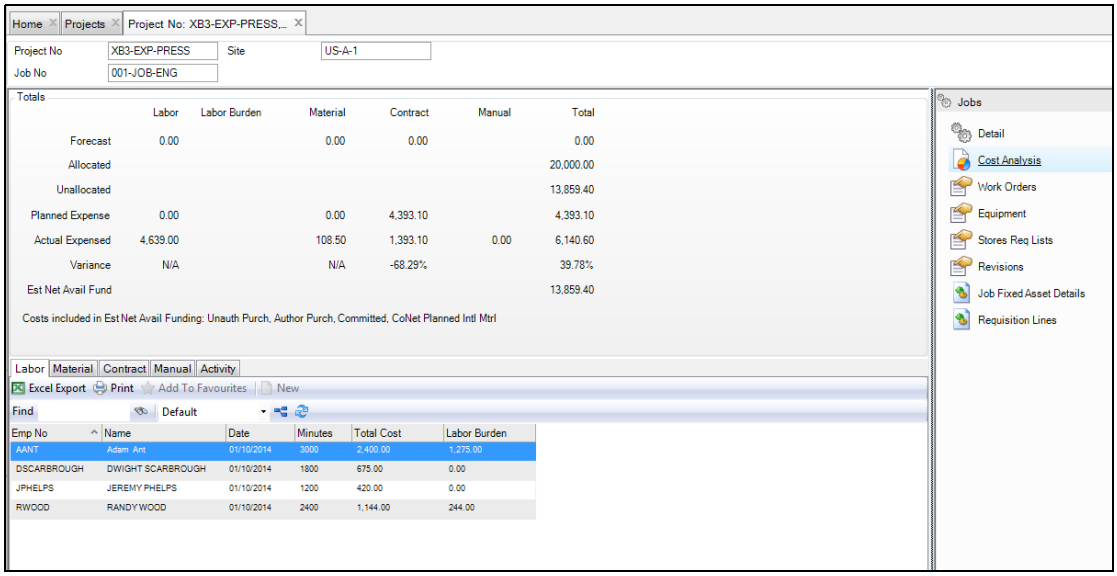



## Reviewing Cost Analysis for a Job

The Job Cost Analysis submenu allows you to view detailed cost analysis for an individual job. At a glance, you can see the forecasted, allocated, and unallocated costs for a job. You can also see the planned and actual expenses for the job. You can review cost summaries and totals, and by using tabbed pages you can find the details of those costs, such as labor postings, part issues, outside contractor charges, manual GL transactions, and expenses by job activities.

Cost analysis is updated with the Refresh action for the project. The action updates cost analysis amounts for both projects and jobs to reflect current balances and amount details.

**Fig. 8.54**
Jobs Submenu: Cost Analysis




### Cost Analysis Totals

Costs for labor, labor burden, manual, contract, and expense categories, plus a total of all these categories, are shown for each of the following items on the Cost Analysis summary screen:

- **Forecast.** The forecast costs for this job.
- **Allocated.** The total funding allocated to this job.
- **Unallocated.** The total not yet allocated for this job.

- **Planned Expense.** The planned expenses for this job.
- **Actual Expense.** The actual expense for this job.
- **Variance.** The difference between Planned Expense and Actual Expense.
- **Est Net Avail Fund.** The remaining funding available for this job as calculated by the cost categories shown in the Costs Included in Estimated Net Available Funding field.
- **Costs included in Est Net Avail Fund.** The categories selected in Site|Maintenance that are used to calculate the Estimated Net Available Funding.

### Cost Analysis Tabs

The Cost Analysis submenu contains the following tabs:

- **Labor**. Detailed labor cost records.
- **Material**. Detailed material cost records.
- **Contract**. Contractor cost records.
- **Manual**. Manual GL records.
- **Activity**. Detailed activity cost records.

## Project Activities–Jobs for Capital Projects

You can perform the following activities for jobs associated with capital projects:

- Capitalizing a Fixed Asset from a Job
- Capitalizing Additional Costs to an Existing Asset
- Viewing Capitalized Asset Data for a Project

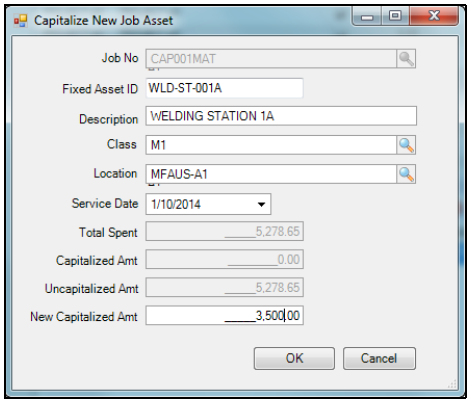
### Capitalizing a Fixed Asset from a Job

You can create a fixed asset from a job. The total costs for the job are used when capitalizing a new fixed asset from EAM to QAD ERP's Fixed Assets module. If you capitalize an asset from a job, then all other capitalizations of assets can only be done at this same job level. You cannot capitalize assets for children of the job or at the project level.

Follow these steps to capitalize a fixed asset from a job:

1. Open the Projects browse and highlight the project record.
2. In the lower browse, highlight the job.
3. Select Capitalize New Job Asset from the lower browse Action menu. The Capitalize New Job Asset window opens.

**Fig. 8.55**
Capitalize New Job Asset




4 Enter the information regarding the asset in the following fields.

*Fixed Asset ID.* Enter the fixed asset identifier of this asset.

*Description.* Enter the text description of this asset.

*Class.* Enter or select the asset class of this asset.

*Location.* Enter or select the location of this asset.

*Service Date.* Enter or select the date this asset was placed into service.

*Total Spent.* Displays the total spent on this job.

*Capitalized Amount.* Because this is a new asset, this field displays the zero capitalized amount.

*Uncapitalized Amount.* Defaults and displays the uncapitalized amount on this job, which is equal to the total spent for a new asset.

*New Capitalized Amount.* Enter the capitalized amount of this asset. This value cannot be greater than the uncapitalized amount of the job.

5 Once you have entered all the information, click OK. The fixed asset has been capitalized for this job.

## Capitalizing Additional Costs to an Existing Asset

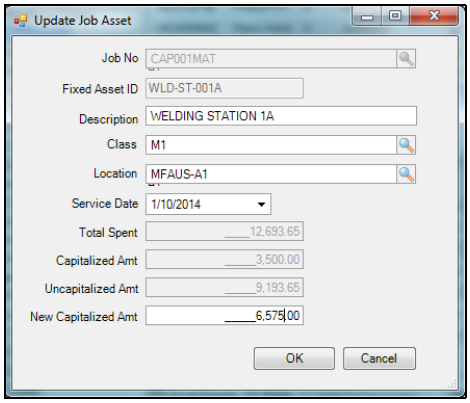
Once a fixed asset is created and additional costs are incurred, the Modify Capital Asset action updates the capitalized amount in EAM Project|Job and sends it back to the asset in QAD's Fixed Assets module.

Follow these steps to capitalize additional costs to an existing asset:

1 Open the Projects browse and highlight the project record.

2 Select Modify Capital Asset from the Project Action menu. The Update Project Asset window opens.

**Fig. 8.56**
Modify Capital Asset




**3** Enter the information regarding the asset in the following fields:

*Fixed Asset ID.* Displays the fixed asset identifier of this asset.

*Description.* Enter the text description of this asset.

*Class.* Displays the asset class of this asset.

*Location.* Displays the location of this asset.

*Service Date.* Displays the date this asset was placed into service.

*Total Spent.* Displays the total spent on this job.

*Capitalized Amount.* Displays the capitalized amount on this job.

*Uncapitalized Amount.* Displays the uncapitalized amount on this job, which is the total spent minus the capitalized amount.

*New Capitalized Amount.* Enter the capitalized amount of this asset. This value cannot be greater than the uncapitalized amount of the job.

**4** Click OK. The fixed asset costs have been updated.

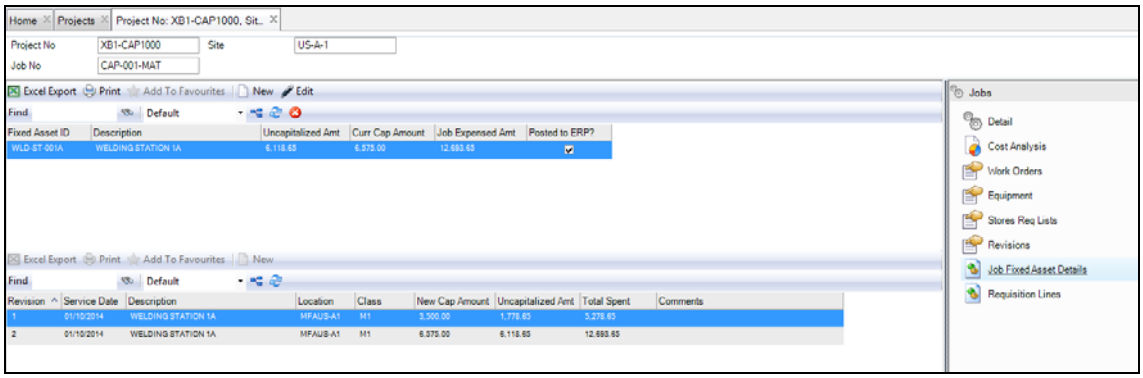
## Viewing Capitalized Asset Data for a Project

The Fixed Asset Details submenu, which is only available for jobs associated with capital projects, allows you to pre-enter fixed asset data to be capitalized or view current capitalized asset data and capitalization changes associated with this job.

The upper browse displays information about the fixed asset, and the lower browse displays the revision history for the fixed asset.

To view the capitalized asset data for a job, open the project and select the Fixed Asset Detail submenu.

**Fig. 8.57**
Modify Capital Asset




The upper browse contains the following fields about the fixed asset.

*Description.* Enter a description of the fixed asset.

*Job Number.* Select a job from this project with which to associate this fixed asset by clicking the magnifying glass and selecting from the list that displays.

*Service Date.* Enter the date this fixed asset was put into service. Defaults to the current date, which can be edited by clicking the arrow and selecting a date from the calendar that displays or by entering a new date.

*Location.* Select the location of the asset by clicking the magnifying glass and selecting from the list.

*Class.* Select the asset class by clicking the magnifying glass and selecting from the list.

*Current Capitalized Amount.* Displays the amount currently capitalized for the asset.

*Posted to ERP?* This check box is selected if this asset has been posted in the ERP.

*Job Expensed Amount.* Displays the amount expensed to the job for this asset. This value is the total spent.

*Job Expense at Level.* The amount expensed at this level for the job. This value is the total spent at this level.

*Uncapitalized Amount.* Displays the job expense associated with this asset that is not yet capitalized.

*Original Capitalization Date.* Displays the original date this asset was capitalized, if any.

*Original Capitalization Amount.* Displays the original amount at which this asset was capitalized, if any.

## Editing a Job

You can perform the following actions on a job:

- Refreshing a Job
- Locking/Unlocking a Job
- Change the Status of a Job

- Reopening a Job
- Viewing the Revision History for a Job

## Refreshing a Job

You can update all the changes made to a project's jobs with the Refresh action. To refresh a job, highlight the project and select Refresh from the Projects Action menu. See "Refreshing a Single Project or Multiple Projects" on page 595.

## Locking/Unlocking a Job

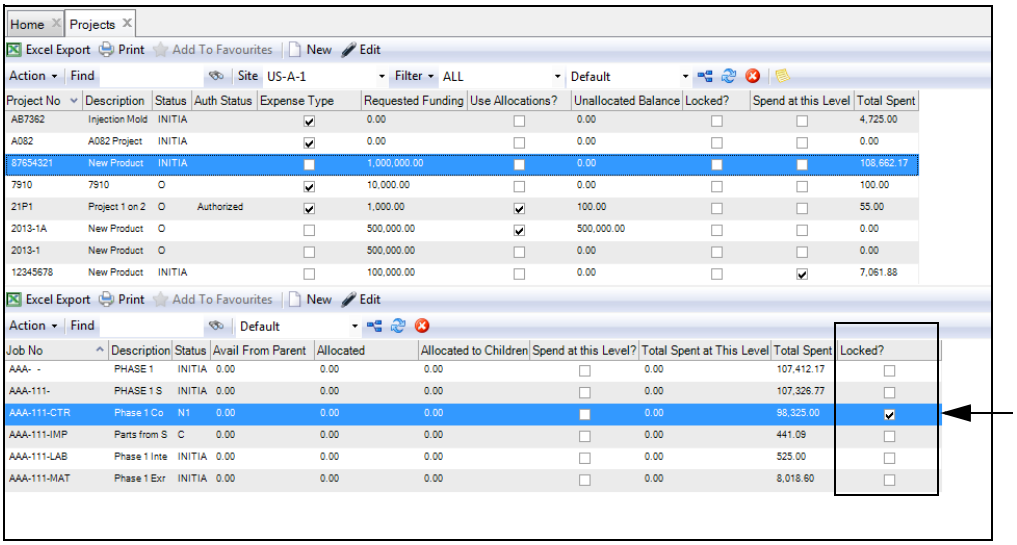
For added security, you can lock a job to prevent additional charges against that job. To resume charges against a job, you can unlock the job.

***Note*** If the job's project has a designated owner or owner group, only the owner or a member of the owner group can lock or unlock the job. If the project does not have an owner, any user can lock/unlock the job.

### Locking a Job

To lock a job, highlight the job and select Lock/Unlock from the Projects Action menu. When a job is locked, the Locked? check box is selected.

**Fig. 8.58**
Locking a Job




### Unlocking a Job

To unlock a job, highlight the job and select Lock/Unlock from the Projects Action menu.

## Change the Status of a Job

Job status codes are established in Finance|Codes|Projects|Project Status. To change the job status, highlight the job and select Change Status from the job's Action menu.

***Note*** You cannot cancel a job with active expenses.

### Reopening a Job

To reopen a suspended job, highlight the job and select Reopen from the Action menu. The Job Status window opens. Double-click to select the job status. The job reopens with the status that was selected.

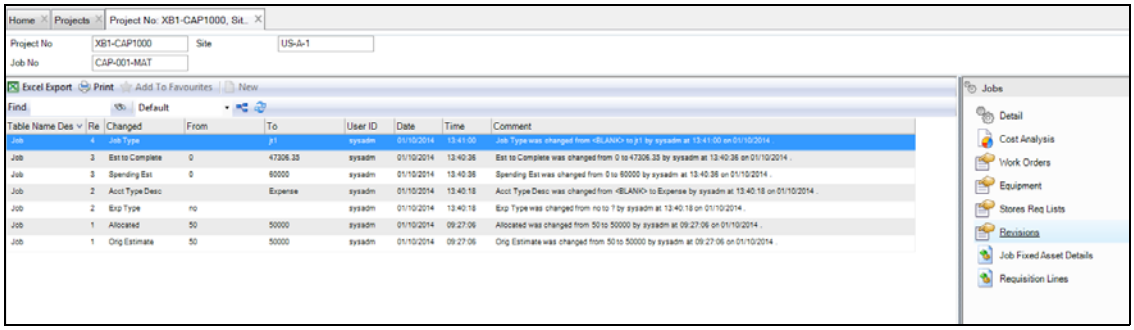
### Viewing the Revision History for a Job

Because many quality systems call for strict record keeping about the revisions made to jobs, the Revisions submenu provides an audit trail of all modifications that are made to this record. The revision records, which are stored in the Revisions submenu and in the Revisions module at General|Revisions, are automatically created when a modification is made to the job.

***Note*** Revision control is activated in the Purchasing|General|Business Units|Sites menu. See “Enable Revision Control” on page 61.

To view a job’s revision history, open the job and select the Revisions submenu.

**Fig. 8.59**
Job Submenu: Revisions



Chapter 9

# Analysis

This section discusses the following Analysis module topics:

***Analysis 616***

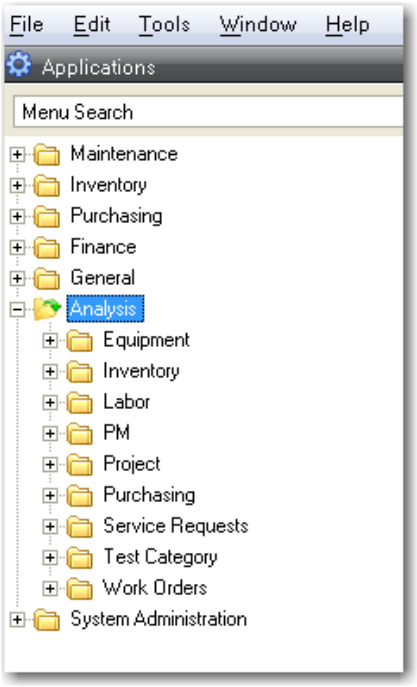
***Default Reports 620***

# Analysis

Reports, available in the Analysis menu, help decision makers analyze diverse aspects of a business before making strategic decisions. The QAD Enterprise Asset Management system offers multiple default reports. While many of these reports are delivered with the system, you can generate custom reports from the information in the database.

You can choose various output media for reports. You can output the reports to external applications, as well.

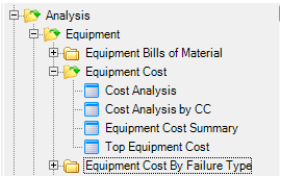
**Fig. 9.1**
Reports Menu




## Running Reports

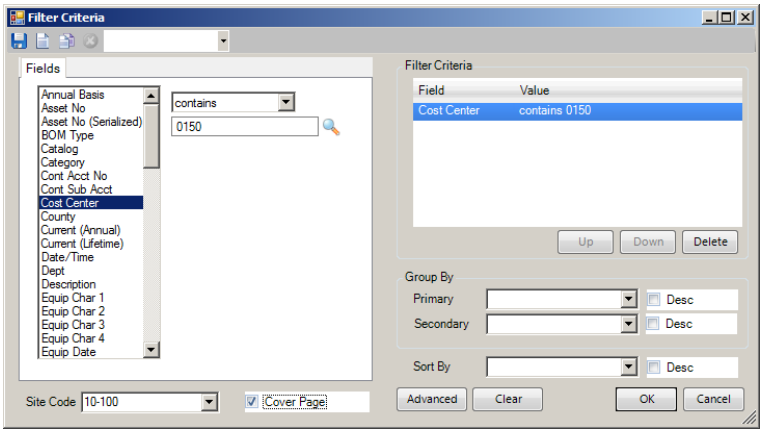
Open the Analysis folder. Navigate to the module folder, then to the appropriate report folder. Double-click the report link to open the filter criteria window.

**Fig. 9.2**
Report Shortcut




Specify report criteria in the report filter window.

**Fig. 9.3**
Report Filter Criteria Window




## Customizing Report Filters

Each report has a default set of selection fields. You can specify filter criteria for each field; for example, “equipment number starting with 00.”

### Specifying Filter Criteria

1. Verify the site in the drop-down on the bottom left.
2. If the filter requires a date range, enter it manually or use the calendar buttons.
3. Select a field.
4. Indicate the search logic. Indicators can include:

| | |
|---|---|
| equals | is zero |
| is not equal to | is not zero |
| is at most | contains |
| is at least | does not contain |
| is more than | is blank |
| is less than | is not blank |

5. Use the Up and Down buttons to change the filter priority. Click Delete to remove the criteria from the Filter Criteria list. Fields removed from the Filter Criteria list remain in the database.
6. Indicate Group By criteria for primary and secondary groupings. Select the Desc check box for a descending list.
7. Indicate Sort By criteria. Select the Desc check box for a descending list. The Sort By menu is blank if the report, by definition, is already sorted by a specific parameter. For example, the Work Order Labor Summary by Class does not have any Sort By options because it is predefined to display by class.
8. To alter the Boolean statement manually, click Advanced.
9. Click OK to run the report.

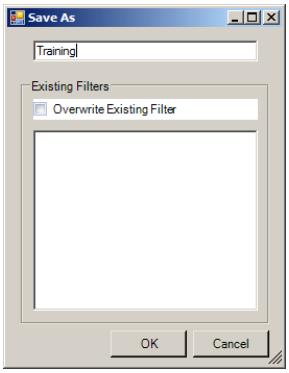
After you specify filter criteria, you can save those settings. Report filters are separate from application filters. They are saved at the user level.

### Saving a Report Filter

1 In the Filter Criteria window, select the settings that you want to save.

2 Click the disk icon in the upper left of the Filter Criteria window. The Save As window appears.

**Fig. 9.4**
Filter Save As Window




1 If it is a new or renamed filter, enter the new name.

2 Click OK.

3 Verify that you want to save the filter.

***Note*** If you already have a named filter open, the system prompts you to overwrite existing selection criteria.

### Overwriting an Existing Filter

1 Select an existing filter.

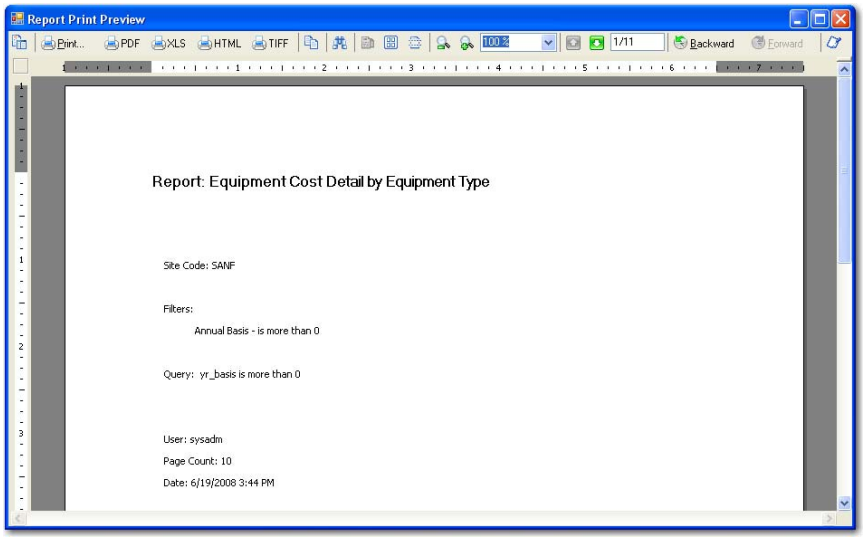
2 Select the Overwrite Existing Filter check box.

3 Click OK.

## Report Output

Report data displays in a print preview window. Use the menu bar at the top of the report output screen to make output selections, print, and navigate through the report.

**Fig. 9.5**
Report Print Output




## Report Format

All reports have a standard format:

- Cover page
- Cover page details
- Report pages

## Saving Output to File

You can save the report to your computer or network.

1. Click the button labeled with the format to save the file:
   - PDF
   - XLS (Microsoft Excel)
   - HTML
   - TIFF
2. Navigate to the location to store the file.
3. Enter a file name.
4. Click Save.

When you display a report, you can choose the output format, change the page setup, define print options, and close the report using the toolbar or the File menu.

**Fig. 9.6**
Report menu bar



| Report Menu Option | Purpose |
|---|---|
| Table of Contents | Each page in the report has an entry in the table of contents. Click the entry to directly open a page. |
| Print | Send the report to a network or local printer. |
| PDF | Save the report in pdf format. |
| XLS | Save the report in Excel format. |
| HTML | Save the report in HTML format. |
| TIFF | Save the report in TIFF image format. |
| Copy to clipboard | Select items in the report and copy them to the clipboard to use in other applications such as Word or Excel. |
| Find | Search for specific text or numbers. |
| Single Page View | View one page at a time. |
| Multi Page View | View up to six consecutive report pages at a time. |
| Continuous scroll | Scroll through the report without clicking page up and down buttons. |
| Zoom in | Enlarge the display. |
| Zoom out | Shrink the display. |
| Adjust view percentage | Indicate a specific percentage for the display view. |
| Page down | View the next page of the report. |
| Page up | View the prior page of the report. |
| Page X of Y | Navigate to a specific page in the report or verify which page you are currently viewing. |
| Backward | Navigate through consecutive views you have taken of the report. These may not be consecutive pages, depending on how you originally navigated. |
| Forward | Return through consecutive views you have taken of the report after navigating backward. These may not be consecutive pages, depending on how you originally navigated. |
| Annotations | Add annotations to a report. |

# Default Reports

EAM offers carefully constructed standard reports based on proven customer needs. Find reports in categories corresponding to modules, such as Equipment.

## Equipment

Detailed equipment data is imperative for scheduling work orders, and tracking maintenance and downtime, as well as monitoring costs and performing failure analysis.

### Equipment Bills of Material

Equipment Bills of Material

This report lists all equipment in the selected site and filter, and all parts issued or added to the BOM of each.

**Fig. 9.7**
Equipment Bills of Material Report



**Equipment Bills of Material**

**Site** SANF San Francisco

**Equip No** 0-0 testing enghrsallocation

| Part No | Description | Qty | UOM | Issued |
|---|---|---|---|---|
| 0-0-0 | 1000 big motor | 2.00 | ea | |
| 0-1 | | | ea | 06/09/2004 |

**Equip No** 0-0-0 Maria s Rotable Test Equip 1

| Part No | Description | Qty | UOM | Issued |
|---|---|---|---|---|
| 0 | Most Popular Part in MLS | 5.00 | ea | 08/23/2004 |
| 0 | Most Popular Part in MLS | 1.00 | ea | |
| 0-0 | zz,zzzz

**Fig. 9.10**
Equipment Cost Analysis by Cost Center Report

**Equipment Cost Analysis by CC**

**Site** 10-100 Ultrasound MFG Site
**Cost Center** Adm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Equip No** | AIRMAKEUP-202 | **Description** | AIRMAKEUP SYSTEM 202 | | | | |
| **Status** | | | | | | | |
| **Serial No** | | **Retired Date** | | **Expense Site** | 10-100 | | |
| **Asset No** | | **Acquisitn Cost** | 0 | **Dept** | | | |
| **Manufacturer** | | **Location** | PRESSROOM | **Cost Center** | Adm | | |
| **Model** | | **Catalog** | | **Labor Acct No** | | **Sub Acct No** | |
| **Yr Made** | | **Category** | | **Matl Acct No** | 5020 | | |
| **Purchase Date** | | **BOM Type** | | **Cont Acct No** | | | |
| **Installed Date** | | **Parent?** | True CHILLER #23 | | | | |

**Material**

| Date | Description | PO No | Qty | Unit Cost | Total Cost |
|---|---|---|---|---|---|
| 06/18/2015 | E44-D32 PHOTO ELECT.SWITCH,FIB | 0 | 2.00 | 10.00 | 20.00 |
| 06/18/2015 | E32-D32 PHOTO ELECT.SWITCH,FIB | 0 | 2.00 | 10.33 | 20.67 |

| | | Labor Cost | Material Cost | Contract Cost | Manual GL Cost | Total Cost |
|---|---|---|---|---|---|---|
| **Total Cost For Equip** | AIRMAKEUP-202 | 0.00 | 40.67 | 0.00 | 0.00 | 40.67 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Equip No** | AIRMAKEUP-301 | **Description** | AIRMAKEUP SYSTEM 301 | | | | |
| **Status** | | | | | | | |
| **Serial No** | | **Retired Date** | | **Expense Site** | 10-100 | | |
| **Asset No** | | **Acquisitn Cost** | 0 | **Dept** | | | |
| **Manufacturer** | | **Location** | PRESSROOM | **Cost Center** | Adm | | |
| **Model** | | **Catalog** | | **Labor Acct No** | | **Sub Acct No** | |
| **Yr Made** | | **Category** | | **Matl Acct No** | 5020 | | |
| **Purchase Date** | | **BOM Type** | | **Cont Acct No** | 5020 | | |
| **Installed Date** | | **Parent?** | True CHILLER #25 | | | | |

**Material**

| Date | Description | PO No | Qty | Unit Cost | Total Cost |
|---|---|---|---|---|---|
| 06/18/2015 | E32-D32 PHOTO ELECT.SWITCH,FIB | 0 | 3.00 | 10.33 | 31.00 |

## Equipment Cost Summary

This report lists all equipment in the selected site and filter, and each piece of equipment's associated costs, totaling the equipment cost of labor, material, contract, and manual GL transactions.

**Fig. 9.11**
Equipment Cost Summary Report

**Equipment Cost Summary**

**Site** 10-100 Ultrasound MFG Site
**Date Range** 01/01/15 - 12/03/15

| Equip No | Description | WO Count | Labor | Material | Contract | Manual GL | Total Cost |
|---|---|---|---|---|---|---|---|
| Air conditioner 1 | | 1 | 17.50 | 0.00 | 0.00 | 0.00 | 17.50 |
| AIRMAKEUP-101 | AIRMAKEUP SYSTEM 101 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AIRMAKEUP-202 | AIRMAKEUP SYSTEM 202 | 0 | 0.00 | 40.67 | 0.00 | 0.00 | 40.67 |
| AIRMAKEUP-301 | AIRMAKEUP SYSTEM 301 | 0 | 0.00 | 41.00 | 0.00 | 0.00 | 41.00 |
| AIRMAKEUP-404 | AIRMAKEUP SYSTEM 404 | 0 | 0.00 | 20.00 | 0.00 | 0.00 | 20.00 |
| AIRMAKEUP-501 | AIRMAKEUP SYSTEM 501 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AIRMAKEUP-601 | AIRMAKEUP SYSTEM 601 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AMTEquip2 | AMTEquip2 Description | 0 | 0.00 | 60.50 | 0.00 | 0.00 | 60.50 |
| AMTEquip3 | AMTEquip3 Description | 0 | 0.00 | 200.00 | 0.00 | 0.00 | 200.00 |
| AMTEquip5 | AMTEquip5 Description | 2 | 600.00 | 100.00 | 0.00 | 0.00 | 700.00 |
| AMTEquip6 | AMTEquip6 Description | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AMTEquip7 | AMTEquip7 Description | 2 | 0.00 | 170.00 | 0.00 | 0.00 | 170.00 |

## Top Equipment Cost

This report lists the equipment numbers that have the highest total cost associated with them by totaling the equipment cost of labor, material, contract, and manual GL transactions.

**Fig. 9.12**
Top Equipment Cost Report

**Top Equipment Cost**

**Site** 10-100 Ultrasound MFG Site

| Equip No | Description | WO Count | labor Hrs | Burden | Labor | Material | Contract | Manual GL | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| CHILLER #45 | CHILLER #45 | 1 | 2.00 | 0.00 | 70.00 | 731.09 | 0.00 | 0.00 | 801.09 |
| COREOVEN30 | COREOVEN30 | 0 | 0.00 | 0.00 | 0.00 | 847.90 | 0.00 | 0.00 | 847.90 |
| COREOVEN33 | COREOVEN33 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AIRMAKEUP-101 | AIRMAKEUP SYSTEM 101 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CHILLER #23 | UNITROL WATER CHILLER #23 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AIRMAKEUP-202 | AIRMAKEUP SYSTEM 202 | 0 | 0.00 | 0.00 | 0.00 | 40.67 | 0.00 | 0.00 | 40.67 |
| AIRMAKEUP-301 | AIRMAKEUP SYSTEM 301 | 0 | 0.00 | 0.00 | 0.00 | 41.00 | 0.00 | 0.00 | 41.00 |

## Equipment Cost Summary by Failure Type

This report lists the equipment in the selected site and filter by the failure type the equipment experienced.

**Fig. 9.13**
Equipment Cost Summary by Failure Type Report

**Equipment Cost Summary By Failure Type**

**Site** 10-100 Ultrasound Mfg Site

| Failure Type | Description | Labor | Material | Contract | Manual GL | Total Cost |
|---|---|---|---|---|---|---|
| E | Electrical | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EH | Electrical/Hydraulic | 500.00 | 195.65 | 2,000.00 | 0.00 | 2,695.65 |
| EHP | Elec/Hydraulic/Pneumatic | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EM | Electrical/Mechanical | 2,065.00 | 815.25 | 0.00 | 0.00 | 2,880.25 |
| EMHP | Elec/Mechl/Hydraulic/Pneumatic | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EP | Electrical/Pneumatic | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EPM | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| H | Hydraulic | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HP | Hydraulic/Pneumatic | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| M | Mechanical | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MH | Mechanical/Hydraulic | 100.00 | 0.00 | 0.00 | 0.00 | 100.00 |

## Equipment Descriptors

This report lists all equipment in the selected site and filter, displaying the equipments' descriptor code, description, type code definition, and type code description.

**Fig. 9.14**
Equipment Descriptors Report

**Equipment Descriptors**

**Site** 10-100 Ultrasound Mfg Site

**Equip No** HO0003 Overhead Hoist 03

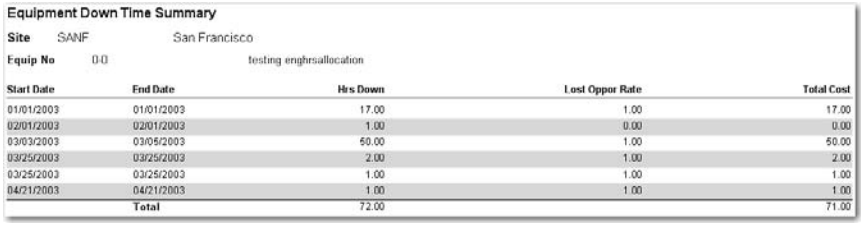
| Descriptor Code | Description | Type Code Definition | Type Code Description |
|---|---|---|---|
| Hoist | Hoist Equipment | MECH | Mechanical |

| Order | Spec Label | Spec Value |
|---|---|---|
| 1 | Model | MT-200 |
| 2 | Motor Power | 45 |
| 3 | Capacity (tons) | 2 |

## Equipment Downtime Summary

This report lists all equipment in the selected site and filter, and it lists a summary of all the times the equipment has not been operational due to repair or maintenance.

**Fig. 9.15**
Equipment Down Time Summary Report



Equipment Down Time Summary

Site SANF San Francisco

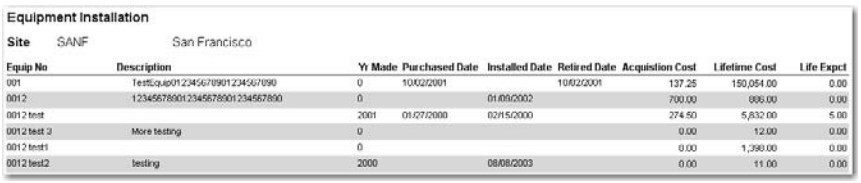
Equip No 0.0 testing enghrsallocation

| Start Date | End Date | Hrs Down | Lost Oppor Rate | Total Cost |
|---|---|---|---|---|
| 01/01/2003 | 01/01/2003 | 17.00 | 1.00 | 17.00 |
| 02/01/2003 | 02/01/2003 | 1.00 | 0.00 | 0.00 |
| 03/03/2003 | 03/05/2003 | 50.00 | 1.00 | 50.00 |
| 03/25/2003 | 03/25/2003 | 2.00 | 1.00 | 2.00 |
| 03/25/2003 | 03/25/2003 | 1.00 | 1.00 | 1.00 |
| 04/21/2003 | 04/21/2003 | 1.00 | 1.00 | 1.00 |
| | Total | 72.00 | | 71.00 |

## Equipment Installation

This report lists the installation and purchasing information for all equipment in the selected site and filter.

**Fig. 9.16**
Equipment Installation Report



Equipment Installation

Site SANF San Francisco

| Equip No | Description | Yr Made | Purchased Date | Installed Date | Retired Date | Acquistion Cost | Lifetime Cost | Life Expct |
|---|---|---|---|---|---|---|---|---|
| 001 | TestEquip01234567890123456789O | 0 | 10/02/2001 | | 10/02/2001 | 137.25 | 150,054.00 | 0.00 |
| 0012 | 12345678901234567890123456789O | 0 | | 01/09/2002 | | 700.00 | 886.00 | 0.00 |
| 0012 test | | 2001 | 01/27/2000 | 02/15/2000 | | 274.50 | 5,832.00 | 5.00 |
| 0012 test 3 | More testing | 0 | | | | 0.00 | 12.00 | 0.00 |
| 0012 test1 | | 0 | | | | 0.00 | 1,398.00 | 0.00 |
| 0012 test2 | testing | 2000 | | 08/08/2003 | | 0.00 | 11.00 | 0.00 |

## Equipment Lists

### CIM Alternate

This report lists all equipment and alternate numbers in the selected site and filter. The system checks the alternate number during the batch/cimload.p batch job, which reads a DUOM file from an outside source.

**Fig. 9.17**
CIM Alternate Report



Equipment Lists

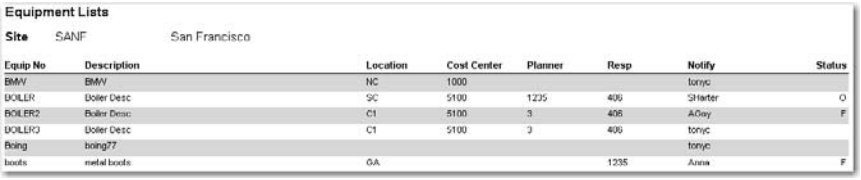
Site SANF San Francisco

| Alt Equip No | Equip No | Description |
|---|---|---|
| conv 22A | CONV-123 | Converters |

### Equipment List

This report lists all equipment in the selected site and filter.

**Fig. 9.18**
Equipment List Report



Equipment Lists

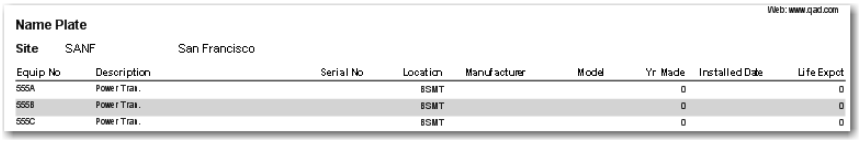
Site SANF San Francisco

| Equip No | Description | Location | Cost Center | Planner | Resp | Notify | Status |
|---|---|---|---|---|---|---|---|
| BMW | BMW | NC | 1000 | | | tonyc | |
| BOILER | Boiler Desc | SC | 5100 | 1235 | 406 | SHarter | O |
| BOILER2 | Boiler Desc | C1 | 5100 | 3 | 406 | AGray | F |
| BOILER3 | Boiler Desc | C1 | 5100 | 3 | 406 | tonyc | |
| Boing | boing77 | | | | | tonyc | |
| boots | metal boots | GA | | | 1235 | Anna | F |

### Name Plate

This report lists all equipment in the selected site and filter, and displays its manufacturing details.

**Fig. 9.19**
Name Plate Report



Name Plate

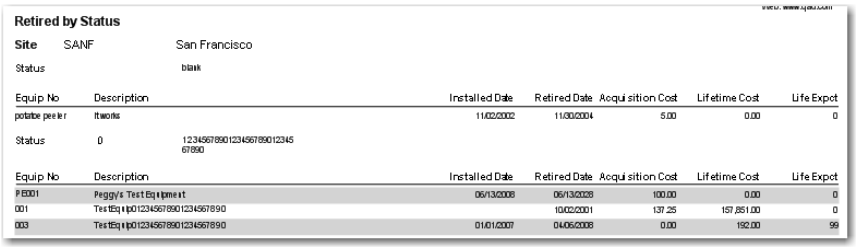
Site SANF San Francisco

| Equip No | Description | Serial No | Location | Manufacturer | Model | Yr Made | Installed Date | Life Expct |
|---|---|---|---|---|---|---|---|---|
| 555A | Power Train. | | BSMT | | | 0 | | 0 |
| 555B | Power Train. | | BSMT | | | 0 | | 0 |
| 555C | Power Train. | | BSMT | | | 0 | | 0 |

### Retired by Status

The report lists all equipment that has been removed from service in the selected site and filter. Retired equipment has a retired date in Equipment Data Entry.

**Fig. 9.20**
Retired by Status Report



Retired by Status

Site SANF San Francisco

Status blank

| Equip No | Description | Installed Date | Retired Date | Acquisition Cost | Lifetime Cost | Life Expct |
|---|---|---|---|---|---|---|
| potatoe peeler | Itworks | 11/02/2002 | 11/30/2004 | 5.00 | 0.00 | 0 |

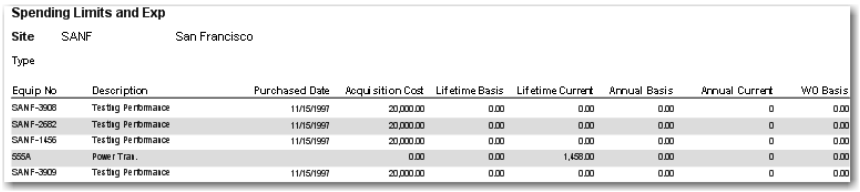
Status 0 12345678901234567890123456789012345 67890

| Equip No | Description | Installed Date | Retired Date | Acquisition Cost | Lifetime Cost | Life Expct |
|---|---|---|---|---|---|---|
| PE001 | Peggy's Test Equipment | 06/13/2008 | 06/13/2028 | 100.00 | 0.00 | 0 |
| 001 | TestEquip01234567890123456789O | | 10/02/2001 | 137.25 | 157,851.00 | 0 |
| 003 | TestEquip01234567890123456789O | 01/01/2007 | 04/05/2008 | 0.00 | 192.00 | 99 |

### Spending Limits and Expense

This report lists all equipment in the selected site and filter, grouped by equipment type. It displays the annual and lifetime expense limits for all equipment (annual and lifetime basis), in addition to the expense limit that can be charged against a single work order for the equipment. It also displays the current expenses charged against this equipment for the current year and its lifetime (annual and lifetime current).

**Fig. 9.21**
Spending Limits and Exp Report



Spending Limits and Exp

Site SANF San Francisco

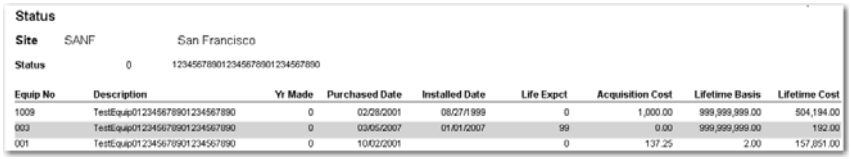
Type

| Equip No | Description | Purchased Date | Acquisition Cost | Lifetime Basis | Lifetime Current | Annual Basis | Annual Current | WO Basis |
|---|---|---|---|---|---|---|---|---|
| SANF-3608 | Testing Performance | 11/15/1997 | 20,000.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 |
| SANF-2682 | Testing Performance | 11/15/1997 | 20,000.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 |
| SANF-1456 | Testing Performance | 11/15/1997 | 20,000.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 |
| 555A | Power Train. | | 0.00 | 0.00 | 1,458.00 | 0.00 | 0 | 0.00 |
| SANF-3609 | Testing Performance | 11/15/1997 | 20,000.00 | 0.00 | 0.00 | 0.00 | 0 | 0.00 |

### Status

This report lists all equipment in the selected site and filter, grouped by equipment type. It displays equipment or machines by status. A code shows the current standing of equipment; for example: A – Active, I – Inactive, O – Obsolete, or M – Moved.

**Fig. 9.22**
Status Report



Status

Site SANF San Francisco

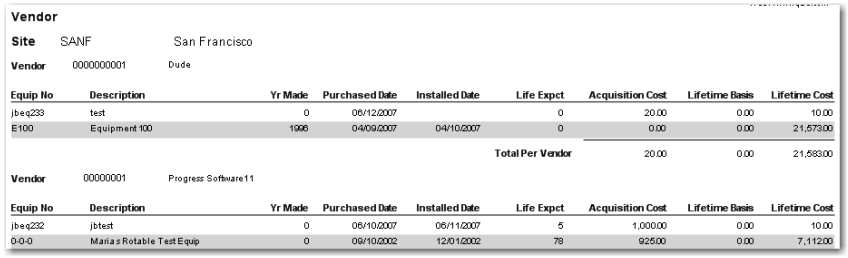
Status 0 12345678901234567890123456789O

| Equip No | Description | Yr Made | Purchased Date | Installed Date | Life Expct | Acquisition Cost | Lifetime Basis | Lifetime Cost |
|---|---|---|---|---|---|---|---|---|
| 1009 | TestEquip01234567890123456789O | 0 | 02/28/2001 | 08/27/1999 | 0 | 1,000.00 | 999,999,999.00 | 504,194.00 |
| 003 | TestEquip01234567890123456789O | 0 | 03/05/2007 | 01/01/2007 | 99 | 0.00 | 999,999,999.00 | 192.00 |
| 001 | TestEquip01234567890123456789O | 0 | 10/02/2001 | | 0 | 137.25 | 2.00 | 157,851.00 |

## Vendor

This report lists all equipment in the selected site and filter, grouped by vendor.

**Fig. 9.23**
Vendor Report



Vendor

Site SANF San Francisco

Vendor 0000000001 Dude

| Equip No | Description | Yr Made | Purchased Date | Installed Date | Life Expct | Acquisition Cost | Lifetime Basis | Lifetime Cost |
|---|---|---|---|---|---|---|---|---|
| jbeq233 | test | 0 | 06/12/2007 | | 0 | 20.00 | 0.00 | 10.00 |
| E100 | Equipment 100 | 1998 | 04/09/2007 | 04/10/2007 | 0 | 0.00 | 0.00 | 21,573.00 |
| | | | | | Total Per Vendor | 20.00 | 0.00 | 21,583.00 |

Vendor 00000001 Progress Software11

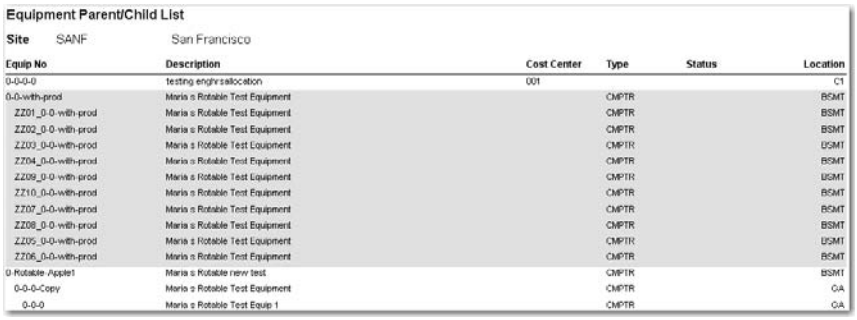
| Equip No | Description | Yr Made | Purchased Date | Installed Date | Life Expct | Acquisition Cost | Lifetime Basis | Lifetime Cost |
|---|---|---|---|---|---|---|---|---|
| jbeq232 | jbtest | 0 | 06/10/2007 | 06/11/2007 | 5 | 1,000.00 | 0.00 | 10.00 |
| 0-0-0 | Maria s Rotable Test Equip | 0 | 09/10/2002 | 12/01/2002 | 78 | 925.00 | 0.00 | 7,112.00 |

## Equipment Parent/Child List

### Equipment Parent/Child List

The report lists all pieces of equipment in the selected site and filter, in a hierarchical format. It groups each piece of equipment, and lists the children below the parent equipment.

**Fig. 9.24**
Equipment Parent/Child List Report



Equipment Parent/Child List

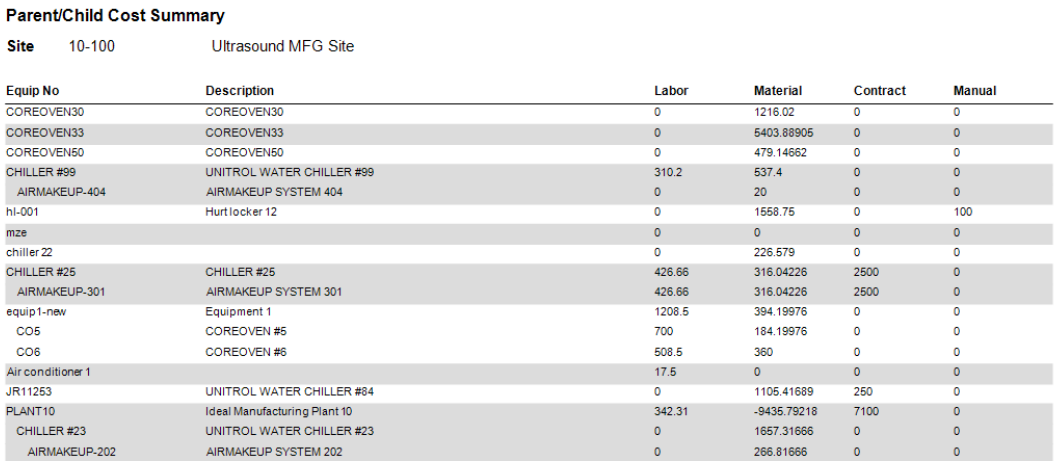
Site SANF San Francisco

| Equip No | Description | Cost Center | Type | Status | Location |
|---|---|---|---|---|---|
| 0-0-0-0 | testing engfin allocation | 001 | | | C1 |
| 0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ01_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ02_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ03_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ04_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ09_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ10_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ07_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ08_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ05_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| ZZ06_0-0-with-prod | Maria s Rotable Test Equipment | | CMPTR | | BSMT |
| 0-Rotable-Apple1 | Maria s Rotable new test | | CMPTR | | BSMT |
| 0-0-0-Copy | Maria s Rotable Test Equipment | | CMPTR | | GA |
| 0-0-0 | Maria s Rotable Test Equip 1 | | CMPTR | | GA |

### Parent/Child Cost Summary

The report lists all pieces of equipment in the selected site and filter, in a hierarchical format. It groups each piece of equipment, and lists the children below the parent equipment and displays the associated costs with each piece of equipment.

**Fig. 9.25**
Equipment Parent/Child Cost Summary Report



**Parent/Child Cost Summary**

**Site** 10-100 Ultrasound MFG Site

| Equip No | Description | Labor | Material | Contract | Manual |
|---|---|---|---|---|---|
| COREOVEN30 | COREOVEN30 | 0 | 1216.02 | 0 | 0 |
| COREOVEN33 | COREOVEN33 | 0 | 5403.88905 | 0 | 0 |
| COREOVEN50 | COREOVEN50 | 0 | 479.14662 | 0 | 0 |
| CHILLER #99 | UNITROL WATER CHILLER #99 | 310.2 | 537.4 | 0 | 0 |
| AIRMAKEUP-404 | AIRMAKEUP SYSTEM 404 | 0 | 20 | 0 | 0 |
| hl-001 | Hurt locker 12 | 0 | 1558.75 | 0 | 100 |
| mze | | 0 | 0 | 0 | 0 |
| chiller 22 | | 0 | 226.579 | 0 | 0 |
| CHILLER #25 | CHILLER #25 | 426.66 | 316.04226 | 2500 | 0 |
| AIRMAKEUP-301 | AIRMAKEUP SYSTEM 301 | 426.66 | 316.04226 | 2500 | 0 |
| equip1-new | Equipment 1 | 1208.5 | 394.19976 | 0 | 0 |
| CO5 | COREOVEN #5 | 700 | 184.19976 | 0 | 0 |
| CO6 | COREOVEN #6 | 508.5 | 360 | 0 | 0 |
| Air conditioner 1 | | 17.5 | 0 | 0 | 0 |
| JR11253 | UNITROL WATER CHILLER #84 | 0 | 1105.41689 | 250 | 0 |
| PLANT10 | Ideal Manufacturing Plant 10 | 342.31 | -9435.79218 | 7100 | 0 |
| CHILLER #23 | UNITROL WATER CHILLER #23 | 0 | 1657.31666 | 0 | 0 |
| AIRMAKEUP-202 | AIRMAKEUP SYSTEM 202 | 0 | 266.81666 | 0 | 0 |

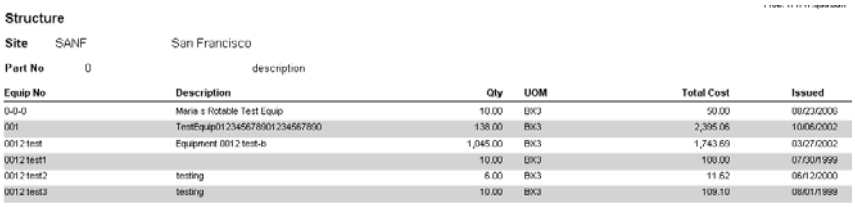
## Equipment Warranty

This functionality is not yet implemented.

## Parts Used On Equipment

This report lists all parts in the selected site and filter, and all the equipment that includes the part in its bill of material, grouped by part number.

**Fig. 9.26**
Structure (Parts Used on Equipment) Report



**Structure**

**Site** SANF San Francisco

**Part No** 0 description

| Equip No | Description | Qty | UOM | Total Cost | Issued |
|---|---|---|---|---|---|
| 0-0-0 | Maria s Rotable Test Equip | 10.00 | BX3 | 50.00 | 08/23/2006 |
| 001 | TestEquip01234567890123456789O | 138.00 | BX3 | 2,395.06 | 10/06/2002 |
| 0012 test | Equipment 0012 test-b | 1,045.00 | BX3 | 1,743.69 | 03/27/2002 |
| 0012 test1 | | 10.00 | BX3 | 100.00 | 07/30/1999 |
| 0012 test2 | testing | 6.00 | BX3 | 11.62 | 06/12/2000 |
| 0012 test3 | testing | 10.00 | BX3 | 109.10 | 08/01/1999 |

## Parts Warranty Issued to Equipment

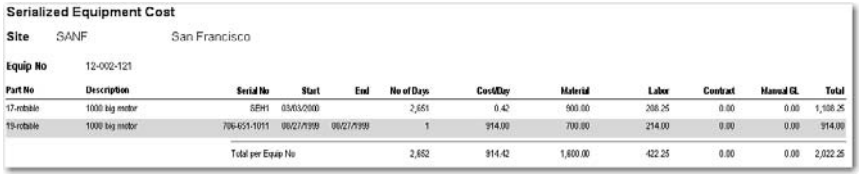
This functionality is not yet implemented.

## Serialized Equipment Cost

This report displays the total cost for all serialized parts issued to a piece of equipment, grouped by equipment number. Select serialized parts with the Serialized check box in Inventory Data Entry. The report includes all serial numbers issued to equipment, even if the serial number is no longer on the piece of equipment.

Cost includes labor, material (issues and returns to inventory), contract (auto-issues and returns to inventory where the requisition is set to contract), and manual GLs that were charged to the equipment when the serialized part was issued.

**Fig. 9.27**
Serialized Equipment Cost



**Serialized Equipment Cost**

**Site** SANF San Francisco

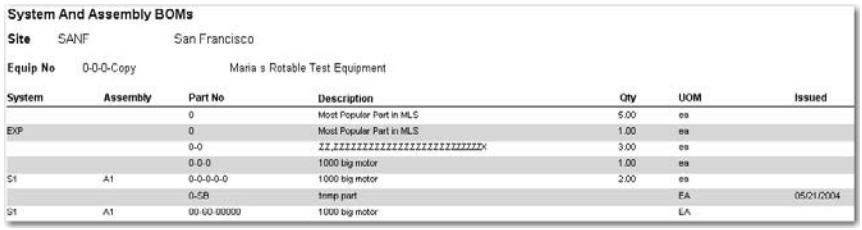
**Equip No** 12-002-121

| Part No | Description | Serial No | Start | End | No of Days | Cost/Day | Material | Labor | Contract | Manual GL | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17-rotable | 1000 big motor | SEH1 | 05/03/2000 | | 2,651 | 0.42 | 900.00 | 208.25 | 0.00 | 0.00 | 1,108.25 |
| 19-rotable | 1000 big motor | 706-651-1011 | 06/27/1999 | 06/27/1999 | 1 | 914.00 | 700.00 | 214.00 | 0.00 | 0.00 | 914.00 |
| | | Total per Equip No | | | 2,652 | 914.42 | 1,600.00 | 422.25 | 0.00 | 0.00 | 2,022.25 |

## System and Assembly BOMs

This report lists all equipment and all parts that have been issued or added to the BOM of each piece of equipment's system and assembly in the selected site and filter.

**Fig. 9.28**
Structure (System and BOMs) Report



**System And Assembly BOMs**

**Site** SANF San Francisco

**Equip No** 0-0-0-Copy Maria s Rotable Test Equipment

| System | Assembly | Part No | Description | Qty | UOM | Issued |
|---|---|---|---|---|---|---|
| | | 0 | Most Popular Part in MLS | 5.00 | ea | |
| EXP | | 0 | Most Popular Part in MLS | 1.00 | ea | |
| | | 0-0 | ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZX | 3.00 | ea | |
| | | 0-0-0 | 1000 big motor | 1.00 | ea | |
| S1 | A1 | 0-0-0-0-0 | 1000 big motor | 2.00 | ea | |
| | | 0-SB | tmp part | | EA | 05/21/2004 |
| S1 | A1 | 00-00-00000 | 1000 big motor | | EA | |

# Finance

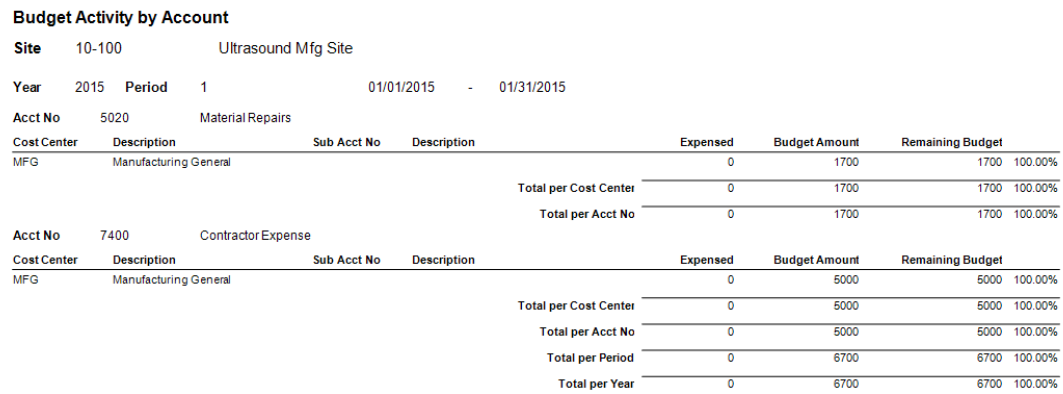
Detailed cost analysis is critical to successful plant management. QAD EAM financial reports are an effective tool for identifying revenue opportunities and cost savings.

## Budget

### Budget Activity by Account

This report groups budget activity by account number and sorts by cost center. The body of the report displays cost center, sub-account, cost center description, current amount, budget amount, variance, and total per account.

**Fig. 9.29**
Budget Activity by Account Report



**Budget Activity by Account**

**Site** 10-100 Ultrasound Mfg Site

**Year** 2015 **Period** 1 01/01/2015 - 01/31/2015

**Acct No** 5020 Material Repairs

| Cost Center | Description | Sub Acct No | Description | | Expensed | Budget Amount | Remaining Budget | |
|---|---|---|---|---|---|---|---|---|
| MFG | Manufacturing General | | | | 0 | 1700 | 1700 | 100.00% |
| | | | | Total per Cost Center | 0 | 1700 | 1700 | 100.00% |
| | | | | Total per Acct No | 0 | 1700 | 1700 | 100.00% |

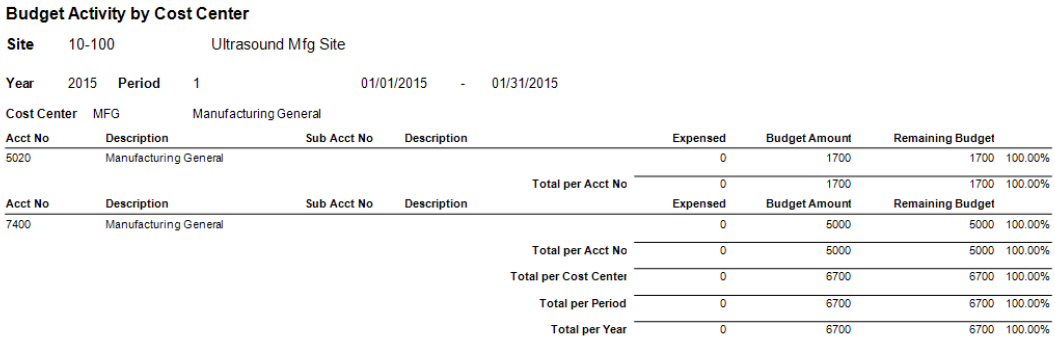
**Acct No** 7400 Contractor Expense

| Cost Center | Description | Sub Acct No | Description | | Expensed | Budget Amount | Remaining Budget | |
|---|---|---|---|---|---|---|---|---|
| MFG | Manufacturing General | | | | 0 | 5000 | 5000 | 100.00% |
| | | | | Total per Cost Center | 0 | 5000 | 5000 | 100.00% |
| | | | | Total per Acct No | 0 | 5000 | 5000 | 100.00% |
| | | | | Total per Period | 0 | 6700 | 6700 | 100.00% |
| | | | | Total per Year | 0 | 6700 | 6700 | 100.00% |

## Budget Activity by Cost Center

This report groups budget activity by cost center and sorts by account number. The body of the report displays account, sub-account, and cost center description. The report displays the totals per cost center for expensed amount, budget amount, and remaining budget.

**Fig. 9.30**
Budget Activity by Cost Center Report



**Budget Activity by Cost Center**

**Site** 10-100 Ultrasound Mfg Site

**Year** 2015 **Period** 1 01/01/2015 - 01/31/2015

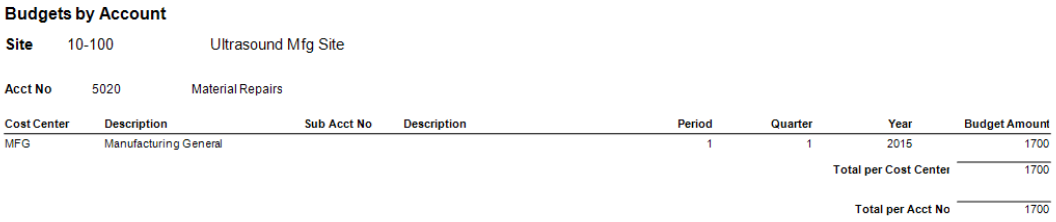
**Cost Center** MFG Manufacturing General

| Acct No | Description | Sub Acct No | Description | | Expensed | Budget Amount | Remaining Budget | |
|---|---|---|---|---|---|---|---|---|
| 5020 | Manufacturing General | | | | 0 | 1700 | 1700 | 100.00% |
| | | | | Total per Acct No | 0 | 1700 | 1700 | 100.00% |
| **Acct No** | **Description** | **Sub Acct No** | **Description** | | **Expensed** | **Budget Amount** | **Remaining Budget** | |
| 7400 | Manufacturing General | | | | 0 | 5000 | 5000 | 100.00% |
| | | | | Total per Acct No | 0 | 5000 | 5000 | 100.00% |
| | | | | Total per Cost Center | 0 | 6700 | 6700 | 100.00% |
| | | | | Total per Period | 0 | 6700 | 6700 | 100.00% |
| | | | | Total per Year | 0 | 6700 | 6700 | 100.00% |

## Budgets by Account

This report groups budget activity by account number and sorts by cost center. The body of the report displays cost center, sub-account, cost center description, period, year, budget amount, and total per cost center.

**Fig. 9.31**
Budgets by Account Report



**Budgets by Account**

**Site** 10-100 Ultrasound Mfg Site

**Acct No** 5020 Material Repairs

| Cost Center | Description | Sub Acct No | Description | Period | Quarter | Year | Budget Amount |
|---|---|---|---|---|---|---|---|
| MFG | Manufacturing General | | | 1 | 1 | 2015 | 1700 |
| | | | | | | Total per Cost Center | 1700 |
| | | | | | | Total per Acct No | 1700 |

## Budgets by Cost Center

This report groups budget activity by cost center and sorts by account number. The body of the report displays account, sub-account, account description, period, year, budget amount, and total per account.

**Fig. 9.32**
Budgets by Cost Center Report

**Cost Center** MFG Manufacturing General

| Acct No | Description | Sub Acct No | Description | Period | Quarter | Year | Budget Amount |
|---|---|---|---|---|---|---|---|
| 5020 | Material Repairs | | | 1 | 1 | 2015 | 1700 |
| | | | | | | Total per Acct No | 1700 |
| **Acct No** | **Description** | **Sub Acct No** | **Description** | **Period** | **Quarter** | **Year** | **Budget Amount** |
| 7400 | Contractor Expense | | | 1 | 1 | 2015 | 5000 |
| | | | | | | Total per Acct No | 5000 |
| | | | | | | Total per Cost Center | 6700 |

## Inventory

Inventory managers and controllers need accurate reports that track spending on spare parts. These reports provide a way to closely monitor inventory values. Managers can track what comes in and what goes out, and make adjustments to inventory purchasing to more closely balance the purchase and consumption of parts.

### Inventory Adjustments

This report groups inventory adjustments by site and part number. The body of the report displays a description of the adjustment, location and date of the adjustment, quantity that was adjusted, unit of measure, total cost of the adjustment and the total cost per site.

**Fig. 9.33**
Inventory Adjustments

**Inventory Adjustments**

**Site** 10-100 Ultrasound MFG Site

**Part No** 01010 Medical Ultrasound

| Adjustment | Description | Location | Date | Qty | UOM | Total Cost |
|---|---|---|---|---|---|---|
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 02/04/2014 | 50 | EA | 2842.5 |
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 02/05/2014 | 12 | EA | 682.2 |
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 02/24/2014 | 100 | EA | 5685 |
| Change in Count | ADJ-QTY-D-01010 | A-1-1-A | 03/30/2014 | -94 | EA | -5343.9 |
| Change in Count | ADJ-QTY-D-01010 | A-1-1-A | 04/02/2014 | -55 | EA | -3126.75 |
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 04/02/2014 | 75 | EA | 4263.75 |
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 04/14/2014 | 21 | EA | 1193.85 |
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 04/14/2014 | 50 | EA | 2842.5 |
| Change in Count | PHY-QTY-I-01010 | A-1-1-A | 05/21/2014 | 2 | EA | 113.7 |
| Change in Count | PHY-QTY-I-01010 | HR2C | 10/01/2014 | 196 | EA | 9996 |
| Change in Value | ADJ-COST-D-01010 | | 12/03/2014 | -392 | EA | -196 |
| Change in Count | ADJ-QTY-I-01010 | A-1-1-A | 12/03/2014 | 4 | EA | 204 |
| Change in Count | PHY-QTY-D-01010 | HR2C | 02/26/2015 | -2 | EA | -101 |
| | | | Total per Part: | -33 | | 19055.85 |

**Part No** 01021 Surgical Kit (in ERP)

| Adjustment | Description | Location | Date | Qty | UOM | Total Cost |
|---|---|---|---|---|---|---|
| Change in Count | ADJ-QTY-I-01021 | A-1-1-B | 03/25/2015 | 0.21 | EA | 3.01349 |
| | | | Total per Part: | 0.21 | | 3.01349 |

### Inventory by Vendor

This report shows all inventory parts associated with a vendor.

**Fig. 9.34**
Inventory by Vendor Report

**Inventory By Vendor**

| Part No / Description | Site / Manufacturer | Vendor No / Manuf Part No | Vendor Name / Primary? | Last Receipt | Vend Part No / Min Order Qty | UOM / Reorder Point | Available / Safety Stock | Mgt Max Qty / On Hand | Excess / On Order |
|---|---|---|---|---|---|---|---|---|---|
| SB Part | SANF | 1005000 | Universal Industries | | gsdfgsdf | ea | 31 | 42 | 0 |
| SB Part | | | yes | 08/12/03 | 5 | 23 | 5 | 31 | 123 |
| testing-testing | SANF | 1005000 | Universal Industries | | gsdfgsdf | EA | 0 | 513 | 0 |
| 1000 big motor | | | yes | | 23 | 23 | 200 | 0 | 0 |
| testpart | do | 1005000 | | | fghdfg | | 1 | 11 | 0 |
| Mike's part | Goodyear | | | | 0 | 11 | 0 | 1 | 10 |
| v | ATL | 1005000 | Universal Industries | | | | 0 | 513 | 0 |
| Kates global test | | | yes | | 13 | 500 | 200 | 0 | 100 |
| With-Attachments | SANF | 1005000 | Universal Industries | | gsdfgsdf | EA | 0 | 25 | 0 |
| 1000 big motor | | | yes | | 5 | 10 | 5 | 0 | 45 |
| 0-0-0 | SANF | 1007 | NORTHLAND ELECTRIC | | AS29-01 | EA | 99 | 42 | 57 |
| 1000 big motor 100 | Ortech | 10IE-011 | yes | 08/16/07 | 1 | 23 | 5 | 2625 | 1812 |
| 000-Training | SANF | 1007 | NORTHLAND ELECTRIC | | 001-Trn | EA | 0 | 10 | 0 |
| Conveyor belt | Artos | 001-Trn | yes | | 2 | 5 | 0 | 0 | 0 |
| 05-01-0089 | 10000 | 1007 | | | O191 | EA | 82 | 130 | 0 |
| Oil, synthetic 20w50w | | | yes | 05/29/09 | 20 | 120 | 0 | 100 | 36 |
| 05-01-0111 | 10000 | 1007 | | | N011-2 | EA | 43 | 125 | 0 |
| Motor Mount | | | yes | 11/19/09 | 25 | 100 | 0 | 45 | 3 |
| 833SO-M-20-1 | 10000 | 1007 | | | AS1 | ea | 4 | 36 | 0 |
| Oil,soluble,coolant,20:1,Mob | Goodyear | m-20-01 | yes | | 24 | 12 | 0 | 2 | 0 |
| CONTACT 001 | 10000 | 1007 | | | | | 8 | 10 | 0 |
| 800T XD1 CONTACT N.O. | | | yes | 09/18/09 | 5 | 5 | 0 | 8 | 0 |
| CONTACT 001 | 10000 | 1007 | | | CG3750 | EA | 8 | 10 | 0 |
| 800T XD1 CONTACT N.O. | | | yes | 09/18/09 | 5 | 5 | 0 | 8 | 0 |
| CONTACT 002 | 10000 | 1007 | | | | | 0 | 35 | 0 |
| 800T XA1 CONTACT NO/NC AB B | | | yes | 09/18/09 | 25 | 10 | 0 | 0 | 22 |
| CONTACT 002 | 10000 | 1007 | | | CG3750 | EA | 0 | 35 | 0 |
| 800T XA1 CONTACT NO/NC AB B | | | yes | 09/18/09 | 25 | 10 | 0 | 0 | 22 |
| 0-0 | ATL | 1011 | GIW Industries, Inc. | | 002 | | 1 | 42 | 0 |
| please do not change part, mik | | | no | 06/26/02 | 1 | 10 | 5 | 1 | 110 |

## Inventory Days of Supply

**Fig. 9.35**
Inventory Days of Supply Report

**Inventory Days Of Supply**

**Site** 10-100 Ultrasound MFG Site

| Part No | Description | On Hand | UOM Cost | Inv Value | Average 30 Days Usage | Days Supply | Reorder Point | Lead Days |
|---|---|---|---|---|---|---|---|---|
| AF606 | 6" Disposable Panel Filters Fiberglass Media | 12.00 | 10.98 | 0.00 | 0.00 | 0.00 | 40 | 0 |
| 1001 | Part 1 | 90,014.00 | 0.00 | 216.03 | 2.58 | 1,045,324.00 | 40 | 0 |
| 01030 | 01030 in EE | 51.00 | 299.00 | 15,249.00 | 0.50 | 3,060.00 | 200 | 0 |
| AF101 | 1" Disposable Panel Filters Fiberglass Media | 8,119.00 | 1.22 | 9,905.18 | 0.00 | 0.00 | 100 | 2 |
| AF202 | 2" Disposable Panel Filters Fiberglass Media | 2,017.00 | 1.12 | 2,259.04 | 84.17 | 719.00 | 10000 | 2 |
| 1002 | consignment | 100.00 | 4.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| 1003 | auto issue stock part | 0.00 | 10.00 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| AF301 | 3" Disposable Panel Filters Fiberglass Media | 4,419.00 | 1.12 | 0.00 | 0.08 | 1,590,840.00 | 2000 | 2 |
| AF-401 | 4" Disposable Panel Filters Fiberglass Media | 1,264.00 | 10.00 | 12,640.00 | 0.08 | 455,040.00 | 1000 | 2 |
| KVGpart | Koenraads part | 22.00 | 5.00 | 110.00 | 0.00 | 0.00 | 0 | 0 |
| S32-1 | E32-D32 PHOTO ELECT.SWITCH,FIB | 178.00 | 10.33 | 0.00 | 0.42 | 12,816.00 | 10 | 0 |
| S44-2 | E44-D32 PHOTO ELECT.SWITCH,FIB | 328.00 | 10.00 | 0.00 | 0.25 | 39,360.00 | 500 | 0 |
| WS200 | Magnetic Welding Square, 12 1/8x3 3/8x5/8 | 2,300.00 | 2.28 | 5,244.00 | 0.42 | 165,600.00 | 250 | 5 |
| AF404 | 4" Disposable Panel Filters Fiberglass Media | 998.00 | 1.12 | 0.00 | 0.08 | 359,280.00 | 5000 | 2 |

## Inventory Descriptors

List

This report displays descriptor codes, sorted by site and part number. Below each descriptor code are the orders that use that associated code.

**Fig. 9.36**
Inventory Descriptors Report

**Inventory Descriptors**

**Site** 10-100 Ultrasound Mfg Site

**Part No** CYLINDER 001 1062DNS-1.50-4 AIR CYLINDER

| Descriptor Code | Description | Type Code Definition | Type Code Description |
|---|---|---|---|
| Cylinder | Cylinder Parts | ELEC | Electrical |

| Order | Spec Label | Spec Value |
|---|---|---|
| 1 | Fill Pressure-PSI | 3442 |
| 2 | Liters | 2 |
| 3 | Cubic in | 122 |
| 4 | Length in | 14.17 |

## Inventory for All Sites

This report displays the inventory for all sites, sorted by part number.

**Fig. 9.37**
Inventory All Sites Report

**Inventory For All Sites**

| Part No | Site / Manufacturer | Description / Manuf Desc | Vendor No / Manuf Part No | Vendor Name / Min Order Qty | Vend Part No / Reorder Point | UOM / Safety Stock | Available / On Hand | Mgt Max Qty / On Order | Excess |
|---|---|---|---|---|---|---|---|---|---|
| 02005 | 10-200 | Valve Connector | 10S1004 | Sungro Chemicals | | EA | 194 | 350 | 0 |
| | | | | 50 | 300 | | 0 | 194 | 0 |
| 02006 | 10-200 | Small Standard Connector | 10S1004 | Sungro Chemicals | | EA | 0 | 0 | 0 |
| | | | | 0 | 0 | | 0 | 0 | 0 |
| 02200 | 10-100 | Motor Asm 8 way seat adj | 10S1005 | Absolute Electronics | qw1233 | EA | 0 | 0 | 0 |
| | ADTECH | ADTECH | a12345 | Company | 0 | | 0 | 4 | 0 |
| 02200 | 10-200 | Motor Asm 8 way seat adj | 10S1005 | Absolute Electronics | | EA | 30 | 0 | 30 |
| | | | | Company | 0 | | 0 | 30 | 200 |
| 0317 | 10-100 | St Paddy Part | 10S1006 | Hampton Electronics | March | EA | 3 | 0 | 3 |
| | | | | 0 | 0 | | 0 | 3 | 0 |
| 0325 | 10-100 | Wed's Part | 10S1003 | Heron Surgical Supply | ffggd | EA | 0 | | |
| | | | | | | | 0 | 0 | 0 |
| 036-004-5-B | ATL | Bearing 2 | 50000000 | Hydroxco Gas Processors | | EA | 74 | 0 | 74 |
| | | | | Inc. | 0 | | 0 | 80 | 329 |
| 036-004-5-B | SANF | 1000 big motor | 00018 | Borg Warner | 12345678901234567890 | EA | 800 | 600 | 200 |
| | Timken | Timken Manufacturing | T1234567890A1234567890B123456 7890C1234567890D12345 | | 23 23 | | 0 | 800 | 2463 |
| 036-005 | Phantom | | AC1 | AC Supply Company | | EA | 821 | 0 | 821 |
| | | | | 0 | 0 | | 0 | 821 | 0 |
| 036-005-001 | sanf | | AC1 | AC Supply Company | | EA | 8000 | 0 | 8000 |
| | | | | 0 | 0 | | 0 | 8000 | 2000 |
| 036-005-002 | PLANT1 | TAPE 1" GRAY | AC1 | AC Supply Company | 12345 | EA | 9 | 550 | 0 |
| | DEC | Digital Equipment Corporation | 125432199 | 500 | 50 | | 50 | 9 | 0 |
| 036-005-002 | SANF | 1000 big motor | 5001000 | General Supply | Vend036-005-002 | EA | 14 | 0 | 14 |
| | 3M | 3M | 3M-036-005-002 | Corporation | 0 0 | | 0 | 14 | 20 |
| 036-005-003 | PLANT1 | TAPE 1" GRAY | AC1 | AC Supply Company | 12345 | EA | 0 | 550 | 0 |
| | DEC | Digital Equipment Corporation | 125432199 | 500 | 50 | | 50 | 0 | 0 |
| 036-005-004 | PLANT1 | TAPE 1" GRAY | AC1 | AC Supply Company | 12345 | EA | 0 | 550 | 0 |
| | DEC | Digital Equipment Corporation | 125432199 | 500 | 50 | | 50 | 0 | 0 |

## Inventory Issues

### Issue to Cost Center and Account

This report displays the issuance of part numbers and their associated values, filtered by site, and grouped by cost center and account number.

**Fig. 9.38**
Issue to Cost Center and Account Report

**Issue to Cost Center and Account**

**Site** 10-100 Ultrasound MFG Site

**Cost Center**

**Acct No** 1500

| Date Stamp | Part No | Description | Location | Date Issued | Qty Issued | UOM | UOM Cost | Value |
|---|---|---|---|---|---|---|---|---|
| 141210005083 | AF202 | 2" Disposable Panel Filters Fiberglass Media | TRD | 12/10/2014 | 1.00 | EA | 1.12 | 1.12 |
| 150209005206 | AMTPart15 | AMTPart15 Description | L1 | 02/09/2015 | 5.00 | EA | 10.00 | 50.00 |
| 150317005286 | 0317 | St Paddy Part | HR2A | 03/17/2015 | 3.00 | EA | 20.00 | 60.00 |
| 150209005207 | AMTPart15 | AMTPart15 Description | L1 | 02/09/2015 | 5.00 | EA | 10.00 | 50.00 |
| 141210005082 | AF202 | 2" Disposable Panel Filters Fiberglass Media | TRD | 12/10/2014 | 1.00 | EA | 1.12 | 1.12 |
| | | | | | | **Total per Account** | | 357.86 |

**Acct No** 1550

| Date Stamp | Part No | Description | Location | Date Issued | Qty Issued | UOM | UOM Cost | Value |
|---|---|---|---|---|---|---|---|---|
| 140414003888 | 01021 | Surgical Kit (in ERP) | A-1-1-B | 04/14/2014 | 2.00 | EA | 60.00 | 120.00 |
| 140414003890 | 01021 | Surgical Kit (in ERP) | A-1-1-B | 04/14/2014 | 2.00 | EA | 60.00 | 120.00 |
| 140414003893 | 01021 | Surgical Kit (in ERP) | A-1-1-B | 04/14/2014 | 1.00 | EA | 60.00 | 60.00 |
| 140414003891 | 01021 | Surgical Kit (in ERP) | A-1-1-B | 04/14/2014 | 1.00 | EA | 60.00 | 60.00 |
| | | | | | | **Total per Account** | | 360.00 |

**Acct No** 1600

| Date Stamp | Part No | Description | Location | Date Issued | Qty Issued | UOM | UOM Cost | Value |
|---|---|---|---|---|---|---|---|---|
| 150210005211 | AMTPart11 | AMTPart11 Description | L1 | 02/10/2015 | 1.00 | EA | 10.00 | 10.00 |
| 141215005099 | 8452-NAI | Single Voltage Capacitor | TBD | 12/15/2014 | 1.00 | EA | 24.68 | 24.68 |
| 150210005212 | AMTPart11 | AMTPart11 Description | L1 | 02/10/2015 | 1.00 | EA | 10.00 | 10.00 |
| 141208005030 | AMTPart11 | AMTPart11 Description | L1 | 12/08/2014 | 1.00 | EA | 10.00 | 10.00 |

## Inventory Transactions

### Consignment Usage Transactions by Vendor

This report displays the transactions that apply to the consignment parts for the selected vendor. The report is filtered by part number and lists the date, transaction type, quantity, UOM, and total cost of each transaction for the part number.

## Inventory Transfer Document

### Inventory Transfer

**Fig. 9.39**
Inventory Transfer

**Inventory Transfer**

**Transit No** 22

**Part No** AID-039 WRIST SUPPORT:#100 WRIST SUPPO

**Transfered By** Janie Dixon

| Transfer From | Transfer To | Date |
|---|---|---|
| 10-100 / 1-A-1-6-B | 10-200 / 1-A-1-6-B | 12/04/2015 |
| **Transfer Qty** | **Transfer Cost per Part** | **Total** |
| 1.00 | 1.50 | 1.50 |

**PO Text**

WRIST SUPPORT:#100 WRIST SUPPORT

**Auth By** _____

## Inventory Usage Analysis

This report displays all inventory, filtered by site, and other constraints you include in Filter Criteria. The body of the report includes the part number and that part number's lead days, safety stock, number on hand, average 30 day usage, and suggested reorder point.

**Fig. 9.40**
Inventory Usage Analysis

**Inventory Usage Analysis**

**Site** 10-100 Ultrasound Mfg Site

| Part No | Description | Lead Days | Safety Stock | Reorder Point | Mgt Max Qty | On Hand | UOM Cost | Actual Lead Days | Avg 30 Days Usage | Suggested Reorder Point | Suggested Economic Order Qty |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AID-001 | ALCOHOL | 5 | 0.00 | 10.00 | 20.00 | 0.00 | 2.14 | 0 | -1.67 | 0.00 | |
| AID-002 | ALCOHOL WIPES | 5 | 5.00 | 10.00 | 11.00 | 0.00 | 2.14 | 0 | 0.00 | 5.00 | 0.00 |
| AID-003 | LENS CLEANING TOWELETTES | 5 | 0.00 | 10.00 | 11.00 | 1.00 | 6.00 | 0 | 0.00 | 0.00 | 0.00 |
| AID-008 | BANDAGES: 1 X 3"" | 5 | 0.00 | 10.00 | 11.00 | 0.00 | 4.60 | 0 | 0.00 | 0.00 | 0.00 |
| AID-009 | BANDAGES:FINGERTIP 2 X 2-5/8"" | 5 | 0.00 | 10.00 | 11.00 | 0.00 | 7.00 | 0 | 0.00 | 0.00 | 0.00 |
| AID-010 | BANDAGES:3/4 X 3"" | 5 | 0.00 | 1.00 | 2.00 | 18.00 | 5.00 | 0 | -1.42 | 0.00 | |
| AID-012 | BANDAGES:KNUCKLE &JOINT 1.5 X | 5 | 0.00 | 1.00 | 3.00 | 1.00 | 8.25 | 0 | 0.00 | 0.00 | 0.00 |
| AID-018 | EAR PLUGS: C-312-1222 E-Z-FIT | 5 | 0.00 | 1.00 | 3.00 | 1.00 | 32.75 | 0 | 0.00 | 0.00 | 0.00 |
| AID-019 | EAR PLUGS: C-QDI QUIET REUSABL | 5 | 0.00 | 1.00 | 3.00 | 2.00 | 25.00 | 0 | 0.00 | 0.00 | 0.00 |
| AID-020 | EAR PLUGS:#250227CORDED LASER | 5 | 0.00 | 1.00 | 3.00 | 4.00 | 15.00 | 0 | -0.25 | 0.00 | |
| AID-023 | GAUZE PADS: 3 X 3 | 5 | 0.00 | 1.00 | 2.00 | 1.00 | 3.25 | 0 | 0.00 | 0.00 | 0.00 |
| AID-024 | GAUZE PADS:2 X 2" X 8PLY" | 5 | 0.00 | 1.00 | 2.00 | 1.00 | 3.10 | 0 | 0.00 | 0.00 | 0.00 |
| AID-025 | GAUZE PADS: KERLUX ROLL 2-1/4",EA" | 5 | 0.00 | 1.00 | 7.00 | 1.00 | 2.50 | 0 | 0.00 | 0.00 | 0.00 |
| AID-026 | GLASSES:SAFETY BLUE B-7070-B | 0 | 0.00 | 10.00 | 25.00 | 7.00 | 1.75 | 0 | 0.33 | 0.00 | 47.81 |
| AID-027 | GLASSES:TOMAHAWK BLACK | 0 | 0.00 | 10.00 | 25.00 | 7.00 | 1.65 | 0 | 0.25 | 0.00 | 42.64 |
| AID-029 | OINTMENTS: TRIPPLE ANTIBIOTIC | 5 | 0.00 | 0.00 | 10.00 | 0.00 | 9.00 | 0 | 0.00 | 0.00 | 0.00 |
| AID-030 | #T883201 STANDARD COLD PACK 5 | 5 | 0.00 | 3.00 | 6.00 | 3.00 | 1.40 | 0 | 0.00 | 0.00 | 0.00 |
| AID-032 | HYDROGEN PEROXIDE | 5 | 0.00 | 15.00 | 16.00 | 0.00 | 0.75 | 0 | 0.00 | 0.00 | 0.00 |
| AID-034 | SALVES:BURN JEL FOIL PACKS | 5 | 0.00 | 1.00 | 2.00 | 1.00 | 17.50 | 0 | 0.00 | 0.00 | 0.00 |
| AID-035 | DERMA SHIELD 120Z CAN | 5 | 0.00 | 5.00 | 6.00 | 0.00 | 28.95 | 0 | 0.00 | 0.00 | 0.00 |
| AID-038 | TAPE: SELF ADHERING TAPE GUARD | 5 | 0.00 | 5.00 | 6.00 | 0.00 | 12.50 | 0 | 0.00 | 0.00 | 0.00 |

## Inventory Value

### Inventory Value Average Cost

This report displays inventory, filtered by site and listed by part number. It includes the on-hand quantity, UOM, cost per unit, and total value of the part.

**Fig. 9.41**
Inventory Value Average Cost Report

**Inventory Value Average Cost**

**Site** 10-100 Ultrasound Mfg Site

| Part No | Description | On Hand | UOM | Cost | Total Value |
|---|---|---|---|---|---|
| CONNECTOR 024 | 705 1-1/2 D/C S/SCR EMT CPMM" | 3 | EA | 0.86 | 2.58 |
| CONNECTOR 025 | GLL-1 1/2 GRND BUSHING MIDWES" | 3 | EA | 2.84 | 8.52 |
| CONNECTOR 026 | 714 1-1/4 D/C S/SCR EMT CPLG" | 3 | EA | 0.63 | 1.89 |
| CONTACT 001 | 800T XD1 CONTACT N.O. | 1 | EA | 8.53 | 8.53 |
| CONTACT 002 | 800T XA1 CONTACT NO/NC AB B | 1 | EA | 17.90 | 17.90 |
| CORD GRIP 001 | CG-7575 APPLETON | 6 | EA | 4.98 | 29.88 |
| CORD GRIP 002 | APP CG-3750 1/2 .375/.500 COR" | 6 | EA | 3.51 | 21.06 |
| CORD GRIP 003 | APP CG-5050 1/2 .500/.625 COR" | 6 | EA | 3.40 | 20.40 |
| CORD GRIP 004 | APP CG-1250 1/2 ALUM CC" | 6 | EA | 3.40 | 20.40 |
| CORD GRIP 005 | APP CG-3150 1/2 .312/.437 COR" | 5 | EA | 3.51 | 17.55 |
| CORD GRIP 006 | APP CG-1850 1/2 .187/.312 COR" | 10 | EA | 3.51 | 35.10 |
| CORN CLAMP 001 | PC50RA 1/2 RIGHT ANGLE CLAMP" | 5 | EA | 2.34 | 11.70 |
| CORN CLAMP 002 | PC75RA 3/4 RIGHT ANGLE CLAMP" | 5 | EA | 2.33 | 11.65 |
| CORN CLAMP 003 | PC100RA 1 RIGHT ANGLE CLAMP A" | 5 | EA | 2.11 | 10.55 |
| CORN CLAMP 004 | PC150RA 1-1/2 RIGHT ANGLE CLA" | 5 | EA | 2.34 | 11.70 |
| CORN CLAMP 005 | SC RC-2 RITE ANGLE CLMP | 2 | EA | 5.82 | 11.64 |
| CORN CLAMP 006 | SC RC32 RITE ANGLE CLMP | 2 | EA | 3.00 | 6.00 |
| CORNER L'S 001 | 820 1/2 90 DEG FEM EL W/GASK" | 5 | EA | 4.65 | 23.25 |
| CORNER L'S 002 | 821 3/4 90 DEG EL W/GASK" | 10 | EA | 5.20 | 52.00 |
| COVER 001 | 2510 CVR 2X4 DUPLEX | 3 | EA | 0.15 | 0.45 |
| COVER 002 | 2538 CVR SGL RECPT | 5 | EA | 0.55 | 2.75 |

### Inventory Value FIFO Cost

This report displays inventory filtered by site and displayed by part number. For a part to display in this report, the part must have at least one FIFO record attached.

**Fig. 9.42**
Inventory Value FIFO Cost Report

**Inventory Value FIFO Cost**

**Site** 10-100 Ultrasound Mfg Site

| Part No | Description | Date | On Hand | UOM | Cost | Total Value |
|---|---|---|---|---|---|---|
| BEARING 004 | INA NK 14/16 BEARING | 3/16/15 | 1.00 | EA | 11.50 | 11.50 |
| | | 6/5/15 | 3.00 | EA | 12.00 | 36.00 |
| | | | | | | 47.50 |
| BEARING 005 | INA 51103J BEARING | 3/16/15 | 1.00 | EA | 16.00 | 16.00 |
| | | 6/5/15 | 3.00 | EA | 12.00 | 36.00 |
| | | | | | | 52.00 |
| BEARING 006 | SFK 6003 RSJEM BEARING | 3/26/15 | 10.00 | EA | 12.50 | 125.00 |
| | | | | | | 125.00 |
| BEARING 007 | INA NK 20/16 BEARING | 3/16/15 | 1.00 | EA | 9.75 | 9.75 |
| | | | | | | 9.75 |
| BLOWER 001 | Blower, Pos Disp I/O Dia 2 In | 3/16/15 | 1.00 | EA | 1,234.00 | 1,234.00 |
| | | | | | | 1,234.00 |
| BLOWER 002 | Blower, Pos Disp I/O Dia 3 In | 3/16/15 | 1.00 | EA | 1,723.00 | 1,723.00 |
| | | | | | | 1,723.00 |

### Inventory Value LIFO Cost

This report displays inventory filtered by site and displayed by part number. For a part to display in this report, the part must have at least one LIFO record attached.

**Fig. 9.43**
Inventory Value LIFO Cost Report

**Inventory Value LIFO Cost**

**Site** 10-100 Ultrasound Mfg Site

| Part No | Description | Date | On Hand | UOM | Cost | Total Value |
|---|---|---|---|---|---|---|
| WELD 018 | BINZEL GAS DIFFUSER | 3/16/15 | 5.00 | EA | 5.51 | 27.55 |
| | | | | | | 27.55 |
| WELD 019 | #940.0019 CLAMPING RING | 3/16/15 | 3.00 | EA | 19.08 | 57.24 |
| | | | | | | 57.24 |
| WELD 021 | QCC CONDUIT 216",EA" | 3/16/15 | 3.00 | EA | 83.36 | 250.08 |
| | | | | | | 250.08 |
| WELD 022 | 1450179 BINZEL 145-15-030 NOZZ | 3/16/15 | 3.00 | EA | 6.30 | 18.90 |
| | | | | | | 18.90 |
| WELD 023 | #175-4371-10W STUD ELECTRODE | 3/16/15 | 0.00 | EA | 87.24 | 0.00 |
| | | | | | | 0.00 |
| WELD 024 | 1400217 BINZEL .035 TIP | 3/16/15 | 100.00 | EA | 1.14 | 114.00 |
| | | | | | | 114.00 |
| WELD 026 | 124.9003 binzel .035-.045 line | 3/16/15 | 3.00 | EA | 11.41 | 34.23 |
| | | | | | | 34.23 |
| WELD 027 | WELDING GLOVES MEDIUM | 3/16/15 | 3.00 | EA | 20.24 | 60.72 |
| | | | | | | 60.72 |
| WELD 028 | 404 STUD ELECTRODE | 3/16/15 | 3.00 | EA | 39.78 | 119.34 |
| | | | | | | 119.34 |

## Inventory Value As of Date

This report displays inventory values as of the date the report is run based on your cost method. It is filtered by site and is sorted by part number.

**Fig. 9.44**
Inventory Value as of Date Report

**Inventory Value as of Date**

**Site** 10-100 Ultrasound Mfg Site

**Values as of Date:** 3/8/2017 12:00:00 AM **Site** 10-100 **Cost Method** Weighted Average

| Part No | Description | UOM | On Hand | UOM Cost | Total Cost | Account | Cost Centre | Sub Account |
|---|---|---|---|---|---|---|---|---|
| AID-001 | ALCOHOL | EA | 0.00 | 2.14 | 0.00 | 1510 | | |
| AID-003 | LENS CLEANING TOWELETTES | BX | 1.00 | 6.00 | 6.00 | 1510 | | |
| AID-008 | BANDAGES: 1 X 3"" | EA | 70.00 | 4.60 | 322.00 | 1510 | | |
| AID-010 | BANDAGES:3/4 X 3"" | EA | 18.00 | 5.00 | 90.00 | 1510 | | |
| AID-019 | EAR PLUGS: C-QDI QUIET REUSABL | EA | 2.00 | 25.00 | 50.00 | 1510 | | |
| AID-020 | EAR PLUGS:#250227CORDED LASER | EA | 4.00 | 15.00 | 60.00 | 1510 | | |
| AID-026 | GLASSES:SAFETY BLUE B-7070-B | EA | 7.00 | 1.75 | 12.25 | 1510 | | |
| AID-027 | GLASSES:TOMAHAWK BLACK | EA | 7.00 | 1.65 | 11.55 | 1510 | | |
| AID-039 | WRIST SUPPORT:#100 WRIST SUPPO | EA | 5.00 | 1.50 | 7.50 | 1510 | | |
| AID-066 | SPLINTER REMOVAL NEEDLES | EA | 5.00 | 3.00 | 15.00 | 1510 | | |
| AID-067 | #889022 TENNIS ELBOW STRAP | EA | 5.00 | 3.50 | 17.50 | 1510 | | |
| AID-076 | #550530 KEVLAR SLEEVE W/OUT TH | EA | 10.00 | 2.25 | 22.50 | 1510 | | |
| AIRFILTER-002 | PF7909-10 3/8 AIR FILTER | EA | 2.00 | 33.86 | 67.72 | 1510 | | |
| AIRFILTER-005 | Filter,air,Compressor 7.5-10 HP | EA | 4.00 | 27.21 | 108.84 | 1510 | | |
| AIRFIT-002 | 2-BU-S 1/8 TUBE NUT | EA | 5.00 | 0.46 | 2.30 | 1510 | | |
| AIRFIT-003 | 2-BT12-B 1/8 NUT & FERRULE | EA | 100.00 | 0.41 | 41.00 | 1510 | | |
| AIRFIT-018 | 169PL-6-8 3/8 X 1/2 SW EL | EA | 5.00 | 4.41 | 22.05 | 1510 | | |
| AIRLUB-002 | PG7829 1/2 AIR LUBRICATOR" | EA | 1.00 | 47.14 | 47.14 | 1510 | | |
| AIRREG-004 | P29904 ISO-1 SANDWICH REG. | EA | 2.00 | 69.20 | 138.40 | 1510 | | |
| BEARING 001 | B8-SA RBC BEARING SETS | EA | 11.00 | 32.77 | 360.47 | | | |
| BEARING 002 | FAFNIR 205PP BEARING | EA | 12.00 | 12.00 | 144.00 | 1510 | | |

## Inventory with Location

This report displays inventory, filtered by site. It lists inventory by part number, including the location of the part, the number on hand, and whether the part is critical or not.

**Fig. 9.45**
Inventory with Location Report

**Inventory With location**

**Site** 10-100 Ultrasound Mfg Site

| Part No | Description | Critical? | Vendor Name | Vendor Part No | Location | On Hand | UOM |
|---|---|---|---|---|---|---|---|
| BEARING 002 | FAFNIR 205PP BEARING | Yes | Hampton Electronics | 205PP FAFNIR | 1-B-2-10-C | 12.00 | EA |
| BEARING 003 | INA 51105 BEARING | Yes | Hampton Electronics | 51105 INA | 1-B-2-10-D | 5.00 | EA |
| BEARING 004 | INA NK 14/16 BEARING | Yes | Heron Surgical Supply | INA NK14/16 | 1-B-2-10-E | 4.00 | EA |
| BEARING 005 | INA 51103J BEARING | Yes | Heron Surgical Supply | INA 51103J | 1-B-2-10-F | 4.00 | EA |
| BEARING 006 | SFK 6003 RSJEM BEARING | Yes | Hampton Electronics | H10023 | 1-B-2-11 | 10.00 | EA |
| BEARING 007 | INA NK 20/16 BEARING | Yes | Heron Surgical Supply | INA NK 20/16 BEARING | 1-B-2-12 | 1.00 | EA |
| BLOWER 001 | Blower, Pos Disp I/O Dia 2 In | No | Bridgeville Industries | JD-I/O2 | 1-A-2-11 | 1.00 | EA |
| BLOWER 002 | Blower, Pos Disp I/O Dia 3 In | No | Bridgeville Industries | JD-I/O3 | 1-A-2-11 | 1.00 | EA |
| SET SCREW 024 | 1/2-13 X 1/2 SET SCREW | No | Bridgeville Industries | 2-Y347J | 1-A-2-3-A | 0.00 | EA |
| BLOWER 003 | Blower, Pos Disp I/O Dia 4 In | No | Bridgeville Industries | JD-I/O4 | 1-A-2-11 | 0.00 | EA |
| BTTNHDSCR 001 | 1/4-20X3/4 BUTTON HEAD SCREW | No | Bridgeville Industries | 428-DJK | 1-B-2-13 | 0.00 | EA |
| BTTNHDSCR 002 | 5/16-18X3/4 BUTTON HEAD SCREW | No | Bridgeville Industries | 742320F | 1-A-2-1 | 0.00 | EA |
| BTTNHDSCR 003 | 3/8-16X3/4 BUTTON HEAD SCREW | No | Bridgeville Industries | FER25 | 1-A-2-2 | 0.00 | EA |
| BTTNHDSCR 004 | 8-32X3/8 BUTTON HEAD SCREW | No | Bridgeville Industries | TWEE98 | 1-A-2-3-A | 0.00 | EA |
| BTTNHDSCR 005 | 5/16-18X3/8 BUTTON HEAD SCREW | No | Bridgeville Industries | 333-98 | 1-A-2-3-B | 0.00 | EA |
| BUSHING 001 | 931 1/2 INSL PLSTIC BUSHING" | No | Heron Surgical Supply | 34331-JM | 1-A-2-3-C | 5.00 | EA |
| BUSHING 002 | 932 3/4 INSL PLSTIC BUSHING" | No | Heron Surgical Supply | L-DE247U | 1-A-2-3-D | 5.00 | EA |
| BUSHING 003 | 934 1 1/4 INSL PLSTIC BUSHING" | No | Heron Surgical Supply | P-43278D | 1-A-2-3-E | 5.00 | EA |

## Inventory Without Price Schedules

This report displays inventory by site, listed by part number. Each part number includes vendor name, vendor part number, and the date the part was last received.

**Fig. 9.46**
Inventory Without Price Schedules Report

**Inventory Without Price Schedules**

**Site** 10-100 Ultrasound Mfg Site

| Part No | Description | Vendor Name | Vendor Part No | UOM Cost | Last Received | UOM Price | Exp Date |
|---|---|---|---|---|---|---|---|
| BEARING 006 | SFK 6003 RSJEM BEARING | Donald Schneider | H10023 | 12.50 | 03/26/2015 | | |
| BEARING 007 | INA NK 20/16 BEARING | Elizabeth Clear | INA NK 20/16 BEARING | 9.75 | | | |
| BLOWER 001 | Blower, Pos Disp I/O Dia 2 In | Bridgeville Industries | JD-I/O2 | 1,234.00 | 09/27/2009 | | |
| BLOWER 002 | Blower, Pos Disp I/O Dia 3 In | Bridgeville Industries | JD-I/O3 | 1,723.00 | 09/27/2009 | | |
| SET SCREW 024 | 1/2-13 X 1/2 SET SCREW | Bridgeville Industries | 2-Y347J | 0.88 | | | |
| BLOWER 003 | Blower, Pos Disp I/O Dia 4 In | Bridgeville Industries | JD-I/O4 | 2,678.00 | 09/27/2009 | | |
| BTTNHDSCR 001 | 1/4-20X3/4 BUTTON HEAD SCREW | Bridgeville Industries | 428-DJK | 3.55 | 09/18/2009 | | |

## Physical Inventory

### Count Sheet

**Fig. 9.47**
Inventory Count Sheet

**Count Sheet**

**Site** 10-100 description **Count By** **Created By** txtCreatedBy1 **Count Date** **Created Date** txtCreatedDate1

| | | | | | | |
|---|---|---|---|---|---|---|
| 10 | 1-A-1-10-E | HOSECLAMP-003 | Bridgeville Industries | EA | | |
| | | 8HS HOSE CLAMP | J3945 | | | |
| 11 | 1-A-1-10-F | AIRFIT-006 | Hampton Electronics | EA | | |
| | | 68PL-4-2 1/4 X 1/8 STRT | D-24378 | | | |
| 12 | 1-A-1-10-F | HOSECLAMP-004 | Bridgeville Industries | EA | | |
| | | 16HS HOSE CLAMP | TE0893 | | | |
| 13 | 1-A-1-11 | AIRFIT-007 | Bridgeville Industries | EA | | |
| | | 68PL-4-4 1/4 X 1/4 STRT | A-1332 | | | |
| 14 | 1-A-1-11 | HOSECLAMP-005 | Bridgeville Industries | EA | | |
| | | 32HS HOSE CLAMP | TJEI703 | | | |
| 15 | 1-A-1-12 | AIRFIT-008 | Bridgeville Industries | EA | | |

### Physical Adjustment

**Fig. 9.48**
Inventory Physical Adjustment Report

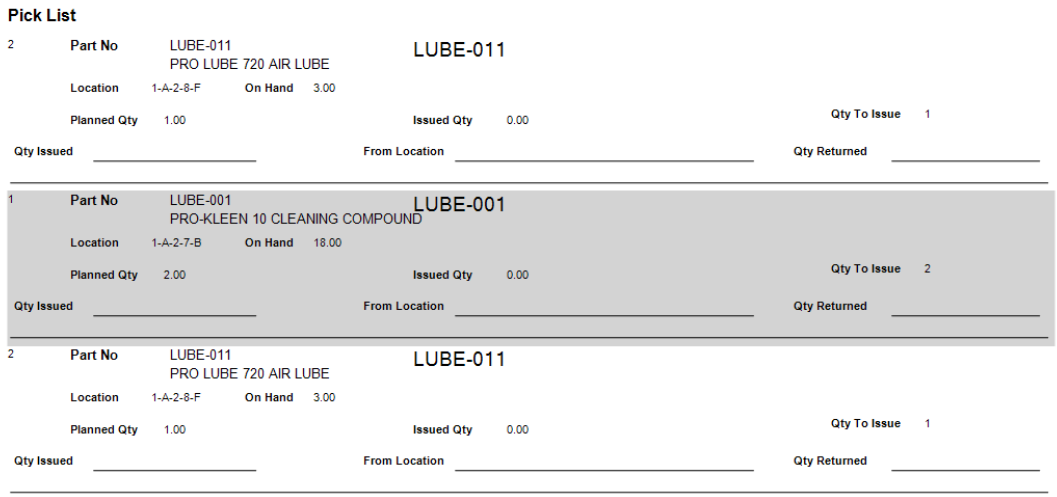
**Physical Adjustment**

**Site** 10-100 Ultrasound Mfg Site

| Part No. | Description | Location | On Hand | Count | Unit Cost | Qty Change | Adjustment |
|---|---|---|---|---|---|---|---|
| 0000joy | test | 1-A-1-1 | 721 | 2 | 0.1 | -719 | -71.9 |
| 000joy | test | 1-A-1-1 | 11 | 12 | 200 | 1 | 200 |
| 0_joy_b | test | 1-A-1-1 | 5 | 3 | 20 | -2 | -40 |
| 0_joy_b | test | 1-A-1-1 | 5 | 4 | 20 | -1 | -20 |
| 0joy | joy's test | 1-A-1-1 | 6 | 1 | 10 | -5 | -50 |
| 0joy3 | | 1-A-1-1 | 8 | 5 | 0 | -3 | 0 |
| 10_m4b | m4b_2 | 1-A-1-10-E | 49 | 30 | 10 | -19 | -190 |
| 10_m4b | m4b_2 | 1-A-1-10-E | 49 | 30 | 10 | -19 | -190 |
| 1_nov | test part | 1-A-1-10-E | 11 | 8 | 1 | -3 | -3 |
| 1_nov | test part | 1-A-1-10-E | 11 | 16 | 1 | 5 | 5 |
| AID-010 | BANDAGES:3/4 X 3"" | 1-A-1-3-D | 18 | 8 | 5 | -10 | -50 |
| AID-010 | BANDAGES:3/4 X 3"" | 1-A-1-3-D | 18 | 10 | 5 | -8 | -40 |

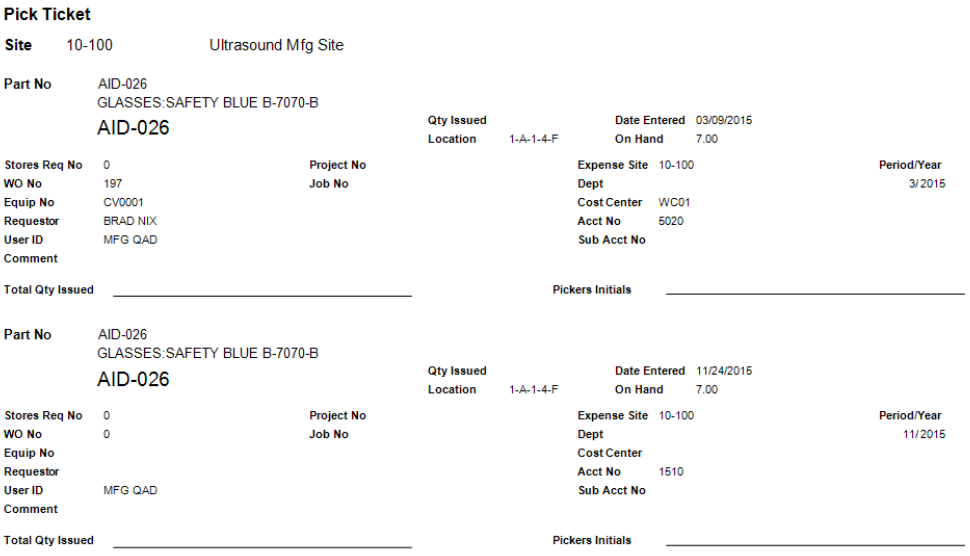
## Pick List

**Fig. 9.49**
Inventory Pick List




## Pick Ticket

**Fig. 9.50**
Pick Ticket Report




## Stock Replenishment

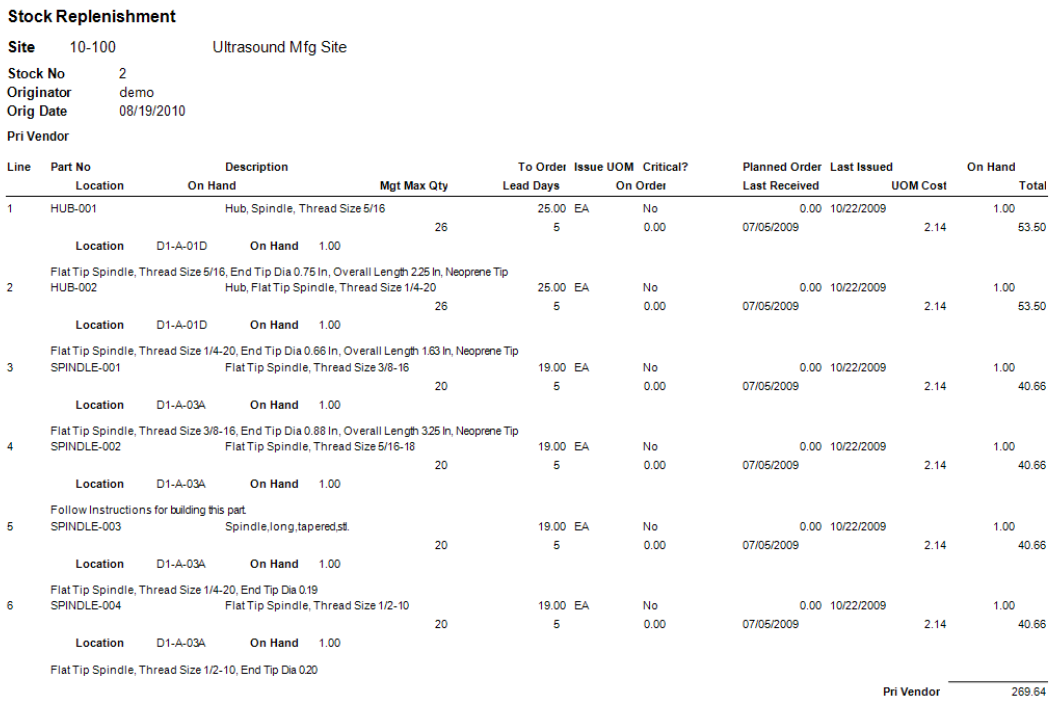
This report shows a list of parts and quantities in inventory, allowing you to confirm those amounts before creating requisitions or work orders. The report displays the vendor part number and a description for each part. The report also displays the expected price for each item, with that price coming from the following sources:

- The price from the vendor part record (vr_qote.uom_cost).

- If the vendor part record does not have a price, then the last price at which the item was purchased.
- If there is no last price, then the item's UOM cost (parts.uom_cost).

The report displays the expected total cost for each part listed and calculates the total cost for parts from each individual vendor.

**Fig. 9.51**
Stock Replenishment Report



**Stock Replenishment**

**Site** 10-100 Ultrasound Mfg Site

**Stock No** 2
**Originator** demo
**Orig Date** 08/19/2010

**Pri Vendor**

| Line | Part No / Location | Description / On Hand | Mgt Max Qty | To Order / Lead Days | Issue UOM / On Order | Critical? | Planned Order / Last Received | Last Issued / UOM Cost | On Hand / Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | HUB-001 | Hub, Spindle, Thread Size 5/16 | | 25.00 | EA | No | 0.00 | 10/22/2009 | 1.00 |
| | | | 26 | 5 | | 0.00 | 07/05/2009 | 2.14 | 53.50 |
| | Location D1-A-01D | On Hand 1.00 | | | | | | | |
| | Flat Tip Spindle, Thread Size 5/16, End Tip Dia 0.75 In, Overall Length 2.25 In, Neoprene Tip | | | | | | | | |
| 2 | HUB-002 | Hub, Flat Tip Spindle, Thread Size 1/4-20 | | 25.00 | EA | No | 0.00 | 10/22/2009 | 1.00 |
| | | | 26 | 5 | | 0.00 | 07/05/2009 | 2.14 | 53.50 |
| | Location D1-A-01D | On Hand 1.00 | | | | | | | |
| | Flat Tip Spindle, Thread Size 1/4-20, End Tip Dia 0.66 In, Overall Length 1.63 In, Neoprene Tip | | | | | | | | |
| 3 | SPINDLE-001 | Flat Tip Spindle, Thread Size 3/8-16 | | 19.00 | EA | No | 0.00 | 10/22/2009 | 1.00 |
| | | | 20 | 5 | | 0.00 | 07/05/2009 | 2.14 | 40.66 |
| | Location D1-A-03A | On Hand 1.00 | | | | | | | |
| | Flat Tip Spindle, Thread Size 3/8-16, End Tip Dia 0.88 In, Overall Length 3.25 In, Neoprene Tip | | | | | | | | |
| 4 | SPINDLE-002 | Flat Tip Spindle, Thread Size 5/16-18 | | 19.00 | EA | No | 0.00 | 10/22/2009 | 1.00 |
| | | | 20 | 5 | | 0.00 | 07/05/2009 | 2.14 | 40.66 |
| | Location D1-A-03A | On Hand 1.00 | | | | | | | |
| | Follow Instructions for building this part. | | | | | | | | |
| 5 | SPINDLE-003 | Spindle,long,tapered,stl. | | 19.00 | EA | No | 0.00 | 10/22/2009 | 1.00 |
| | | | 20 | 5 | | 0.00 | 07/05/2009 | 2.14 | 40.66 |
| | Location D1-A-03A | On Hand 1.00 | | | | | | | |
| | Flat Tip Spindle, Thread Size 1/4-20, End Tip Dia 0.19 | | | | | | | | |
| 6 | SPINDLE-004 | Flat Tip Spindle, Thread Size 1/2-10 | | 19.00 | EA | No | 0.00 | 10/22/2009 | 1.00 |
| | | | 20 | 5 | | 0.00 | 07/05/2009 | 2.14 | 40.66 |
| | Location D1-A-03A | On Hand 1.00 | | | | | | | |
| | Flat Tip Spindle, Thread Size 1/2-10, End Tip Dia 0.20 | | | | | | | | |
| | | | | | | | | Pri Vendor | 269.64 |

## Labor

Tracking labor time and cost is one of the keys to successful budget management. With QAD EAM labor reports, you can analyze labor transactions with various filter options to give you the exact data that you need.

### Equipment Labor Summary

This report displays the number of labor hours, the total labor cost, and the number of work orders that have been generated for the specified piece of equipment.

**Fig. 9.52**
Equipment Labor Summary Report

**Equipment Labor Summary**

**Site** 10-100 Ultrasound Mfg Site

| Equip No | Description | Cost Center | Department | Total WO Count | Total Labor Hrs | Total % | Total Labor Cost |
|---|---|---|---|---|---|---|---|
| CV0005 | Conveyor,feed,7ft,9in belt | | Department 2 | 11 | 45.25 | 18.59 | 1,164.88 |

| Failure | Description | WO Count | Labor Hrs | % | Labor Cost |
|---|---|---|---|---|---|
| BATT | Battery | 4 | 8.25 | 3.39 | 259.88 |
| PM | PM | 2 | 7.00 | 2.88 | 140.00 |
| BOLT | Stripped or Broken | 3 | 10.00 | 4.11 | 250.00 |
| ACD | AC Drive | 1 | 10.00 | 4.11 | 315.00 |
| | | 1 | 10.00 | 4.11 | 200.00 |

## Labor Transactions by CC

**Fig. 9.53**
Labor Transactions by CC Report

**Labor Transactions by CC**

**Site** 10-100 Ultrasound Mfg Site

**Cost Center**

| Equip No | Description | WO No | Date | Emp No | Name | Time | Total Cost |
|---|---|---|---|---|---|---|---|
| | | 0 | 11/24/2015 | 10-EMP18 | KEN GREEN | 2:00 | 40.00 |
| | | 294 | 11/23/2015 | 10-EMP18 | KEN GREEN | 1:00 | 20.00 |
| | | 295 | 11/23/2015 | 10-EMP23 | FRANK HARRIS | 1:00 | 20.00 |
| | | 297 | 11/23/2015 | 10-EMP18 | KEN GREEN | 1:00 | 20.00 |
| | | 298 | 11/23/2015 | 10-EMP18 | KEN GREEN | 2:00 | 40.00 |
| | | 303 | 11/24/2015 | 10-EMP18 | KEN GREEN | 3:00 | 60.00 |
| AC0001 | Air Conditioner 01 | 0 | 11/30/2015 | BNIX | BRAD NIX | 1:00 | 31.50 |
| AC0002 | Air Conditioner 02 | 277 | 04/23/2015 | 10-EMP26 | SAM HELTSLEY | 5:00 | 192.50 |
| | | 281 | 05/11/2015 | 10-EMP05 | RANDY WOOD | 10:00 | 200.00 |
| CV0005 | Conveyor,feed,7ft,9in belt | 279 | 04/24/2015 | bnix | BRAD NIX | 5:30 | 173.25 |
| HO0151 | Hopper,vibrating,100lb | 313 | 12/08/2015 | 10-EMP23 | FRANK HARRIS | 0:15 | 6.63 |
| | | | | | **Total per Cost Center** | 31:45 | 803.88 |

## Labor Transactions by CC/Acct No

**Fig. 9.54**
Labor Transactions by CC/Acct No Report

**Labor Transactions by Cost Center/Acct No**

**Site** 10-100 Ultrasound Mfg Site

**Cost Center**
**Acct No**

| Equip No | Description | WO No | Date | Emp No | Name | Time | Total Cost |
|---|---|---|---|---|---|---|---|
| AC0002 | Air Conditioner 02 | 277 | 04/23/2015 | 10-EMP26 | SAM HELTSLEY | 5:00 | 192.50 |
| | | 281 | 05/11/2015 | 10-EMP05 | RANDY WOOD | 10:00 | 200.00 |
| CV0005 | Conveyor,feed,7ft,9in belt | 279 | 04/24/2015 | bnix | BRAD NIX | 5:30 | 173.25 |
| | | | | | **Total per Acct No** | 20:30 | 565.75 |

**Acct No** 1090 Petty Cash

| Equip No | Description | WO No | Date | Emp No | Name | Time | Total Cost |
|---|---|---|---|---|---|---|---|
| | | 294 | 11/23/2015 | 10-EMP18 | KEN GREEN | 1:00 | 20.00 |
| | | 295 | 11/23/2015 | 10-EMP23 | FRANK HARRIS | 1:00 | 20.00 |
| | | 297 | 11/23/2015 | 10-EMP18 | KEN GREEN | 1:00 | 20.00 |
| | | 298 | 11/23/2015 | 10-EMP18 | KEN GREEN | 2:00 | 40.00 |
| | | | | | **Total per Acct No** | 5:00 | 100.00 |

**Acct No** 116151 test act

| Equip No | Description | WO No | Date | Emp No | Name | Time | Total Cost |
|---|---|---|---|---|---|---|---|
| AC0001 | Air Conditioner 01 | 0 | 11/30/2015 | BNIX | BRAD NIX | 1:00 | 31.50 |
| | | | | | **Total per Acct No** | 1:00 | 31.50 |

**Acct No** 1510 MRO Inventory

## Work Order Labor Summary

### Work Order Labor Summary by Class

**Fig. 9.55**
Work Order Labor Summary by Class Report

**Work Order Labor Summary by Class**

**Site** 10-100 Ultrasound Mfg Site

| Class | Description | WO Count | Labor Hours | % | Labor Cost |
|---|---|---|---|---|---|
| PM | Preventative Maintenance | 44 | 141.00 | 57.92 | 2,936.63 |
| | | 46 | 74.42 | 30.57 | 1,604.13 |
| PLAN | PLanned CM | 9 | 19.75 | 8.11 | 487.50 |
| BD | Breakdown | 2 | 8.25 | 3.39 | 279.13 |
| | | 101 | 243.42 | 100.00 | 5,307.39 |

### Work Order Labor Summary by Cost Center

**Fig. 9.56**
Work Order Labor Summary by Cost Center Report

**Work Order Labor Summary by Cost Center**

**Site** 10-100 Ultrasound Mfg Site

| Cost Center | Description | WO Count | Labor Hours | % | Labor Cost |
|---|---|---|---|---|---|
| WC01 | Work Center 1 | 21 | 82.25 | 33.79 | 1,904.88 |
| Adm | Administration | 53 | 93.92 | 38.58 | 2,055.88 |
| Mfg | Manufacturing General | 8 | 21.00 | 8.63 | 420.00 |
| WC02 | Work Center 2 | 4 | 15.00 | 6.16 | 300.00 |
| WC03 | Work Center 3 | 9 | 23.00 | 9.45 | 460.00 |
| | | 6 | 8.25 | 3.39 | 166.63 |
| | | 101 | 243.42 | 100.00 | 5,307.39 |

### Work Order Labor Summary by Pri Craft

**Fig. 9.57**
Work Order Labor Summary by Pri Craft Report

**Work Order Labor Summary by Pri Craft**

**Site** 10-100 Ultrasound Mfg Site

| Pri Craft | Description | WO Count | Labor Hours | % | Labor Cost |
|---|---|---|---|---|---|
| | | 0 | 202.00 | 82.98 | 4,068.13 |
| OPR | Operator | 0 | 15.17 | 6.23 | 412.75 |
| MNT | Maintenance | 0 | 26.25 | 10.78 | 826.51 |
| | | 0 | 243.42 | 100.00 | 5,307.39 |

### Work Order Labor Summary by Priority

**Fig. 9.58**
Work Order Labor Summary by Priority Report

**Work Order Labor Summary by Priority**

**Site** 10-100 Ultrasound Mfg Site

| Priority | Description | WO Count | Labor Hours | % | Labor Cost |
|---|---|---|---|---|---|
| 3 | High | 48 | 147.50 | 60.59 | 3,066.63 |
| | | 48 | 83.67 | 34.37 | 1,881.63 |
| 4 | Low | 2 | 8.25 | 3.39 | 279.13 |
| 01 | | 1 | 1.00 | 0.41 | 20.00 |
| 06 | | 1 | 1.00 | 0.41 | 20.00 |
| aa | | 1 | 2.00 | 0.82 | 40.00 |
| | | 101 | 243.42 | 100.00 | 5,307.39 |

## Preventive Maintenance

Preventive maintenance is the foundation of all maintenance philosophy. If the PM program is not effective, nothing else will be. Preventive maintenance can address many issues that affect a company's ability to remain profitable. Management support is the single most critical factor to the success or failure of a PM program

### Master Instruction Lists with Equipment

**Fig. 9.59**
Master Instruction Lists with Equipment Report

**Master Instruction Lists with Equipment**

**Site** 10-100 Ultrasound Mfg Site

**Mstr Inst No** 5 Instruction Motoman Battery Change

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| CV0003 | Conveyor,delivery,4ft,9in belt | 1002 | WEEKLY CONVEYOR INSPECTION | 10/14/2014 |
| CV0004 | Conveyor,feed,3ft,6in belt | 1003 | SEMI-ANNUAL CONVEYOR PM | 03/12/2015 |
| CV0005 | Conveyor,feed,7ft,9in belt | 1004 | YEARLY CONVEYOR PM | 06/12/2015 |
| CV0005 | Conveyor,feed,7ft,9in belt | 1056 | MONTHLY CONVEYOR PM | 06/01/2015 |

**Mstr Inst No** 6 Instruction Motoman Weekly Inspection

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| PAINT | Paint Shop | 1050 | M1 C &I Fire Extinguisher Sys | 11/26/2015 |

**Mstr Inst No** 7 Instruction Motoman yearly inspection

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| GREASER0001 | Grease Tumbler V229 | 1026 | QUARTERLY GREASER PM | 08/01/2014 |
| GREASER0002 | Greaser-02 | 1027 | QUARTERLY GREASER PM | 08/01/2014 |
| GREASER0003 | Greaser-03 PN96 | 1028 | QUARTERLY GREASER PM | 08/01/2014 |
| GREASER0004 | Greaser-04 | 1029 | QUARTERLY GREASER PM | 08/01/2014 |
| PAINT | Paint Shop | 1048 | CLEAN EYEWASH STATIONS | 10/14/2014 |

**Mstr Inst No** 9 Instruction Hydraulic Unit Check

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| HO0001 | Hopper,vibrating,100lb | 1031 | QUARTERLY HOPPER PM | 12/12/2014 |
| HO0151 | Hopper,vibrating,100lb | 1032 | QUARTERLY HOPPER PM | 01/12/2015 |

### Master Part Lists with Equipment

**Fig. 9.60**
Master Parts Lists with Equipment Report

**Master Part Lists With Equipment**

**Site** 10-100 Ultrasound Mfg Site

**Mstr Part No** 1 M1 C&I Press Servicing

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| AC0008 | Air Conditioner 08 | 1053 | AC MONTHLY PM | 04/06/2015 |
| P00001 | Press,80t,w/a bolster 26x36 | 1005 | MONTHLY PRESS PM | 10/14/2014 |
| P00002 | Press,50t,incline,36x48 tbl. | 1006 | MONTHLY PRESS PM | 10/14/2014 |

**Mstr Part No** 4 M1 Motoman Greasing

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| CV0001 | Conveyor,feed,3ft,6in belt | 1000 | MONTHLY CONVEYOR PM | 10/14/2014 |

**Mstr Part No** 6 Y1 Motoman Rebuild

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| CV0005 | Conveyor,feed,7ft,9in belt | 1004 | YEARLY CONVEYOR PM | 06/12/2015 |
| AC0006 | Air Conditioner 06 | 1055 | AC MONTHLY PM | 04/06/2015 |
| CV0005 | Conveyor,feed,7ft,9in belt | 1056 | MONTHLY CONVEYOR PM | 06/01/2015 |

**Mstr Part No** 7 M1 Lube Conveyors

| Equip No | Description | PM No | Description | PM Due |
|---|---|---|---|---|
| AC0007 | Air Conditioner 07 | 1046 | AC MONTHLY PM | 06/11/2015 |
| AC0007 | Air Conditioner 07 | 1054 | AC MONTHLY PM | 03/30/2015 |

**Mstr Part No** 9 M1 C&I Resistance Welders

## PM Master Lists

**Fig. 9.61**
PM Master Lists

**Labor Transactions by CC**

**Site** 10-100 Ultrasound Mfg Site

**Cost Center**

| Equip No | Description | WO No | Date | Emp No | Name | Time | Total Cost |
|---|---|---|---|---|---|---|---|
| | | 0 | 11/24/2015 | 10-EMP18 | KEN GREEN | 2:00 | 40.00 |
| | | 294 | 11/23/2015 | 10-EMP18 | KEN GREEN | 1:00 | 20.00 |
| | | 295 | 11/23/2015 | 10-EMP23 | FRANK HARRIS | 1:00 | 20.00 |
| | | 297 | 11/23/2015 | 10-EMP18 | KEN GREEN | 1:00 | 20.00 |
| | | 298 | 11/23/2015 | 10-EMP18 | KEN GREEN | 2:00 | 40.00 |
| | | 303 | 11/24/2015 | 10-EMP18 | KEN GREEN | 3:00 | 60.00 |
| AC0001 | Air Conditioner 01 | 0 | 11/30/2015 | BNIX | BRAD NIX | 1:00 | 31.50 |
| AC0002 | Air Conditioner 02 | 277 | 04/23/2015 | 10-EMP26 | SAM HELTSLEY | 5:00 | 192.50 |
| | | 281 | 05/11/2015 | 10-EMP05 | RANDY WOOD | 10:00 | 200.00 |
| CV0005 | Conveyor,feed,7ft,9in belt | 279 | 04/24/2015 | bnix | BRAD NIX | 5:30 | 173.25 |
| HO0151 | Hopper,vibrating,100lb | 313 | 12/08/2015 | 10-EMP23 | FRANK HARRIS | 0:15 | 6.63 |
| | | | | | **Total per Cost Center** | 31:45 | 803.88 |

## PMs Issue Method Detail

**Fig. 9.62**
PMs Issue Method Detail Report

**PMs Issue Method Detail**

**Site** 10-100 Ultrasound Mfg Site

| PM No / Equip No | Description / Description | Issue Method / PM Due | No of Cycles / DUOM Cycle / Event | Issue Cycle / DUOM | Next Issue / Next DUOM Issue / Next Event Issue | Current Reading | Est Due Date |
|---|---|---|---|---|---|---|---|
| 1042 | AC MONTHLY PM | Calendar | 1 | Month | 05/11/2015 | | |
| AC0003 | Air Conditioner 03 | 5/11/2015 12:00:00 AM | 0 | | 0 | | |
| 1043 | AC MONTHLY PM | Calendar | 1 | Month | 05/11/2015 | | |
| AC0004 | Air Conditioner 04 | 5/11/2015 12:00:00 AM | 0 | | 0 | | |
| 1044 | AC 10,000 HITS PM | DUOM | 0 | DUOM | | | |
| CV0005 | Conveyor,feed,7ft,9in belt | 8/28/2015 12:00:00 AM | 10000 | HITS | 10001 | 7361 | 09/13/2015 |
| 1045 | AC MONTHLY PM | Calendar | 1 | Month | 04/13/2015 | | |
| AC0006 | Air Conditioner 06 | | 0 | | 0 | | |
| 1046 | AC MONTHLY PM | Calendar | 1 | Month | 06/11/2015 | | |
| AC0007 | Air Conditioner 07 | 6/11/2015 12:00:00 AM | 0 | | 0 | | |
| 1047 | AC MONTHLY PM | Calendar | 1 | Month | 07/13/2015 | | |
| AC0008 | Air Conditioner 08 | 7/13/2015 12:00:00 AM | 0 | | 0 | | |
| 1048 | CLEAN EYEWASH STATIONS | Calendar | 1 | Month | 10/14/2014 | | |
| PAINT | Paint Shop | 10/14/2014 12:00:00 AM | 0 | | 0 | | |

# Project

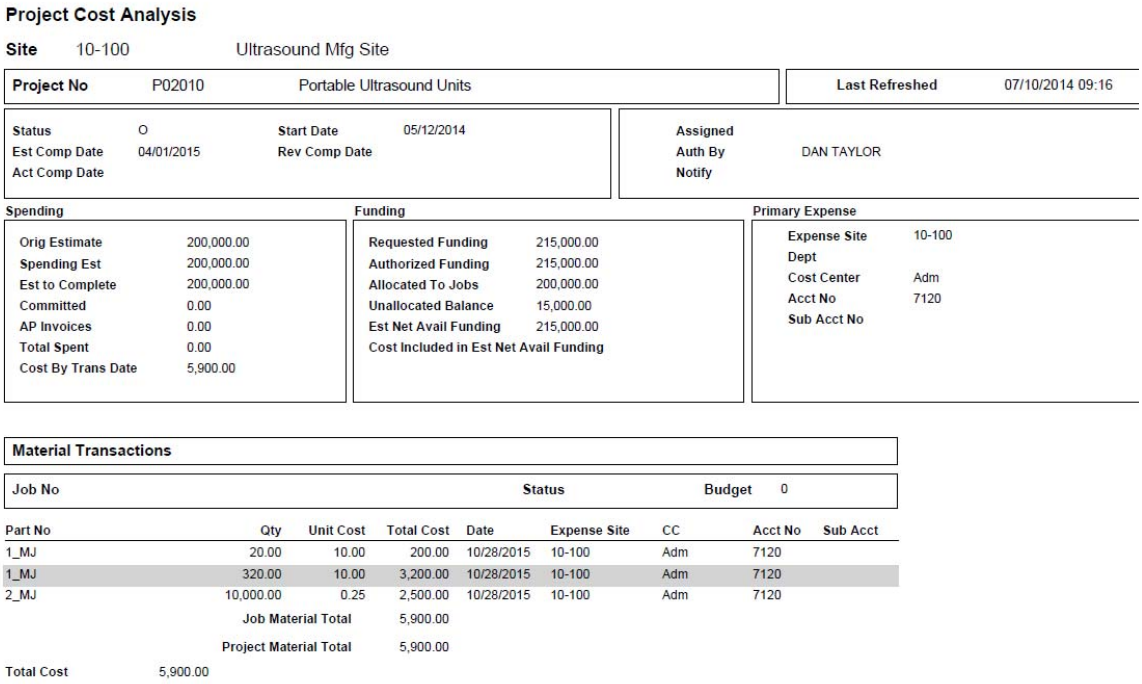
Effective project budget management requires detailed monthly and annual cost analysis. You can track spending for capital projects by jobs and activities with QAD EAM project reports.

## Cost Analysis

### Project Cost Analysis

This report displays the total cost of manual GL transactions, labor transactions by employee number, material transactions by part number, and contractor transactions by part number.

**Fig. 9.63**
Project Cost Analysis Report



**Project Cost Analysis**

**Site** 10-100 Ultrasound Mfg Site

| | | | | | |
|---|---|---|---|---|---|
| **Project No** | P02010 | Portable Ultrasound Units | | **Last Refreshed** | 07/10/2014 09:16 |
| **Status** | O | **Start Date** | 05/12/2014 | **Assigned** | |
| **Est Comp Date** | 04/01/2015 | **Rev Comp Date** | | **Auth By** | DAN TAYLOR |
| **Act Comp Date** | | | | **Notify** | |

| **Spending** | | **Funding** | | **Primary Expense** | |
|---|---|---|---|---|---|
| **Orig Estimate** | 200,000.00 | **Requested Funding** | 215,000.00 | **Expense Site** | 10-100 |
| **Spending Est** | 200,000.00 | **Authorized Funding** | 215,000.00 | **Dept** | |
| **Est to Complete** | 200,000.00 | **Allocated To Jobs** | 200,000.00 | **Cost Center** | Adm |
| **Committed** | 0.00 | **Unallocated Balance** | 15,000.00 | **Acct No** | 7120 |
| **AP Invoices** | 0.00 | **Est Net Avail Funding** | 215,000.00 | **Sub Acct No** | |
| **Total Spent** | 0.00 | **Cost Included in Est Net Avail Funding** | | | |
| **Cost By Trans Date** | 5,900.00 | | | | |

**Material Transactions**

**Job No** **Status** **Budget** 0

| Part No | Qty | Unit Cost | Total Cost | Date | Expense Site | CC | Acct No | Sub Acct |
|---|---|---|---|---|---|---|---|---|
| 1_MJ | 20.00 | 10.00 | 200.00 | 10/28/2015 | 10-100 | Adm | 7120 | |
| 1_MJ | 320.00 | 10.00 | 3,200.00 | 10/28/2015 | 10-100 | Adm | 7120 | |
| 2_MJ | 10,000.00 | 0.25 | 2,500.00 | 10/28/2015 | 10-100 | Adm | 7120 | |
| | | **Job Material Total** | 5,900.00 | | | | | |
| | | **Project Material Total** | 5,900.00 | | | | | |

**Total Cost** 5,900.00

## Project Activity

The Project Activity Report calculates the subtotal of all amounts by Activity and Project values. It displays the following columns:

- Activity
- Activity Description
- Committed
- Received
- Spending Limit
- Variance to Limit = If Spending Limit <> 0, then (Committed+Total Spent)/Spending Limit. Otherwise, it displays 0.
- Spending Estimate
- Variance to Estimate = If Spending Estimate <> 0, then (Committed+Total Spent)/Spending Estimate. Otherwise, it displays 0.
- Spending Estimate

**Fig. 9.64**
Project Activity Report

**Project Activity Cost Summary**

**Site** 10-100 Ultrasound Mfg Site
**Project No** DIO_CP2 CIO Capital Project 2

| | | | | | |
|---|---|---|---|---|---|
| **Authorized Funding** | 0.00 | **Total Spent** | 0.00 | **Spending Est** | 500,000.00 |
| **Committed** | 0.00 | **Variance to Limit** | 0.00 | **Variance To Estimate** | 0.00 |
| **Received** | 0.00 | | | | |

| Activity | Description | Allocated | Committed | Received | Total Spent | Variance to Limit | Spending Est | Variance To Estimate |
|---|---|---|---|---|---|---|---|---|
| | | 500,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 500,000.00 | 0.00 |

## Project Job Cost

This report calculates the project job cost through the subtotal amounts by Job No and Project. It displays the planned, committed and total spent values, both at their lowest level and rolled up into the total amount. The report also displays the percent variance of total spent compared to either the limit or estimate, but those variances can only be calculated when limits and estimates are available. Project totals cannot be calculated, but are pulled from the project table.

It displays the following columns:

- Job No
- Job Description
- Committed
- Received
- Spending Limit
- Variance to Limit = If Spending Limit <> 0, then (Committed+Total Spent)/Spending Limit. Otherwise, it displays 0.
- Spending Estimate
- Variance to Estimate = If Spending Estimate <> 0, then (Committed+Total Spent)/Spending Estimate. Otherwise, it displays 0.
- Spending Estimate

**Fig. 9.65**
Project Job Cost Report

**Project Job Cost Summary**

**Site** 10-100 Ultrasound Mfg Site
**Project No** P01030 New Product Introduction

| | | | | | |
|---|---|---|---|---|---|
| **Authorized Funding** | 111,400.00 | **Total Spent** | 1,625.00 | **Spending Est** | 250,700.00 |
| **Committed** | 0.00 | **Variance to Limit** | 0.01 | **Variance To Estimate** | 0.01 |
| **Received** | 1,625.00 | | | | |

| Job No | Description | Allocated | Committed | Received | Total Spent | Variance to Limit | Spending Est | Variance To Estimate |
|---|---|---|---|---|---|---|---|---|
| | Internal Parts | 1,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,000.00 | 0.00 |
| | Internal Labor | 2,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,700.00 | 0.00 |
| | Subcontractor Services | 20,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20,000.00 | 0.00 |
| | Press | 15,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15,000.00 | 0.00 |
| | Installation | 16,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 17,000.00 | 0.00 |
| | Material Handling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 56,000.00 | 0.00 |
| | Conveying Units | 24,400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24,900.00 | 0.00 |
| | Specialized Lift Truck | 16,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16,600.00 | 0.00 |
| | Gantry Crane | 14,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14,500.00 | 0.00 |
| | Purchase Parts | 1,000.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,200.00 | 0.00 |
| | Tooling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24,900.00 | 0.00 |
| | Production Line | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 56,900.00 | 0.00 |

## Project Reimbursement Due

**Fig. 9.66**
Project Reimbursement Due Report

**Project Reimbursement Due**

**Site** 10-100 Ultrasound Mfg Site

| Project | Description | Customer Name | SO No | SO Line No | Amount | Due Date |
|---|---|---|---|---|---|---|
| PO2010 | | MLEA3455 | | 1 | 200000 | 12/15/2010 |
| PO2010 | | MLEA3455 | SOEAM100 | 2 | 200000 | 12/15/2010 |
| P02010 | Portable Ultrasound Units | MLEA3455 | SOEAM100 | 1 | 100000 | 09/01/2014 |

## Uncapitalized Project Balance

**Fig. 9.67**
Uncapitalized Project Balance Report

**Uncapitalized Project Balance**

**Site** 10-100 Ultrasound Mfg Site

**Uncapitalized Project Balance - as of** **01/20/2016**

| Project<br>Description | Job No<br>Description | Asset ID | Class | Location | Expensed Total<br>Last Expense Dt | Original Cap Amt<br>Trailing Charges | Cap Amt as of Date<br>Uncapitalized Amt |
|---|---|---|---|---|---|---|---|
| DIO_CP1<br>DIO Capital project 1 | | DIODP1 | 85 | L-01 | 199.00<br>10/08/2015 | 100.00<br>200.00 | 300.00<br>-101.00 |
| | | | | | | **Uncapitalized Total:** | **-101.00** |

## Uncapitalized Project Jobs Balance

**Fig. 9.68**
Uncapitalized Project Jobs Balance Report

**Uncapitalized Project Jobs Balance**

**Site** 10-100 Ultrasound MFG Site

**Uncapitalized Project Balance - as of** 02/02/2016

| Project | Description | Job No | Description | Asset ID | Last Expense Dt | Uncapitalized Amt |
|---|---|---|---|---|---|---|
| kvg 0910a | kvg test FA | 01 | kvg FA | kvg1008 | 09/10/2013 | 10.00 |
| kvg0920 | Test FA | 01 | job level | kvgFA-0925 | 09/20/2013 | 30.00 |

# Purchasing

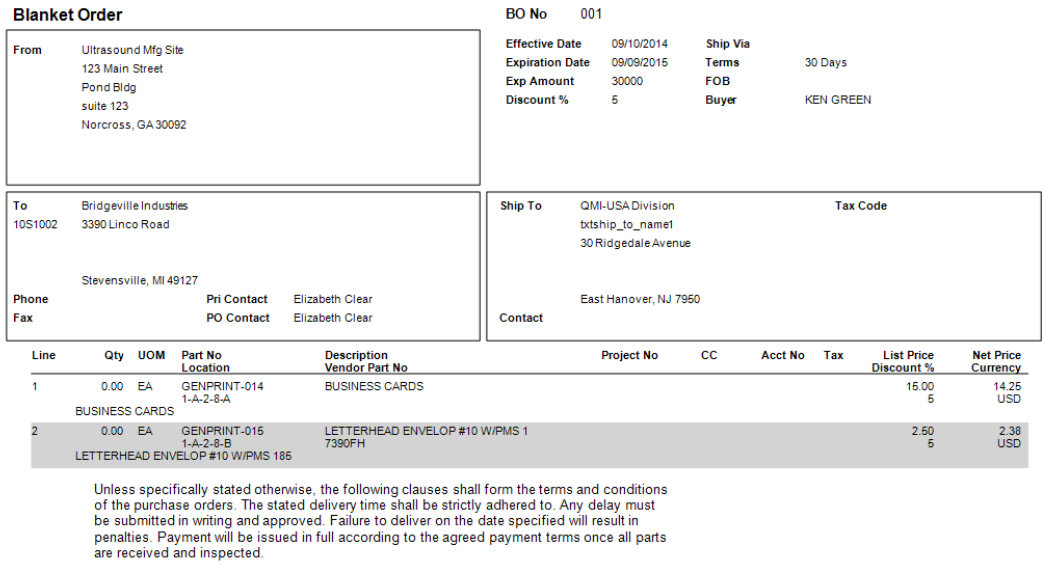
Use QAD EAM Purchasing Reports to help control costs associated with MRO inventory and procurement. Purchasing agents, buyers, or maintenance personnel may find this data useful for requesting price and quantity quotations from suppliers. At times, these reports could be used to evaluate which vendors should be used and which should be avoided, based on turnaround time and price comparison. Overall, these reports can be used as a tool to refine the efficiency of your internal purchasing process based on past history.

## Blanket Orders

### BO Document

This report displays all blanket orders that meet the filter criteria specified.

**Fig. 9.69**
BO Document Report



**Blanket Order**

**BO No** 001

| | | | |
|---|---|---|---|
| **From** | Ultrasound Mfg Site<br>123 Main Street<br>Pond Bldg<br>suite 123<br>Norcross, GA 30092 | | |
| **Effective Date** | 09/10/2014 | **Ship Via** | |
| **Expiration Date** | 09/09/2015 | **Terms** | 30 Days |
| **Exp Amount** | 30000 | **FOB** | |
| **Discount %** | 5 | **Buyer** | KEN GREEN |

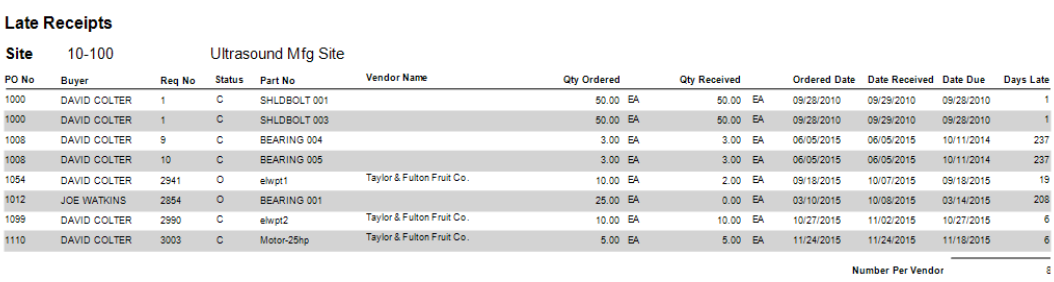
| | | | |
|---|---|---|---|
| **To** | Bridgeville Industries<br>3390 Linco Road<br>Stevensville, MI 49127 | **Ship To** | QMI-USA Division<br>txtship_to_name1<br>30 Ridgedale Avenue<br>East Hanover, NJ 7950 |
| 10S1002 | | **Tax Code** | |
| **Phone** | **Pri Contact** Elizabeth Clear | **Contact** | |
| **Fax** | **PO Contact** Elizabeth Clear | | |

| Line | Qty | UOM | Part No<br>Location | Description<br>Vendor Part No | Project No | CC | Acct No | Tax | List Price<br>Discount % | Net Price<br>Currency |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.00 | EA | GENPRINT-014<br>1-A-2-8-A | BUSINESS CARDS | | | | | 15.00<br>5 | 14.25<br>USD |
| | BUSINESS CARDS | | | | | | | | | |
| 2 | 0.00 | EA | GENPRINT-015<br>1-A-2-8-B | LETTERHEAD ENVELOP #10 W/PMS 1<br>7390FH | | | | | 2.50<br>5 | 2.38<br>USD |
| | LETTERHEAD ENVELOP #10 W/PMS 185 | | | | | | | | | |

Unless specifically stated otherwise, the following clauses shall form the terms and conditions of the purchase orders. The stated delivery time shall be strictly adhered to. Any delay must be submitted in writing and approved. Failure to deliver on the date specified will result in penalties. Payment will be issued in full according to the agreed payment terms once all parts are received and inspected.

## Late Receipts

**Fig. 9.70**
Late Receipts Report



**Late Receipts**

**Site** 10-100 Ultrasound Mfg Site

| PO No | Buyer | Req No | Status | Part No | Vendor Name | Qty Ordered | | Qty Received | | Ordered Date | Date Received | Date Due | Days Late |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | DAVID COLTER | 1 | C | SHLDBOLT 001 | | 50.00 | EA | 50.00 | EA | 09/28/2010 | 09/29/2010 | 09/28/2010 | 1 |
| 1000 | DAVID COLTER | 1 | C | SHLDBOLT 003 | | 50.00 | EA | 50.00 | EA | 09/28/2010 | 09/29/2010 | 09/28/2010 | 1 |
| 1008 | DAVID COLTER | 9 | C | BEARING 004 | | 3.00 | EA | 3.00 | EA | 06/05/2015 | 06/05/2015 | 10/11/2014 | 237 |
| 1008 | DAVID COLTER | 10 | C | BEARING 005 | | 3.00 | EA | 3.00 | EA | 06/05/2015 | 06/05/2015 | 10/11/2014 | 237 |
| 1054 | DAVID COLTER | 2941 | O | elwpt1 | Taylor & Fulton Fruit Co. | 10.00 | EA | 2.00 | EA | 09/18/2015 | 10/07/2015 | 09/18/2015 | 19 |
| 1012 | JOE WATKINS | 2854 | O | BEARING 001 | | 25.00 | EA | 0.00 | EA | 03/10/2015 | 10/08/2015 | 03/14/2015 | 208 |
| 1099 | DAVID COLTER | 2990 | C | elwpt2 | Taylor & Fulton Fruit Co. | 10.00 | EA | 10.00 | EA | 10/27/2015 | 11/02/2015 | 10/27/2015 | 6 |
| 1110 | DAVID COLTER | 3003 | C | Motor-25hp | Taylor & Fulton Fruit Co. | 5.00 | EA | 5.00 | EA | 11/24/2015 | 11/24/2015 | 11/18/2015 | 6 |
| | | | | | | | | | | | Number Per Vendor | | 8 |

## Open POs Not Yet Received

**Fig. 9.71**
Open POs Not Yet Received Report

**Open POs Not Received**

**Site** 10-100 Ultrasound Mfg Site

**Vendor** 10S1006

| PO NO | PO Line | Req No | Part No / Description | Date Created / Acct No | Date Ordered / Sub Acct No | Date Due / CC | Qty Ordered | Qty Recvd | Open Qty | UOM | Unit Cost | Total Open Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1013 | 2 | 44 | BEARING 002<br>FAFNIR 205PP BEARING | 03/10/2015<br>5020 | 03/10/2015 | 03/14/2015<br>MFG | 20.00 | 0.00 | 20.00 | EA | 12.00 | 240.00 |
| | | | | | | | | | | | PO Total | 240.00 |
| 1014 | 1 | 49 | BEARING 003<br>INA 51105 BEARING | 03/10/2015<br>5020 | 03/10/2015 | 03/14/2015<br>MFG | 5.00 | 0.00 | 5.00 | EA | 11.25 | 56.25 |
| | | | | | | | | | | | PO Total | 56.25 |
| 1021 | 1 | 104 | BEARING 001<br>B8-SA RBC BEARING SETS | 03/27/2015<br>5020 | 03/27/2015 | 03/31/2015<br>MFG | 25.00 | 0.00 | 25.00 | EA | 32.77 | 819.25 |
| | | | | | | | | | | | PO Total | 819.25 |
| 1131 | 1 | 328 | 10_m4b<br>m4b_2 | 01/11/2016 | 01/11/2016 | 01/11/2016 | 10.00 | 4.00 | 6.00 | EA | 10.00 | 60.00 |
| | | | | | | | | | | | PO Total | 60.00 |
| 1133 | 1 | 330 | 10_m4b<br>m4b_2 | 01/11/2016 | 01/11/2016 | 01/11/2016 | 10.00 | 0.00 | 10.00 | EA | 10.00 | 100.00 |
| | | | | | | | | | | | PO Total | 100.00 |
| | | | | | | | | | | | Vendor Total | 1,275.50 |

## Purchase Order Print

Purchase Order

**Fig. 9.72**
Purchase Order Print Report

QAD

**Ultrasound Mfg Site**
123 Main Street
Pond Bldg
suite 123
Norcross, GA 30092

**Purchase Order** **Planned** **PO No** EA 0 **Ordered Date**

**From** Ultrasound Mfg Site
123 Main Street
Pond Bldg
suite 123
Norcross, GA 30092

**Revision** 0
**Date Due**
**Release No**
**Exp Date**
**Exp Amount** 0
**Confirming?** No
**Confirm To**
**Remarks**

**Ship Via**
**Terms** 60 Days
**FOB**
**Buyer**
**Phone** **Fax**
**Email** mze@qad.com
**Ordered By**

**To** Heron Surgical Supply 10S1003
30 89th Avenue
Queens, NY 11432
**Phone** **Pri Contact** Donald Schneider
**Fax** **PO Contact** Donald Schneider
**Email** mze@qad.com

**Ship To** 10-100
QMI-USA Division
30 Ridgedale Avenue
East Hanover, NJ 7950
**Contact**

**Bill To** 10-100
QMI-USA Division
30 Ridgedale Avenue
East Hanover, NJ 7950
**Tax Code**

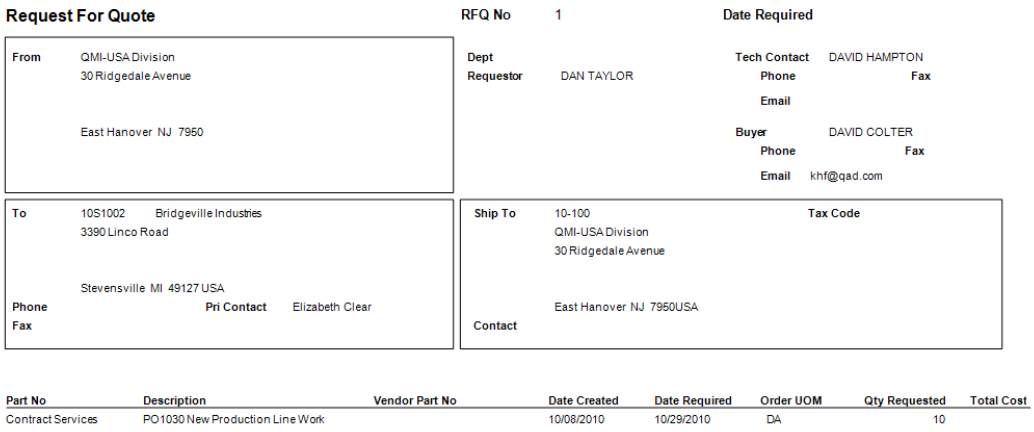
| Line | Qty | UOM | Part No / Location | Description / Vendor Part No | Project No / Req No | CC / Date Due | Acct No / Asset Acct | Tax / Asset CC | Unit Price | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100.00 | EA | HEXNUTS 003<br>1-A-1-5-B | 8-32 HEX HD NUT<br>C7809CH | 26 | 03/09/2015 | 1510 | | 0.01 | 1.00 |
| | 8-32 HEX HD NUT | | | | | | | | | |
| 2 | 100.00 | EA | BTTNHDSCR 001<br>1-B-2-13 | 1/4-20X3/4 BUTTON HEAD SCREW<br>428-DJK | 26 | 03/09/2015 | 1510 | | 0.07 | 7.00 |
| | 1/4-20X3/4 BUTTON HEAD SCREW | | | | | | | | | |
| 3 | 25.00 | EA | HXHDSCR 001<br>1-B-2-3-A | 1/4 X 4 LAG SCREW<br>0834LJF | 26 | 03/09/2015 | 1510 | | 0.25 | 6.25 |
| | 1/4 X 4 LAG SCREW | | | | | | | | | |
| 4 | 11.00 | EA | AID-002<br>1-A-1-2 | ALCOHOL WIPES<br>I-08481 | 26 | 03/14/2015 | 1510 | | 2.14 | 23.54 |

## Quote Document

### Request for Quote

This report displays all quotes that meet the filter criteria specified.

**Fig. 9.73**
Request for Quote Report



**Request For Quote** RFQ No 1 Date Required

From QMI-USA Division
30 Ridgedale Avenue
East Hanover NJ 7950

Dept
Requestor DAN TAYLOR

Tech Contact DAVID HAMPTON
Phone Fax
Email
Buyer DAVID COLTER
Phone Fax
Email khf@qad.com

To 10S1002 Bridgeville Industries
3390 Linco Road
Stevensville MI 49127 USA
Phone Pri Contact Elizabeth Clear
Fax

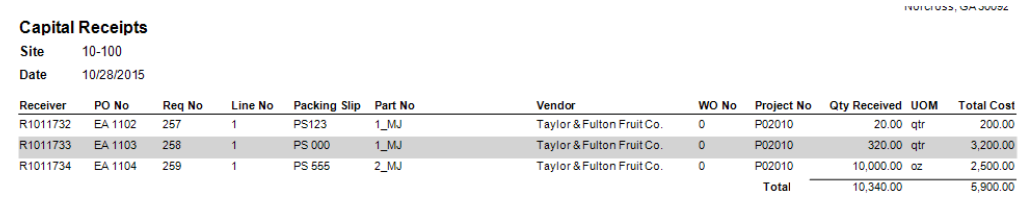
Ship To 10-100 Tax Code
QMI-USA Division
30 Ridgedale Avenue
East Hanover NJ 7950USA
Contact

| Part No | Description | Vendor Part No | Date Created | Date Required | Order UOM | Qty Requested | Total Cost |
|---|---|---|---|---|---|---|---|
| Contract Services | PO1030 New Production Line Work | | 10/08/2010 | 10/29/2010 | DA | 10 | |

## Receipts and Returns

### Capital Receipts

**Fig. 9.74**
Capital Receipts Report

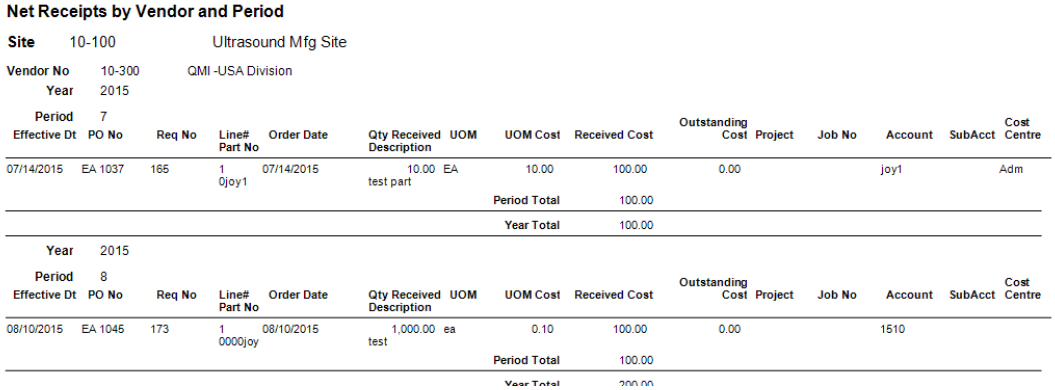


**Capital Receipts**
Site 10-100
Date 10/28/2015

| Receiver | PO No | Req No | Line No | Packing Slip | Part No | Vendor | WO No | Project No | Qty Received | UOM | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R1011732 | EA 1102 | 257 | 1 | PS123 | 1_MJ | Taylor & Fulton Fruit Co. | 0 | P02010 | 20.00 | qtr | 200.00 |
| R1011733 | EA 1103 | 258 | 1 | PS 000 | 1_MJ | Taylor & Fulton Fruit Co. | 0 | P02010 | 320.00 | qtr | 3,200.00 |
| R1011734 | EA 1104 | 259 | 1 | PS 555 | 2_MJ | Taylor & Fulton Fruit Co. | 0 | P02010 | 10,000.00 | oz | 2,500.00 |
| | | | | | | | | Total | 10,340.00 | | 5,900.00 |

### Net Receipts by Vendor and Period

**Fig. 9.75**
Net Receipts by Vendor and Period Report



**Net Receipts by Vendor and Period**

Site 10-100 Ultrasound Mfg Site
Vendor No 10-300 QMI -USA Division
Year 2015
Period 7

| Effective Dt | PO No | Req No | Line# Part No | Order Date | Qty Received Description | UOM | UOM Cost | Received Cost | Outstanding Cost | Project | Job No | Account | SubAcct | Cost Centre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 07/14/2015 | EA 1037 | 165 | 1 0joy1 | 07/14/2015 | 10.00 test part | EA | 10.00 | 100.00 | 0.00 | | | joy1 | | Adm |
| | | | | | | | Period Total | 100.00 | | | | | | |
| | | | | | | | Year Total | 100.00 | | | | | | |

Year 2015
Period 8

| Effective Dt | PO No | Req No | Line# Part No | Order Date | Qty Received Description | UOM | UOM Cost | Received Cost | Outstanding Cost | Project | Job No | Account | SubAcct | Cost Centre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08/10/2015 | EA 1045 | 173 | 1 0000joy | 08/10/2015 | 1,000.00 test | ea | 0.10 | 100.00 | 0.00 | | | 1510 | | |
| | | | | | | | Period Total | 100.00 | | | | | | |

## Receipts by Vendor

**Fig. 9.76**
Receipts by Vendor Report

**Receipts By Vendor**

**Site** 10-100 Ultrasound Mfg Site

**Vendor No** 10S1006 Hampton Electronics

| Date Received | Receiver | PO No | Req No | Line# | Requestor | Part No | Description | Qty Received | UOM | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|
| 09/30/2010 | MLS5 | EA 1001 | 3 | 1 | FRANK HARRIS | Contractor Services | Conveyor Allignment | 2,000.00 | EA | 2,000.00 |
| 03/10/2015 | R1011430 | EA 1016 | 47 | 1 | MFG QAD | BEARING 003 | INA 51105 BEARING | 4.00 | EA | 40.00 |
| 03/10/2015 | R1011428 | EA 1013 | 44 | 1 | MFG QAD | BEARING 002 | FAFNIR 205PP BEARING | 20.00 | EA | 240.00 |
| 03/10/2015 | R1011428 | EA 1013 | 43 | 1 | MFG QAD | BEARING 001 | B8-SA RBC BEARING SETS | 25.00 | EA | 819.25 |
| 03/26/2015 | R1011438 | EA 1021 | 104 | 1 | BRAD NIX | BEARING 001 | B8-SA RBC BEARING SETS | 25.00 | EA | 819.25 |
| 03/26/2015 | R1011438 | EA 1021 | 105 | 1 | BRAD NIX | BEARING 006 | SFK 6003 RSJEM BEARING | 15.00 | EA | 187.50 |
| 04/20/2015 | R1011459 | EA 1028 | 131 | 1 | BRAD NIX | BEARING 001 | B8-SA RBC BEARING SETS | 10.00 | EA | 325.00 |
| 10/08/2015 | R1011672 | EA 1021 | 104 | 1 | BRAD NIX | BEARING 001 | B8-SA RBC BEARING SETS | -25.00 | EA | -819.25 |
| 10/08/2015 | R1011667 | EA 1013 | 44 | 1 | MFG QAD | BEARING 002 | FAFNIR 205PP BEARING | -20.00 | EA | -240.00 |
| 01/11/2016 | 1002 | EA 1133 | 330 | 1 | MFG QAD | 10_m4b | m4b_2 | 10.00 | EA | 100.00 |
| 01/11/2016 | 1003 | EA 1133 | 330 | 1 | MFG QAD | 10_m4b | m4b_2 | -3.00 | EA | -30.00 |
| 01/11/2016 | m4b1 | EA 1131 | 328 | 1 | MFG QAD | 10_m4b | m4b_2 | 10.00 | EA | 100.00 |
| 01/11/2016 | m4b_5 | EA 1132 | 329 | 1 | MFG QAD | 10_m4b | m4b_2 | 10.00 | EA | 100.00 |

## Receiver

**Fig. 9.77**
Receiver Report

**Receiver**

**Vendor** 10S1002
Bridgeville Industries
3390 Linco Road

Stevensville, MI 49127

**Site** 10-100

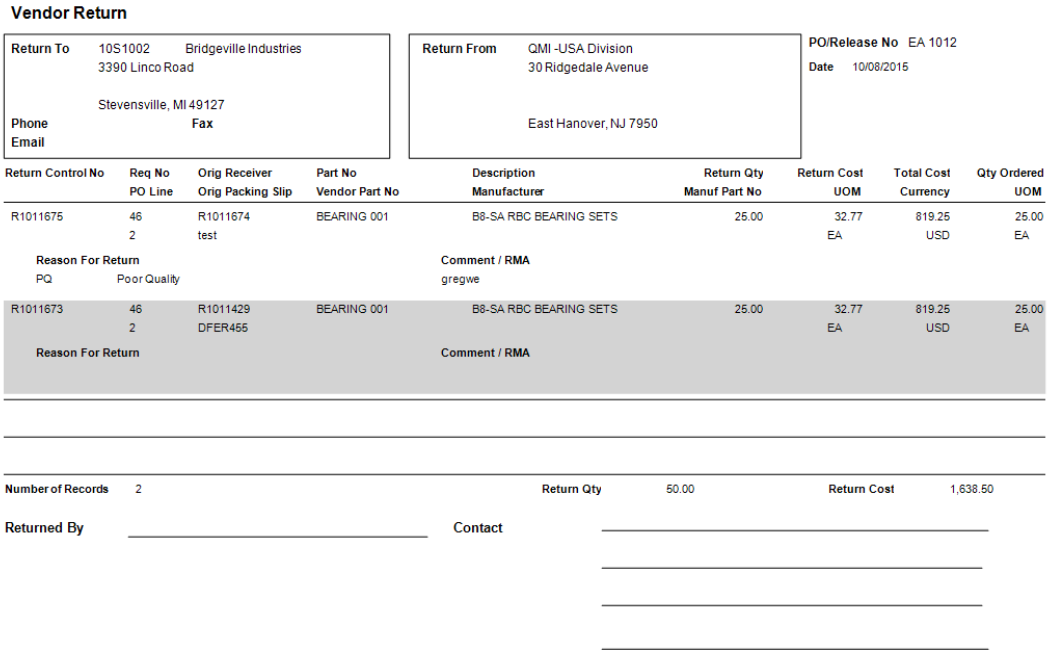
**Receiver** R1011419
**Date Received** 02/24/2015
**PO/Release No** EA 1004
**Received By** _____

**Packing Slip** FT677
**FOB**
**Shipped Via**
**Date Shipped** 02/24/2015
**Auth By** _____

| Req No | Line No | Part No | Description | Location | Receive Cost | Ext Cost | OH Group | Tax | Qty Ordered | UOM |
|---|---|---|---|---|---|---|---|---|---|---|
| | Auto Issue? | Equip No | WO No Project No Job No | Requestor | Currency | Qty Canceled | Qty Received | UOM | Total Received | UOM |
| 16 | 1 | FILTER 002 | 6B950 16X25X2 FILTER | 1-B-2-4-B | 1.63000 | 39.12 | | | 24.00 | EA |
| | No | 1510 | 0 | MFG QAD | USD | 0.00 | 24.00 | EA | 0.00 | EA |
| 16 | 2 | FILTER 001 | 6B958 16X16X2 FILTER | 1-B-2-4-A | 1.63000 | 81.50 | | | 50.00 | EA |
| | No | 1510 | 0 | MFG QAD | USD | 0.00 | 50.00 | EA | 50.00 | EA |
| **Number of Records** | 2 | | | | | | **Qty Received** | | 74.00 | |
| | | | | | | | **Amount Received** | | 120.62 | |

Vendor Returns

**Fig. 9.78**
Vendor Returns Report



**Vendor Return**

| | | | |
|---|---|---|---|
| **Return To** | 10S1002 Bridgeville Industries<br>3390 Linco Road<br><br>Stevensville, MI 49127<br>**Phone** **Fax**<br>**Email** | **Return From** | QMI -USA Division<br>30 Ridgedale Avenue<br><br>East Hanover, NJ 7950 |
| **PO/Release No** | EA 1012 | | |
| **Date** | 10/08/2015 | | |

| Return Control No | Req No / PO Line | Orig Receiver / Orig Packing Slip | Part No / Vendor Part No | Description / Manufacturer | Return Qty / Manuf Part No | Return Cost / UOM | Total Cost / Currency | Qty Ordered / UOM |
|---|---|---|---|---|---|---|---|---|
| R1011675 | 46<br>2 | R1011674<br>test | BEARING 001 | B8-SA RBC BEARING SETS | 25.00 | 32.77<br>EA | 819.25<br>USD | 25.00<br>EA |
| **Reason For Return** | | | | **Comment / RMA** | | | | |
| PQ | Poor Quality | | | gregwe | | | | |
| R1011673 | 46<br>2 | R1011429<br>DFER455 | BEARING 001 | B8-SA RBC BEARING SETS | 25.00 | 32.77<br>EA | 819.25<br>USD | 25.00<br>EA |
| **Reason For Return** | | | | **Comment / RMA** | | | | |

**Number of Records** 2 **Return Qty** 50.00 **Return Cost** 1,638.50

**Returned By** _____ **Contact** _____

## Requisition Document

### Requisition

This report displays all requisitions that meet the filter criteria specified.

**Fig. 9.79**
Requisition Report

**Requisition**

**Req No** 5 Stock Run No 1 **Auto Issue?** No

**Site** 10-100

**Vendor**
10S1003 Heron Surgical Supply
30 89th Avenue
Queens, NY 11432 USA
**Phone** **Fax**

**PO No** 1008
**Ordered By** mfg
**Requestor** JESSICA JONES
**Buyer** DAVID COLTER
**Auth?** Yes **Auth Status** Authorized
**Auth By** DWAYNE HARDIMON **Date Required**
**Ordered Date** 06/05/2015 **Date Due** 10/11/2014

**Ship To** 10-100
QMI-USA Division
30 Ridgedale Avenue
East Hanover, NJ 7950
**Contact**

**Bill To** 10-100
QMI-USA Division
30 Ridgedale Avenue
East Hanover, NJ 7950
**Contact**

| Line | Part No | Description / Vendor Part No | Qty Ordered | UOM | Project No / Source Site | CC Acct No / Location | Sub Acct No / Date Due | Order Cost / Tax | Total Cost |
|---|---|---|---|---|---|---|---|---|---|
| 1 | BEARING 004 | INA NK 14/16 BEARING<br>INA NK14/16 | 3.00 | EA | 10-100 | 1-B-2-10-E | 10/11/2014 | 12.00<br>0.00 | 36.00 USD |
| | INA NK 14/16 BEARING $8.67 EACH | | | | | | | | |
| 2 | BEARING 005 | INA 51103J BEARING<br>INA 51103J | 3.00 | EA | 10-100 | 1-B-2-10-F | 10/11/2014 | 12.00<br>0.00 | 36.00 USD |
| | INA 51103J BEARING $11.86 EACH | | | | | | | | |
| 3 | BEARING 006 | SFK 6003 RSJEM BEARING<br>SKF 6003 RSJEM | 3.00 | EA | 10-100 | 1-B-2-11 | 10/11/2014 | 10.75<br>0.00 | 32.25 USD |
| | SKF 6003 RSJEM BEARING $12.03 EACH | | | | | | | | |
| 4 | BEARING 007 | INA NK 20/16 BEARING<br>INA NK 20/16 BEARING | 3.00 | EA | 10-100 | 1-B-2-12 | 10/11/2014 | 11.25<br>0.00 | 33.75 USD |
| | INA NK 20/16 BEARING $10.36 EACH | | | | | | | | |
| | | | | | | | | **Total Cost** | 138.00 USD |

**Auth By** _____

## Service Requests

The service request is an extension of the work order system. It allows non-maintenance employees, such as operators and the production crew, to inform the maintenance department of equipment problems as they occur. The generation of service requests should be encouraged by management and used for all equipment.

### Aging Service Request

**Fig. 9.80**
Aging Service Request Report

**Aging Service Requests**

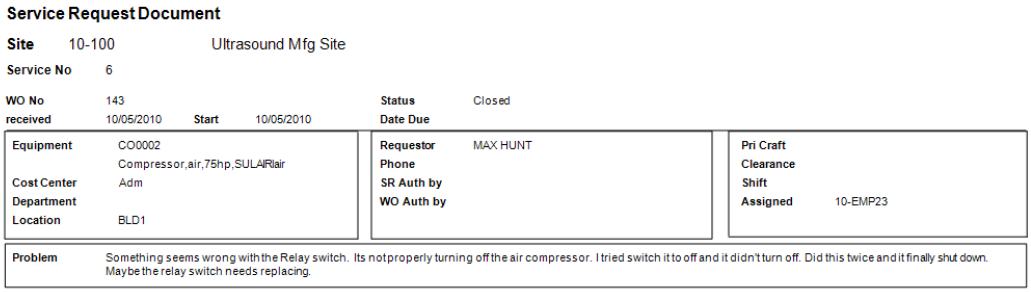
**Site** 10-100 Ultrasound Mfg Site

| Service No | WO No | Equip No / Problem | Description | Priority | Class | Type | Cost Center | Assigned | Start | Days Open |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 144 | CO0002<br>Air Compressor warning light is on. Need to check and see what the issue is. | Compressor,air,75hp,SULAIRlair | | | | Adm | JEFFREY JAMES | 10/07/2010 | 1931 |
| 8 | 145 | AC0006<br>There is water underneath the backside of the air conditioner unit number 6. Need to look at the water pump to make sure its running properly. | Air Conditioner 06 | | | | Adm | KEN GREEN | 07/14/2014 | 555 |
| 17 | 224 | CO0002 | Compressor,air,75hp,SULAIRlair | | PM | | Adm | | 03/09/2015 | 317 |
| 11 | 219 | | | | | | | | 03/09/2015 | 317 |
| 12 | 230 | Plant 1 | Plant 1,manufacturing,NY | | PM | | Adm | | 03/09/2015 | 317 |
| 13 | 222 | BLDG 1 | Building 1, mfg, NY | | PM | | Adm | | 03/09/2015 | 317 |
| 14 | 220 | AC0009 | Air Conditioner 09 | | PM | | Adm | | 03/09/2015 | 317 |
| 15 | 221 | AC0010 | Air Conditioner 10 | | PM | | Adm | | 03/09/2015 | 317 |
| 16 | 223 | CO0001 | Compressor,air,100hp,joy | | PM | | Adm | | 03/09/2015 | 317 |
| 23 | 229 | HO0004 | Overhead Hoist 04 | | | | Mfg | | 03/09/2015 | 317 |
| 22 | 229 | HO0004 | Overhead Hoist 04 | | | | Mfg | | 03/09/2015 | 317 |

### Service Request Document

This report displays all service requests that meet the filter criteria specified.

**Fig. 9.81**
Service Request Document



**Service Request Document**

**Site** 10-100 Ultrasound Mfg Site

**Service No** 6

| | | | | | |
|---|---|---|---|---|---|
| **WO No** | 143 | | | **Status** | Closed |
| **received** | 10/05/2010 | **Start** | 10/05/2010 | **Date Due** | |

| | | | | | |
|---|---|---|---|---|---|
| **Equipment** | CO0002 | **Requestor** | MAX HUNT | **Pri Craft** | |
| | Compressor,air,75hp,SULAIRlair | **Phone** | | **Clearance** | |
| **Cost Center** | Adm | **SR Auth by** | | **Shift** | |
| **Department** | | **WO Auth by** | | **Assigned** | 10-EMP23 |
| **Location** | BLD1 | | | | |

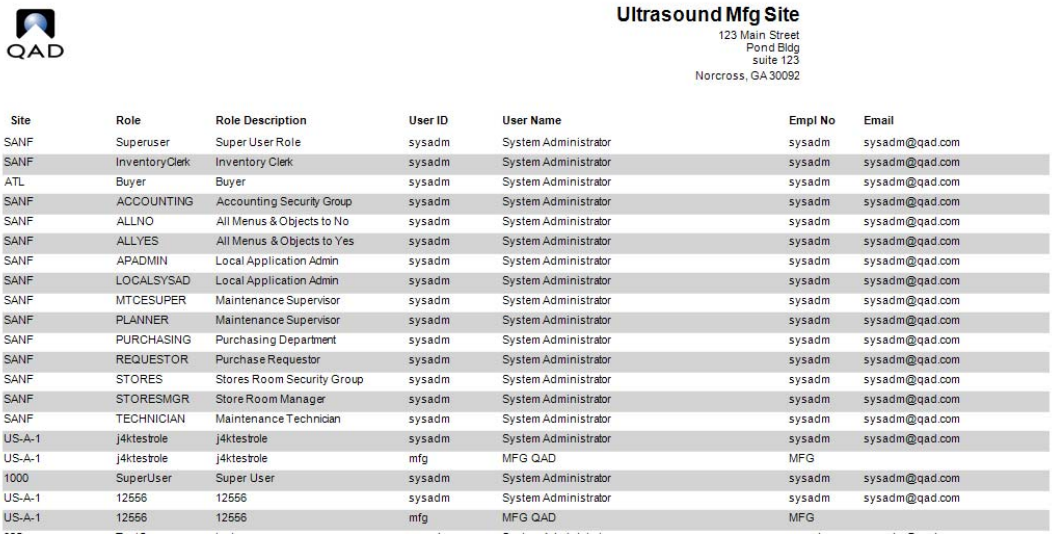
**Problem** Something seems wrong with the Relay switch. Its not properly turning off the air compressor. I tried switch it to off and it didn't turn off. Did this twice and it finally shut down. Maybe the relay switch needs replacing.

## System Administration

### Role Users

The Role Users report lists all EAM users, their roles, and the access granted to each role within EAM. This report helps companies review and audit their role assignments to ensure there is no conflict with segregation of duties for user access.

**Fig. 9.82**
Role Users Report



QAD

**Ultrasound Mfg Site**
123 Main Street
Pond Bldg
suite 123
Norcross, GA 30092

| Site | Role | Role Description | User ID | User Name | Empl No | Email |
|---|---|---|---|---|---|---|
| SANF | Superuser | Super User Role | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | InventoryClerk | Inventory Clerk | sysadm | System Administrator | sysadm | sysadm@qad.com |
| ATL | Buyer | Buyer | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | ACCOUNTING | Accounting Security Group | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | ALLNO | All Menus & Objects to No | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | ALLYES | All Menus & Objects to Yes | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | APADMIN | Local Application Admin | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | LOCALSYSAD | Local Application Admin | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | MTCESUPER | Maintenance Supervisor | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | PLANNER | Maintenance Supervisor | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | PURCHASING | Purchasing Department | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | REQUESTOR | Purchase Requestor | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | STORES | Stores Room Security Group | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | STORESMGR | Store Room Manager | sysadm | System Administrator | sysadm | sysadm@qad.com |
| SANF | TECHNICIAN | Maintenance Technician | sysadm | System Administrator | sysadm | sysadm@qad.com |
| US-A-1 | j4ktestrole | j4ktestrole | sysadm | System Administrator | sysadm | sysadm@qad.com |
| US-A-1 | j4ktestrole | j4ktestrole | mfg | MFG QAD | MFG | |
| 1000 | SuperUser | Super User | sysadm | System Administrator | sysadm | sysadm@qad.com |
| US-A-1 | 12556 | 12556 | sysadm | System Administrator | sysadm | sysadm@qad.com |
| US-A-1 | 12556 | 12556 | mfg | MFG QAD | MFG | |

## Work Orders

The work order system is the information system for the maintenance organization. Without the diligent record keeping of all maintenance activities on a work order, you do not have the data to perform analysis on your company's policies and practices, or on the equipment you are responsible for maintaining. Additionally, without a work order system, no planning or scheduling activity is possible.

## Closed Work Order Cost Summary

**Fig. 9.83**
Closed Work Order Cost Summary

**Closed Work Order Cost Summary**

**Site** 10-100 Ultrasound Mfg Site

| WO No | Equip No<br>Problem | Description | Received | Type | Assigned | Priority | Cost Center | Class | Pri Craft | Actual Labor | Actual Material | Actual Contract | Actual Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 132 | AC0002<br>**********SAFETY FIRST********** | Air Conditioner02 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 60.00 | 0.00 | 0.00 | 60.00 |
| 131 | AC0003<br>**********SAFETY FIRST********** | Air Conditioner03 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 40.00 | 0.00 | 0.00 | 40.00 |
| 130 | AC0004<br>**********SAFETY FIRST********** | Air Conditioner04 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 40.00 | 0.00 | 0.00 | 40.00 |
| 129 | AC0005<br>**********SAFETY FIRST********** | Air Conditioner05 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 35.00 | 0.00 | 0.00 | 35.00 |
| 128 | AC0006<br>**********SAFETY FIRST********** | Air Conditioner06 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 50.00 | 0.00 | 0.00 | 50.00 |
| 127 | AC0007<br>**********SAFETY FIRST********** | Air Conditioner07 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 60.00 | 0.00 | 0.00 | 60.00 |
| 126 | AC0008<br>**********SAFETY FIRST********** | Air Conditioner08 | 09/29/2010 | CM | SAM HELTSLEY | 3 | Adm | PM | | 30.00 | 0.00 | 0.00 | 30.00 |
| 125 | PAINT<br>**********SAFETY FIRST********** | Paint Shop | 09/29/2010 | CM | JEFFREY JAMES | 3 | Mfg | PM | | 40.00 | 0.00 | 0.00 | 40.00 |

## Daily Planned/Unplanned WO Labor

**Fig. 9.84**
Daily Planned/Unplanned WO Labor Report

**Daily Planned/Unplanned WO Labor**

**Site** 10-100 Ultrasound Mfg Site

**Start Date** 04/11/2015
**Employee** BNIX BRAD NIX

| WO No | Type | Equip No | Target Date | Work Order Type | | Estimated Hrs | Actual Hrs |
|---|---|---|---|---|---|---|---|
| 269 | | CV0005 | | Planned Work Orders Total | | 0.00 | 10.00 |
| | | | | | Employee Total | 0.00 | 10.00 |
| | | | | | Daily Total | 0.00 | 10.00 |

**Start Date** 04/08/2015
**Employee** BNIX BRAD NIX

| WO No | Type | Equip No | Target Date | Work Order Type | | Estimated Hrs | Actual Hrs |
|---|---|---|---|---|---|---|---|
| 267 | | CV0005 | | Planned Work Orders Total | | 5.00 | 10.00 |
| | | | | | Employee Total | 5.00 | 10.00 |
| | | | | | Daily Total | 5.00 | 10.00 |

**Start Date** 04/22/2015
**Employee** BNIX BRAD NIX

| WO No | Type | Equip No | Target Date | Work Order Type | | Estimated Hrs | Actual Hrs |
|---|---|---|---|---|---|---|---|
| 272 | | CR0011 | | Planned Work Orders Total | | 0.00 | 5.50 |
| | | | | | Employee Total | 0.00 | 5.50 |
| | | | | | Daily Total | 0.00 | 5.50 |

**Start Date** 04/27/2015
**Employee** bnix BRAD NIX

| WO No | Type | Equip No | Target Date | Work Order Type | | Estimated Hrs | Actual Hrs |
|---|---|---|---|---|---|---|---|
| 279 | | CV0005 | | Unplanned Work Orders Total | | 0.00 | 2.75 |
| | | | | | Employee Total | 0.00 | 2.75 |
| | | | | | Daily Total | 0.00 | 2.75 |

## Monthly Labor Hours Forecast

### Monthly Labor Hours Forecast by Class

**Fig. 9.85**
Monthly Labor Hours Forecast by Class Report

**Monthly Labor Hours Forecast by Class**

**Site** 10-100 Ultrasound Mfg Site

**From** 02/01/2016 **To** 12/31/2016

| Class | | Feb-2016 | Mar-2016 | Apr-2016 | May-2016 | Jun-2016 | Jul-2016 | Aug-2016 | Sep-2016 | Oct-2016 | Nov-2016 | Dec-2016 | Jan-2017 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PM | PM | 147.0 | 119.0 | 92.0 | 145.0 | 166.0 | 88.0 | 145.0 | 157.0 | 101.0 | 104.0 | 110.0 | 0.0 | 1,374.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | PM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | PM | 147.0 | 119.0 | 92.0 | 145.0 | 166.0 | 88.0 | 145.0 | 157.0 | 101.0 | 104.0 | 110.0 | 0.0 | 1,374.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

### Monthly Labor Hours Forecast by Cost Center

**Fig. 9.86**
Monthly Labor Hours Forecast by Cost Center Report

**Monthly Labor Hours Forecast by Cost Center**

**Site** 10-100 Ultrasound Mfg Site

**From** 02/01/2016 **To** 12/31/2016

| Cost Center | | Feb-2016 | Mar-2016 | Apr-2016 | May-2016 | Jun-2016 | Jul-2016 | Aug-2016 | Sep-2016 | Oct-2016 | Nov-2016 | Dec-2016 | Jan-2017 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WC01 | PM | 28.0 | 21.0 | 13.0 | 28.0 | 21.0 | 13.0 | 28.0 | 21.0 | 13.0 | 15.0 | 21.0 | 0.0 | 222.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mfg | PM | 12.0 | 17.0 | 12.0 | 12.0 | 65.0 | 10.0 | 12.0 | 17.0 | 12.0 | 5.0 | 17.0 | 0.0 | 191.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | PM | 29.0 | 31.0 | 22.0 | 27.0 | 30.0 | 20.0 | 27.0 | 33.0 | 27.0 | 25.0 | 22.0 | 0.0 | 293.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Adm | PM | 33.0 | 34.0 | 29.0 | 33.0 | 34.0 | 29.0 | 33.0 | 70.0 | 33.0 | 26.0 | 34.0 | 0.0 | 388.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| WC02 | PM | 16.0 | 6.0 | 6.0 | 16.0 | 6.0 | 6.0 | 16.0 | 6.0 | 6.0 | 10.0 | 6.0 | 0.0 | 100.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| WC03 | PM | 29.0 | 10.0 | 10.0 | 29.0 | 10.0 | 10.0 | 29.0 | 10.0 | 10.0 | 23.0 | 10.0 | 0.0 | 180.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | PM | 147.0 | 119.0 | 92.0 | 145.0 | 166.0 | 88.0 | 145.0 | 157.0 | 101.0 | 104.0 | 110.0 | 0.0 | 1,374.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

### Monthly Labor Hours Forecast by Pri Craft

**Fig. 9.87**
Monthly Labor Hours Forecast by Pri Craft Report

**Monthly Labor Hours Forecast by Pri Craft**

**Site** 10-100 Ultrasound Mfg Site

**From** 02/01/2016 **To** 12/31/2016

| Pri Craft | | Feb-2016 | Mar-2016 | Apr-2016 | May-2016 | Jun-2016 | Jul-2016 | Aug-2016 | Sep-2016 | Oct-2016 | Nov-2016 | Dec-2016 | Jan-2017 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PM | 147.0 | 119.0 | 92.0 | 145.0 | 166.0 | 88.0 | 145.0 | 157.0 | 101.0 | 104.0 | 110.0 | 0.0 | 1,374.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TECH | PM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | PM | 147.0 | 119.0 | 92.0 | 145.0 | 166.0 | 88.0 | 145.0 | 157.0 | 101.0 | 104.0 | 110.0 | 0.0 | 1,374.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

### Monthly Labor Hours Forecast by Priority

**Fig. 9.88**
Monthly Labor Hours Forecast by Priority Report

**Monthly Labor Hours Forecast by Priority**

**Site** 10-100 Ultrasound Mfg Site

**From** 02/01/2016 **To** 12/31/2016

| Priority | | Feb-2016 | Mar-2016 | Apr-2016 | May-2016 | Jun-2016 | Jul-2016 | Aug-2016 | Sep-2016 | Oct-2016 | Nov-2016 | Dec-2016 | Jan-2017 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | PM | 140.0 | 114.0 | 90.0 | 140.0 | 161.0 | 86.0 | 140.0 | 150.0 | 96.0 | 99.0 | 108.0 | 0.0 | 1,324.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | PM | 7.0 | 5.0 | 2.0 | 5.0 | 5.0 | 2.0 | 5.0 | 7.0 | 5.0 | 5.0 | 2.0 | 0.0 | 50.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | PM | 147.0 | 119.0 | 92.0 | 145.0 | 166.0 | 88.0 | 145.0 | 157.0 | 101.0 | 104.0 | 110.0 | 0.0 | 1,374.0 |
| | CM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Open Work Orders

**Fig. 9.89**
Open Work Orders Report

**Open Work Orders**

**Site** 10-100 Ultrasound Mfg Site

| WO No | Equip No<br>Problem | Description | Received | Type | Assigned | Class | Priority | Cost Center | Pri Craft | Labor Estimate | Matl Estimate | Cont Estimate | Total Estimate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 324 | 2016_m4b | m4b Equipment | 01/19/2016 | CM | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 323 | VE0001 | pit,sump,3'x10'deep,btg2 | 01/08/2016 | CM | | | | Adm | | 0.00 | 0.00 | 0.00 | 0.00 |
| 321 | AC0006<br>**********SAFETY FIRST********** | Air Conditioner06 | 01/04/2016 | PM | | PM | 3 | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 320 | | | 01/04/2016 | CM | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 319 | AC0002 | Air Conditioner02 | 01/04/2016 | CM | | | 3 | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 318 | CV0005<br>**********SAFETY FIRST********** | Conveyor,feed,7ft,9in bet | 12/23/2015 | PM | | PM | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 316 | HO0151<br>TEST 14654 | Hopper,vibrating,100lb | 12/10/2015 | CM | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 315 | TEST 123 | | 12/09/2015 | CM | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 314 | Test ABC | | 12/09/2015 | CM | | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| 313 | HO0151<br>**********SAFETY FIRST********** | Hopper,vibrating,100lb | 12/07/2015 | PM | | PM | 3 | | | 0.00 | 0.00 | 0.00 | 0.00 |

## Planned/Unplanned Work Orders

### Daily Planned/Unplanned Detail

**Fig. 9.90**
Daily Planned/Unplanned Detail Report

**Daily Planned/Unplanned Detail**

**Site** 10-100 Ultrasound Mfg Site

**Start Date** 04/23/2015

**Unplanned Work Orders**

| WO No | Type | Equip No | Target Date | Employee | Estimated Hrs | Actual Hrs |
|---|---|---|---|---|---|---|
| 277 | CM | AC0002 | | SAM HELTSLEY | 0.00 | 5.00 |
| | | | | JEFFREY JAMES | | 4.75 |
| 275 | CM | AC0001 | | KEN GREEN | 0.00 | 6.00 |
| | | | | FRANK HARRIS | | 0.00 |
| | | | | SAM HELTSLEY | | 0.00 |
| 0 | CM | AC0001 | | KEN GREEN | 0.00 | 2.00 |
| | | | | WILLIAM KEY | | 10.00 |
| | | | | BRAD NIX | | 1.00 |
| | | | | **Daily Total** | 0.00 | 28.75 |

## PM Labor Hours Forecast

**Fig. 9.91**
PM Labor Hours Forecast Report

**PM Labor Hours Forecast**

**Site** 10-100 Ultrasound Mfg Site

**From** 01/01/2016 **To** 12/31/2016

| PM No / Problem | Equip No | Description | Cost Center | Dept | Priority | Class | Pri Craft | WO Count | Est Hrs Labor Per WO | Total Est Hrs Labor |
|---|---|---|---|---|---|---|---|---|---|---|
| 1062 | | | | | | | | 261 | 0.00 | 0.00 |
| 1056 | CV0005 | MONTHLY CONVEYOR PM | | D2 | | PM | | 8 | 5.00 | 40.00 |
| **********SAFETY FIRST********** Follow all Company safety procedures.WWWW | | | | | | | | | | |
| 1055 | AC0006 | AC MONTHLY PM | | | 3 | PM | | 52 | 2.00 | 104.00 |
| **********SAFETY FIRST********** Follow all Company safety procedures. | | | | | | | | | | |
| 1054 | AC0007 | AC MONTHLY PM | Adm | | 3 | PM | | 52 | 2.00 | 104.00 |
| **********SAFETY FIRST********** Follow all Company safety procedures. | | | | | | | | | | |
| 1053 | AC0008 | AC MONTHLY PM | Adm | | 3 | PM | | 52 | 2.00 | 104.00 |
| **********SAFETY FIRST********** Follow all Company safety procedures. | | | | | | | | | | |
| 1051 | | Temperature readings for Water Chiller units | | | 3 | PM | TECH | 53 | 0.00 | 0.00 |
| Check temperature readings for Water Chillers Unit 001 and Unit 002 | | | | | | | | | | |
| 1050 | PAINT | M1 C &I Fire Extinguisher Sys | Mfg | | 3 | PM | | 11 | 2.00 | 22.00 |
| **********SAFETY FIRST********** Follow all Company safety procedures. | | | | | | | | | | |

## Work Order Backlog

**Fig. 9.92**
Work Order Backlog Report

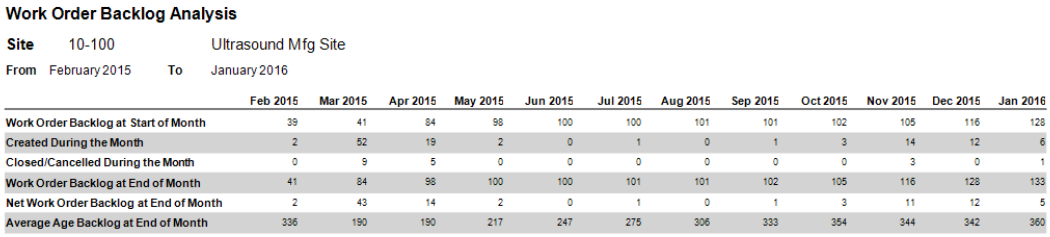
**Work Order Backlog**

**Site** 10-100 Ultrasound Mfg Site

| WO No / Problem | Equip No | Description | Start | Status | Type | Assigned | Priority | Cost Center | Class | Pri Craft | Est Hrs Labor | Actual Labor | Estimated Backlog |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 324 | 2016_m4b | m4b Equipment | 01/19/2016 | O | CM | | | | | | 0.00 | 0.00 | 0.00 |
| 323 | VE0001 | pit,sump,3'x10'deep,bldg2 | 01/08/2016 | O | CM | | | Adm | | | 0.00 | 0.00 | 0.00 |
| 321 | AC0006 | Air Conditioner06 | 03/30/2015 | S | PM | | 3 | | PM | | 2.00 | 0.00 | 0.00 |
| **********SAFETY FIRST********** | | | | | | | | | | | | | |
| 320 | | | 01/04/2016 | O | CM | | | | | | 0.00 | 0.00 | 0.00 |
| 319 | AC0002 | Air Conditioner02 | 01/04/2016 | O | CM | | 3 | | | | 0.00 | 0.00 | 0.00 |
| 318 | CV0005 | Conveyor,feed,7ft,9in bel | 04/30/2015 | S | PM | | | | PM | | 5.00 | 0.00 | 0.00 |
| **********SAFETY FIRST********** | | | | | | | | | | | | | |
| 316 | HO0151 | Hopper,vibrating,100lb | 12/10/2015 | O | CM | | | | | | 0.00 | 0.00 | 0.00 |
| TEST 14654 | | | | | | | | | | | | | |
| 315 | | | 12/09/2015 | O | CM | | | | | | 0.00 | 0.00 | 0.00 |
| TEST 123 | | | | | | | | | | | | | |
| 314 | | | 12/09/2015 | O | CM | | | | | | 0.00 | 0.00 | 0.00 |
| Test ABC | | | | | | | | | | | | | |
| 313 | HO0151 | Hopper,vibrating,100lb | 12/12/2014 | S | PM | | 3 | | PM | | 5.00 | 0.25 | 0.00 |
| **********SAFETY FIRST********** | | | | | | | | | | | | | |
| 312 | CV0005 | Conveyor,feed,7ft,9in bel | 03/31/2015 | S | PM | | | | PM | | 5.00 | 0.00 | 0.00 |
| **********SAFETY FIRST********** | | | | | | | | | | | | | |
| 311 | HO0002 | High Speed Overhead Hoist | 06/12/2015 | S | PM | SAM HELTSLEY | 3 | | PM | | 12.00 | 0.00 | 0.00 |
| **********SAFETY FIRST********** | | | | | | | | | | | | | |

## Work Order Backlog Analysis

**Fig. 9.93**
Work Order Backlog Analysis



**Work Order Backlog Analysis**

**Site** 10-100 Ultrasound Mfg Site

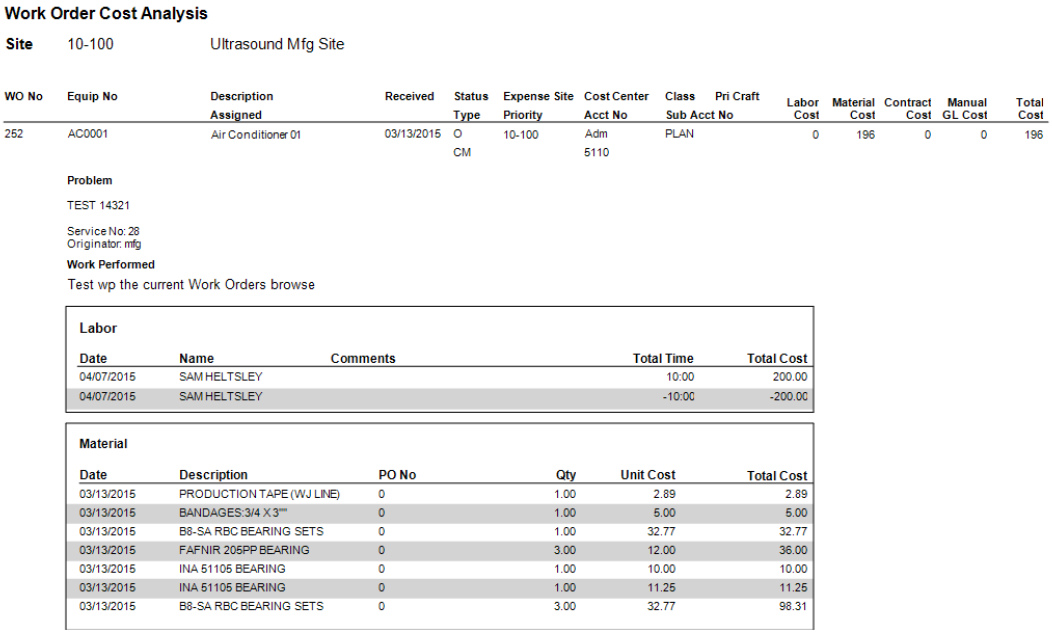
**From** February 2015 **To** January 2016

| | Feb 2015 | Mar 2015 | Apr 2015 | May 2015 | Jun 2015 | Jul 2015 | Aug 2015 | Sep 2015 | Oct 2015 | Nov 2015 | Dec 2015 | Jan 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Work Order Backlog at Start of Month | 39 | 41 | 84 | 98 | 100 | 100 | 101 | 101 | 102 | 105 | 116 | 128 |
| Created During the Month | 2 | 52 | 19 | 2 | 0 | 1 | 0 | 1 | 3 | 14 | 12 | 6 |
| Closed/Cancelled During the Month | 0 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 |
| Work Order Backlog at End of Month | 41 | 84 | 98 | 100 | 100 | 101 | 101 | 102 | 105 | 116 | 128 | 133 |
| Net Work Order Backlog at End of Month | 2 | 43 | 14 | 2 | 0 | 1 | 0 | 1 | 3 | 11 | 12 | 5 |
| Average Age Backlog at End of Month | 336 | 190 | 190 | 217 | 247 | 275 | 306 | 333 | 354 | 344 | 342 | 360 |

## Work Order Cost Analysis

This report displays labor done on the work order and cost details for labor and parts.

**Fig. 9.94**
Work Order Cost Analysis



**Work Order Cost Analysis**

**Site** 10-100 Ultrasound Mfg Site

| WO No | Equip No | Description<br>Assigned | Received | Status<br>Type | Expense Site<br>Priority | Cost Center<br>Acct No | Class<br>Sub Acct No | Pri Craft | Labor Cost | Material Cost | Contract Cost | Manual GL Cost | Total Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 252 | AC0001 | Air Conditioner 01 | 03/13/2015 | O<br>CM | 10-100 | Adm<br>5110 | PLAN | | 0 | 196 | 0 | 0 | 196 |

**Problem**

TEST 14321

Service No: 28
Originator: mfg

**Work Performed**

Test wp the current Work Orders browse

**Labor**

| Date | Name | Comments | Total Time | Total Cost |
|---|---|---|---|---|
| 04/07/2015 | SAM HELTSLEY | | 10:00 | 200.00 |
| 04/07/2015 | SAM HELTSLEY | | -10:00 | -200.00 |

**Material**

| Date | Description | PO No | Qty | Unit Cost | Total Cost |
|---|---|---|---|---|---|
| 03/13/2015 | PRODUCTION TAPE (WJ LINE) | 0 | 1.00 | 2.89 | 2.89 |
| 03/13/2015 | BANDAGES:3/4 X 3"" | 0 | 1.00 | 5.00 | 5.00 |
| 03/13/2015 | B8-SA RBC BEARING SETS | 0 | 1.00 | 32.77 | 32.77 |
| 03/13/2015 | FAFNIR 205PP BEARING | 0 | 3.00 | 12.00 | 36.00 |
| 03/13/2015 | INA 51105 BEARING | 0 | 1.00 | 10.00 | 10.00 |
| 03/13/2015 | INA 51105 BEARING | 0 | 1.00 | 11.25 | 11.25 |
| 03/13/2015 | B8-SA RBC BEARING SETS | 0 | 3.00 | 32.77 | 98.31 |

## Work Order Cost with Variance

**Fig. 9.95**
WO Cost with Variance Report

**Work Order Cost With Variance**

**Site** 10-100 Ultrasound Mfg Site

| WO No | Equip No / Problem | Description | Type | Status | Closed | Labor Estimate | Actual Labor | Material Estimate | Actual Material | Contract Estimate | Actual Contract | Total Estimate | Actual Total | Variance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 146 | CO0002 | Compressor,air,75hp,SULAIRair | CM | C | 10/20/2010 | 0.00 | 40.00 | 0.00 | 32.77 | 0.00 | 0.00 | 0.00 | 72.77 | (72.77) |
| | Air compressor warning light is on<br>Service No: 9<br>Originator: bnix | | | | | | | | | | | | | |
| 145 | AC0006 | Air Conditioner06 | CM | O | | 0.00 | 0.00 | 0.00 | 7.10 | 0.00 | 0.00 | 0.00 | 7.10 | (7.10) |
| | There is water underneath the backside of the air conditioner unit number 6. Need to look at the water pump to make sure its running properly.<br>Service No: 8<br>Originator: MHUNT | | | | | | | | | | | | | |
| 144 | CO0002 | Compressor,air,75hp,SULAIRair | CM | F | | 0.00 | 80.00 | 0.00 | 65.54 | 0.00 | 0.00 | 0.00 | 145.54 | (145.54) |
| | Air Compressor warning light is on. Need to check and see what the issue is.<br>Service No: 7<br>Originator: BNIX | | | | | | | | | | | | | |
| 143 | CO0002 | Compressor,air,75hp,SULAIRair | CM | C | 10/07/2010 | 0.00 | 60.00 | 0.00 | 11.52 | 0.00 | 0.00 | 0.00 | 71.52 | (71.52) |
| | Something seems wrong with the Relay switch. Its not properly turning off the air compressor. I tried switch it to off and it didn't turn off. Did this twice and it finally shut down. Maybe the relay switch needs replacing.<br>Service No: 6<br>Originator: mhunt | | | | | | | | | | | | | |
| 142 | AC0006 | Air Conditioner06 | CM | C | 09/30/2010 | 0.00 | 80.00 | 0.00 | 111.41 | 0.00 | 0.00 | 0.00 | 191.41 | (191.41) |
| | Water is leaking again on the Air Conditioner unit<br>Service No: 5<br>Originator: bnix | | | | | | | | | | | | | |

## Work Order Document

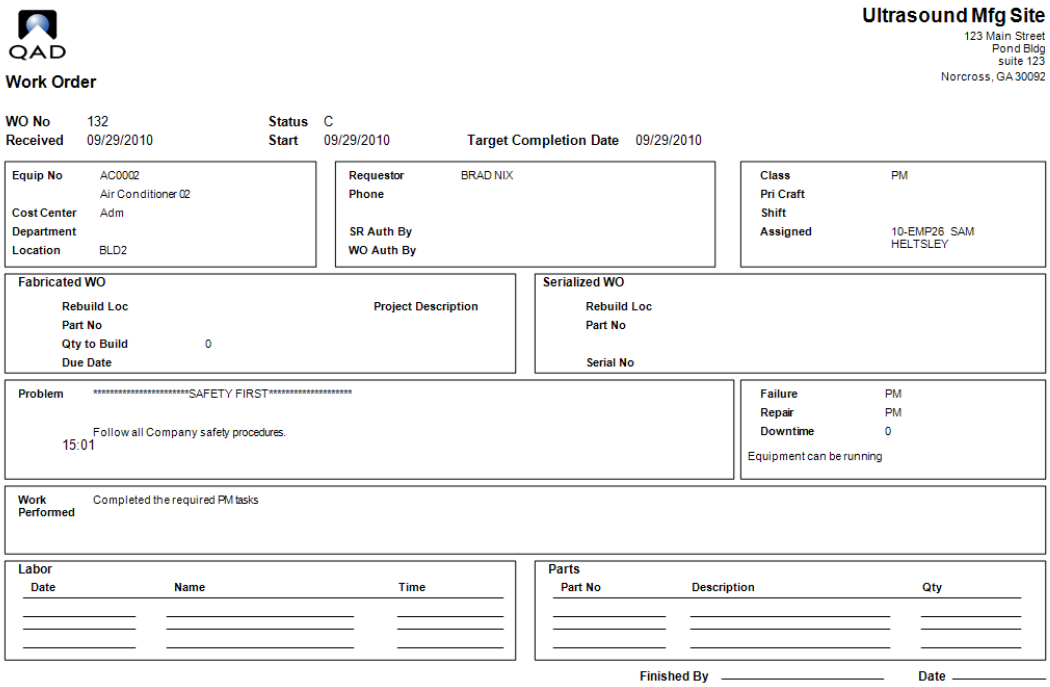
Work Order Document

This report displays all work orders that meet the filter criteria specified.

- The address displayed on the top of the report comes from Site address Line 1, Line 4, and Line 5.
- The descriptions displayed in the boxes are truncated to the first 22 characters to fit the box.
- The codes displayed in boxes are assumed to be 15 characters long or less.

The next two figures show the Work Order Document and the Work Order Instruction List.

**Fig. 9.96**
Work Order Document



QAD

**Work Order**

**Ultrasound Mfg Site**
123 Main Street
Pond Bldg
suite 123
Norcross, GA 30092

**WO No** 132 **Status** C
**Received** 09/29/2010 **Start** 09/29/2010 **Target Completion Date** 09/29/2010

**Equip No** AC0002
Air Conditioner 02
**Cost Center** Adm
**Department**
**Location** BLD2

**Requestor** BRAD NIX
**Phone**
**SR Auth By**
**WO Auth By**

**Class** PM
**Pri Craft**
**Shift**
**Assigned** 10-EMP26 SAM HELTSLEY

**Fabricated WO**
**Rebuild Loc** **Project Description**
**Part No**
**Qty to Build** 0
**Due Date**

**Serialized WO**
**Rebuild Loc**
**Part No**
**Serial No**

**Problem** **********SAFETY FIRST**********
Follow all Company safety procedures.
15:01

**Failure** PM
**Repair** PM
**Downtime** 0
Equipment can be running

**Work Performed** Completed the required PM tasks

**Labor**

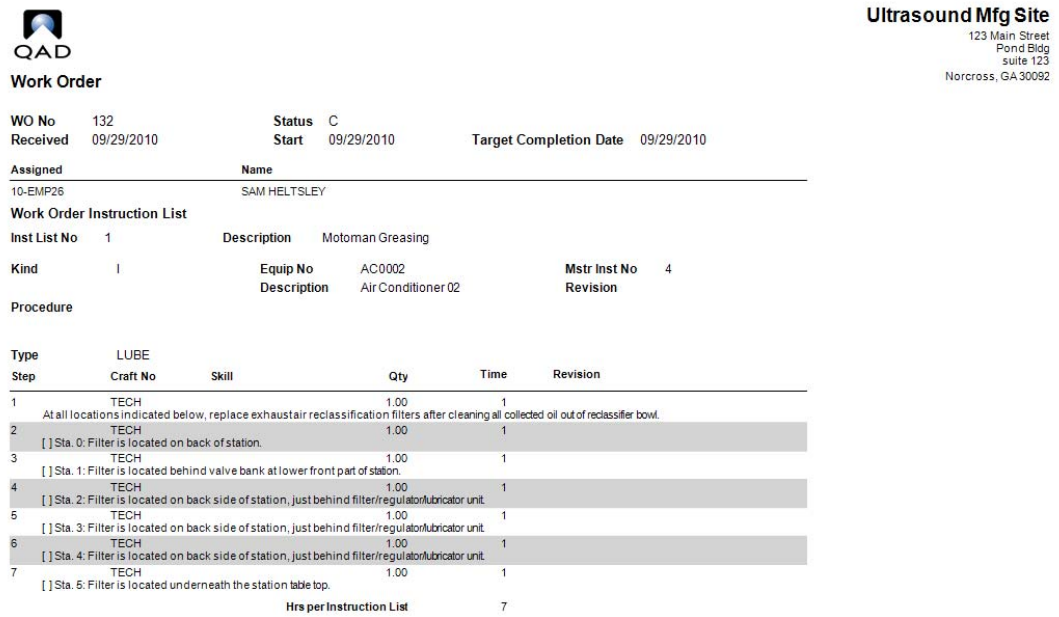
| Date | Name | Time |
|---|---|---|
| | | |
| | | |
| | | |

**Parts**

| Part No | Description | Qty |
|---|---|---|
| | | |
| | | |
| | | |

**Finished By** _____ **Date** _____

**Fig. 9.97**
Work Order Instruction List



QAD

**Work Order**

**Ultrasound Mfg Site**
123 Main Street
Pond Bldg
suite 123
Norcross, GA 30092

**WO No** 132 **Status** C
**Received** 09/29/2010 **Start** 09/29/2010 **Target Completion Date** 09/29/2010

| Assigned | Name |
|---|---|
| 10-EMP26 | SAM HELTSLEY |

**Work Order Instruction List**

**Inst List No** 1 **Description** Motoman Greasing

**Kind** I **Equip No** AC0002 **Mstr Inst No** 4
**Description** Air Conditioner 02 **Revision**

**Procedure**

**Type** LUBE

| Step | Craft No | Skill | Qty | Time | Revision |
|---|---|---|---|---|---|
| 1 | TECH | | 1.00 | 1 | |
| | At all locations indicated below, replace exhaust air reclassification filters after cleaning all collected oil out of reclassifier bowl. | | | | |
| 2 | TECH | | 1.00 | 1 | |
| | [ ] Sta. 0: Filter is located on back of station. | | | | |
| 3 | TECH | | 1.00 | 1 | |
| | [ ] Sta. 1: Filter is located behind valve bank at lower front part of station. | | | | |
| 4 | TECH | | 1.00 | 1 | |
| | [ ] Sta. 2: Filter is located on back side of station, just behind filter/regulator/lubricator unit. | | | | |
| 5 | TECH | | 1.00 | 1 | |
| | [ ] Sta. 3: Filter is located on back side of station, just behind filter/regulator/lubricator unit. | | | | |
| 6 | TECH | | 1.00 | 1 | |
| | [ ] Sta. 4: Filter is located on back side of station, just behind filter/regulator/lubricator unit. | | | | |
| 7 | TECH | | 1.00 | 1 | |
| | [ ] Sta. 5: Filter is located underneath the station table top. | | | | |
| | | **Hrs per Instruction List** | | 7 | |

Chapter 10

# System Administration

This section discusses the following System Administration module topics:


***System Administration Menu 662***

***Set Up Roles, Employees, and User Data 663***

***Roles 664***

***Users 675***

***User/Roles 683***

***System Control 685***

***ERP Interface 690***

***User-Defined Fields 701***

***Job Control Application 703***

***Set Up Sequence Data 738***

***Report Setup 746***

***Mandatory Fields 747***

***Req Reroute/Notify Fields 749***

***PO Reroute/Notify Fields 750***

***Screen Editor 751***

***Form Designer 752***

***Report Designer 753***

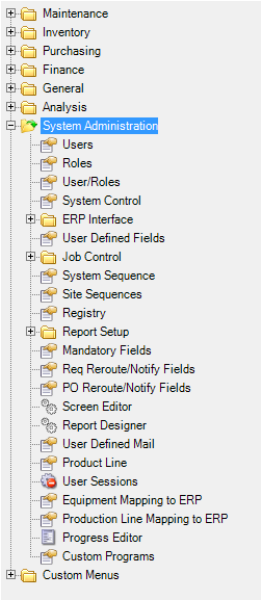
***User-Defined Mail 756***

***Product Line 760***

# System Administration Menu

Use System Administration to maintain standard administrative functions within EAM. You can set up custom modifications of standard screens, administer users, configure system control settings, manage roles for security, download data from the QAD ERP application, manage jobs, and maintain reports. You can also set sequences for system-generated numbering throughout EAM such as WO number and PO number.

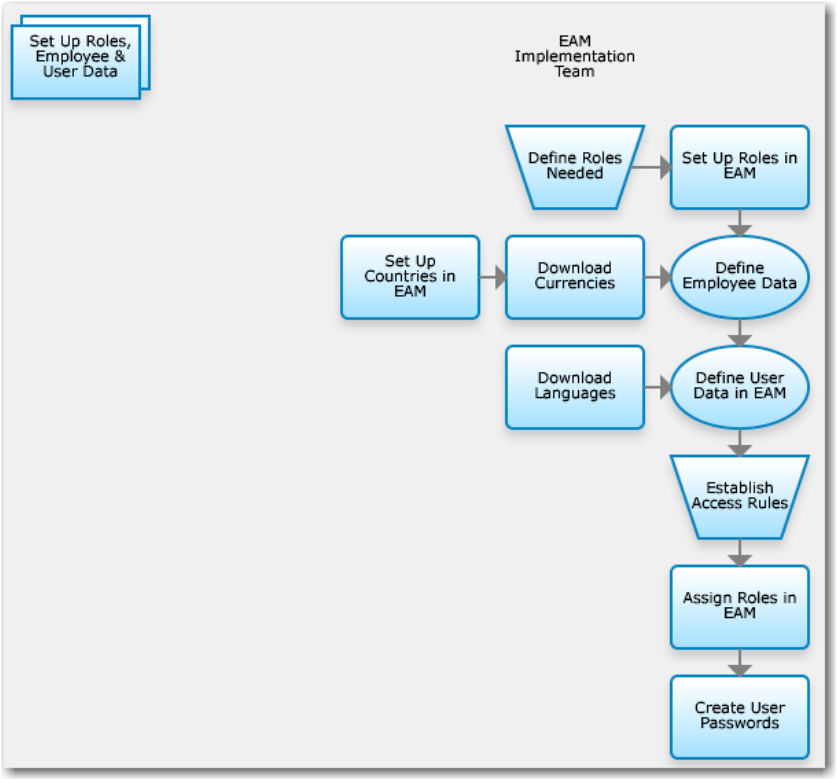
**Fig. 10.1**
System Administration Menu



# Set Up Roles, Employees, and User Data

## Set Up Roles, Employees, and User Data Process Flows

**Fig. 10.2**
Set Up Roles, Employees, and User Data Process Flows




The process for setting up roles, employees, and user data is:

1. Define roles.
2. Set up roles in EAM.
3. Set up countries in EAM.
4. Download currencies.
5. Define employee data.
6. Download languages.
7. Download user data from the ERP.
8. Establish access rules.
9. Assign roles in EAM.

# Roles

Use roles to determine permissions for user types. Roles give users access to folders within the application, and allow them to perform actions in the modules. Users can add, edit, and delete records within the subfolders. Assign users one or more roles in each site they access.

The system ships with predefined roles based on typical users. You can modify or delete these roles, copy and rename them in the same site, copy them to a new site, or add new roles. Use roles to grant access to the features a user needs; for example, a purchase requestor needs access to Requisitions, but not to Finance. Default system roles include:

*Accounting.* Accounting Security Group

*All Yes.* All menus and objects to Yes

*APADMIN.* Local Application Administrator

*Buyer.* Buyer

*Inventory Clerk.* Inventory Clerk

*LOCALSYSAD.* Local System Administrator

*MTCESUPER.* Maintenance Supervisor

*PLANNER.* Maintenance Supervisor

*PURCHASING.* Purchasing Department

*REQUESTOR.* Purchase Requestor

*STORES.* Store Room Security Group

*STORES MGR.* Store Room Manager

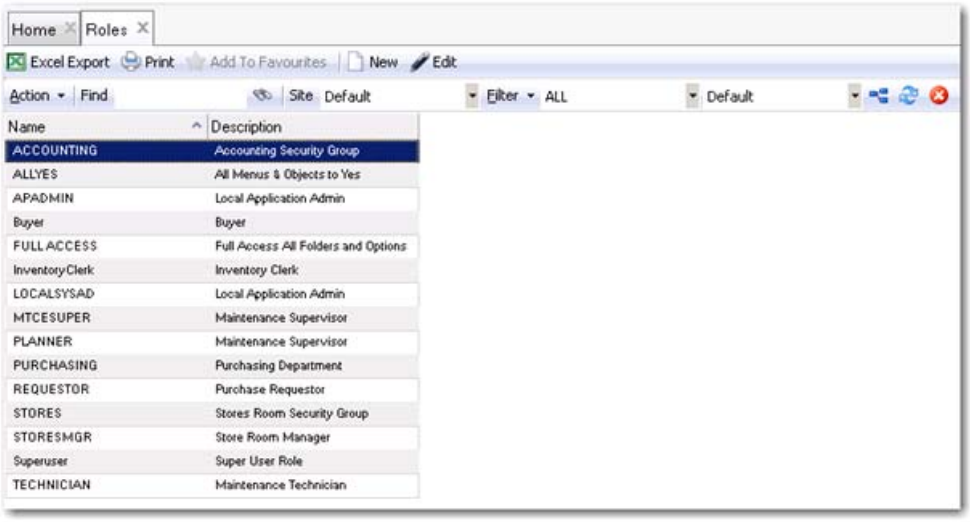
*Superuser.* Super User Role

*TECHNICIAN.* Maintenance Technician

## Roles Browse

Access this browse from System Administration|Roles. Use it to organize and display records, to access supporting functions, to edit or create new records, or to export data to Excel.

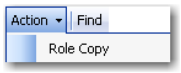
**Fig. 10.3**
System Administration Roles Browse




## Roles Action Menu

Choices available on this menu vary depending on context. Access the Action menu from the toolbar or right-click menu.

**Fig. 10.4**
Roles Action Menu

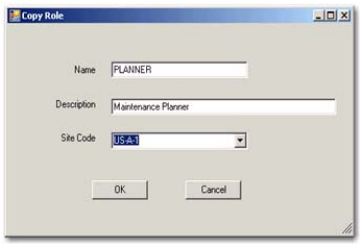



### Role Copy

You can copy a role and give it a new name after you establish its attributes. You can alter the attributes of the new role. You can also copy a role to another site, retain the original attributes and name, or change them.

To copy a role, highlight the role to copy in the source site and select Role Copy from the Action menu. Enter the name and description of the role, and select a site from the Site Code drop down. Click OK.

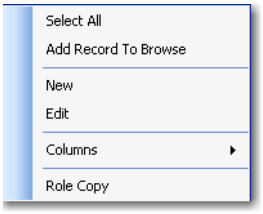
**Fig. 10.5**
System Administration Roles Copy




## Roles Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 10.6**
Roles Right-Click Menu




### New

Use New to open the roles record detail to create a record.

### Edit

Use Edit to open the roles record detail to edit the selected record.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

## Roles Record Detail

The record detail contains all information about this role. Assign a name to the role.

### Adding a Roles Record

1. Click New to open a blank roles record.
2. Assign the role name and description.
3. Click Save.
4. Highlight the module and select the access levels on the General tab.

### Editing a Roles Record

1. Double-click a record from the browse or click Edit to open the roles record detail.
2. Verify the role's name.
3. Highlight the module and select the access level on the General tab.
4. Click Save.

***Note*** The default for a new role is no access in any module, indicated by an empty blue circle.

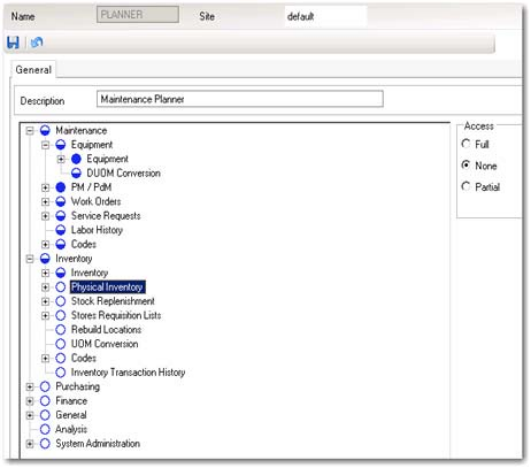
***Note*** If you are adding a role with access to almost everything, first provide full access. Then, change access to Partial or None for individual functions.

## Access Levels

Full access grants a user permission to use all functionality in the module or submodule. A solid blue circle represents full access. None provides no access and prohibits a user from viewing or using a module or submodule. A white circle with a blue outline represents no access. Partial access grants a user permission to use or view submodules or features under a larger umbrella. A half-blue circle indicates partial or view access.

***Example*** You have full access to Maintenance|PM/PdM, but no access to Inventory|Rebuild Locations. The circle beside PM/PdM is solid blue. The circle beside Rebuild Locations is outlined blue. The circle beside Work Orders is half-blue because subordinate submodules include multiple access levels.

**Fig. 10.7**
Access Levels




### Full Access

Select the Full option in the Access box to grant a user type access to all features in a module or submodule.

### No Access

Select the None option in the Access box to deny a user type access to all features in a module or submodule.

### Partial Access

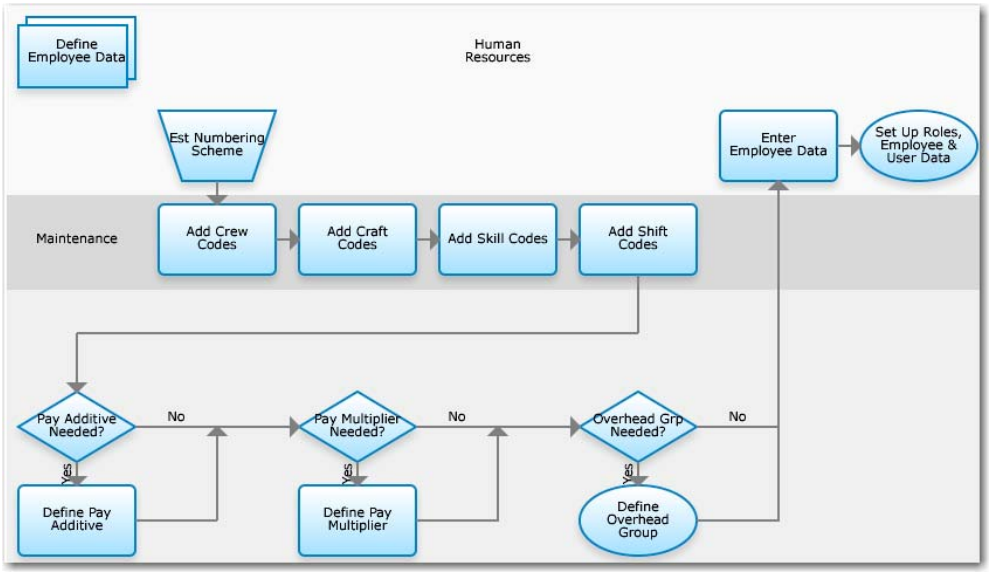
Select the partial option in the Access box to grant a user type limited access to features in a module or submodule. Select Partial to grant print/export, edit, add, delete, and—if applicable—copy privileges. If you indicate no access to some features and full access to others, then the higher-level circle indicator automatically displays as half-blue.

### Options

Options include Print/Export, Add, Copy, Delete, Notes, and Edit. These settings enable you to perform only the selected functions on the highlighted module or submodule. All options are not available in all modules or submodules.

## Set Up Employee Data Process Flow

**Fig. 10.8**
Set Up Employee Data Process Flow




To set up employee data:

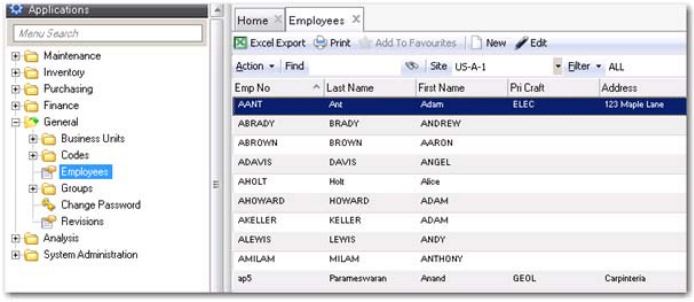
1. Establish numbering scheme.
2. Add crew codes.
3. Add craft codes.
4. Add skill codes.
5. Add shift codes.
6. Define pay additives.
7. Define pay multipliers.
8. Define overhead groups.
9. Enter employee data.

## Employees Browse

Access this browse from General|Employee. Use it to organize and display records, to access supporting functions, and to edit or create new records. The site-specific Employee file in EAM is where you set up records on individuals. Each employee is given a unique employee number for identification. These employee records can be used to distribute labor, for reference information,

and to designate employees who can be assigned to work orders. In addition, employees can be designated as buyers for one or more sites and linked to a PO Approval Group and/or a Blanket Order Approval Group for that site.

**Fig. 10.9**
Employee Browse




## Employee Action Menu

Choices available on this menu vary depending on context. Access the Action menu from the toolbar or right-click menu.

### Post Labor

This action allows the highlighted employee's time to be charged to a particular activity such as a work order or a project or directly to a department, cost center, and account number.

### Reverse Labor

The Reverse action is used to remove previously posted labor charges.

## Employee Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

New

Use New to open the Employee record detail to create a record.

Edit

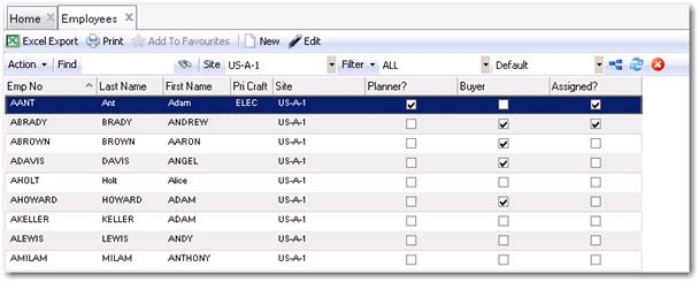
Use Edit to open the Employee record detail to edit the selected record.

Post Labor and Reverse Labor are options from the Action menu.

## Employee Record Detail

The record detail contains all information about this employee. The employee number and current site display over all associated tabs.

**Fig. 10.10**
Employee Record Detail




## Creating an Employee Record

1 Click New to open a blank employee record.

2 Verify the current site.

3 Assign the employee number.

4 Enter information in relevant fields on the tabs.

5 Click Save.

## Editing an Employee Record

1 Double-click a record from the browse or click Edit to open the employee record detail.

2 Verify the current site.

3 Verify the employee number.

4 Enter or update information in the relevant fields on the tabs.

5 Click Save.

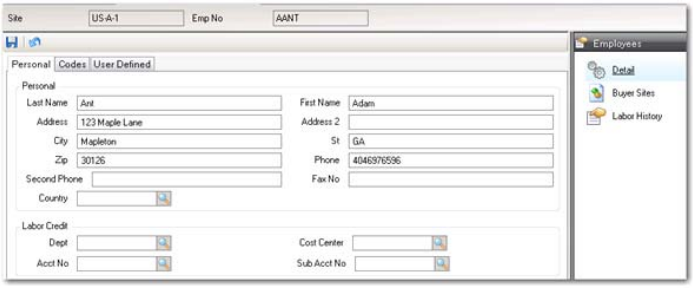
## Employee Tabs

Employee contains three tabs: Personal, Codes, and User Defined.

### Employee Tab: Personal

Use this tab to enter personal data about the Employee plus accounting data.

**Fig. 10.11**
Employee: Personal Tab




## Personal

*Last Name.* The employee's last or surname.

*First Name.* The employee's first or given name.

*Address.* The employee's home address.

*Address 2.* The employee's second line of address.

*City.* The city in which the employee lives.

*State.* The state or province in the employee's address.

*Zip.* The postal code used in the employee's address.

*Phone.* The employee's home phone number.

*Second Phone.* An employee's second telephone number, such as a cell phone or work extension.

*Fax.* The employee's home fax number.

*Country.* The country in the employee's address.

## Labor Credit

*Dept.* The department code used when charging an employee's time. The department number in the employee's record is used on the credit side of the labor posting transaction.

*Cost Center.* Used as the expense cost center by EAM during a labor posting, if no cost center is specified under the equipment.

***Note*** The system first checks the equipment cost center. If one is not listed under the equipment, the system looks for a default cost center under the employee.

*Acct No.* The account number used when charging an employee's time. The account number in the employee's record is used as the credit side of the transaction.

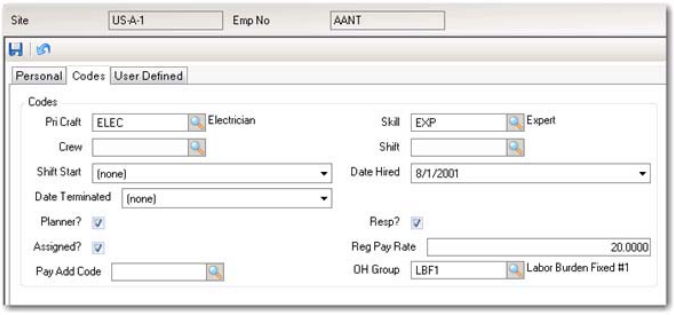
*Sub Acct No.* The sub-account number used when charging an employee's time. The sub-account number in the employee's record is used as the credit side of the transaction.

***Note*** There are two sets of default labor accounting codes in the Site System Maintenance module on the Labor tabbed page. The first column is labeled Debit, which is used for the expense accounting codes if none was used in the labor posting transaction. The second column is labeled Credit. If there are no codes in the employee record, these accounting codes are used.

## Employee Tab: Codes

The Codes tab identifies a number of groups to which an employee belongs, such as Craft, Skill, Crew, and Shift, and also contains pay information, such as Pay Rate and any pay adders.

**Fig. 10.12**
Employee Tab: Codes




*Pri Craft.* Identifies the employee's primary craft.

***Note*** This craft is drawn from a user-defined table of crafts. The employee's craft is identified so that the system can search for employees with specific crafts during the work order scheduling process.

*Skill.* A user-defined table that allows further definition of an employee's capabilities.

***Note*** You can denote the level of skill employees have within their craft. It becomes important to know an employee's level of capability when scheduling a work order, since a more senior craftsperson may be needed for a more difficult task.

*Crew.* A user-defined table, containing crew codes and descriptions, used to identify the group to which an employee belongs.

*Shift.* This field contains a valid shift from the standard shifts defined for your system. There is also a lookup available for this field.

*Date Hired.* The date the employee was hired.

*Date Terminated.* The date the employee was terminated from employment.

*Planner.* Select if the employee is defined as a planner in EAM.

***Note*** If planner is selected, the employee shows up on the planners lookup table.

*Resp.* Select if the employee is listed as a responsible individual for a group of equipment or for a group of parts.

***Note*** If responsible is selected, then when the lookup table is activated to search for responsible individuals, this employee is listed.

*Assigned.* Select if the employee can be assigned to maintenance work orders. Only employee records that are selected as Assigned appear in the Assigned Employee Lookup.

*Regular Pay Rate.* The standard hourly rate the employee is paid, expressed in the company's base currency.

***Note*** This rate can then be combined with pay multipliers, such as time and a half or double time, depending upon the specific activity or time they are working such as holidays or weekends.

*Pay Add Code.* A user-defined code that specifies an amount of money that is paid to an employee on an hourly basis in addition to that employee's regular hourly wage.

***Note*** This is an optional field. It could be used, for example, to pay an employee on third shift an additional 50 cents per hour. Keep in mind that, when the employee is receiving time and a half for working on Sunday, for example, the employee receives not only half again of the regular hourly wage, but also half again for the 50 cents.

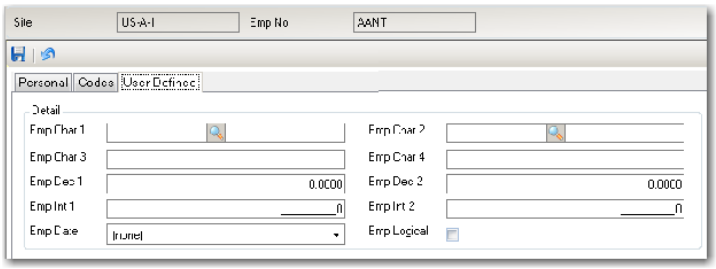
*OH Group.* The default overhead group for an employee.

***Note*** Labor posted for an employee includes overhead charges defined by the overhead group. An employee overhead group overrides the site default labor overhead group.

## Employee Tab: User Defined

Use the Employee User Defined tab to track information against specific employees in EAM. There are ten user-defined fields.

**Fig. 10.13**
Employee Tab: User Defined




*Character 1/2.* User-defined character fields. They are validated against tables that you add.

*Character 3/4.* Free-form user-defined character fields, not validated against tables.

*Decimal 1/2.* User-defined decimal fields for Employee.

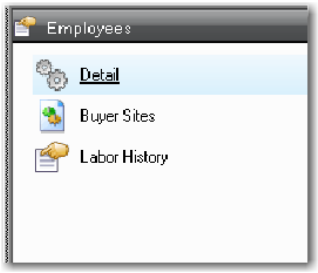
*Integer 1/2.* User-defined integer fields for Employee.

*Enable/Disable Logic.* A user-defined check box.

## Employee Subdetail

The number of subdetail options varies from module to module. All have an option labeled Detail, which remains visible and returns you to the previously viewed tab page in the highlighted record if one of the other subdetails is selected. Normal security applies: a user can be given full, partial, or no access to each subdetail option. If no access is given, the subdetail is not visible.

**Fig. 10.14**
Employee Subdetail




### Detail

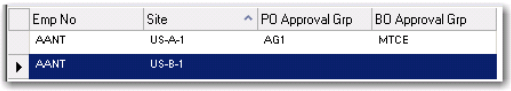
This option opens the tabbed view.

### Buyer Sites

Use this option to display a buyer in a single- or multiple-site configuration. Click New to access a standard Site Maintenance lookup table. Select the appropriate site code. In addition, you can select the appropriate PO Approval Group to which the buyer is associated for the electronic approval routing of purchase orders, for organizations that use PO authorization.

You can also select the appropriate Blanket Order Approval Group with which the buyer is associated to specify electronic routing and approval of blanket orders. This step is required for organizations that use blanket orders.

**Fig. 10.15**
Employee Buyer Sites Subdetail

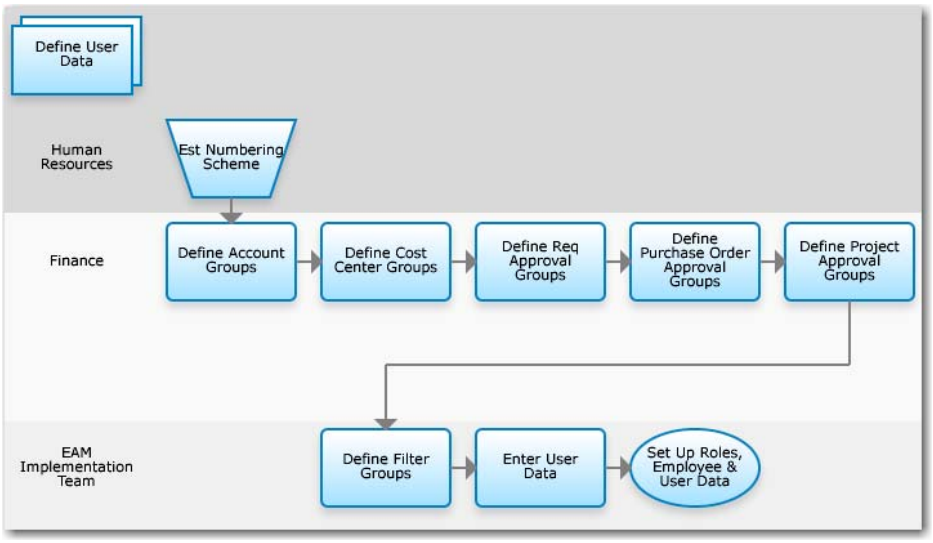



### Labor History

Use this option to display a browse of labor records, allowing you to view both posted and reversed records. Reversals show a negative number of hours and negative cost; postings have positive hours and costs.

## Defining User Data Process Flow

**Fig. 10.16**
Define User Data Process Flow




1. Establish a numbering scheme.
2. Define account groups.
3. Define cost center groups.
4. Define requisition approval groups.
5. Define purchase order approval groups.
6. Define project approval groups.
7. Define filter groups.
8. Enter user data.

# Users

***Note*** EAM users are created and deleted from within QAD Enterprise Application Enterprise Edition (EE). The EE user information is loaded into EAM using the Refresh Users job program, described on page 737. You can edit user information within EAM, but changes made in EAM that are not also made in EE are overridden the next time the Refresh Users job program runs. For more information on creating users in EE, see *QAD Security and Controls User Guide*.

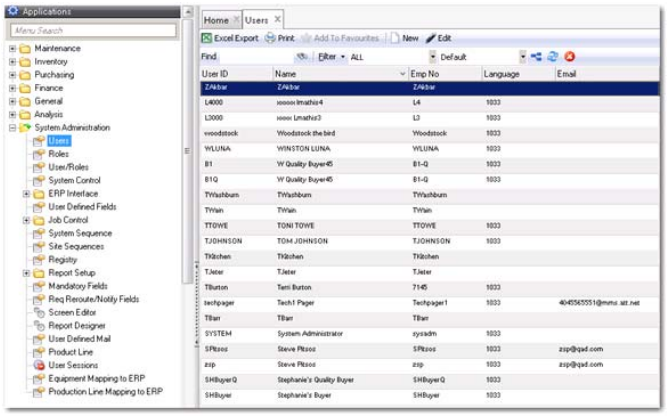
The User module is where EAM-specific user details and preferences are maintained. The user record can be linked to the user's corresponding employee ID, which populates certain information from the employee record into the user record. This link reduces unnecessary duplication of information. Linking the user record to the employee record is sometimes required when a user is creating transactions in EAM such as creating work orders, distributing labor, or creating stores requisitions. EAM can automatically populate employee information required for the transaction based on the user's ID.

Before users are allowed access to EAM, they must be linked to at least one site and at least one role in the site.

## Users Browse

Access this browse from System Administration. Use it to organize and display records, or export data to Excel.

**Fig. 10.17**
Users Browse




## User Action Menu

The Action menu contains the following functions.

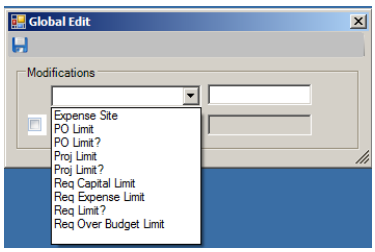
### Unlock User

Use Unlock User to unlock an ID that was locked when a user tried to log in with the incorrect password four times.

### Global Edit

Use Global Edit to make the same change to all selected user files. The edit options are related to finances, as shown in Figure 10.18.

**Fig. 10.18**
Users: Global Edit




The Global Edit options are either free-form currency fields or check boxes to select or clear. Enter the appropriate dollar amount in the following fields to give all selected users the same spending limit:

- Expense Site
- PO Limit
- Proj Limit
- Req Capital Limit
- Req Expense Limit
- Req Over Budget Limit

Check or clear the box in the following fields to change this setting for all selected users:

- PO Limit?
- Proj Limit?
- Req Limit?

### Purge Mail

Use Purge Mail to delete EAM system e-mail messages for this user. Enter the number of days you want the system to keep e-mail messages. Any messages older than that time frame are deleted. For example, if you enter 30, all e-mails 31 days and older are deleted. The default value is 14 days. EAM displays a message that indicates how many e-mails the action deleted.

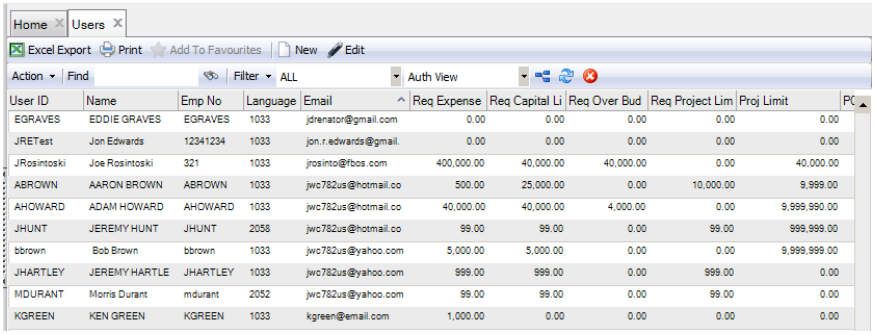
### Change Active Status

Use Change Active Status to make an active user inactive or to make an inactive user active. You cannot deactivate SysAdm or SYSTEM user IDs. An inactive user cannot log in to EAM and sees the message, “User XXXXX is inactive. Please contact your system administrator,” where “XXXXX” is the inactive user ID.

## User Record Detail

The record detail contains all information about this user.

**Fig. 10.19**
User Record Detail




## Editing a User Record

1 Double-click a record from the browse or click Edit to open the user record detail.

2 Verify the user number.

3 Enter or update information in the relevant fields on the tabs.

4 Click Save.

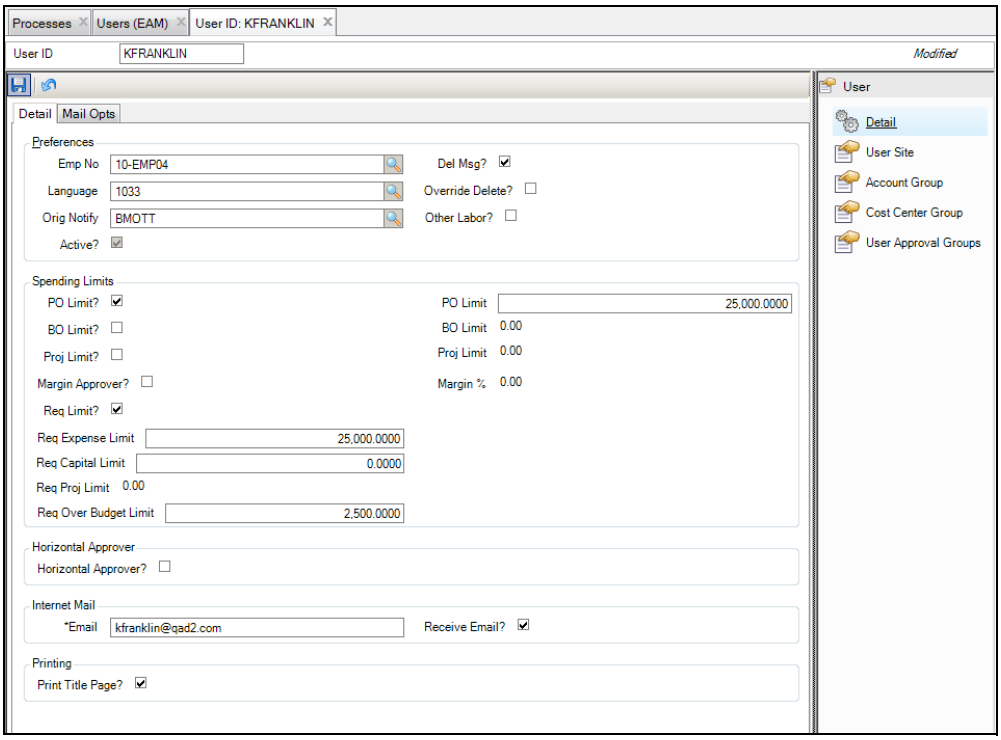
## User Tabs

User contains two tabs: Detail and Mail Opts. The user ID displays over all associated tabs.

### User Tab: Detail

Use this tab to enter detail data about the user plus purchasing and project spending limits.

**Fig. 10.20**
Users Detail Tab




*User ID.* The system administrator assigns the user number in the User module. The user ID is an alphanumeric code.

***Note*** In many cases, the user ID is a number. This number is displayed on many screens and reports throughout the system. If the users are not familiar with these numbers, it can make some of the reports more difficult to understand. It may make more sense to use a more recognizable identifier such as the first letter of the user's first name, followed by last name. Example: Joe Smith – jsmith.

*Emp No.* The system administrator links a previously established employee number in this user's record. The employee number is an alphanumeric code. The employee number entered is validated against the Employee table. You can use the lookup button to select an existing employee number.

*Language.* The default language code for the selected user. The language chosen here is the language in which this user views/uses EAM. The Language field allows individual users to access EAM in their own language. The Lookup displays only the languages in which EAM is available.

*Orig Notify.* This field is used to specify a user who should receive an automated e-mail notification when this user creates a service request. Click into the Orig Notify field to access the User Lookup with browses of users and mail groups.

The associated user receives an automated e-mail indicating that this user created a service request.

*Del Msg?* User preference to display or suppress warning message before deleting records. Select if the field should cause a warning message to display before a record is deleted. This warning message allows the user to cancel the deletion. Regardless of this setting, the system has built-in parameters that prohibit the deletion of some records.

***Note*** In order to prevent a record from being deleted in error, it is suggested that you select this field for most users. Records cannot be restored once deleted.

*Override Del?* Select this field to allow the user to override the system controls that prohibit the deletion of certain record types, depending upon their status and attributes.

***Note*** It is suggested that this field is not selected for most users. With it selected, the user can override the system controls that prohibit the deletion of certain records.

*Other Labor?* This check box determines whether the user can post labor for all other users or only for himself/herself.

***Note*** If the profile for the current user has this check box selected, EAM allows the user to post or reverse labor for any employee, if the user has security for the option. If not selected, EAM only allows users to post and reverse labor for themselves.

*PO Limit?* Select if the user has been assigned a spending limit for approval of purchase orders. If selected, the amount in the next field represents the user's Purchase Order Limit—the amount for which a user can approve a purchase order.

***Note*** When the user approves a purchase order, the user's spending limit is checked. If the spending limit is equal to or greater than the purchase order, the purchase order is approved and authorized. If the purchase order is greater than the user's spending limits, then the purchase order is approved, but not authorized.

*PO Limit.* If the PO Limit? option is selected, assign a spending limit for approval of purchase orders.

*BO Limit.* If the BO Limit? option is selected, assign a spending limit for approval of blanket orders.

***Note*** When the user approves a blanket order, the user's BO spending limit is checked. If the user's BO spending limit is equal to or greater than the BO's expiration amount, the blanket order is authorized. If the BO's expiration amount is greater than the user's BO spending limits, then a routing for authorization is started. The user's action is shown as Approve in the BO's Routing lower screen. However, the blanket order is not authorized until a user with a higher spending limit and any quantity person approve it.

*Proj Limit?* Select if the user has been assigned a spending limit for the initial approval of projects. If selected, the user has been assigned a spending limit for approval of projects.

*Proj Limit.* If Proj Limit? is selected, the amount in this field represents the user's Project Limit, which is the amount for which a user can approve a given project.

***Note*** When the user approves a project, the user's spending limit is checked. If the user's spending limit is equal to or greater than the project, the project is approved and authorized. If the project is greater than the user's spending limits, then the user's action is considered to be approved. However, the project is not authorized until someone with high enough spending limits authorizes it and any quantity persons authorize it.

*Margin Approver?* Select this check box so that the user can be added to Margin Approval Groups.

*Margin%.* Specify the Margin Limit % by entering the lowest percentage of margin for which this user can approve a customer-funded project.

*Req Limit?* Select if the user has been assigned a spending limit for one or more of the following fields for approval of requisitions. When you select this box and save the tab, the available fields become active.

*Req Expense Limit.* If Req Limit? is selected, the amount in this field represents the user's Requisition Expense Limit, which is the amount for which a user can approve a given requisition that is not flagged as a capital expense.

*Req Capital Limit.* If Req Limit? is selected, the amount in this field represents the user's Requisition Capital Limit, the amount for which a user can approve a requisition that is flagged as a capital expense.

*Req Proj Limit.* If Req Limit? is selected, the amount in this field represents the user's Requisition Project Limit, which is the amount for which a user can approve a requisition that is linked and expensed to a project.

*Req Over Budget Limit.* If Req Limit? is selected, the spending limit to use when a cost center, account, or sub-account has reached its budget limit.

*Horizontal Approver?* If the Horizontal Approver? option is enabled on the General|Business Units|Sites|Authorization Options tab, then a user can be designated as a Horizontal Approver here. Then, add one or more Horizontal Approvers to a requisition approval group at Purchasing|Approval Group|Requisition Approval Group.

*Email.* Enter an Internet e-mail address for each user in your system. The address must be unique to the user and cannot be duplicated within the EAM system.

*Receive Email?* Select if this user should receive automated Internet e-mail.

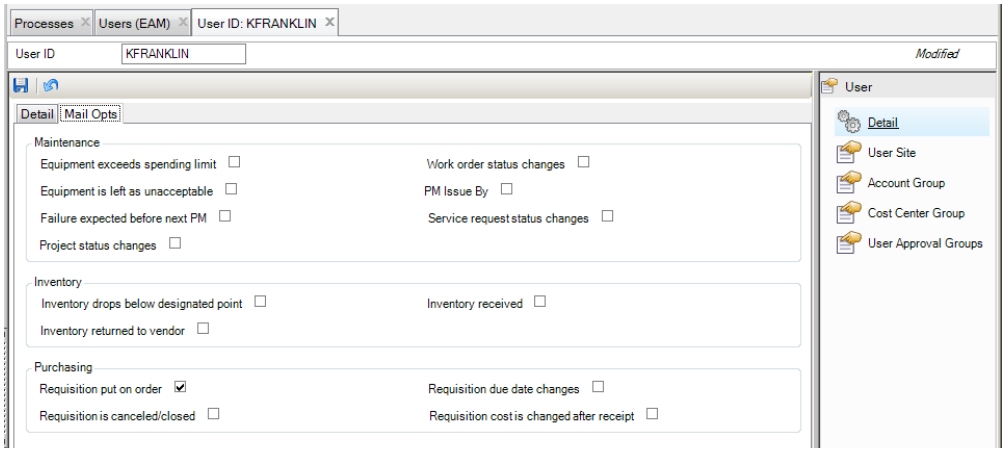
*Prt Title Page?* Select if the user should have the title page containing the report criteria printed whenever this user generates reports.

***Note*** If selected, the title page prints. If cleared, the title page does not print.

### User Tab: Mail Opts

Use this tab to select events that trigger e-mail to this user.

**Fig. 10.21**
Users Mail Opts Tab




## Maintenance

*Equipment exceeds spending limit.* User preference to receive mail when a piece of equipment exceeds its annual, lifetime, or work order spending limit.

***Note*** If selected, the user designated in the Notify field of the equipment record receives mail when the piece of equipment exceeds a spending limit.

*Work order status changes.* User preference to receive mail when a work order's status changes.

***Note*** Each work order status can be set to send mail when a work order status is changed. If selected, the user designated in the work order record receives mail when the work order status is changed to a status designated to generate mail.

*Equipment is left as unacceptable.* User preference to receive mail when a piece of equipment is left in an unacceptable state following a work order.

***Note*** Each work order has an As Left code. These codes can be set to send mail if a piece of equipment is left in the condition that the code describes. If selected, the user designated in the Notify field of the equipment record receives mail when the piece of equipment is left in a condition designated to generate mail.

*PM Issue By.* User preference to receive mail when a PM comes due.

***Note*** If selected, the user designated in the PM record receives mail when the PM comes due by reaching a certain date or driving unit of measure. If it is not, no mail of this type is sent to this user.

*Failure expected before next PM.* User preference to receive mail when a calculated next failure date precedes the next PM Issue By date.

***Note*** When a work order is closed, the next failure date for the piece of equipment is calculated. If selected, the user designated in the Notify field of the PM record receives mail when the next failure date calculated precedes the next preventing PM Issue By date.

*Service request status changes.* A user preference to receive mail when a service request changes status, if the user is the Notify person or part of the mail group on the service request.

*Project status changes.* Each project status can be set to send mail when a project status is changed. If selected and the user is designated as the Notify person in the project record, the user receives mail when the project status is changed to a status designated to generate mail.

**Inventory**

*Inventory drops below designated point.* User preference to receive mail when inventory drops below the designated point of safety stock or reorder point.

***Note*** Each piece of inventory can be designated to send mail when inventory drops below either safety stock or reorder point. If this field is selected, the user designated in the Notify field of the inventory record receives mail when stock levels drop below this point.

*Inventory received.* When selected, the user, if Requestor or Notify, receives e-mail when inventory is received from a requisition.

*Inventory returned to vendor.* When selected, the user, if Requestor or Notify, receives e-mail when parts are returned to the vendor.

**Purchasing**

*Requisition put on order.* When selected, the user, if Requestor or Notify, receives e-mail when the requisition is put on order.

*Requisition due date changes.* When selected, the user, if Requestor or Notify, receives e-mail when the requisition due date changes.

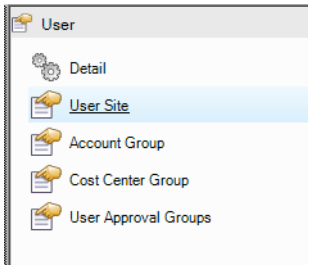
*Requisition is canceled/closed.* When selected, the user, if Requestor or Notify, receives e-mail when the requisition status is changed to either Canceled or Closed.

*Requisition cost is changed after receipt.* When selected, the user, if Requestor or Notify, receives e-mail when the requisition status is changed after receipt.

## User Subdetail

The number of subdetail options varies from module to module. All have an option labeled Detail, which remains visible and returns you to the previously viewed tab page in the highlighted record if one of the other subdetails is selected. Normal security applies, meaning that a user can be given full, partial, or no access to each subdetail option. If no access is given, the subdetail is not visible.

**Fig. 10.22**
Users Subdetail




Detail

This option opens the tabbed view.

### User Site

Use this option to display a user in a single- or multiple-site configuration. Click New to access a standard Site Maintenance lookup table. Select the appropriate site code. While each user must be assigned at least one valid site in order to access EAM, a user can have access to multiple sites. Designate one of the sites as Primary, which is the site into which the user is logged by default.

The lower browse displays the roles associated with the user highlighted in the upper browse.

### Account Group

Account group (Finance|Groups|Account Group) is used to associate a set of accounts with a user ID. When the user clicks Authorize action on the requisition header, EAM checks if the user has either an account group or a cost center group that contains the appropriate account number or cost center to authorize the selected requisition. If an account in the user's account group matches the account on the selected requisition and the user has a large enough spending limit, the user can authorize the requisition without going through routing.

### Cost Center Group

Cost center group (Finance|Groups|Cost Center Group) is used to associate a set of cost centers with a user ID. When the user clicks the Authorize action on the requisition header, EAM checks if the user has either an account group or a cost center group that contains the appropriate account number or cost center to authorize the selected requisition. If a cost center in the user's cost center group matches the cost center on the selected requisition and the user has a large enough spending limit, the user can authorize the requisition without going through routing.

### User Approval Groups

Requisition approval groups (Purchasing|Approval Group|Requisition Approval Group) and stores requisition approval groups (Inventory|Stores Requisition Approval Groups) are used to associate a set of requisition approvers to a user ID. When the selected user initiates routing requests, the approval group identifies who receives those requests to authorize requisitions. Associate approval groups here only if your organization has selected User Based Routing for approval of requisitions. The routing method used for requisition approval is determined by the Req Auth? check box in General|Business Units|Site Authorization tab. If User Based Routing is enabled, the system routes all approval requests for requisitions according to the user who clicked the Approve action.

# User/Roles

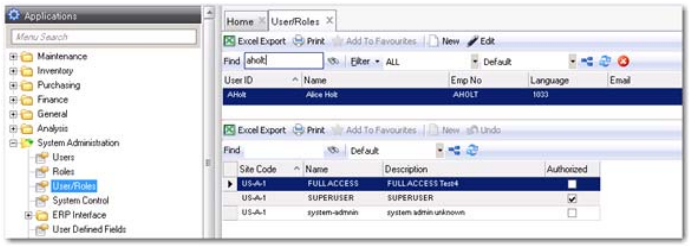
Use this module to link users to roles in their required sites.

## User/Roles Browse

Access this browse from System Administration|User/Roles. Use it to organize and display records, to edit or create new records, or to export data to Excel.

The User/Roles browse consists of the top browse, listing users, and the lower browse, listing roles for each site.

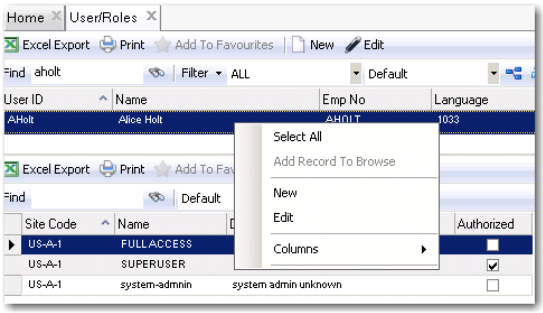
**Fig. 10.23**
User/Roles Browse



## User/Roles Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 10.24**
User/Roles Right-Click Menu




*Select All.* Use Select All to highlight all the user records in the browse.

*New.* Use New to open the user/roles record detail to create a record.

*Edit.* Use Edit to open the user/roles record detail to edit the selected record.

*Columns.* A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

## Creating a User/Role

1 Highlight the user in the upper browse. EAM displays available roles and sites for that user.

2 Select the check box to add a role. Authorized roles display predefined user permissions.

***Note*** If you highlight a user in the upper browse to add roles and nothing displays in the child browse, the user has not been assigned to any site in EAM. Go to System Administration|Users|User Site submenu to designate sites for this user.

## Editing a User/Role

1 Highlight the user in the upper browse. EAM displays available roles and sites for that user.

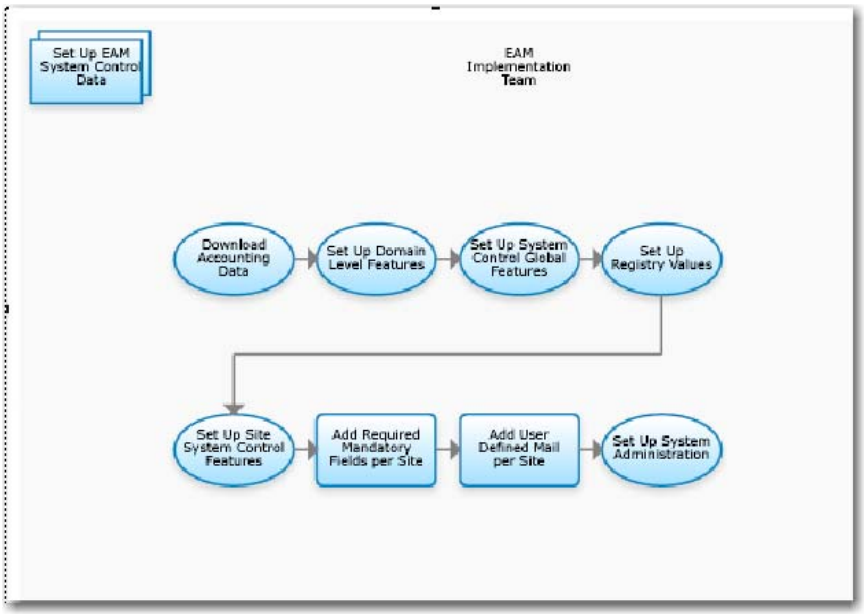
2 Select the check box to add a role. Clear the check box to remove a role. Authorized roles display predefined user permissions.

# System Control

Use System Control to set general data, indicate mail options, set revision control, and establish password and general ledger options. In addition, you can set interface rules, indicate purchase receiving options, and set tax options.

## System Control Process Flow

**Fig. 10.25**
System Control Process Flow

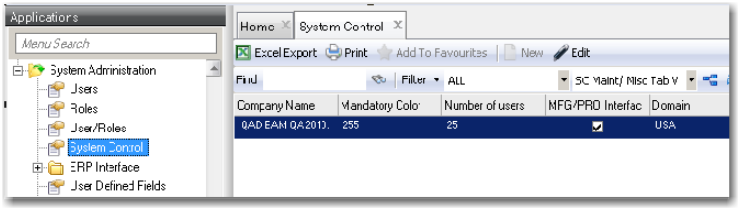



1. Download Accounting Data.
2. Set Up Domain Level Features.
3. Set Up System Control Global Features.
4. Set Up Registry Values.
5. Set Up Site System Control Features.
6. Add Required Mandatory Fields per Site.
7. Add User Defined Mail per Site.

## System Control Browse

Use the browse to organize and display records, to access supporting functions, and to edit or create new records.

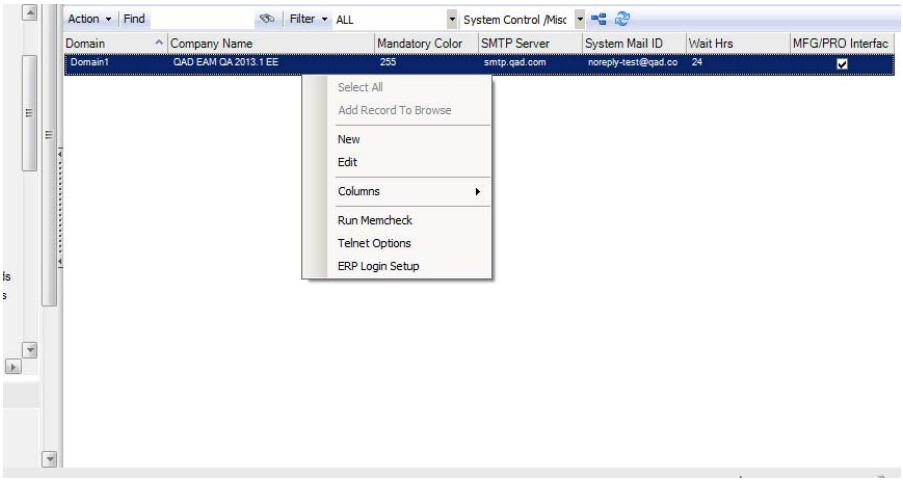
**Fig. 10.26**
System Control Browse




## System Control Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 10.27**
System Control Right-Click Menu




*Edit.* Opens the System Control screens to edit the selected record.

*Columns.* A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

*Run Memcheck.* Reserved for QAD support.

*Telnet Options.* Used to maintain the system information needed to support the Progress Editor. These options control everything from which server is accessed to what ID and password are used to log in. In addition, the options control what keyboard strokes are automated so that EAM can automatically open the character-based Progress Editor from the server's command line.

**Table 1**
Telnet Options

| Field Name | Setting |
|---|---|
| Host Name | DNS name or IP address of the EAM DB server. |
| Login ID | Login ID used to log in to the EAM DB server (for example, mfg). |
| Host OS | Select UNIX. (Windows is not currently supported) |
| Password | Password used to log in to the DB server. The password is encrypted before it is stored in the database. |
| Port No | DB server's SSH port (usually 22). |

| Field Name | Setting |
|---|---|
| Domain | Reserved for future use. |
| Script Timeout | Reserved for future use; leave this at 240. |
| Idle Timeout | Reserved for future use; leave this at 240. |
| Script 1 Pattern | The pattern EAM is looking for before it runs Script 1 Value. Usually, this is the OS's command line prompt. Example: $ |
| Script 1 Value | The command line value to enter once EAM sees the DB server write Script 1 Pattern. This should be used to run mpro and pass it the .pf file used by the EAM appserver.<br>**Note:** Place a period followed by a space ( . ) at the beginning of this line so that the Progress Editor window will close after the Progress session ends. Without this, users will be left at the server's command prompt…<br>Example: . `mpro -pf /qadapps/eam/pf/eamtest.pf` |
| Script 2 Pattern | (Optional) This is the next pattern for which EAM is looking. EAM runs Script Value 2 when it sees this string. This can be used to skip through Progress messages related to codepage, if they occur. Example: Press space bar to continue. |
| Script 2 Value | The keyboard strokes/text that EAM automatically writes to the Telnet session when Script 2 Pattern is detected. An example would be a space (" " without the double quotes). |
| Script 3 Pattern | (Optional) If more keyboard automation is required, EAM looks for this pattern. |
| Script 3 Value | (Optional) If more keyboard automation is required, EAM automatically enters these keystrokes when Script 3 Pattern is detected. |
| Script 4 Pattern | (Optional) If more keyboard automation is required, EAM looks for this pattern. |
| Script 4 Value | (Optional) If more keyboard automation is required, EAM automatically enters these keystrokes when Script 4 Pattern is detected. |
| Min Connections | Reserved for future use. |
| Max Connections | Reserved for future use. |

During implementation, the system administrator should use a terminal program (PuTTY or similar) to log in to the DB server using a login ID and password to see what the prompt is and to better understand what Script Value 1 should be and, if necessary, what Script 2 Pattern and Script 2 Value should be.

*ERP Login Setup.* During implementation, the system administrator can use ERP Login Setup to help enable the integration between EAM and the ERP. An ID and password for the ERP must be entered in this pop-up window for EAM to successfully communicate with the ERP's Finance module.

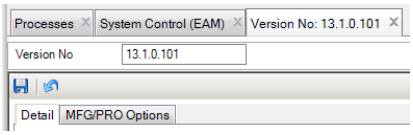
***Note*** The ID should be a common ERP system account such as "mfg."

## System Control Record Detail

The tabs contain information about the System Control record. The assigned version number displays over the associated tabs.

***Note*** EAM is installed with the System Control record already created and defaults to the current version number.

**Fig. 10.28**
System Control Record Detail




### Editing the System Control Record

1. Double-click the System Control record from the browse or click Edit to open the System Control record detail.
2. Verify the version number.
3. Enter information in the relevant fields on the tabs.
4. Click Save.

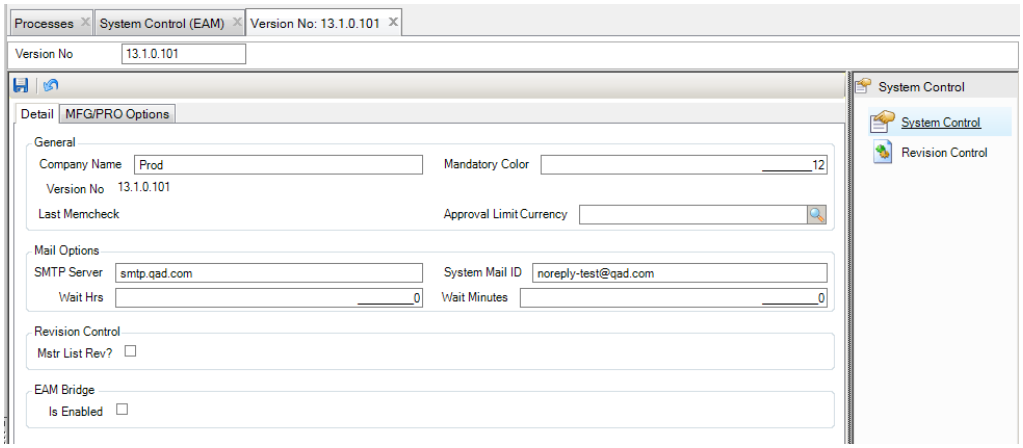
## System Control Tabs

Use these tabs to set general data, to indicate mail options, to set revision control, and to establish password and general ledger options. In addition, you can indicate purchase receiving options, and set tax options.

### System Control: Detail Tab

Use this tab to set general data, to indicate mail options, to set revision control, and to establish password and general ledger options.

**Fig. 10.29**
System Control: Detail Tab




*Company Name.* The name appearing on the bottom of the EAM main menu panel helps you to differentiate between live and test databases.

*Mandatory Color.* Not in use.

*Version No.* EAM is installed with the System Control record already created. It defaults to the current version number.

*Last Memcheck.* Reserved for QAD support.

*Approval Limit Currency.* Select the currency from the lookup that will be used system wide for the approval limit values. You must define a currency if you are using Approval Groups for authorization. Approval limits for POs, requisitions, blanket orders, and projects are converted into the domain's base currency if the base currency is different than this setting.

*SMTP Server.* The SMTP server name or corresponding IP address. To send Internet mail, EAM routes e-mail to the entered server or address.

*System Mail ID.* Enter the ID to appear in the From box on EAM system-generated e-mail sent through the Internet.

*Wait Hrs.* The number of hours a request for approval of a requisition, purchase order, blanket order, or project waits in an individual's mailbox before automatically moving on to the next user in the authorization queue.

*Wait Minutes.* The number of minutes a request for the approval of a requisition, purchase order, blanket order, or project waits in an individual's mailbox.

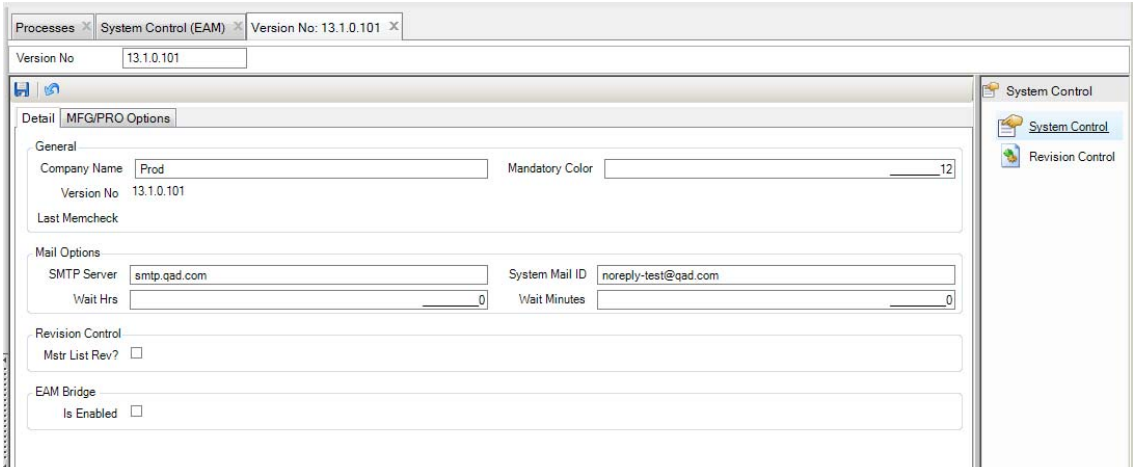
*Mstr List Rev?* Specify whether the system should automatically create revisions for master lists. Select if revision records should be created every time any of the master lists in EAM are modified. This includes master instructions lists and master parts lists.

*EAM Bridge Is Enabled.* Select this check box when EAM is in use with QAD Channel Islands.

## System Control: MFG/PRO Options Tab

Use this tab to set general data, to indicate purchasing options, and to set tax options.

**Fig. 10.30**
System Control: MFG/PRO Options Tab




*MFG/PRO Interface?* Select to enable the interface to QAD ERP. If this interface is not enabled, the interface programs do not function and do not create general ledger transactions in QAD ERP.

*Display Error?* If there is some type of error when a general ledger transaction is created in QAD ERP, select to enable the system to display an error message and a description of the specific error encountered.

*Domain.* The domain to use when filling out domain fields in QAD ERP. It should match the domain that EAM interfaces with from QAD ERP's Domain Maintenance option (menu 36.1.1.1).

When reading data from QAD ERP, EAM only looks at records that match the entered domain. When writing data to the QAD ERP, EAM fills out the Domain field with the entered domain. Fill out this field to interface properly.

*Validate When Posting?* When a general ledger is created in QAD ERP, validate when posting causes EAM to run the QAD ERP validation routine to verify that the cost center, account, and sub-account combinations are valid within the QAD ERP validation tables.

*Database Name.* Database name to use when filling out QAD ERP purchasing fields related to QAD ERP's multiple database configurations. This name must match the database name on QAD ERP's Database Connection Maintenance screen (menu 36.6.1).

*Use EIR?* Select to enable QAD ERP's Expense Items Receipts accounting structure to overwrite EAM's AP (credit) accounting structure (at General|Business Units|Site|Purchase Order tab) for receipt credits.

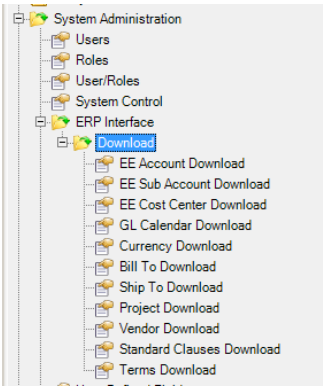
# ERP Interface

Use this module to update EAM with information from tables shared with QAD ERP. Access the real-time link or gateway to the QAD ERP database and common tables that EAM and QAD EE share.

## Download

There are 12 shared tables in EAM. They are: Account, Sub Account, Cost Center, GL Calendar, Currency, Bill To, Ship To, Project, Vendor, Standard Clauses, and Terms. Update EAM with information from some or all of these shared tables.

**Fig. 10.31**
ERP Interface|Download




***Note*** When you are connected to a QAD EE database, the Account, Sub Account, and Cost Center options are listed as EE Account, EE Sub Account, and EE Cost Center.

## Account Download Browse

Access this browse from System Administration|ERP Interface|Download|Account Download. Use it to organize and display records, to access supporting functions, and to download new records.

The account download module allows users to download either all or to select account numbers to use in EAM. Downloading account numbers from QAD ERP also downloads corresponding sub-account and cost center relationships, which are then found at Finance|Accounting|Accounts.

### Downloading a Single Account Code

1. Enter a complete or a portion of an account code in Find. Use Find to search for specific records. Find searches the column on the far left.
2. Highlight the required record in the browse, click Action, and select Download Account.
3. EAM presents the Select Site screen. Choose the sites to update with the downloaded data and click Download.

### Downloading Multiple Account Codes

1. Enter a portion of an account code, description, or type in Find.
2. Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Account.
3. EAM presents the Select Site screen. Choose the sites to update with the downloaded data, click Download.

**Fig. 10.32**
Account Download Browse

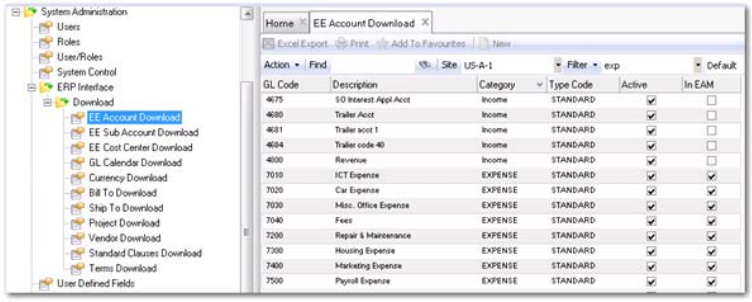
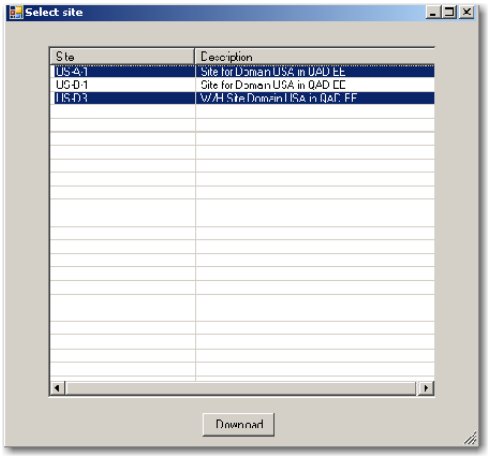



**Fig. 10.33**
Account Download Select Site




## Sub Account Download Browse

Access this browse from System Administration|ERP Interface|Download|Sub Account Download. Use it to organize and display records, to access supporting functions, and to download new records.

The sub-account download option allows you to download either all or selected sub-account numbers to use in EAM. The download of sub-account numbers from QAD ERP also downloads corresponding account and cost center relationships, which are then found at Finance|Accounting|Sub Accounts.

### Downloading a Single Sub-Account Code

1. Enter a complete or a portion of a sub-account code in Find. Use Find to search for specific records. Find searches the column on the far left.
2. Highlight the required record in the browse, click Action, and select Download Sub Account.
3. EAM presents the Select Site screen. Choose the sites to update with the downloaded data.

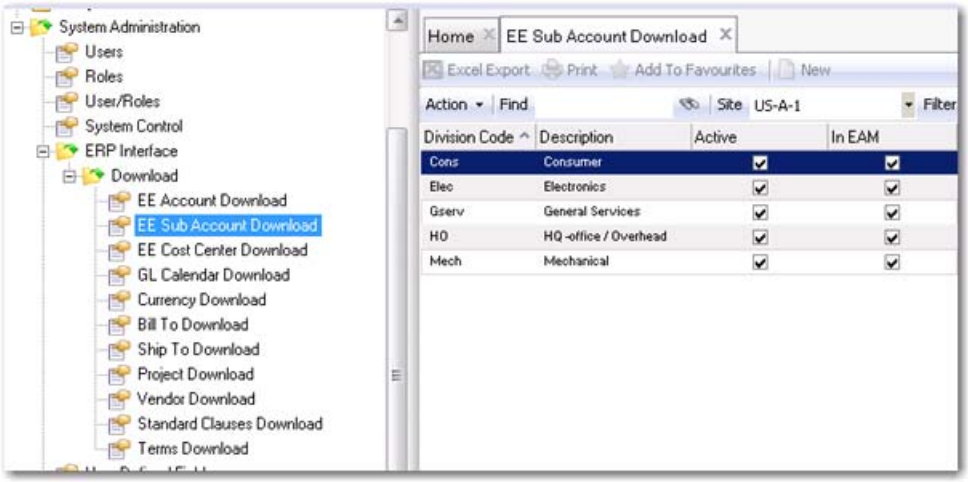
### Downloading Multiple Sub-Account Codes

1 Enter a portion of a sub-account code, description, or type in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Sub Account.

3 EAM offers the Select Site screen. Choose the sites to update with the downloaded data.

**Fig. 10.34**
Sub Account Download Browse




## Cost Center Download Browse

Access this browse from System Administration|ERP Interface|Download|Cost Center Download. Use it to organize and display records, to access supporting functions, and to download new records.

The cost center download option allows you to download either all or selected cost centers to use in EAM. The downloading of cost centers from QAD ERP also downloads corresponding accounts and sub-account relationships that are then found at Finance|Accounting|Cost Centers.

### Downloading a Single Cost Center

1 Enter a complete or a portion of a cost center code in Find. Use Find to search for specific records.

2 Highlight the required record in the browse, click Action, and select Download Cost Center.

3 EAM offers the Select Site screen. Choose the sites to update with the downloaded data.

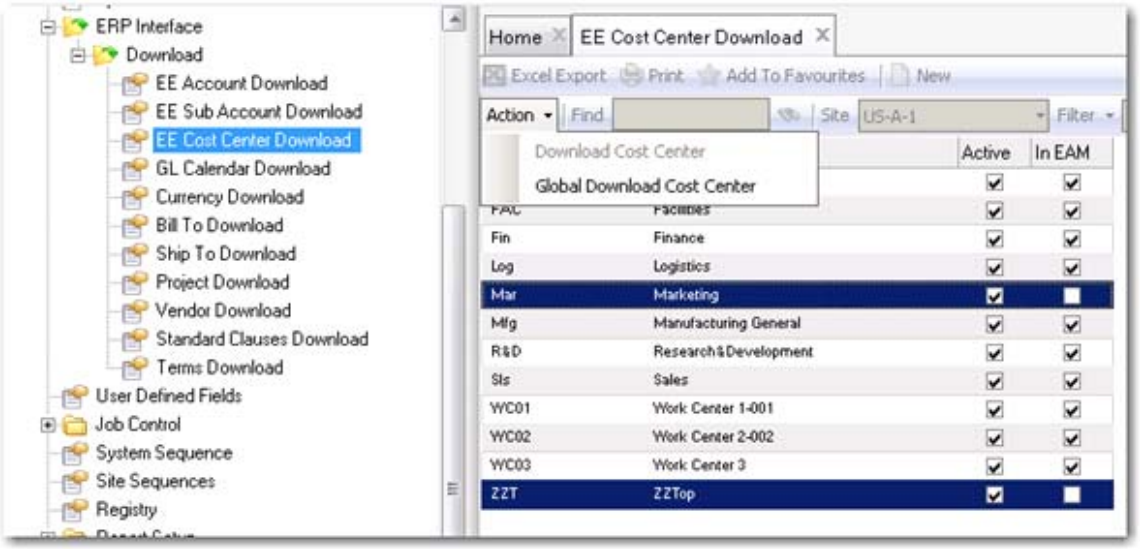
### Downloading Multiple Cost Centers

1 Enter a portion of a cost center code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Cost Center.

3 EAM offers the Select Site screen. Choose the sites to update with the downloaded data.

**Fig. 10.35**
Cost Center Download Browse




***Note*** When the In EAM column's check box is selected on the Account, Sub Account, or Cost Center Download screen, the codes have been downloaded to a site, but not necessarily to your current site.

## GL Calendar Download Browse

Access this browse from System Administration|ERP Interface|Download|GL Calendar Download. Use it to organize and display records, to access supporting functions, and to download new records.

The GL calendar download option allows you to download either all periods or selected GL calendar periods (or months) to use in EAM, found at Finance|Accounting|GL Calendar. The system displays the GL periods as they have been set up in QAD ERP.

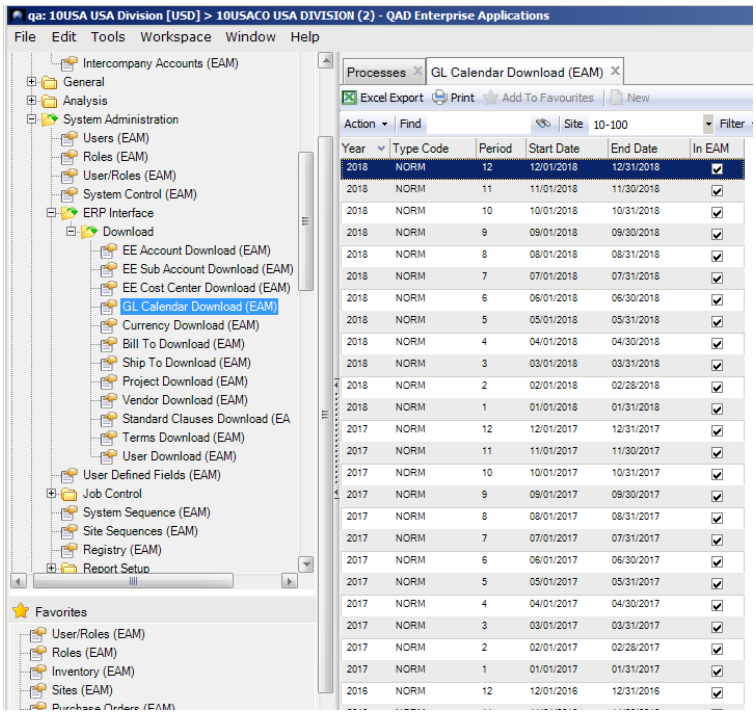
### Downloading a Single GL Calendar Period

1. Enter a year in Find. Use Find to search for specific records.
2. Highlight the required record in the browse, click Action, and select Download GL Calendar Period.

### Downloading Multiple GL Calendar Periods

1. Enter a year in Find.
2. Highlight the required records in the browse using Shift to select a range of periods, click Action, and select Global Download GL Calendar.

**Fig. 10.36**
GL Calendar Download Browse




## Currency Download Browse

Access this browse from System Administration|ERP Interface|Download|Currency Download. Use it to organize and display records, to access supporting functions, and to download new records.

The currency download option allows you to download either all rates or to select currency exchange rates to use in EAM, found at Purchasing|Currency. The currency download option from QAD ERP also downloads currency codes to EAM and the exchange rate relationships between those currency codes.

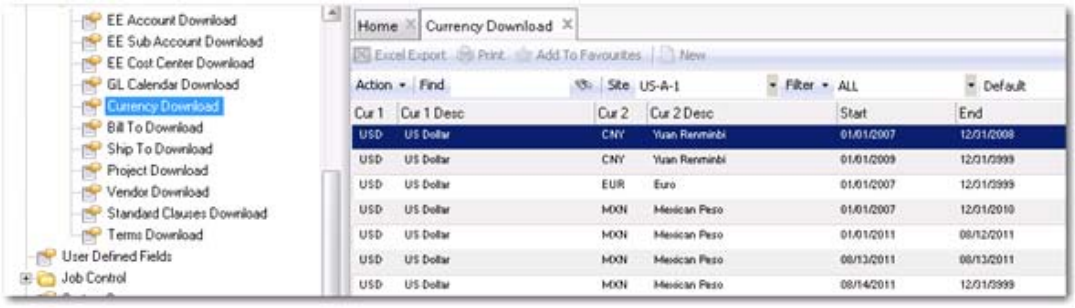
### Downloading a Single Currency Exchange Rate

1. Enter a complete or a portion of a currency code in Find. Use Find to search for specific records.
2. Highlight the required record in the browse, click Action, and select Download Currency.

### Downloading Multiple Currency Exchange Rates

1. Enter a portion of a currency code in Find.
2. Highlight the required records in the browse using Shift to select a range or using Ctrl to highlight non-sequential records, click Action, and select Global Download Currency.

**Fig. 10.37**
Currency Download Browse




## Bill To Download Browse

Access this browse from System Administration|ERP Interface|Download|Bill To Download. Use it to organize and display records, to access supporting functions, and to download new records.

The Bill To download option allows users to download either all bill to records or to select bill to address and contact data to use in EAM (Purchasing|Codes|Addresses|Bill To).

### Downloading a Single Bill To Record

1 Enter a complete or a portion of a bill to code in Find. Use Find to search for specific records.

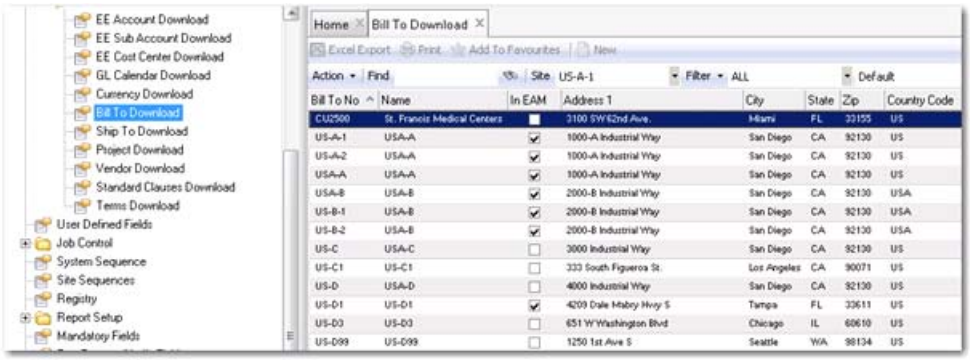
2 Highlight the required record in the browse, click Action, and select Download Bill To.

### Downloading Multiple Bill To Records

1 Enter a portion of a Bill To code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Bill To.

**Fig. 10.38**
Bill To Download Browse




## Ship To Download Browse

Access this browse from System Administration|ERP Interface|Download|Ship To Download. Use it to organize and display records, to access supporting functions, and to download new records.

The Ship To download option allows you to download either all ship-tos or selected ship to addresses and contact data to use in EAM (Purchasing|Codes|Addresses|Ship To).

### Downloading a Single Ship To Record

1 Enter a complete or a portion of a ship to code in Find. Use Find to search for specific records.

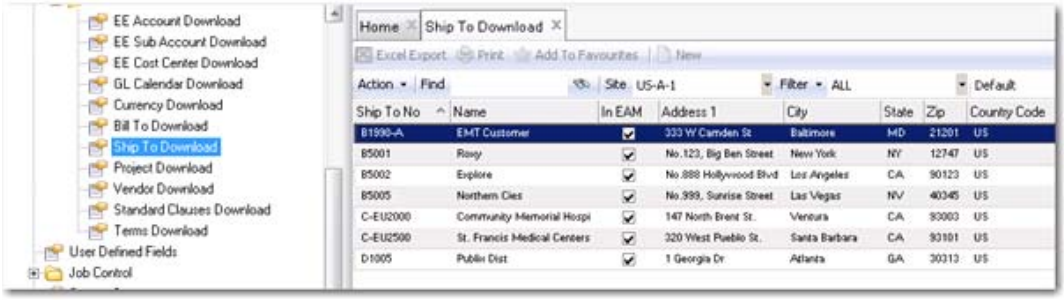
2 Highlight the required record in the browse, click Action, and select Download Ship To.

### Downloading Multiple Ship To Records

1 Enter a portion of a Ship To code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Ship To.

**Fig. 10.39**
Ship To Download Browse




## Project Download Browse

Access this browse from System Administration|ERP Interface|Download|Project Download. Use it to organize and display records, to access supporting functions, and to download new records.

The project download option allows you to download either all projects or selected projects to use in EAM. The project data downloaded from QAD ERP is found at Finance|Projects.

### Downloading a Single Project

1 Enter a complete or a portion of a project code in Find. Use Find to search for specific records.

2 Highlight the required record in the browse, click Action, and select Download Project.

3 EAM offers the Select Site screen. Choose the sites to update with the downloaded data.

### Downloading Multiple Projects

1 Enter a portion of a project code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Project.

3 EAM presents the Select Site screen. Choose the sites to update with the downloaded data.

**Fig. 10.40**
Project Download Browse

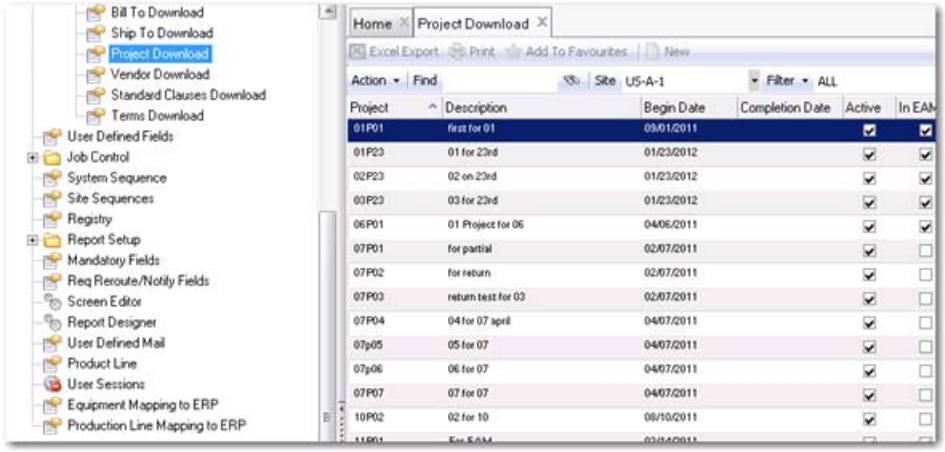
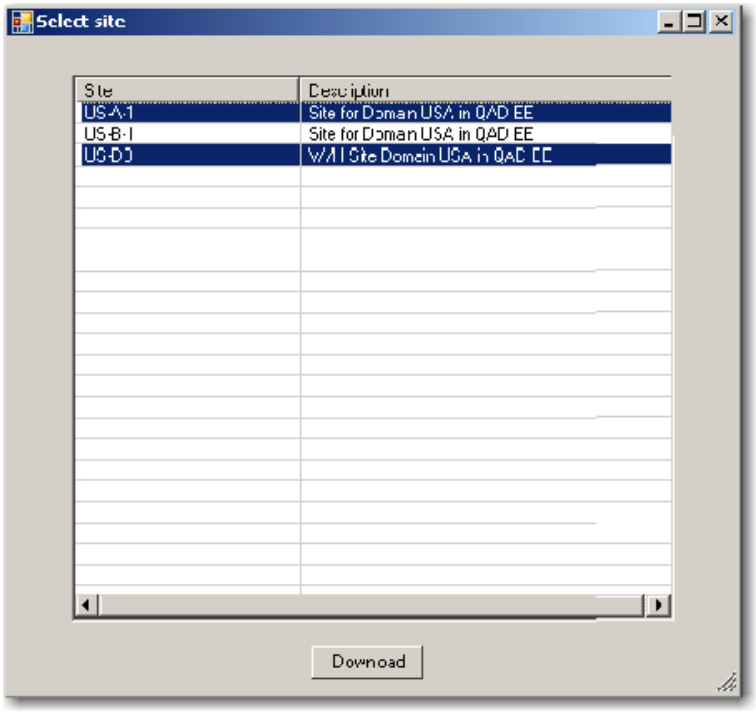



**Fig. 10.41**
Project Download Select Site




## Vendor Download Browse

Access this browse from System Administration|ERP Interface|Download|Vendor Download. Use it to organize and display records, to access supporting functions, and to download new records.

The Vendor download option allows you to download either all vendors or selected vendor data to use in EAM (Purchasing|Vendor).

### Downloading a Single Vendor Record

1 Enter a complete or a portion of a vendor code in Find. Use Find to search for specific records.

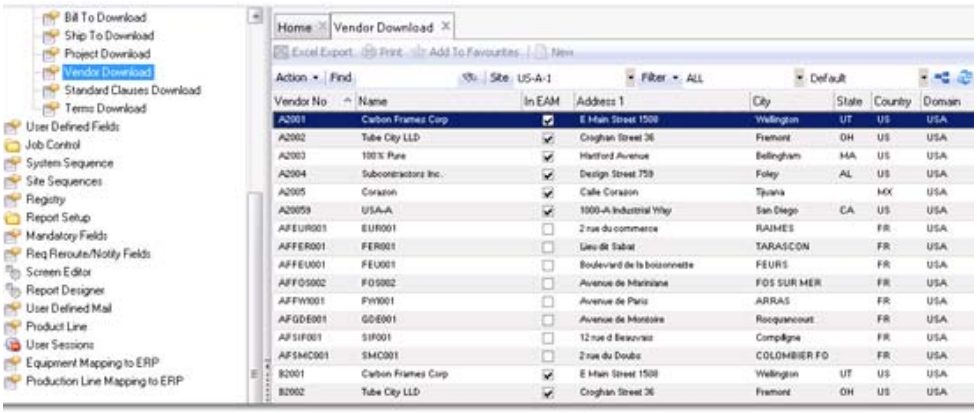
2 Highlight the required record in the browse, click Action, and select Download Vendor.

### Downloading Multiple Vendor Records

1 Enter a portion of a vendor code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Vendor.

**Fig. 10.42**
Vendor Download Browse




## Standard Clauses Download Browse

Access this browse from System Administration|ERP Interface|Download|Standard Clauses Download. Use it to organize and display records, to access supporting functions, and to download new records.

The standard clauses download option allows you to download either all standard clauses or selected standard clauses to use in EAM (Purchasing|Standard Clauses).

### Downloading a Single Standard Clause Record

1 Enter a complete or a portion of a standard clauses code in Find. Use Find to search for specific records.

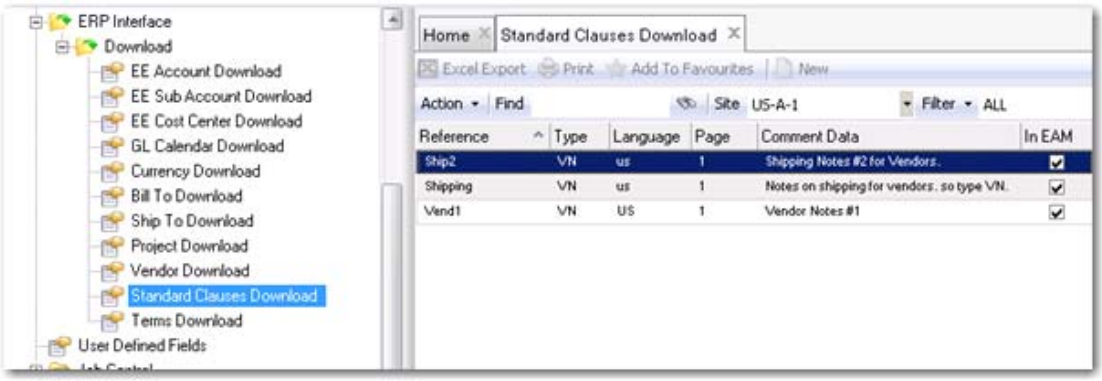
2 Highlight the required record in the browse, click Action, and select Download Standard Clauses.

### Downloading Multiple Standard Clauses Records

1 Enter a portion of a standard clauses code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Standard Clauses.

**Fig. 10.43**
Standard Clauses Download Browse




## Terms Download Browse

Access this browse from System Administration|ERP Interface|Download|Terms Download. Use it to organize and display records, to access supporting functions, and to download new records.

The terms download option allows you to download either all terms or selected terms to use in EAM (Purchasing|Codes|Terms).

### Downloading a Single Terms Record

1 Enter a complete or a portion of a terms code in Find. Use Find to search for specific records.

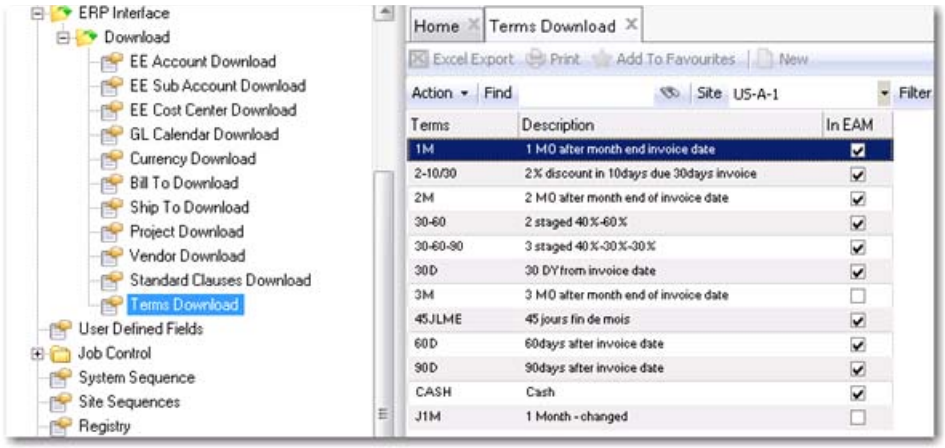
2 Highlight the required record in the browse, click Action, and select Download Terms.

### Downloading Multiple Terms Records

1 Enter a portion of a terms code in Find.

2 Highlight the required records in the browse using Shift to select a range or Ctrl to highlight non-sequential records, click Action, and select Global Download Terms.

**Fig. 10.44**
Terms Download Browse

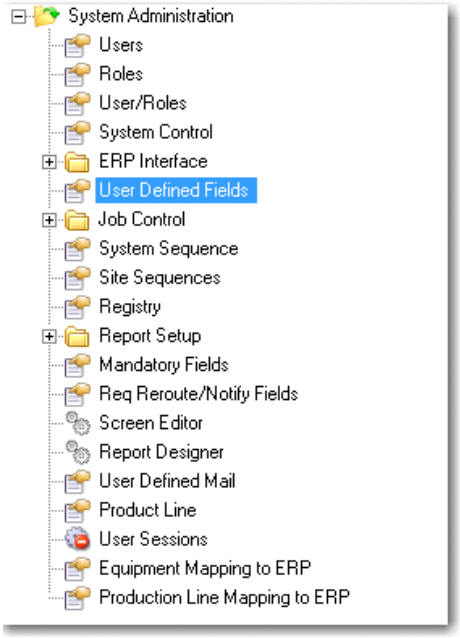


# User-Defined Fields

Use this module to add specialized fields. There are 80 user-defined fields in EAM. Modules with user-defined fields are Employee, Equipment, Inventory, Project, Job, Purchase Order, Requisition Line, Vendor, and Work Order. Each has at least ten user-defined fields. There are two lookup tables, integer fields, decimal fields, and at least two alphanumeric fields (not validated against any table). There is a date field and a logical field. These provide significant flexibility for tracking user-defined information against specific records in EAM.

Changes to the field labels for employee, equipment, inventory, project, job, purchase order, requisition line, vendor, and work order are displayed on the User Defined tab in that module. Changes to the field label for Character 1 or Character 2 are also displayed on the User Defined tab in that module. In addition, the change is shown in the codes folder for that module. For example, if the field label for equipment character 1 is changed, EAM displays the field label change as the name of the file folder at Maintenance|Equipment|Codes|Equipment|.

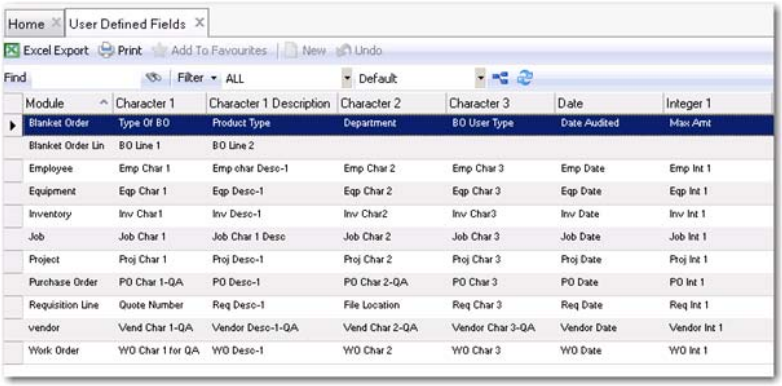
**Fig. 10.45**
User Defined Fields Option




## User Defined Fields Browse

Access this browse from System Administration|User Defined Fields. Use it to organize and display records, to access supporting functions, and to edit or create new records.

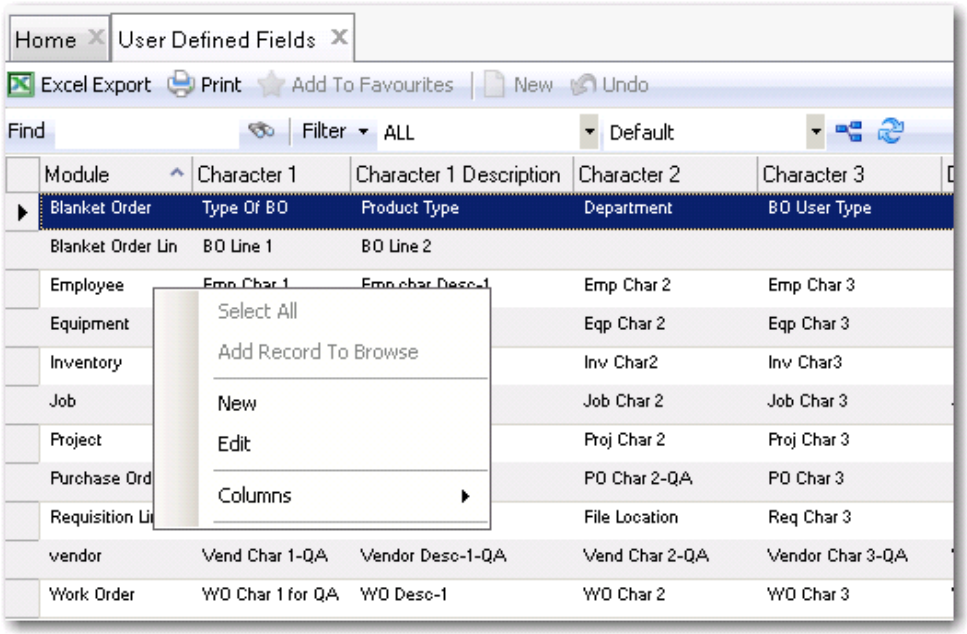
**Fig. 10.46**
User Defined Fields Browse




## User-Defined Fields Right-Click Menu

The right-click menu contains administrative functions.

**Fig. 10.47**
User-Defined Fields Right-Click Menu




New

Use New to open the user-defined record detail to create a record.

Edit

Use Edit to open the user-defined record detail to edit the selected record.

Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

### Creating a User-Defined Field

1. Double-click the User Defined Fields option to display the User Defined Fields browse. This browse lists the modules that allow you to add a user-defined field, along with the field labels to edit or add.
2. Add a field label.
3. Close the user-defined fields browse by clicking the X on the top of the browse.

### Editing a User-Defined Field

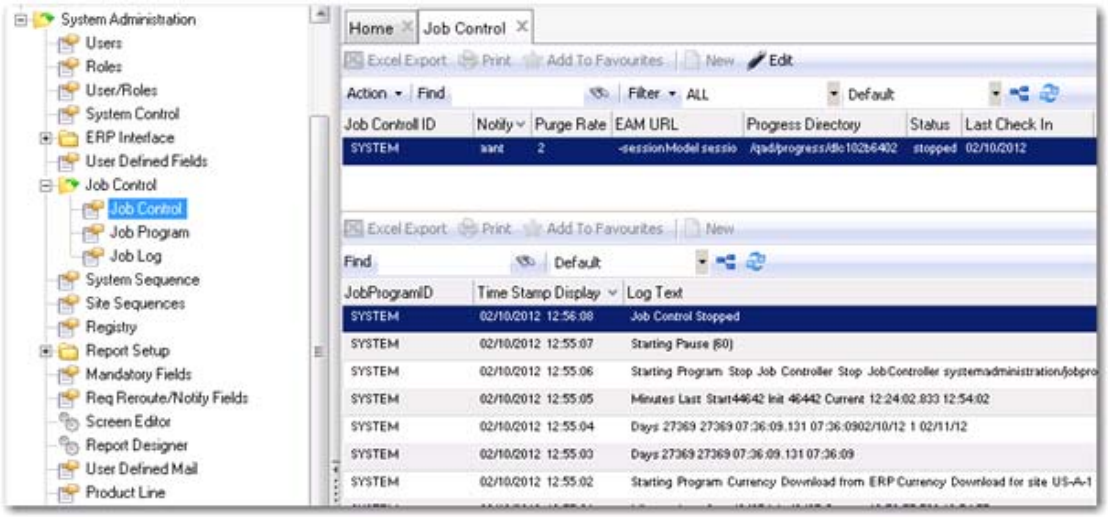
1. Double-click the User Defined Fields option to display the User Defined Fields browse. This browse lists the modules that allow you to add a user-defined field, along with the labels.
2. Edit a field label. Close the user-defined fields browse by clicking the X on the top of the browse.

## Job Control Application

The Job Control Application is located under the System Administration module. Use this module to set up and schedule routine EAM functions as customized jobs. When these procedures or jobs are scheduled, they automatically run in the background at the appointed time by the Job Controller process. The Job Controller is a stand-alone Progress process that reads a list of jobs to run from the EAM database and spawns the jobs as stand-alone Progress sessions.

There are three submodules found in the Job Control Application: Job Control, Job Program, and Job Log.

**Fig. 10.48**
Job Control Application

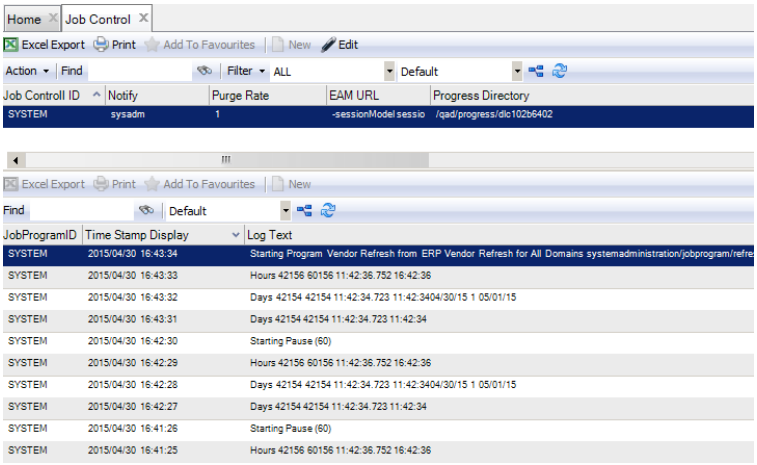


*Job Control.* Job Control programs are written to perform specific routine EAM procedures. The Job Control programs are defined in the Job Program upper browse. The lower browse cannot be updated and displays the Job Control Log.

## Job Control Browse

Access this browse from System Administration|Job Control|Job Control. Use it to organize and display records, to access supporting functions, and to edit records.

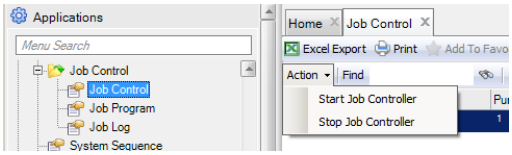
**Fig. 10.49**
Job Control Browse




## Job Control Action Menu

Choices available on this menu vary depending on context. Access the Action menu from the toolbar or from the right-click menu.

**Fig. 10.50**
Job Control Action Menu



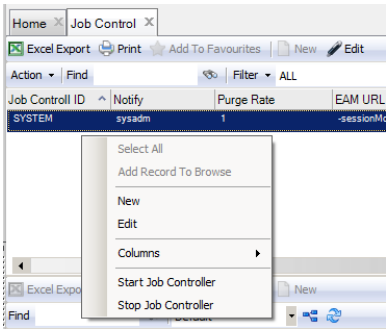

*Start Job Controller.* Use Start Job Controller to begin the Progress process that reads the list of jobs to run, and spawns them as stand-alone Progress sessions.

*Stop Job Controller.* Use Stop Job Controller to halt the Progress process sessions. This action does not terminate the jobs currently running, but prevents them from running again.

### Job Control Right-Click Menu

The right-click menu contains administrative functions and options from the Action menu.

**Fig. 10.51**
Job Control Right-Click Menu




*Edit.* Use Edit to open the Job Control screen to edit the job control record.

*Columns.* A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

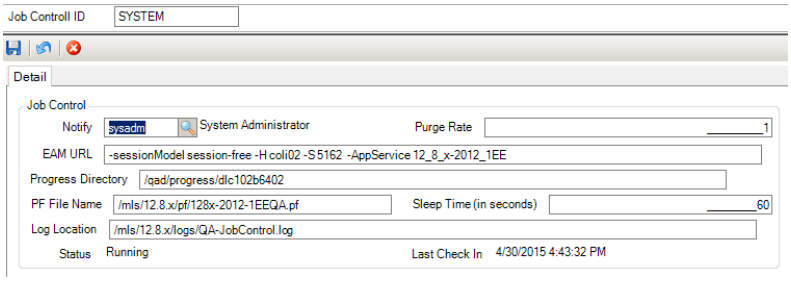
Start Job Controller and Stop Job Controller are options from the Job Control Action menu.

*Job Control Record Detail.* The record detail contains information about the job control record. The job control record name or job control ID displays over the Detail tab. There is only one job control record per database.

## Editing the Job Control Record

1. Double-click the record from the browse or click Edit to open the Job Control record detail.
2. Verify the job control name.
3. Enter information in relevant fields on the Detail tab.
4. Click Save.

**Fig. 10.52**
Job Control Record Detail




*Notify.* Enter the user or group of users to receive e-mail each time the job is run and completed. A lookup filters users in the user and mail groups.

*Purge Rate.* Enter the number of days to keep log records; for example, 45 purges log messages older than 45 days.

*EAM URL.* Enter the connection string for the EAM appserver broker.

*Progress Directory.* Enter the actual Progress root directory, usually ending in /dlc.

*PF File Name.* Enter the full path including the .pf file name.

*Sleep Time.* Enter the number of seconds the job starter sleeps between looking for jobs to run. Set this to something other than 0. The typical setting is 60 seconds.

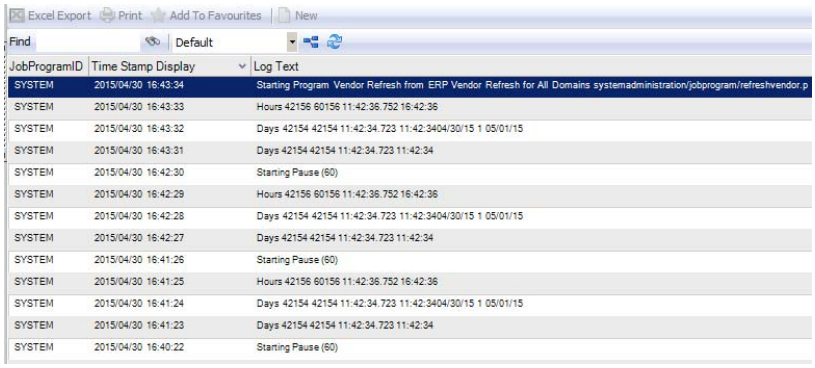
*Log Location.* Enter the absolute path where job control logs are found and stored.

*Status.* EAM displays the status of the Job Controller: Running, Stopped, Starting, or Stopping. Typically, the Job Controller is Running or Stopped. It is in the Stopping status briefly when the Stop Job Controller action is selected.

*Last Check In.* EAM displays the last date and time the Job Controller checked in.

The lower browse displays the Job Program ID, Time Stamp Display, and Log Text. Additionally, the Log Level and Time Stamp can be displayed, if needed.

**Fig. 10.53**
Job Control Lower Browse



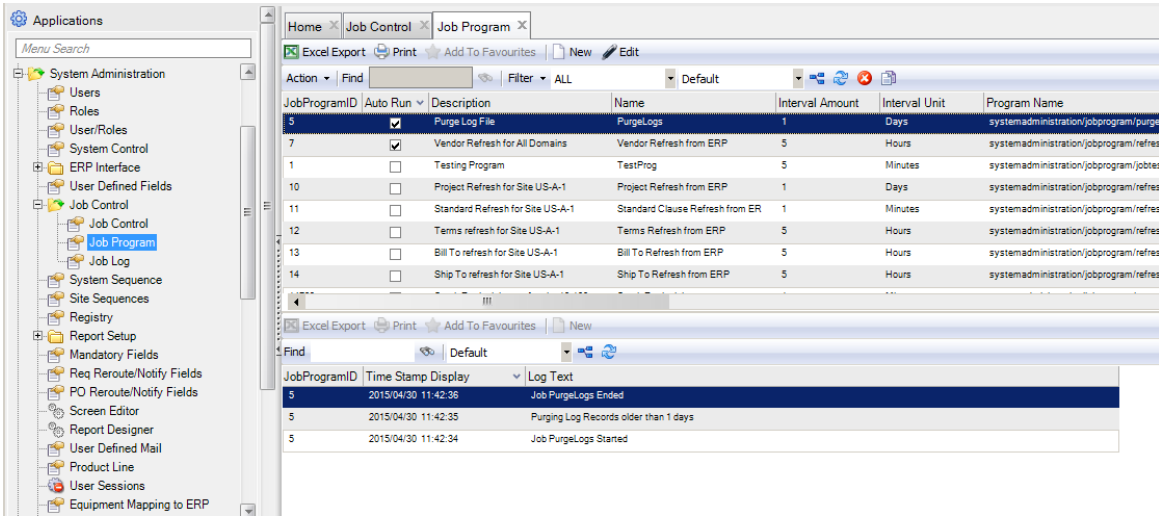

## Job Program

The Job Program consists of an upper and a lower browse. These programs are written to perform specific routine EAM procedures. The Job Control programs are defined in the Job Programs upper browse. The lower browse displays the Job Program Log**.**

### Job Program Browse

Access this browse from System Administration|Job Control|Job Program. Use it to organize and display records, to access supporting functions, and to edit records.

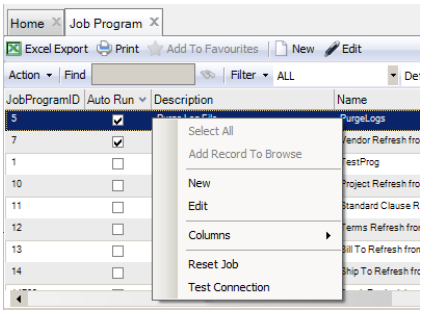
**Fig. 10.54**
Job Program Browse




## Job Program Right-Click Menu

The right-click menu contains administrative functions.

**Fig. 10.55**
Job Program Right-Click Menu




*Edit.* Use Edit to open the Job Program screen to edit the job program record.

*Columns.* A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

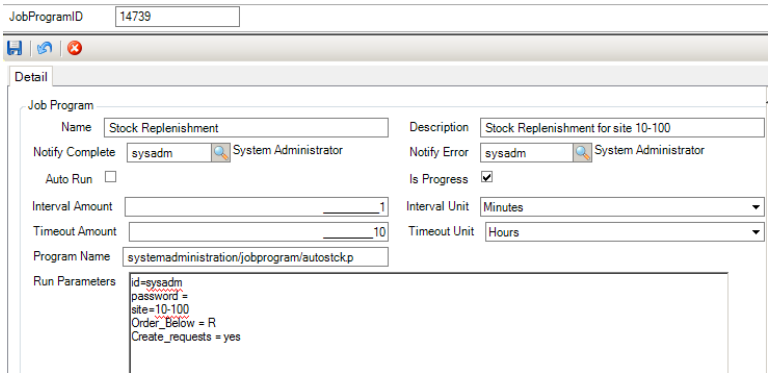
*Reset Job.* Changes the job status from Running to Error. This allows the job controller to begin the job again at the next scheduled start time.

*Test Connection.* *Loads the parameters for the highlighted job and attempts to connect to the AppServer with the login information. If it is successful, the job status is Tested. If it is not successful, the job status is Error. The Job Log contains all of the information regarding the parameters and any possible errors that might occur during the Job Connection Test.

## Editing the Job Program record

1. Double-click the record from the browse or click Edit to open the Job Program ID record detail.
2. Verify the job program ID.
3. Enter information in relevant fields on the Detail tab.
4. Click Save.

**Fig. 10.56**
Job Program Record Detail




*Name.* Enter or update the name of the job program.

*Description.* Enter or update the description of the job program.

*Notify Complete.* Enter the user or group of users to notify with e-mail notifications when this job program is completed.

*Notify Error.* Enter the user or group of users to notify with e-mail notifications when this Job Program runs into a problem and does not run successfully.

*Auto Run.* Select this check box to have the Job Controller run this job automatically. Clear this check box to have the Job Controller ignore this job.

*Is Progress.* Clear this check box to have the Job Controller execute this job from the command line exactly as typed in the Program field.

*Interval Amount.* Enter the number of units between runs.

*Interval Unit.* EAM displays the unit options available in a drop-down menu: Minutes, Hours, or Days. Select the proper unit for this job.

*Timeout Amount.* Enter the number of units of time before the job stops running whether it is complete or not.

*Timeout Unit.* EAM displays the unit options available in a drop-down menu: Minutes, Hours, or Days. Select the proper unit for stopping this job.

*Program Name.* Review the program name for this job.

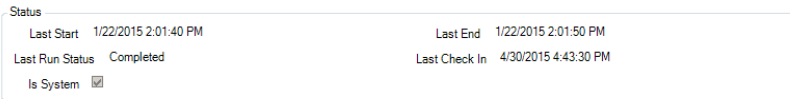
*Run Parameters.* Enter the free-form parameters for this job. A user ID and password are required for any job that uses an EAM Application Programming Interface (API). Many of the EAM jobs use APIs, which are used to call programs both internal and external to EAM. To ensure access to the EAM AppServer, an EAM user ID and password must be noted.

Enter the user ID parameter using the format “id=xxxxxxxxxxxx”, where xxxxxxxxxxxx is the desired user ID.

Enter the password parameter using the format “password= xxxxxxxxxxxxxxx”, where xxxxxxxxxxxxxxx is the user’s password.

***Note*** Because many organizations require EAM users to establish user IDs and passwords, it is recommended that you set up a virtual user. Virtual users serve a specific purpose and are not representative of or linked to an employee. For example, you could add a user “JOBCUSER” with a password of “jobcuser”.

**Fig. 10.57**
Job Program Record Detail - Status Section




*Last Start.* EAM displays the last date and time the job started.

*Last End.* EAM displays the last date and time the job ended.

*Last Run Status.* EAM displays the status of this job program: Running, Completed, Error, or [blank]. Typically, the job program is in a status of Running or Completed.

*Last Check In.* EAM displays the last date and time the job was checked in. The Job Logger performs this check automatically or it is performed at-will by each job program.

*Is System.* Check box cannot be deleted but can be copied. This is a read-only field.

The lower browse displays the Job Program ID, Time Stamp Display, and Log Text. Additionally, the Log Level and Time Stamp can be displayed, if needed.

**Fig. 10.58**
Job Program Lower Browse

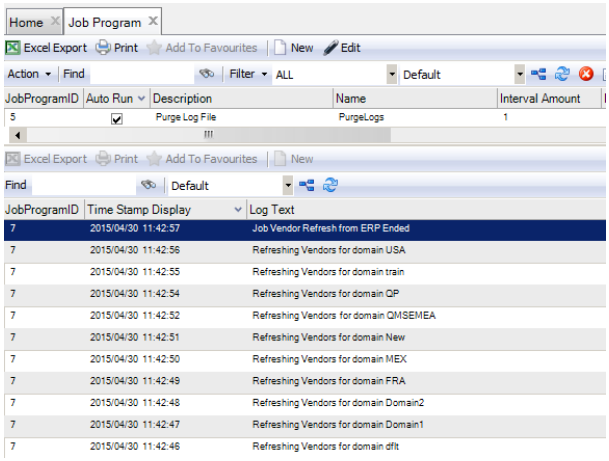
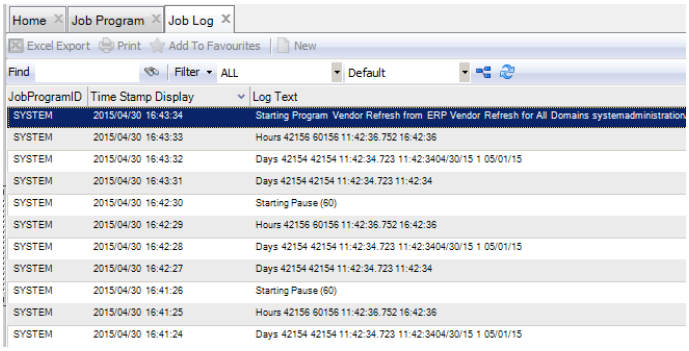


**Fig. 10.59**
Job Log Browse




*Job Log Browse.* Access this browse from System Administration|Job Control|Job Log. The browse displays the same information shown on the lower browse of the Job Program screen, but for all job programs.

## List of Job Programs

EAM provides the following job programs:

1. Testing Program
2. PM Auto Issue
3. Import Bid sml Files from SCP
4. Currency Download from ERP
5. Purge Log File
6. Refresh Project Cost
7. Vendor Refresh
8. Send Mail on Price Schedule Expiration
9. Account Refresh from ERP
10. Project Refresh from ERP
11. Standard Clauses Refresh from ERP
12. Terms Refresh from ERP
13. Bill To Refresh from ERP
14. Ship To Refresh from ERP
15. Cost Center Refresh from ERP
16. Sub Account Refresh from ERP
17. Account Calendar Refresh from ERP
18. Send Service Request Mail from ERP
19. Equipment Failure Analysis
20. Stock Replenishment
21. Blanket Order Expiration
22. Forward Blanket Order Routing
23. CIM Load
24. Reserve/Short Recalculation
25. Update Planned/On Order
26. Refresh Voucher
27. Forward All Routings
28. Equipment Refresh
29. Check PO Balance
30. Inventory Reorder
31. PO Header Status Check
32. Requisition Check for PO Routing
33. Send Emails when PM is due
34. Submit PO/Receipts to ERP
35. Load Production Hours
36. DUOM Load
37. GL Validation Report
38. Job Program number not in use
39. Job Program number not in use
40. Purge Mail for All Users
41. Refresh Users
42. PO/Req Revision Rollup Create
43. Rename Inventory
44. Tool Failure Analysis

### Testing Program

Run Parameters – Testing Program

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.

### PM Auto Issue

The PM Auto Issue job program automatically issues a PM work order when criteria established in the Run Parameters field are met. This job can be set up to issue PM WOs based on a calendar schedule, DUOMs, a combination of DUOMs and calendar schedule, or on a specific event. As with the manual global issue of PM WOs, filtering by date can result in multiple issues for a given PM WO.

Certain PM WOs are automatically skipped. PMs are skipped in the following situations:

- **Active?** check box is clear
- **Equip No** is Locked
- **Sliding Sch?** check box is selected and there is an open work order for the PM
- PM is being issued during a **Skip** period
- **Superior PM** is being issued within entered time frame

Run Parameters – PM Auto Issue

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code.
- **Day Range**. Enter the range of days during which you want the job to search for PMs that are due. Use the format “PM Issue By=nn,nn”, where the first nn is the starting point from today and the second nn is the number of days until the end of the range. In Figure 10.60, PM Issue By=3,3 means start in three days and search over the next three days.

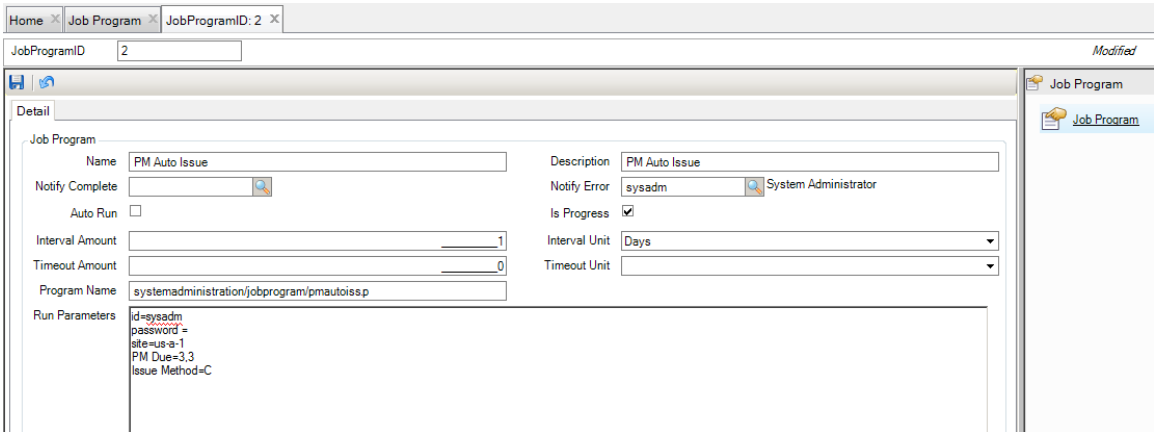
  ***Note*** It does not matter what issue cycle is used in the calendar-based PM because the job searches for any calendar-based PMs, where the PM Issue By date falls within the selected range of days.
- **Issue Method**. Enter the issue method using the format “Issue Method=x” where x is:
  - **C** for calendar.
  - **U** for DUOM. EAM issues a PM when Current Reading reaches the Next DUOM Issue value.
  - **B** for both DUOM and calendar. EAM issues a PM when the Current Reading reaches the Next DUOM Issue value and/or the day range setting reaches the PM Issue By date.
  - **E** for event based.
- **Additional Parameters**. You can use additional parameters to refine the PM WOs that the PM Auto Issue job generates. The following table contains a list of those parameters. The entries in the Field Name column are used to customize this job.

**Table 10.1**
PM Auto Issue - Run Parameters

| Field Label | Field Name | Data Type |
|---|---|---|
| SiteCode | site | character |
| IssueBase | issue base | character |
| UOMNextDate | Est Due Date | date |
| NextFailure | Next Failure | date |
| PMCompleteBy | PM Complete By | date |
| Date 1 | date 1 | date |
| AssyCode | Assembly | character |
| AssignTo | Assigned | character |
| Catalog | Catalog | character |
| Class | Class | character |
| Clearance | Clearance | character |
| AcctNoc | Cont Acct No | character |
| location | location | character |
| PlanCode | planner | character |
| SubAcctNoc | Cont Sub Acct | character |
| CC | Cost Center | character |
| CrewCode | Crew | character |
| DeptCode | Dept | character |
| Description | Description | character |
| DUOMCode | DUOM | character |
| UOMCycle | DUOM Cycle | character |
| EquipNo | Equip No | character |
| Event | Event | character |
| ExpSite | Expense Site | character |
| IssueSch | Issue Cycle | character |
| IssueMethod | Issue Method | character value |
| JobNo | Job No | character |
| AcctNo | Labor Acct | character |
| pLocation | Labor Sub Acct | character |
| LeadDays | Lead Days | integers only |
| AcctNop | Mtl Acct No | character |
| SubAcctNop | Mtl Sub Acct | character |
| UOMNextIssue | NextDUOM Issue | date |
| IssueCycle | No of Cycles | integers only |
| Notify | Notify | character |
| PMNo | PM Template No | integers only |
| Craft | Pri Craft | character |
| ProjectNo | Project No | character |
| ShiftCode | Shift | character |
| ShiftWkday | Shift Work Day? | integers only |

| Field Label | Field Name | Data Type |
|---|---|---|
| SlidSch | Sliding Sch? | integers only |
| SysCode | System | character |

**Fig. 10.60**
Job Program: PM Auto Issue




## Import Bid sml Files from SCP

The Import Bid sml Files from SCP job program (systemadministration/jobprogram/importbid.p) processes SCP .xml files to update bids within EAM. The job uses the .xml file to update RF quotes and RF quote line records in EAM. EAM does not perform validation on these quotes.

### Run Parameters - Import Bid sml Files from SCP

The Import Bid sml Files from SCP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

## Currency Download from ERP

The Currency Download from ERP job program downloads new currency records to EAM from the ERP and also refreshes currency information already downloaded to EAM at System Administrator|ERP Interface|Download|Currency Download. This job updates in EAM any information that has been modified in the ERP.

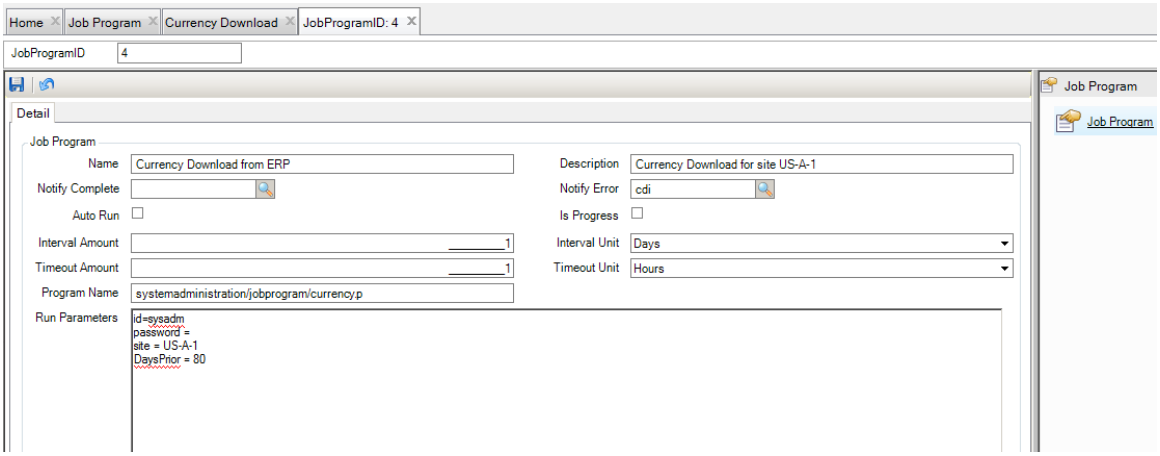
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Currency Download

The Currency Download job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.
- **Days Prior**. The number of days, counting backward from today, that the job should search for new currency records and changes to existing currency records. Enter an integer value.

**Fig. 10.61**
Job Program: Currency Download from ERP




## Purge Log File

The Purge Log File job program purges log files based on the time frame you define.

### Run Parameters

The Purge Log File job program contains the following run parameters, which are entered in the Run Parameters field.

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Days**. Enter the number of days for which you want the system to keep log files. Any log files older than that time frame are deleted. For example, if you enter 30, all log files 31 days and older are deleted each time the job runs. Recommended run time is at least once a month.

## Refresh Project Cost

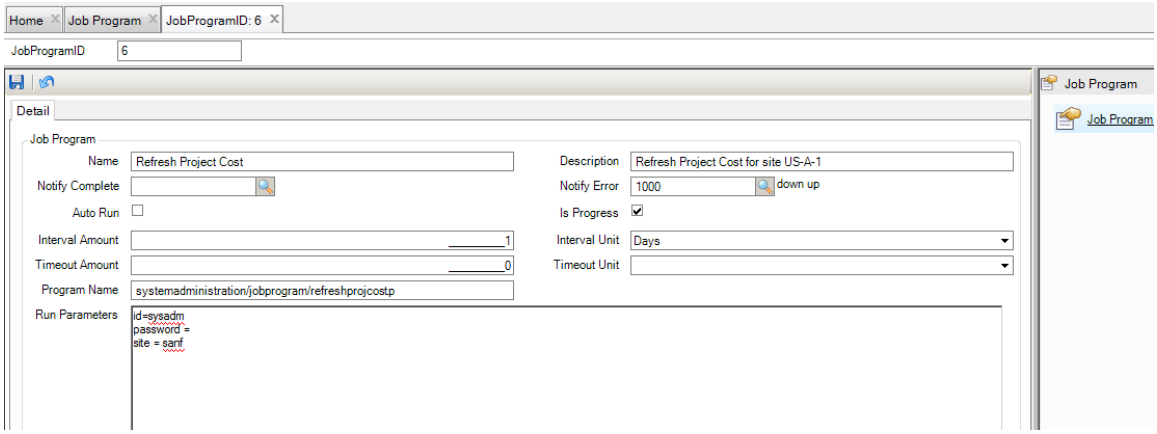
The Refresh Project Cost job program refreshes the cost of a project for one or more sites. This job recalculates the project costs and updates the Last Refreshed Date/Time on the Cost tab of the project in the Finance|Projects browse. The job performs the same function as the Refresh Action found in a project record.

### Run Parameters – Refresh Project Cost

The Project Cost Refresh job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.62**
Job Program: Refresh Project Cost




## Vendor Refresh

The Vendor Refresh job program refreshes the vendor records already downloaded to EAM at System Administration|ERP Interface|Download|Vendor Download. This job updates vendor records in EAM that have been modified in the ERP.

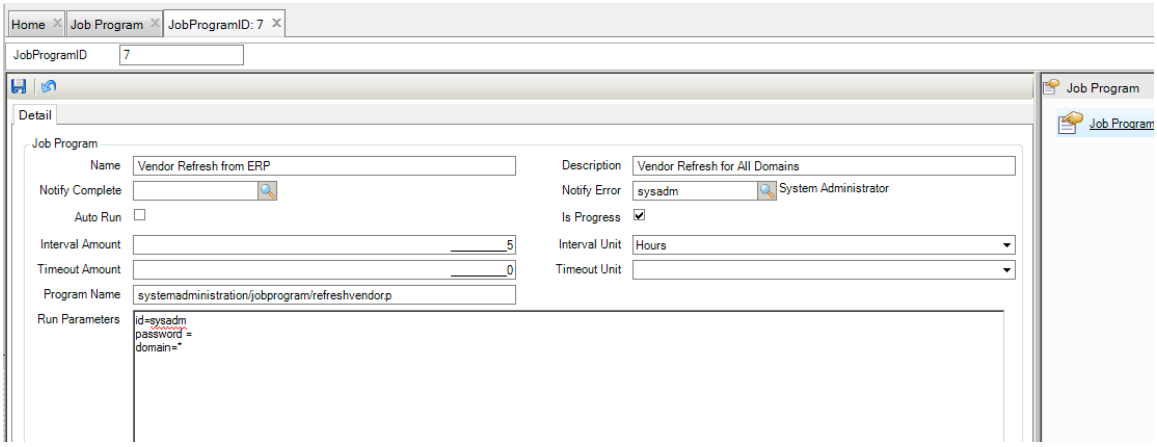
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters - Refresh Vendors

The Vendor Refresh job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Domain**. Enter the domain parameter using the format “domain=yyyyyyy”, where yyyyyyy is the desired domain code. You can specify one domain or enter “domain=*”, where the asterisk (*) represents all domains.

**Fig. 10.63**
Job Program: Vendor Refresh




## Send Mail on Price Schedule Expiration

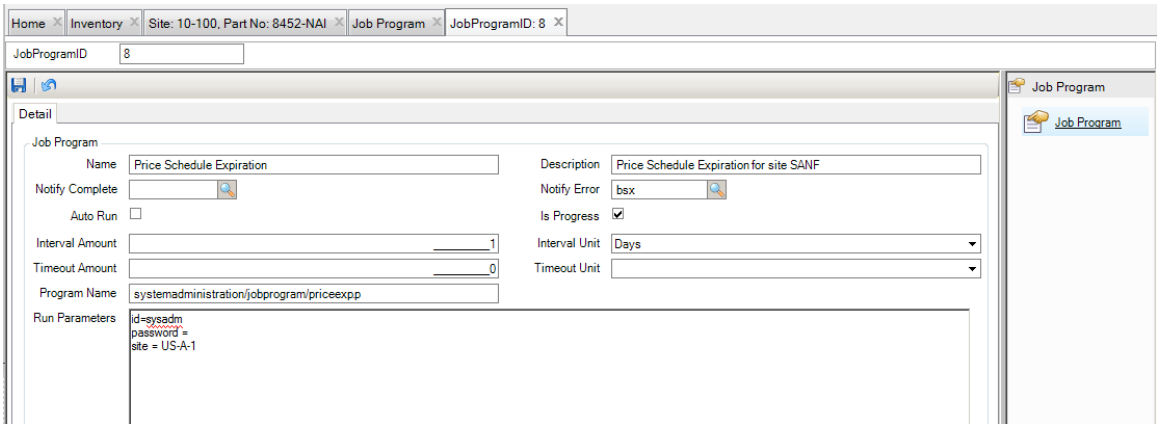
The Send Mail on Price Schedule Expiration program can be configured to send an e-mail notification when the expiration date is reached for each record found in the bottom browse of the Vendor Parts submenu at Inventory|Inventory. The job program finds pricing schedules that have expired and sends e-mail to the user ID or mail group designated in the Notify Error lookup.

### Run Parameters – Price Schedule Expiration

The Price Schedule Expiration job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.64**
Job Program: Price Schedule Expiration



## Account Refresh from ERP

The Account Refresh job program refreshes the accounts already downloaded from ERP to EAM at System Administration|ERP Interface|Download|EE Account Download. This job updates account information in EAM that has been modified in the ERP.

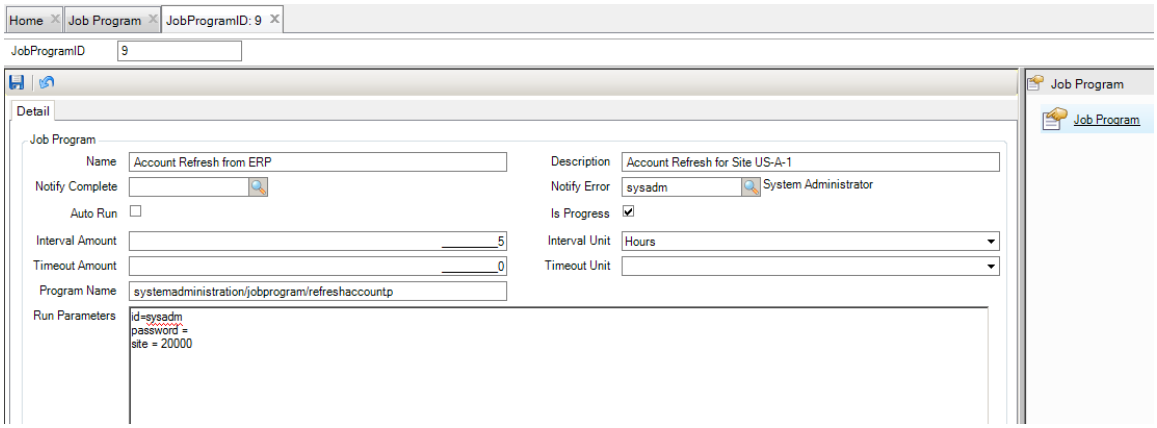
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Account Refresh

The Account Refresh job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.65**
Job Program: Account Refresh from ERP




## Project Refresh from ERP

The Project Refresh from ERP job program refreshes the project information already downloaded from the ERP to EAM at System Administration|ERP Interface|Download|Project Download. This job updates in EAM any records that have been modified in the ERP.

### Run Parameters - Project Refresh from ERP

The Project Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

## Standard Clauses Refresh from ERP

The Standard Clauses Refresh job program refreshes the standard clauses information already downloaded from the ERP to EAM at System Administration|ERP Interface|Download|Standard Clauses Download. This job updates in EAM any records that have been modified in the ERP.

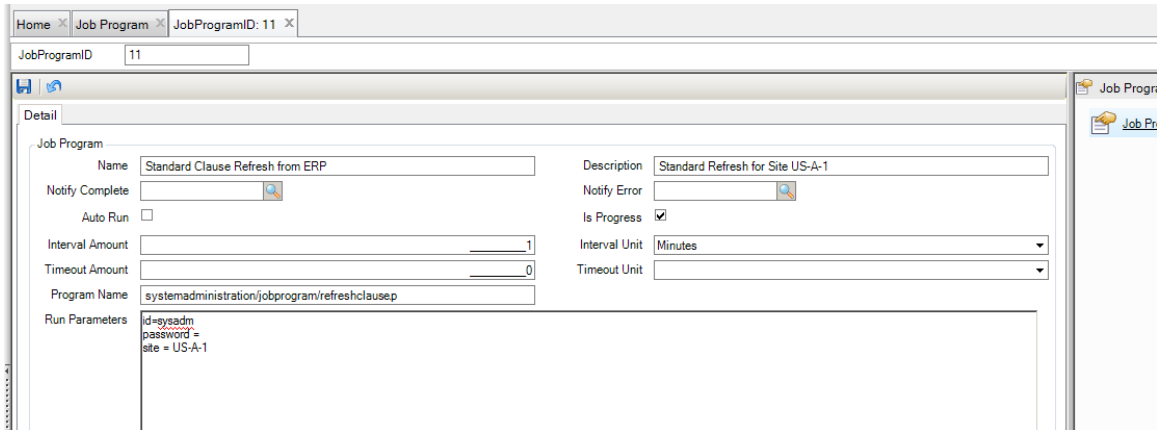
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Standard Clauses Refresh from ERP

The Standard Clauses Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.66**
Job Program: Standard Clauses Refresh




## Terms Refresh from ERP

The Terms Refresh job program refreshes the terms information already downloaded from the ERP to EAM at System Administration|ERP Interface|Download|Terms Download. This job updates in EAM any information that has been modified in the ERP.

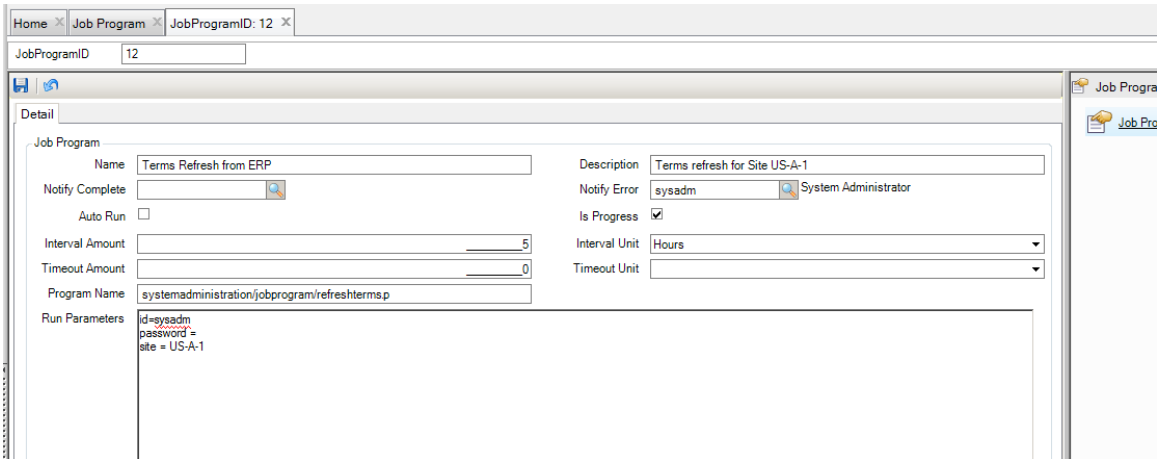
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Terms Refresh from ERP

The Terms Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.67**
Job Program: Terms Refresh




## Bill To Refresh from ERP

The Bill To Refresh job program refreshes the Bill To information already downloaded from the ERP to EAM at System Administration|ERP Interface|Download|Bill To Download. This job updates in EAM any information that has been modified in the ERP.

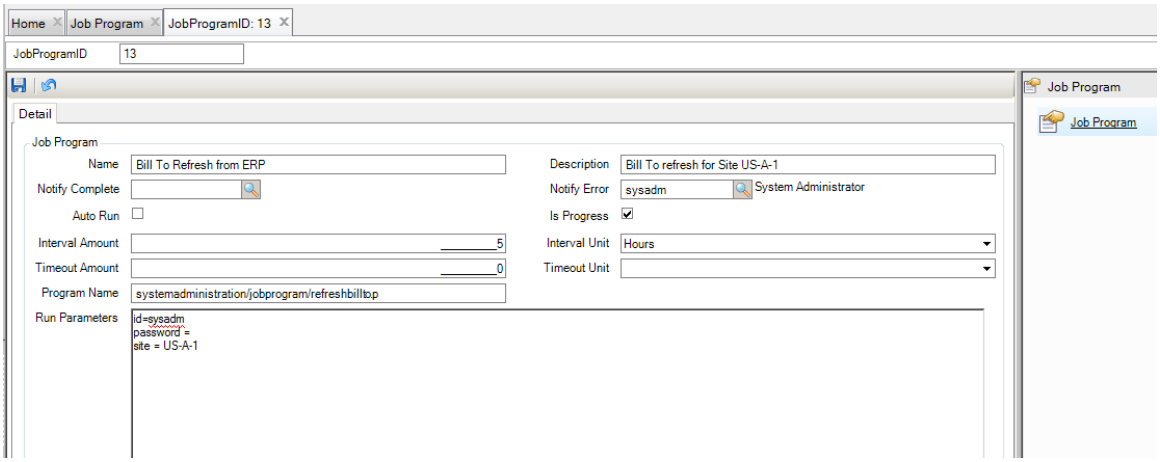
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Bill To Refresh from ERP

The Bill To Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.68**
Job Program: Bill To Refresh



## Ship To Refresh from ERP

The Ship To Refresh job program refreshes the Ship To information already downloaded from the ERP to EAM at System Administration|ERP Interface|Download|Ship To Download. This job updates in EAM any information that has been modified in the ERP.

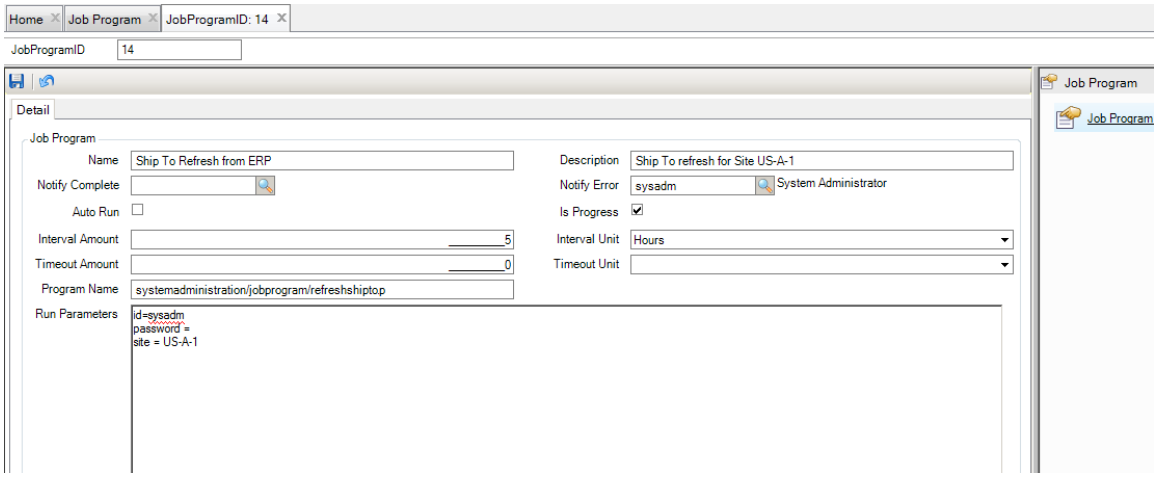
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Ship To Refresh from ERP

The Ship To Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.69**
Job Program: Ship To Refresh




## Cost Center Refresh from ERP

The Cost Center Refresh job program refreshes records from the ERP that were already downloaded to EAM at System Administration|ERP Interface|Download|EE Cost Center Download. This job updates in EAM any information that has been modified in the ERP.

***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

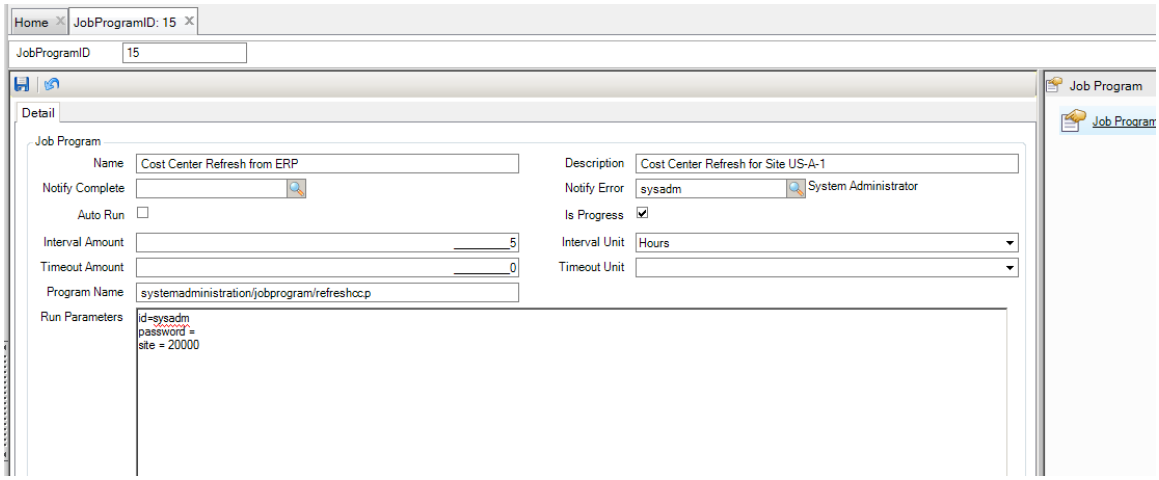
### Run Parameters – Cost Center Refresh from ERP

The Cost Center Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.

- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.70**
Job Program: Cost Center Refresh from ERP




## Sub Account Refresh from ERP

The Sub Account Refresh job program refreshes records from the ERP that already downloaded to EAM at System Administration|ERP Interface|Download|EE Sub Account Download. This job updates in EAM any information that has been modified in the ERP.

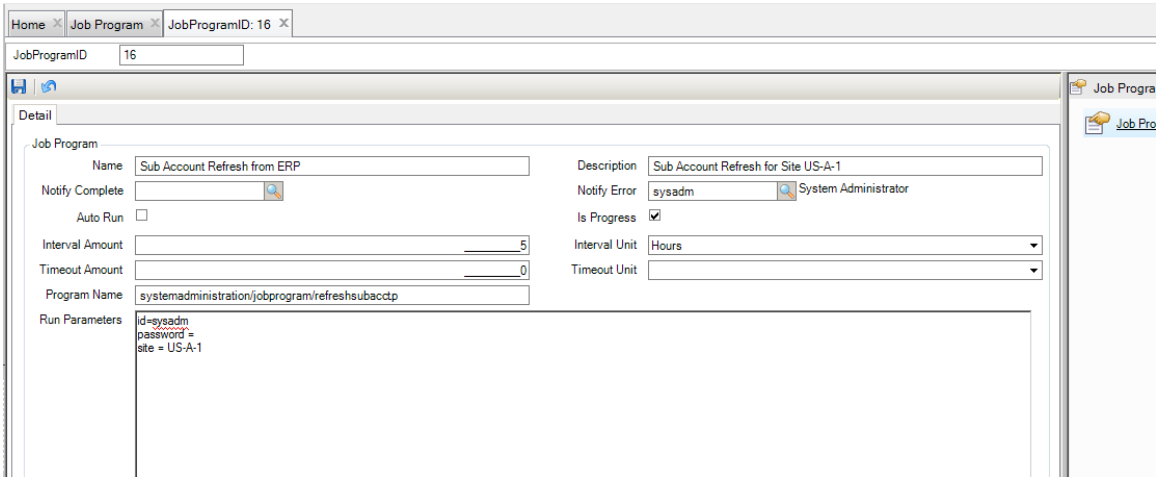
***Note*** In order to use this option, EAM must be connected to the QAD ERP database.

### Run Parameters – Sub Account Refresh from ERP

The Sub Account Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

**Fig. 10.71**
Job Program: Sub Account Refresh from ERP




## Account Calendar Refresh from ERP

The Account Calendar Refresh from ERP job program refreshes the GL Calendar records already downloaded from the ERP to EAM at System Administration|ERP Interface|Download|GL Calendar Download. This job updates in EAM any records that have been modified in the ERP.

### Run Parameters – Account Calendar Refresh from ERP

The Account Calendar Refresh from ERP job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Domain**. Enter the domain parameter using the format “domain=yyyyyyy”, where yyyyyyy is the desired domain code.

## Equipment Failure Analysis

The Equipment Failure Analysis job program updates information for each equipment record in the Failure Analysis browse, which is located in Maintenance|Equipment|Equipment|Failure Analysis. The job program keeps the information on the Failure Analysis subdetail screen up to date by recalculating the Mean Time Between Failure, average cost for downtime hours, and the average time equipment is down for each specific failure code.

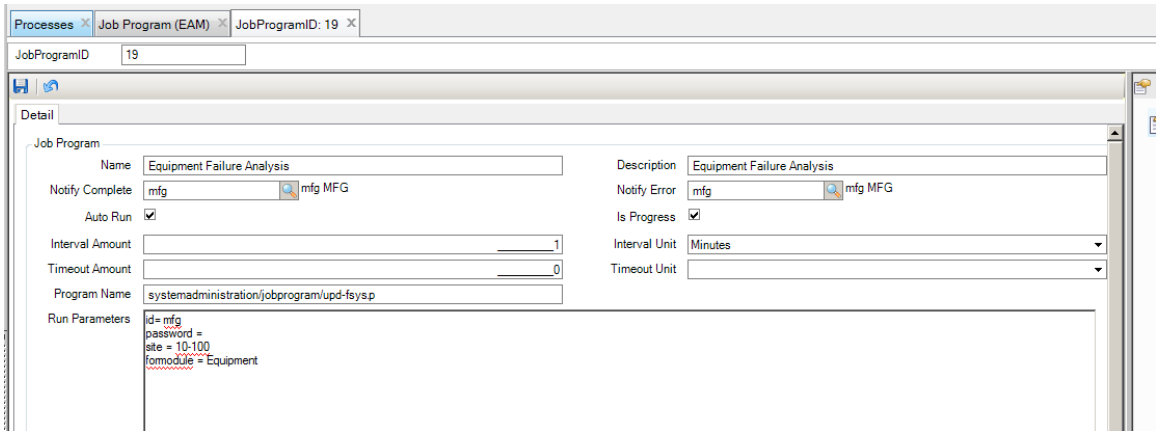
### Run Parameters – Equipment Failure Analysis

The Equipment Failure Analysis job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.

- **ForModule.** The module to which this job applies. Enter Equipment.

**Fig. 10.72**
Job Program: Equipment Failure Analysis




## Stock Replenishment

The Stock Replenishment job program (autostck.p) adds a new stock replenishment run, globally adds parts, and then creates requests based on the run parameters that are entered. This job program can produce the same results as if the stock replenishment run was added manually in the Inventory|Stock Replenishment browse.

When the Stock Replenishment job program runs, it first looks for any parts that match the entered run parameters. If it finds at least one part, it creates a stock replenishment run with a batch stock replenishment description. Records are created for any parts that match the entered run parameters with the order quantities calculated, just as in a manual stock run. If the “Create_requests=yes” run parameter is entered, the procedure then creates requests (requisitions and work orders) with the same functionality as selecting the Create Requests action in the Inventory|Stock Replenishment browse. In addition, it generates requisitions for items set to sole source in Sites|Misc tab, where the Sole Source Options setting of Automatically is set to at least Create a Requisition.

### Run Parameters – Stock Replenishment

The Stock Replenishment job programs contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site**. The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites or you can specify one site.
- **Additional Parameters.** You can use additional parameters to tell the job which parts to replenish such as source, planner, or pri vendor.

  The following table contains a list of parameters that can be used in the Stock Replenishment job program. The entries in the Field Name column are used to customize this job. For example:

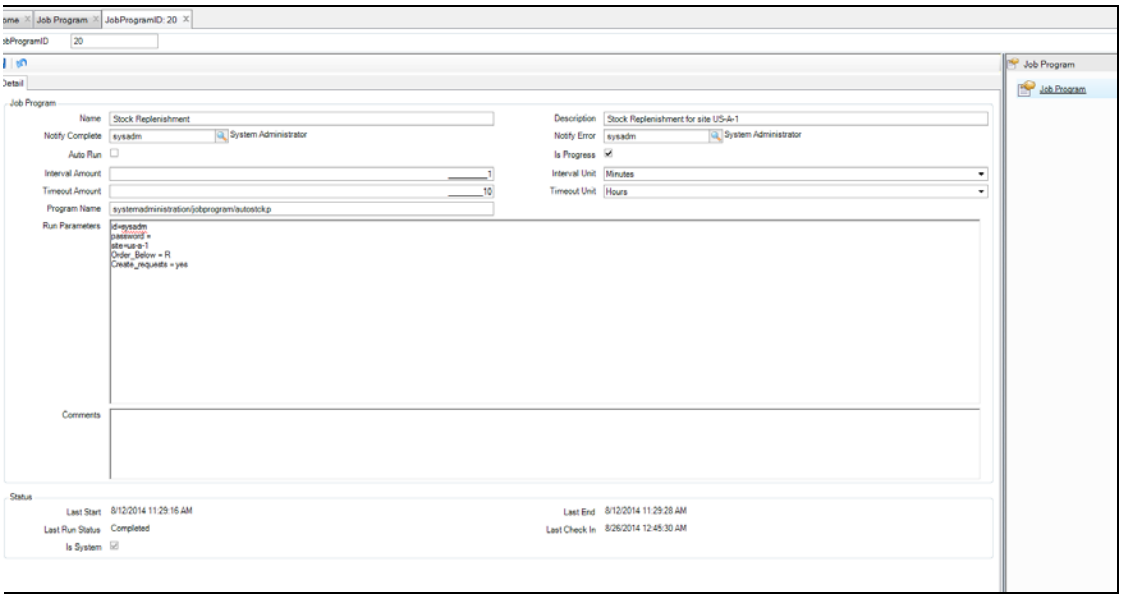
  - Add a parameter for Blanket by entering “blanket=yes”.

- Add a parameter for Source by entering “Source=internal” or “Source=vendor”.
- Create requests (requisitions and work orders) with the same functionality as selecting the Create Requests action in the Inventory|Stock Replenishment browse, by entering “Create_requests=yes”.
- Add a stock replenishment run for consignment parts by entering “Consignment?=yes”.

**Table 10.2**
Stock Replenishment - Run Parameters

| Field Label | Field Name | Data Type |
|---|---|---|
| SiteCode | site | character |
| Blanket | blanket | character |
| Buyer | buyer | character |
| CommCode | commodity | character |
| Consign | consignment? | character |
| Critical | critical? | character |
| pLocation | location | character |
| pPlanCode | planner | character |
| PriVend | pri vendor | character |
| PtStatus | status | character |
| TypeCode | type | character |
| Source | source | character |
| SoleSource | sole source? | integers only |
| MonthsAgo | last issued | integers only |
| OrderBelow | order_below | character value |
| CreateRequests | create_requests | character value |

**Fig. 10.73**
Job Program: Stock Replenishment



## Blanket Order Expiration

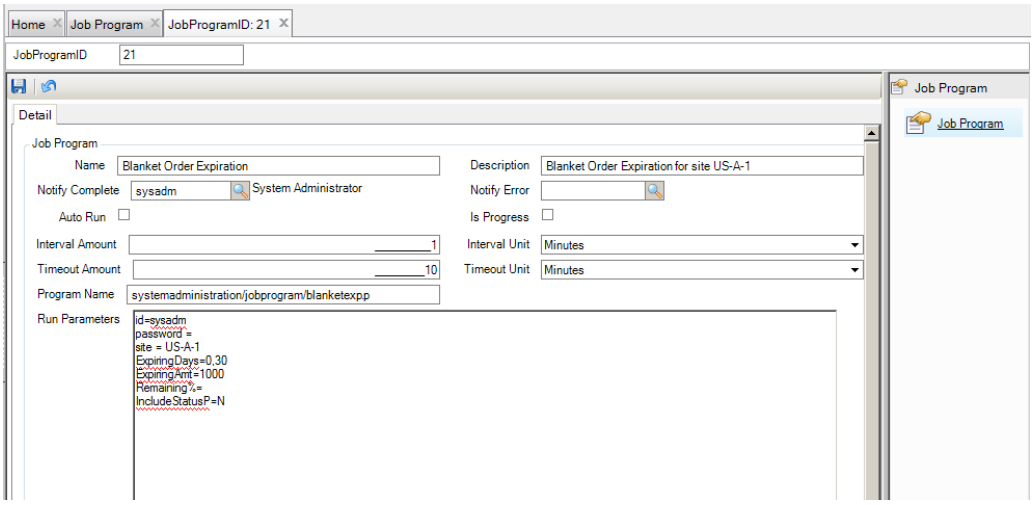
The Blanket Order Expiration job program can be configured to send an e-mail notification when the Expiration Amount or Expiration Date is reached for each Blanket Order in Purchasing| Blanket Orders. The job looks for any BO that meets the criteria set up in Run Parameters and then sends an e-mail to the buyer and any user ID or mail group designated in the Notify lookup on the BO Detail tab.

### Run Parameters – Blanket Order Expiration

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.
- **ExpiringDays**. Enter the range of days you want the job to search for expiring or expired BOs. Use the format “ExpiringDays=nn,nn”, where the first nn is the starting point from today and the second nn is the number of days until the end of the range. In Figure 10.74, ExpiringDays= 0,30, which means start from today and search during the next 30 days.
- **ExpiringAmt**. Enter an expiration amount in the format “ExpiringAmt=nnnnn,” where nnnnn is the Dollar amount. In Figure 10.74, ExpiringAmt=1000, which means if the remaining balance on a BO falls below $1,000, the buyer and/or the notify users receive an e-mail notification.

  ***Note*** The job can use either or both ExpiringDays and ExpiringAmt.
- **IncludeStatusP**. Y or N. If set to N, blanket orders with a status of Planned (P) are excluded.

**Fig. 10.74**
Job Program: Blanket Order Expiration




The job does record if the buyer or the users identified in the Notify lookup have received or read the e-mail notifications. The job continues to send e-mail notifications until one or more of the following conditions are met.

- The expiration date falls outside the ExpiringDays range.
- The remaining balance falls outside the ExpiringAmt threshold.

- The BO is locked.
- The BO is canceled (X).

### Forward Blanket Order Routing

The Forward Blanket Order Routings job forwards routing approval e-mails, based on the Wait Hrs set in System Administration|System Control Maintenance|Misc tab. For example, if a routing approval e-mail has not been forwarded by the assigned user within the designated wait hours, then the forwardborouting.p forwards the routing request to the next authorized user. Users who do not approve the authorization receive an e-mail telling them they were skipped due to the approval time limit and the system automatically enters a comment in the routing group submenu of "Skipped due to expired waiting time."

#### Run Parameters – Forward Blanket Order Routings

The Forward Blanket Order Routings job program contains the following run parameters, which are entered in the Run Parameters field.

- **User ID and Password**. For more information, see "Editing the Job Program record" on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format "site=xxxxxxxx", where xxxxxxxx is the desired site code. You can enter "site=*", where the asterisk (*) represents all sites, or you can specify one site.

### CIM Load

The CIM Load job program loads equipment DUOM readings from the data file designated in the job program. Before creating this job at System Administration|Job Control|Job Program, you must define the CIM Load setting on the Maintenance tab at General|Business Units|Sites. In the Equipment Options section of the Maintenance tab, select either Usage or Reading from the CIM Load drop-down menu.

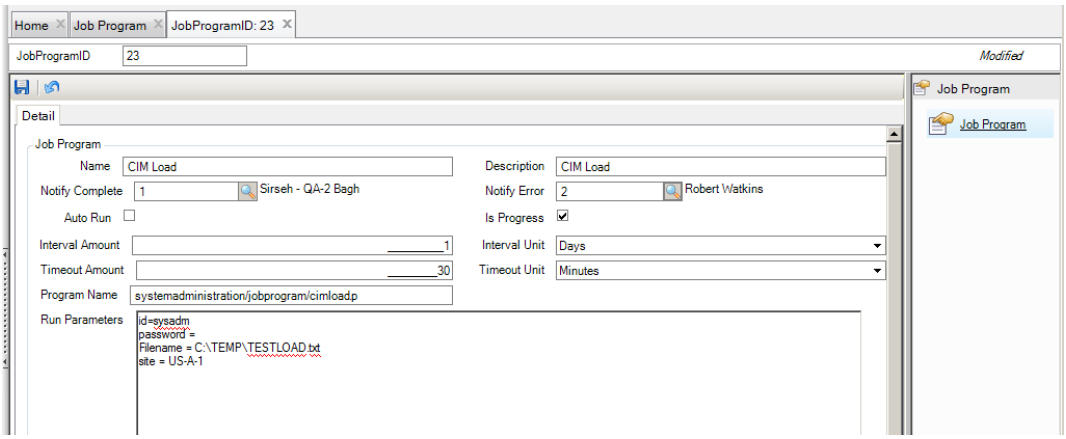
***Note*** If you set the option to Usage, the text data file that the CIM Load job program loads must match the following format: Equip No, DUOM, Usage, Date, Time, User ID. If the CIM Load option is set to Reading, the data file must match the format Equip No, DUOM, Reading, Date, Time, User ID.

#### Run Parameters – CIM Load

The CIM Load job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see "Editing the Job Program record" on page 708.
- **Filename**. Enter the location and name of the text data file to load.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format "site=xxxxxxxx", where xxxxxxxx is the desired site code. You can specify one site or enter "site=*", where the asterisk (*) represents all sites.

**Fig. 10.75**
Job Program: CIM Load




## Reserve/Short Recalculation

The Reserve/Short Recalculation job program recalculates the reserve/short values on items.

### Run Parameters – Reserve/Short Recalculation

The Reserve/Short Recalculation job program contains the following run parameters, which are entered in the Run Parameters field.

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

## Update Planned/On Order

The Update Planned/On Order job program recalculates the planned/on order values on items.

### Run Parameters – Planned/On Order

The Planned/On Order job program contains the following run parameters, which are entered in the Run Parameters field.

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

## Forward All Routings

The Forward All Routings job program forwards routing approval e-mails based on the Wait Hrs set in System Administration|System Control Maintenance|Misc tab. For example, if a routing approval e-mail has not been forwarded by the assigned user within the designated wait hours, then the forwmail.p forwards the routing request to the next authorized user. Users who do not

approve the authorization receive an e-mail telling them they were skipped due to approval time limit and the system automatically enters a comment in the routing group submenu of “Skipped due to expired waiting time.”

### Run Parameters – Forward All Routings

The Forward All Routings job program contains the following run parameters, which are entered in the Run Parameters field.

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

## Equipment Refresh

The Equipment Refresh job program globally refreshes a filtered list of equipment records. The job:

- Adds all labor costs charged to the equipment for the equipment’s lifetime and for the current year.
- Adds all material cost charged to the equipment for its lifetime and for the current year.
- Adds all manual GLs charged to the equipment for its lifetime and for the current year.
- Recalculates Current Lifetime Basis by adding all labor, material, and manual GL costs for the equipment’s lifetime to Initial Lifetime Basis (refer to Initialize Limits action).
- Recalculates Current Annual Basis by adding all labor, material, and manual GL costs for the current year to the Initial Annual Basis (refer to Initialize Limits action).
- Updates Last Refresh by the current date and time.
- Updates change history information by the current user, date, and time.
- Checks if the equipment’s current lifetime cost exceeds its lifetime spending limit in Current Lifetime Basis|Lifetime Basis and if the equipment’s current annual cost exceeds its annual spending limit in Current Annual Basis|Annual Basis. If the value of either costs exceeds its limit, EAM sends an email to the equipment’s Notify user or mail group.

### Run Parameters – Equipment Refresh

The Equipment Refresh job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

### Check PO Balance

The Check PO Balance job program searches for the Posted Journal date stamp that matches the parts_status date. If the matching date stamp is not found, the job sends a notification mail.

#### Run Parameters – Check PO Balance

The Check PO Balance job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.
- **Notify**. The user ID to notify with an e-mail if the matching date stamp is not found.
- **LastDays**.

### Inventory Reorder

The Inventory Reorder job program (invreorder.p) determines if a part is below either its reorder point or safety stock limit, depending on the setting, and sends an email to the Notify user when those limits are reached.

#### Run Parameters – Inventory Reorder

The Inventory Reorder job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.
- **Notify**. The user ID to notify with an e-mail if the part’s inventory has dropped below its reorder point or safety stock limit.

### PO Header Status Check

The PO Header Status Check job program checks for a mismatch between the status on a PO header and the PO’s related lines. If a mismatch is found, the job generates an e-mail notification to the Notify user ID defined in the run parameters.

#### Run Parameters – PO Header Status Check

The PO Header Status Check job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.

- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.
- **Notify**. The user ID to notify with an e-mail if the status on a PO header does not match the PO’s related lines.

### Requisition Check for PO Routing

#### Run Parameters – Requisition Check for PO Routing

The Requisition Check for PO Routing job program contains the following run parameters, which are entered in the Run Parameters field.

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.
- **Notify**. The user ID to notify with an e-mail.

### Send Emails when PM is due

The Send Emails when PM is due job program queries all PM templates and sends e-mails to the Notify person or mail group when the prevent_main.pm_due is less than or equal to today’s date. The job program sends an e-mail each time the program runs if the PM is still due. You need to issue the PM or update the due date to stop receiving e-mails. If you have PM templates no longer being used that have past due dates, you should clean up your templates before initiating pmduedate.p.

#### Run Parameters – Send Emails when PM is due

The Send Emails when PM is due job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

### Submit PO/Receipts to ERP

The Submit PO/Receipts to ERP job program (resendpostoerp.p) resends POs to ERP when changes are made to an Ordered PO in EAM. You determine which POs to send by selecting their check boxes in the Send to ERP? column on the Purchase Order browse. This job automates the Submit PO/Receipts to ERP Action menu option on the PO browse.

### Run Parameters – Submit PO/Receipts to ERP

The Submit PO/Receipts job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

## Load Production Hours

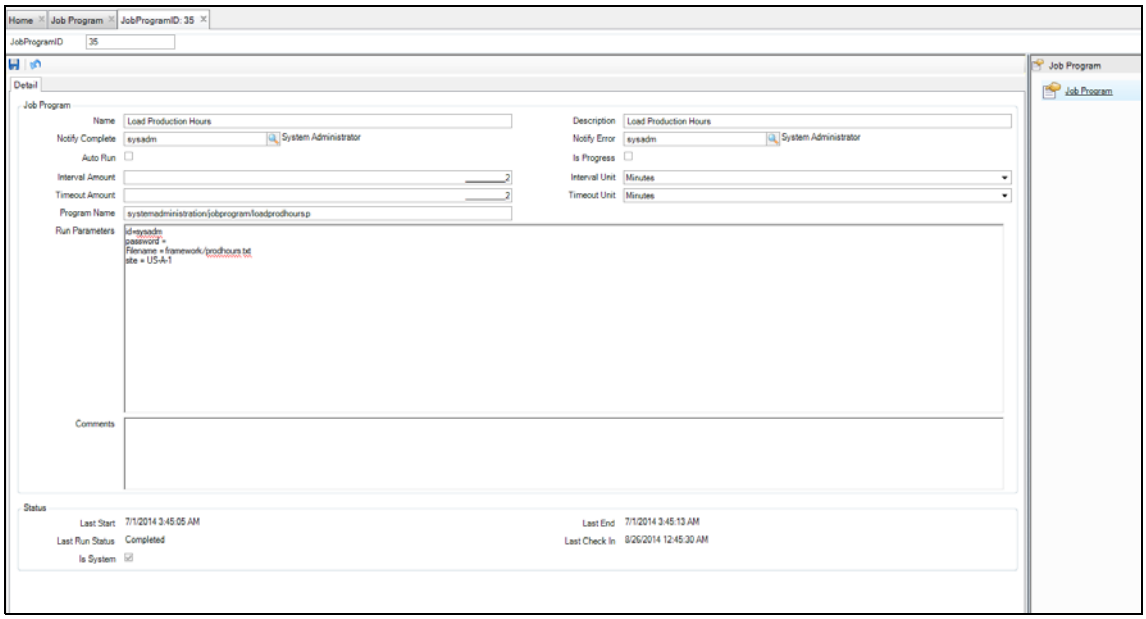
The Load Production Hours job program loads the data from a predefined data file into EAM Equipment. All records, whether they have errors or are error free, are loaded into the Production Hours browse, which is located in Maintenance|Equipment|Data Loads|Production Hours. The records that are error free also are loaded into the Production Hours submenu in the equipment record. If the record contains an error, a description of the error is displayed in the Comments field in the Production Hours browse.

### Run Parameters – Load Production Hours

The Load Production Hours job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Filename**. Identifies the file location and the file name for the `.txt` file that is read during the Load Production job program.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

**Fig. 10.76**
Job Program: Load Production Hours




## DUOM Load

The DUOM Load job program automatically updates Equipment DUOMs based on the operation transaction types defined in EAM for the site, which is used to select the ERP operation history transactions along with the operation data related to the EAM Equipment Mapping to ERP and Equipment DUOM/ERP Items conversions.

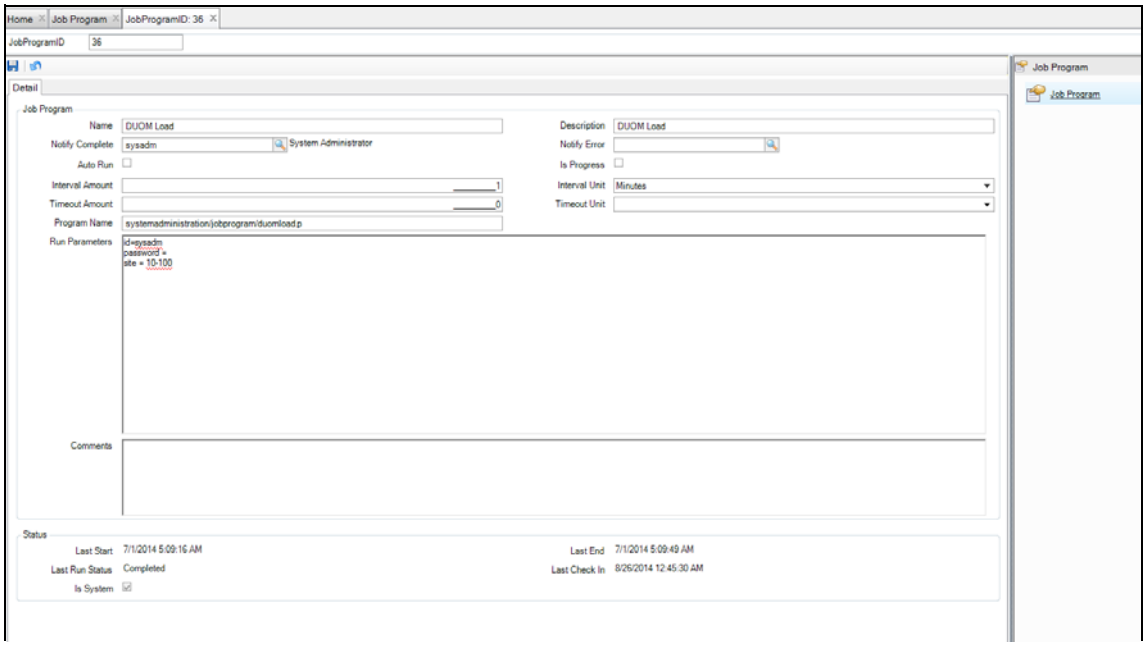
After the DUOM Load job runs, the Equipment DUOM is updated with readings that can be viewed in the Equipment Readings submenu. The readings can then be used to determine the PM Issue for the equipment.

### Run Parameters – DUOM Load

The DUOM job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site.** The job program must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can enter “site=*”, where the asterisk (*) represents all sites, or you can specify one site.

**Fig. 10.77**
Job Program: DUOM Load




## GL Validation Report

Because of changes in the Financial module, GL account data can become invalid in EAM when you:

- Make an account, sub-account, or cost center inactive
- Change the setup of the COA mask

Data discrepancies between EAM and EE can potentially cause EAM postings to fail during processing to EE, resulting in mismatched EAM and EE transactions. The GL Validation report highlights discrepancies between EAM and EE account data.

**Table 10.3**
GL Validation Report

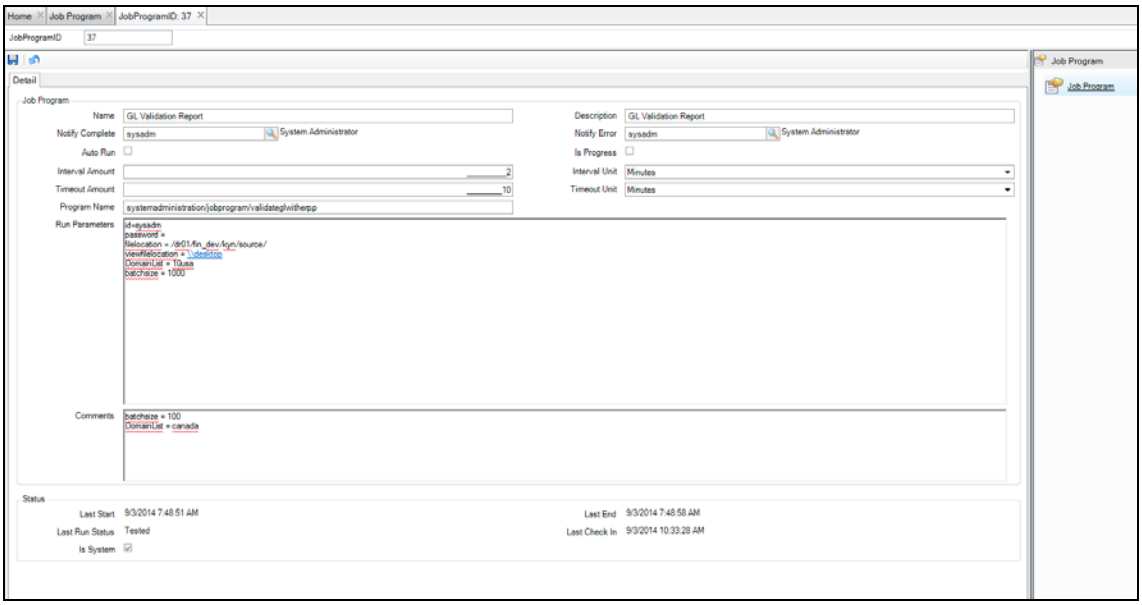
| | |
|---|---|
| **Purpose** | The purpose of the report is to identify invalid GL components and combinations in EAM that would cause postings to fail in EE. Any errors highlighted in the report can be corrected before generating postings. |

| | |
|---|---|
| **Functionality** | • Identify GL elements in EAM that do not exist in EE such as account, sub-accounts, cost centers, and projects.<br>• Report account elements in EAM that are not active in EE. Report project system statuses in EE that do not allow postings such as accounts, sub-accounts, cost centers.<br>• Check GL combinations in EAM and report those that are invalid in EE.<br>• Identify GL analysis limitation settings in EE and compare these to COA combinations defined in EAM.<br>• Report COA elements that are defined in EAM, but are inactive.<br>• Identify COA Mask combinations sent from EAM that do not exist in EE. |
| **Scope** | There are 27 menus in EAM that store GL data:<br>• **Set-up Menus**. There are 19 set-up menus where GL data is defined for use in later transaction processing; for example, equipment and site. These are within the scope of this report. Analysis showed that 12 of the 19 set-up menus should be validated in this report.<br>• **Transaction Menus**. There are eight transaction menus that create transaction postings that are sent to EE. These are not in the scope of this report. They will form part of future EAM/EE integration work. |

### Run Parameters - GL Validation Report

The report is configured as a job program, so the parameters, notifications, and option to run automatically can be set. When complete, you access the report by clicking a link in the notification e-mail.

**Fig. 10.78**
Job Program: GL Validation Report




*Program Name.* Program that loads the EAM GL details and sends to Financials for validation.

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **File Location**. The Unix directory path location where the report is output.
- **View File Location**. Optional Windows UNC path location parameter. Specifying this parameter allows the report name to appear as a link in the notification e-mail.

- UNC is a naming convention used primarily to specify and map network drives in Microsoft Windows. UNC names are most commonly used to reach file servers or printers on a LAN. It is the mapping of a non-Windows path to a Windows path; for example, mapping a UNIX directory to a Windows drive.
- **Domain List**. Specify the domains you want to validate. You can specify one value or several values, each separated by a comma; for example, Domain1, Domain2. If set to *, then all domains in the database are validated.
- **Batch Size**. Determines how many records are sent to EE for validation at one time; for example, 1000. If set to *, then all records are sent to EE for validation.

### Running the GL Validation Report

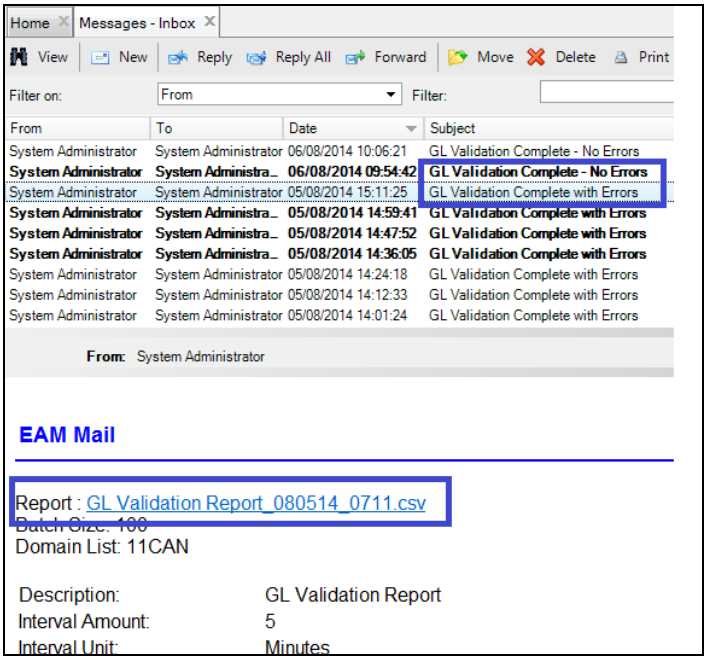
If AutoRun is selected, the report runs periodically.

### GL Validation Report – Notification E-mail

When the GL Validation Report is complete, a notification e-mail is sent, which can be accessed from the user's Inbox in the EAM application.

- The subject of the e-mail is Complete with Errors or Complete - No Errors.
- The e-mail content has a link to the report. This is dependent on the ViewFileLocation parameter.
- If the parameter is specified, the report name appears as a link in the e-mail. If the parameter is not specified, then the path and file name appear only as text in the e-mail, with no link.
- Report Name contains the date and timestamp.

**Fig. 10.79**
GL Validation Report E-mail



The report lists all validation errors returned from EE. The errors are ordered by domain and then by site. For each site, the menu, record, and tab that contain invalid data are listed. The report gives the details of the account, sub-account, cost center, and project combination and it displays the problem data so that you can easily identify and correct it. The report is formatted as a `.csv` file, which can be saved to Excel for further formatting, data filtering, and sorting.

**Fig. 10.80**
GL Validation Report Example

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Domain | Table | Site | Record Identifier | Menu Location | Menu Sub Group | Account | CC | Sub-Acct | Project | Error |
| 2 | 11CAN | equipment | 11-100 | ckc-equip1 | Equipment - Detail Tab | Labor | ccacct | cc-4 | FR-Sub1 | Proj1 | The GL account ccacct requires either cost center or project analysis. |
| 3 | 11CAN | equipment | 11-100 | ckc-equip1 | Equipment - Detail Tab | Material | ccacct | cc-4 | FR-Sub1 | Proj1 | The GL account ccacct requires either cost center or project analysis. |
| 4 | 11CAN | equipment | 11-100 | ckc-equip1 | Equipment - Detail Tab | Contractor | ccacct | cc-4 | FR-Sub1 | Proj1 | The GL account ccacct requires either cost center or project analysis. |
| 5 | 11CAN | parts | 11-100 | 11PART | Inventory - Cost Tab | Adjustment | ccacct | CC1 | fr-sub1 | | Cost centre CC1 has no definition of COA Mask. System does not allow to use this Cost centre. Please, check Cost centre definition to define COA Mask. |
| 6 | 11CAN | parts | 11-100 | 11PART | Inventory - Cost Tab | Inventory | ccacct | CC1 | fr-sub1 | | Cost centre CC1 has no definition of COA Mask. System does not allow to use this Cost centre. Please, check Cost centre definition to define COA Mask. |
| 7 | 11CAN | ovhd_rate | 11-100 | CKC-test | Overhead Rates - Detail | Accounting | ccacct | CC-4 | subacc1 | | Sub-Account is not active |
| 8 | 11CAN | prevent_maint | 11-100 | 2110 | PM Templates - Detail Tab | Labour | ccacct | cc-4 | FR-Sub1 | Proj1 | The GL account ccacct requires either cost center or project analysis. |
| 9 | 11CAN | prevent_maint | 11-100 | 2110 | PM Templates - Detail Tab | Matl | ccacct | cc-4 | FR-Sub1 | Proj1 | The GL account ccacct requires either cost center or project analysis. |
| 10 | 11CAN | prevent_maint | 11-100 | 2110 | PM Templates - Detail Tab | Cont | ccacct | cc-4 | FR-Sub1 | Proj1 | The GL account ccacct requires either cost center or project analysis. |
| 11 | 11CAN | rebuild | 11-100 | CKC | Rebuild Locations - Detail | Accounting | ccacct | CC1 | fr-sub1 | | Cost centre CC1 has no definition of COA Mask. System does not allow to use this Cost centre. Please, check Cost centre definition to define COA Mask. |
| 12 | 11CAN | site | 11-100 | 11-100 | Site - Inventory Tab | Consignment Inventory Defaults | ccacct | cc-5 | subacc1 | | Sub-Account is not active |
| 13 | 11CAN | site | 11-100 | 11-100 | Site - Inventory Tab | Inventory Issue Defaults Debit | ccacct | CC1 | fr-sub1 | | Cost centre CC1 has no definition of COA Mask. System does not allow to use this Cost centre. Please, check Cost centre definition to define COA Mask. |
| 14 | 11CAN | site | 11-100 | 11-100 | Site - Inventory Tab | Inventory Issue Defaults Debit | ccacct | CC1 | fr-sub1 | | Cost centre CC1 has no definition of COA Mask. System does not allow to use this Cost centre. Please, check Cost centre definition to define COA Mask. |

## Purge Mail for All Users

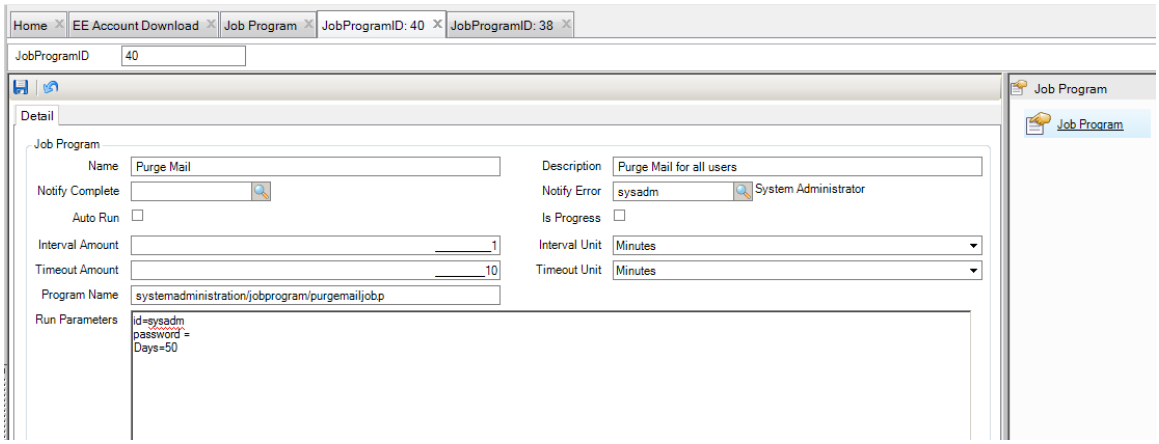
The Purge Mail for All Users job program deletes EAM system e-mail messages for all users based on the Days parameter set in the Run Parameters field.

### Run Parameters – Purge Mail for All Users

The Purge Mail for All Users job program (mailcleanse.p) consists of the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Days**. Enter the number of days you want the system to keep e-mail messages. Any e-mails older than that time frame are deleted. For example, if you enter 60, all e-mails 61 days and older are deleted each time the job runs.

**Fig. 10.81**
Job Program: Purge Mail for All Users



## Refresh Users

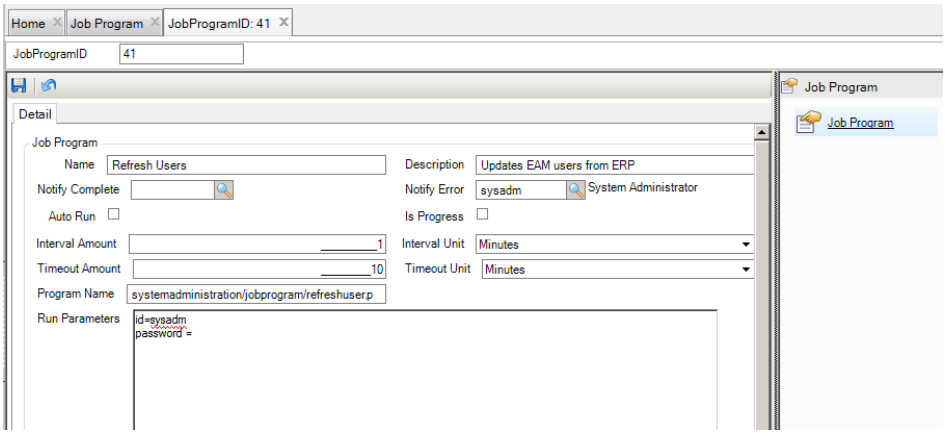
The Refresh Users job program updates and adds user records from the ERP. These records are copies of established EE users who are also licensed for EAM.

### Run Parameters – Refresh Users

The Refresh Users job program consists of the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code.

**Fig. 10.82**
Job Program: Refresh Users




## PO/Req Revision Rollup Create

The PO/Req Revision Rollup Create job program populates the browse at Purchasing|Codes|All PO/Req Revisions. The utility `poreqrevcreate.p` must be run once to convert the existing revisions into data for the browse.

### Run Parameters – PO/Req Revision Rollup Create

The PO/Req Revision Rollup Create job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code.
- **Days Prior**. The number of days, counting backward from today, that the job should search for revisions to POs and requisitions.

### Rename Inventory

The Rename Inventory job program renames an inventory item throughout EAM. You can define the parameter settings to also rename the item throughout the ERP system.

Run Parameters – Rename Inventory

The Rename Inventory job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **OldPartNo.** The part number you want to change.
- **NewPartNo.** The new part number that will replace the old part number.
- **IncludeERPTable.** Default is No. Should this change take place across the entire ERP system?

***Note*** Rename Inventory is the only job program that does not require a site code.

### Tool Failure Analysis

The Tool Failure Analysis job program updates information for each serialized tool record in the Failure Analysis browse, which is located in Maintenance|Tools|Tools|Serialized Tool|Failure Analysis. The job program keeps the information on the Failure Analysis subdetail screen up to date by recalculating the Mean Time Between Failure, average cost for downtime hours, and the average time the tool is unavailable for each specific failure code.

Run Parameters – Tool Failure Analysis

The Tool Failure Analysis job program contains the following run parameters, which are entered in the Run Parameters field:

- **User ID and Password**. For more information, see “Editing the Job Program record” on page 708.
- **Site Code**. Each job must have a parameter with site specified. Enter the site parameter using the format “site=xxxxxxxx”, where xxxxxxxx is the desired site code. You can specify one site or enter “site=*”, where the asterisk (*) represents all sites.
- **ForModule.** The module to which this job applies. Enter Tool Serial.

## Set Up Sequence Data

The system administrator uses the Sequence modules to set the next number for certain tables and documents. The sequence fields are broken into two major groups: those that all sites share and those that are site-specific.

### Set Up System Sequence Data

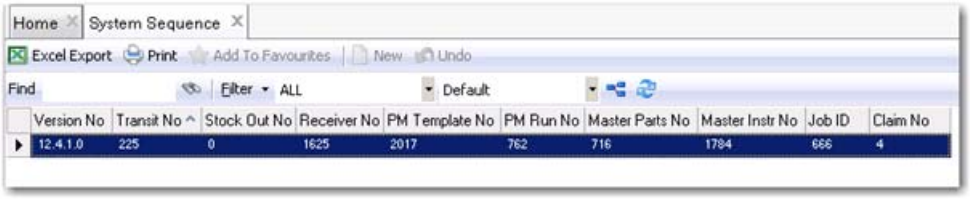
All sites share ten fields listed in the System Administration|System Sequence screen: Transit No, Stock Out No, Receiver No, PM Template No, PM Run No, Master Tool No, Master Parts List No, Master Instruction List No, Job No, and Claim No.

One site can create a Master Instruction List but any other site can access and use it. However, numbers for some other documents or files are site-specific, meaning that each site has its own set of work order numbers. If you have two sites, there could be two work orders with number 10101. It takes both the site and the work order number to create a unique identifier, whereas the Master Instruction List number is unique, regardless of the site.

## System Sequence Browse

Access this browse from System Administration. Use it to organize and display the System Sequence record, to edit the record, or to export the data to Excel.

**Fig. 10.83**
System Sequence Browse




## System Sequence Record Detail

The System Sequence record detail contains the current record number for these nine fields.

*Claim No.* The Reimbursement Claim number is not site-specific, and this field displays the claim number used in the system. This is the number of the last claim for which a reimbursement has been received.

*Job ID.* The job ID is not site-specific. The administrator can change this number to a higher figure. If the number is changed, the system increments from that point forward.

*Master Instr No.* This field displays the last instruction list number used within the system.

***Note*** EAM continually changes this number as Master Instruction Lists are created. The system administrator can interrupt the automatic sequencing by coming into the system sequence module and resetting the last Master Instruction List number to any higher than the previous number. Once reset, the system continues to automatically increment that number from that point forward.

*Master Parts No.* This field displays the last-used Master Parts List number. The Master Parts List number has the same properties as the Master Instruction List number. It is not site-specific; therefore, the Master Parts List number 1 is the same in all sites.

*PM Run No.* A number representing the last batch routine event that automatically issued PMs that were due. The administrator can change this number to a higher value. If the number is changed, the system increments from that point forward.

*PM Template No.* The PM Template number is not site-specific, and this field displays the last PM number used in the system. The administrator can change this number to a higher value. If the number is changed, the system increments from that point forward.

*Receiver No.* This number represents the last used receiver document number and is not site specific. The administrator can change this number to a higher value. If the number is changed, the system increments from that point forward.

*Stock Out No.* This number is not site specific, and this field displays the last Stock Out number used in the system.

*Transit No.* This number is not site specific, and this field displays the last Transit number used in the system. EAM uses it for each unique inventory relocation from one site to another.

## Set Up Site Sequences Data

There are ten fields listed in the System Sequence module at System Administration|Site Sequence screen that are unique for each site: Inv No, Inv Trans No, PO No, Multi-Line (Req) No, RFQ No, Service No, Stock Run No, Stores Req No, WO No, and BO No.

## Site Sequences Browse

Access this browse from System Administration. Use it to organize and display the System Sequence record, to edit the record, or to export the data to Excel.

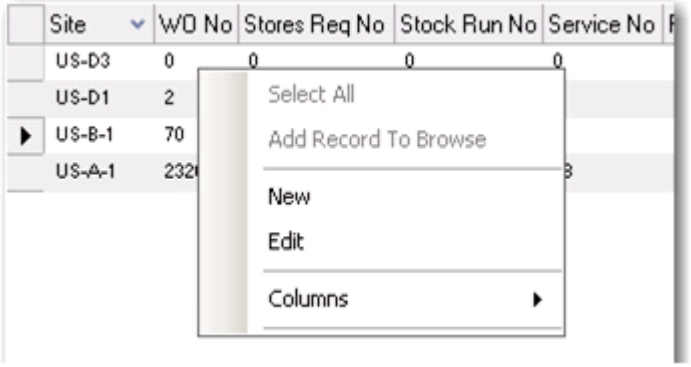
**Fig. 10.84**
Site Sequences Browse




### Site Sequences Right-Click Menu

The right-click menu contains administrative functions.

**Fig. 10.85**
Site Sequences Right-Click Menu




Edit

Use Edit to open and to edit the System Sequence record detail.

## Site Sequences Record Detail

The Site Sequences records contains the current record number for these ten tables and documents.

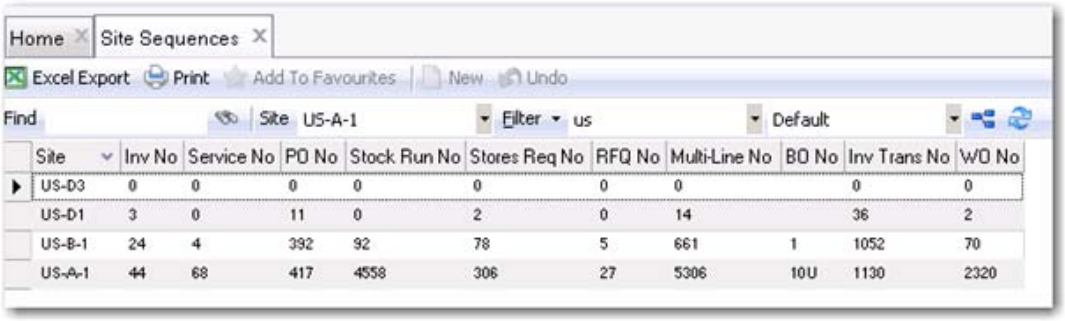
## Editing the Site Sequences Record

1 Put the cursor in the module and site with the sequence number you want to set, then enter the next number for this record.

2 Verify the field name whose number you want to change.

3 Enter or update information in the relevant fields.

**Fig. 10.86**
Site Sequences Browse




| Site | Inv No | Service No | PO No | Stock Run No | Stores Req No | RFQ No | Multi-Line No | BO No | Inv Trans No | WO No |
|---|---|---|---|---|---|---|---|---|---|---|
| US-D3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| US-D1 | 3 | 0 | 11 | 0 | 2 | 0 | 14 | | 36 | 2 |
| US-B-1 | 24 | 4 | 392 | 92 | 78 | 5 | 661 | 1 | 1052 | 70 |
| US-A-1 | 44 | 68 | 417 | 4558 | 306 | 27 | 5306 | 10U | 1130 | 2320 |

*Inv No.* This number represents the last used physical inventory number for the specific site. The system administrator can change this number to alter what the next physical inventory number is. The system refers to the number here and increments by one when creating a new physical inventory.

*Service No.* This number represents the last used service request number for the specific site. The system administrator can change this number to alter what the next service request number is. The system refers to the number here and increments by one when a new service request is created.

*PO No.* This number represents the last used purchase order number for the specific site. The system administrator can change this number to alter what the next purchase order number is. The system refers to the number here and increments by one when a new purchase order is created.

*Stock Run No.* This number represents the last used stock run number for the specific site. The system administrator can change this number to alter what the next stock run number is. The system refers to the number here and increments by one when a new stock run is created.

*Multi-Line No (Req Header No).* This number represents the last used requisition header number for the specific site.

*Stores Req No.* This number represents the last used stores requisition list number for the specific site. The system administrator can change this number to alter what the next stores requisition list number is. The system refers to the number here and increments by one when a new stores requisition list is created.

*WO No.* This number represents the last used work order number for the specific site. The system administrator can change this number to alter what the next work order number is. The system refers to the number here and increments by one when a new work order is created.

*RFQ No.* This number represents the last used request-for-quote number for the specific site. The system administrator can change this number to alter what the next request-for-quote number is. The system refers to the number here and increments by one when a new quote is created.

*BO No.* This number represents the last used blanket order number for the specific site. The system administrator can change this number to alter what the next blanket order number is. The system refers to the number here and increments by one when a new blanket order is created.

*Inv Transit No.* This number represents the last used inventory transit number for the specific site. EAM defines it for each unique inventory relocation from one site to another that is designed to go through transit.

## Set Up Registry Data

Set the database level features in the registry. During the installation of EAM, the registry is populated with values. Access to the registry has three purposes:

- Reviewing the registry settings in case of a question.
- Changing a value in case it was entered incorrectly during the installation
- Adding or updating a registry setting

Do not modify the registry unless there is a definite need to do so. Contact the QAD EAM Support group for advice on your situation.

***Note*** A number of entries in the browse are either no longer used or are scheduled for use in the future. Those items are not explained in this document.

## Registry Browse

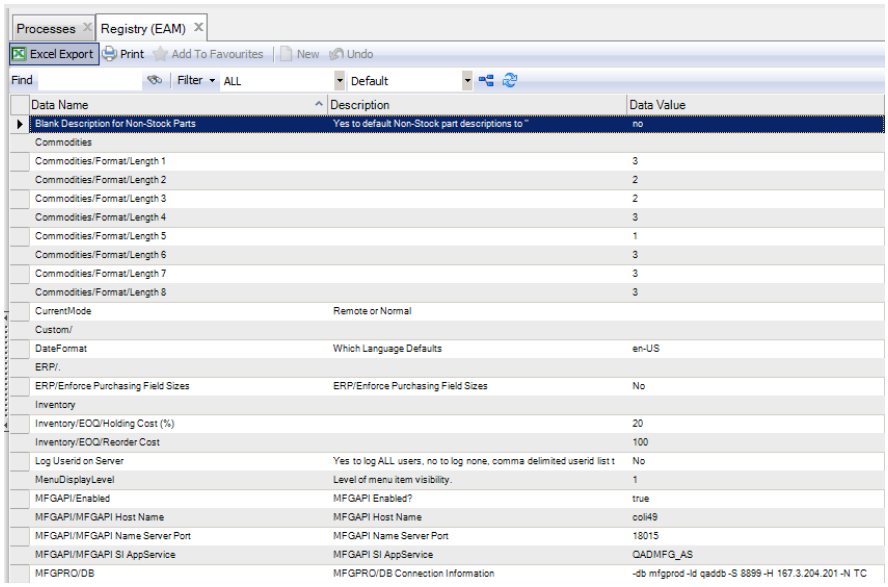
Access this browse from System Administration. Use it to organize and display the registry record, to edit the record, or to export the data to Excel. The default display consists of the following columns:

*Data Name.* Various elements are found in the registry. Some of the elements are children of a parent element. In other words, there are multiple lines on the browse for a single registry element such as Commodities. The default display presents the data names in alphabetical order. None of the data names can be changed or deleted.

*Description.* A brief explanation of the highlighted element. Not all lines have an explanation—especially a child of a parent element. None of the descriptions can be changed or deleted.

*Data Value.* The asked-for entry of the highlighted element. Not all lines have a data value—especially a child of a parent element. This is the only column where an entry can be made or changed.

**Fig. 10.87**
Registry Browse View 1




*Blank Description for Non-Stock Parts.* Yes or No data value. Enter No to default the non-stock part description to “non-stock part.”

*Commodities Section.* Format commodity codes to match industry standards. The element in the EAM Registry controls formatting for the commodity code on screens and when printing.

Commodity codes are an important tool for buyers to help analyze a company’s spending habits. Commodity codes group items based on the type or use of the part. Your company might have tens of thousands of part numbers. Many of these items are similar; however, it is hard for a buyer to connect two part numbers together in the same family without the use of a commodity code.

The buyer uses commodity code reports to analyze how much and where the company is spending. With this information, the buyer can focus on commodities where the company spends the most money. They can also use commodity-purchasing history to negotiate with suppliers for volume purchase discounts. In most cases, each grouping in a commodity code represents a type of part.

Starting at Commodities/Format/Length 1, update the Data Value column by placing your cursor in the field and entering the needed commodity code length. Continue adding the needed commodity code length in the rest of the fields.

The following rules apply for all new values entered:

- Length must be an integer.
- If any later lengths are not zero, length 5 cannot be zero.
- The sum of all lengths (including dashes) cannot exceed 15.

*Date Format.* Specify the default language to define the coordinating date format. For example, enter en-US for U.S. English.

*ERP/Enforce Purchasing Field Sizes.* When this is set to Yes, it prevents users from entering PO text that is more than 1140 characters.

*Inventory/EOQ/Holding Cost (%).* Enter a data value for this percentage.

*Inventory/EOQ/Reorder Cost.* Enter a reorder cost.

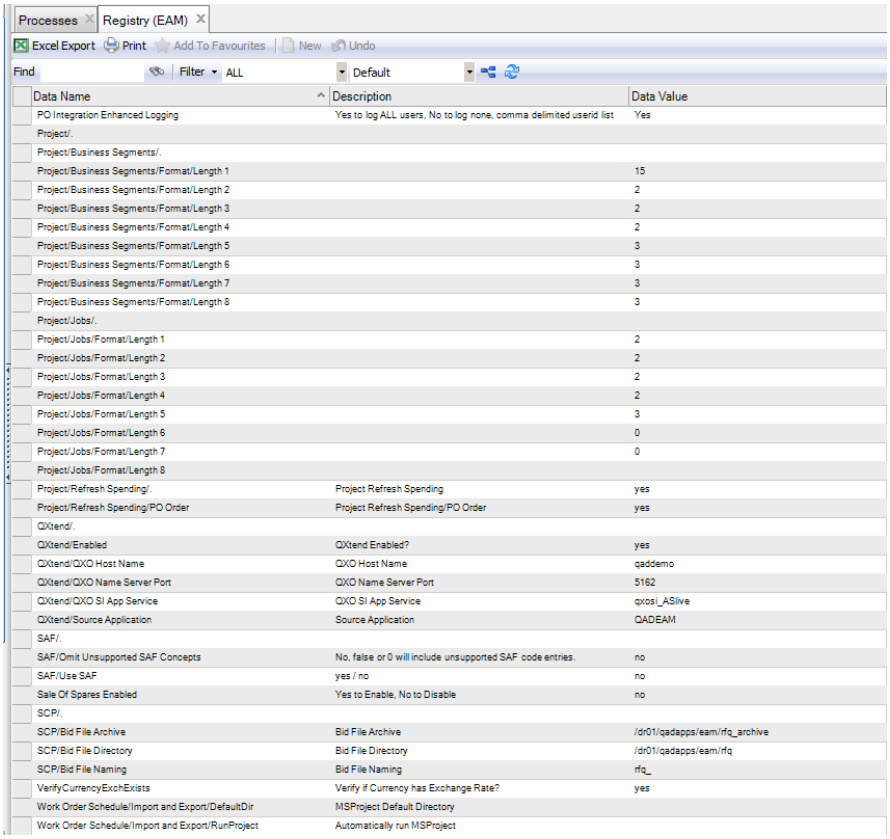
*Log Userid on Server.* Logging is enabled for zero, one, multiple, or all users via the Registry entry.

*MenuDisplayLevel.* QAD sets this value. Do not change it from 1. The setting determines what menu items are visible.

*MFGAPIEnabled.* To use an API for integration with the QAD ERP, set the Data Value to true. If enabled, enter the Host Name, Server Port, and Service (name).

*MFGPRO/DB.* Enter MFGPRO/DB connection information. For example, `-db mfgprod -id-qaddb -S 8899 -H 167.3.204.201 -N TC.`

**Fig. 10.88**
Registry Browse View 2




| Data Name | Description | Data Value |
|---|---|---|
| PO Integration Enhanced Logging | Yes to log ALL users, No to log none, comma delimited userid list | Yes |
| Project/. | | |
| Project/Business Segments/. | | |
| Project/Business Segments/Format/Length 1 | | 15 |
| Project/Business Segments/Format/Length 2 | | 2 |
| Project/Business Segments/Format/Length 3 | | 2 |
| Project/Business Segments/Format/Length 4 | | 2 |
| Project/Business Segments/Format/Length 5 | | 3 |
| Project/Business Segments/Format/Length 6 | | 3 |
| Project/Business Segments/Format/Length 7 | | 3 |
| Project/Business Segments/Format/Length 8 | | 3 |
| Project/Jobs/. | | |
| Project/Jobs/Format/Length 1 | | 2 |
| Project/Jobs/Format/Length 2 | | 2 |
| Project/Jobs/Format/Length 3 | | 2 |
| Project/Jobs/Format/Length 4 | | 2 |
| Project/Jobs/Format/Length 5 | | 3 |
| Project/Jobs/Format/Length 6 | | 0 |
| Project/Jobs/Format/Length 7 | | 0 |
| Project/Jobs/Format/Length 8 | | |
| Project/Refresh Spending/. | Project Refresh Spending | yes |
| Project/Refresh Spending/PO Order | Project Refresh Spending/PO Order | yes |
| QXtend/. | | |
| QXtend/Enabled | QXtend Enabled? | yes |
| QXtend/QXO Host Name | QXO Host Name | qaddemo |
| QXtend/QXO Name Server Port | QXO Name Server Port | 5162 |
| QXtend/QXO SI App Service | QXO SI App Service | qxosi_ASlive |
| QXtend/Source Application | Source Application | QADEAM |
| SAF/. | | |
| SAF/Omit Unsupported SAF Concepts | No, false or 0 will include unsupported SAF code entries. | no |
| SAF/Use SAF | yes / no | no |
| Sale Of Spares Enabled | Yes to Enable, No to Disable | no |
| SCP/. | | |
| SCP/Bid File Archive | Bid File Archive | /dr01/qadapps/eam/rfq_archive |
| SCP/Bid File Directory | Bid File Directory | /dr01/qadapps/eam/rfq |
| SCP/Bid File Naming | Bid File Naming | rfq_ |
| VerifyCurrencyExchExists | Verify if Currency has Exchange Rate? | yes |
| Work Order Schedule/Import and Export/DefaultDir | MSProject Default Directory | |
| Work Order Schedule/Import and Export/RunProject | Automatically run MSProject | |

*PO Integration Enhanced Logging.* Enter yes, no, or a list. Enter yes to log ALL users, no to log no users, or a comma-delimited user ID list to log specific users.

*Production Hours.* EAM shows Production Hours/Readings/DataFileWithPath in the Data Name column. Update the Data Value column by placing your cursor in the field and entering the name and location of the data file of production readings to read for the Loads Production Hours batch job. If there is no entry in the registry or the file name entered cannot be found, the e-mail sent to the batch job's Notify notes this lack of data and informs the Notify that the job ran.

### Project Business Segments

An organization may have specialized business segments that operate as distinct units, concentrating on particular interests or tasks. EAM allows managers to track which business segments are initiating particular capital projects, and to identify the driving business segments in the Project module. With EAM, you can add up to eight levels to the business segment format. That provides the flexibility to define the format based on your organization's requirements. In addition to formatting the business segment, the length of the business segment can be selected for a total of up to 15 characters among the eight levels of formatting.

***Note*** Both the job format and the business segments format follow the same rules.

*Project Jobs.* Larger projects need to be broken down into many components, called jobs. Sometimes these jobs have smaller jobs, which collectively make up the higher-level job. With EAM, you can add up to eight levels of formatting to the job number. That provides the flexibility to define the format based on your organization's requirements. A primary reason for using the job format is to enable cost rollup of jobs in reporting. In addition to formatting the job number, the length of the job number can be selected for a total of up to 15 characters among the eight levels of formatting.

Starting at Project/Jobs/Format/Length 1 update the Data Value column by placing your cursor in the field and entering the required job code length. Continue adding the needed job code length in the rest of the fields.

The following rules apply for all new values entered:

- Length must be an integer.
- If any later lengths are not zero, length 5 cannot be zero.
- The sum of all lengths (including dashes) cannot exceed 15.

*Project Refresh Spending.* Enter Yes or No to indicate whether project spending is refreshed when a PO is ordered.

*QXtend.* QXtend, including all related fields in the Registry browse, is no longer in use.

*SAF.* Supplementary Analysis Fields (SAF) background: QAD Enterprise Edition provides sub-account, cost center, project, and SAF analysis to use for additional analytical reporting on transactions. SAF analysis is optional, but lets you create detailed views of data. Using SAFs, you can analyze a single sub-account in many different ways by filtering based on the SAF codes included in the postings to the account. A carefully planned set of SAF structures avoids the need to set up separate COA elements for individual reporting.

Enter Yes or No to indicate whether EAM uses SAF at SAF/Use SAF?. Enter No, false, or 0 to include unsupported SAF code entries at SAF/Omit Unsupported SAF Concepts in the Data Name column.

*SCP.* To use EAM to Supply Chain Portal, enter the bid file archive name and the path to use at SCP/Bid File Archive in the Data Name column. Enter the bid file directory name and path to use at SCP/Bid File Directory in the Data Name column. Enter the bid file name and path to use at SCP/Bid File Naming in the Data Name column. Update the Data Value column by placing the cursor in the field and entering the needed information.

*Verify Currency Exch Exists.* Enter Yes or No to indicate whether EAM verifies that a currency exchange rate exists when a PO is received. If set to No and a currency exchange rate exists, EAM uses it. If set to No and a currency exchange rate does not exist, EAM uses a 1-to-1 rate.

*Work order Schedule/Import and Export/Default Dir.* Enter the default directory for MS Project.

*Work Order Schedule/Import and Export/Run Project.* Reserved for future development.

# Report Setup

Use this module to substitute a custom print document for the standard. A custom print document can be the replacement for one of the print documents found in EAM.

## Report Xref

There are seven print documents found in EAM: Stock Replenishment, (Physical Inventory) Count Sheet, Requisition, Service Request Document, (Stores Requisition) Pick List, Purchase Order, and Work Order Document. When a custom print document is substituted for the standard, it prints when the Print Document action is selected or when that document is selected from Analysis.

### Report Xref Browse

Access this browse from System Administration|Report Setup|Report Xref. Use it to organize and display records, to access supporting functions, and to edit or create new records.

***Note*** You cannot update any of the fields in the upper browse, which lists the print documents that can be customized. However, you can change the columns displayed in the upper and lower browses and save those settings. If you are going to substitute a custom print document, highlight the report name you want in the upper browse

## Report Xref Right-Click Menu

The right-click menu contains administrative functions.

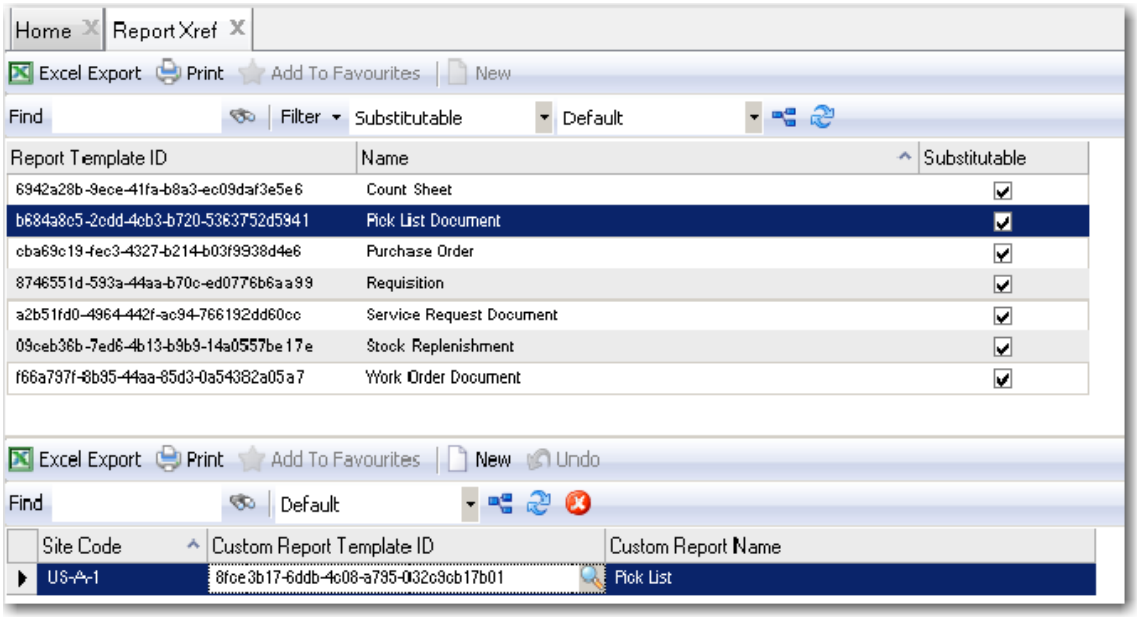
Columns

A list of columns available to the upper browse displays here. Select a column header to display it. Clear the column header to hide it.

1. From the upper browse, highlight the report name you want to substitute.
2. In the lower browse, click New to substitute a custom print document previously established in the Report Designer (System Administration|Report Designer) for the standard in a specific site.
3. If you know the site, enter it or access the Site Lookup to find it.
4. Move to the Custom Report Template ID and click the lookup to find the correct one. The Custom Report Template ID lookup displays all the custom reports and print documents added in the Report Designer. Find the correct print document and double-click it.
5. EAM fills in the Custom Report Name with the name of the selected template ID established in the Report Designer.
6. The same custom print document can be used in another site in place of the standard.

7 Close the user-defined fields browse by clicking the X on the top of the browse.

**Fig. 10.89**
Report Xref Upper/Lower Browse




# Mandatory Fields

Use this module to indicate that the user must provide data for critical fields. Mandatory fields are fields that must be populated before an action is taken such as save, put a purchase on order, or close a work order.

## Mandatory Fields Browse

Access this browse from System Administration|Mandatory Fields. Use it to organize and display records, to access supporting functions, and to edit or create new records.

**Fig. 10.90**
Mandatory Fields Option

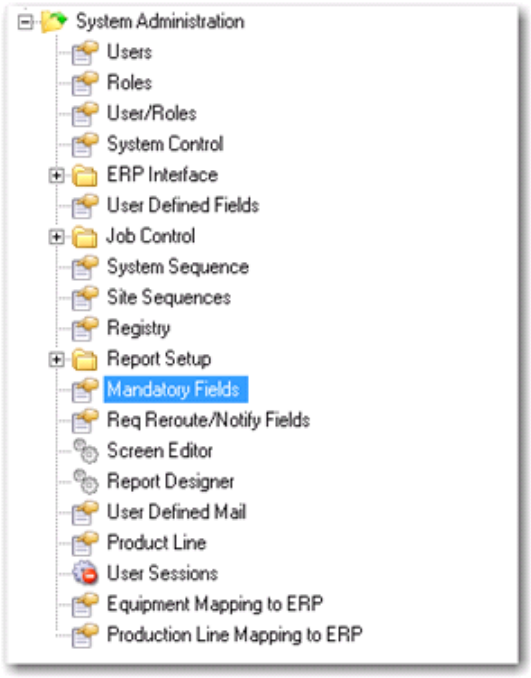



**Fig. 10.91**
Mandatory Field Browse

| Module | Action |
|---|---|
| Employee | Save |
| Equipment | Save |
| Inventory | Issue |
| Inventory | Save |
| Labor | Post |
| Master Instruction List | Save |
| Master Instruction Steps | Save |
| PM Template | Save |
| Purchase Order | Save |
| Purchase Order | Order |
| Purchase Order | Authorize |
| Receipts | Receive |
| Requisition Line | Save |
| Service Request | Save |
| Work Order | Save |
| Work Order | Close |

***Note*** You cannot update any of the fields in the upper browse. However, you can change the order of the columns displayed in the upper and lower browses and save those settings.

### Creating a Mandatory Field

The upper browse lists existing actions within each module that can be set up as required.

1. Select the site from the upper browse.
2. Select the action within the module from the upper browse.
3. The lower browse lists corresponding fields and indicates whether they are mandatory for the selected module and action.
4. Select the check box to add a mandatory field.
5. Close the mandatory fields browse by clicking the X on the Mandatory Fields tab at the top of the window.

### Editing a Mandatory Field

To modify mandatory fields, highlight the module and action.

1. Select the site from the upper browse.
2. The lower browse lists corresponding fields and indicates whether they are mandatory for the selected module and action.
3. Select the check box to add a mandatory field. Clear the check box to make a field optional.

   ***Note*** Some check boxes cannot be made optional because other settings within QAD require that they remain mandatory. For example, when Buyer/Commodity Purchasing? is selected on the Domain|Inventory tab, you cannot clear the Commodity field for Inventory within the Mandatory Fields browse.
4. Close the mandatory fields browse by clicking the X on the top of the window.

***Note*** Since mandatory fields are modified at the site level, any changes you make apply only to that particular site.

***Note*** Buyer/Commodity Purchasing automatically sets the Buyer and Commodity fields to mandatory when saving both Inventory and Requisitions. If you turn off Buyer/Commodity Purchasing, EAM clears the mandatory requirements for both Buyer and Commodity. You must reapply mandatory settings for those fields individually for Inventory and Requisitions, if needed.

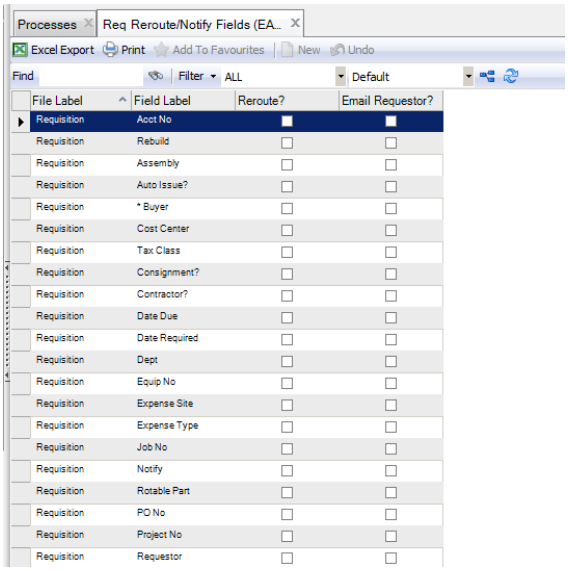
## Req Reroute/Notify Fields

Use this option to enable or disable rerouting or notification if modifications are done to certain fields on an approved requisition. You can define which fields on a requisition, if changed after authorization, cause rerouting for approval and send an e-mail to only the originator.

### Req Reroute/Notify Fields Browse

Access this browse from System Administration|Req Reroute/Notify Fields. Use it to organize and display records, to edit records, or to export data to Excel.

**Fig. 10.92**
Req Reroute/Notify Fields Browse




***Note*** You cannot add or delete any of the fields in the browse. However, you can change the columns displayed in the browse and save those settings.

## Req Reroute/Notify Fields Right-Click Menu

Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

## Editing a Req Reroute/Notify Fields Record

1. Highlight a record from the browse.
2. Select the check box for a field under Reroute? to cause an authorized requisition to reroute, even if the cost has not changed.
3. Select or clear the check box under Email Requestor? to give you the option to send an e-mail to the originator on a requisition when the selected fields are changed.
4. Close the browse by clicking the X on the top of the browse.

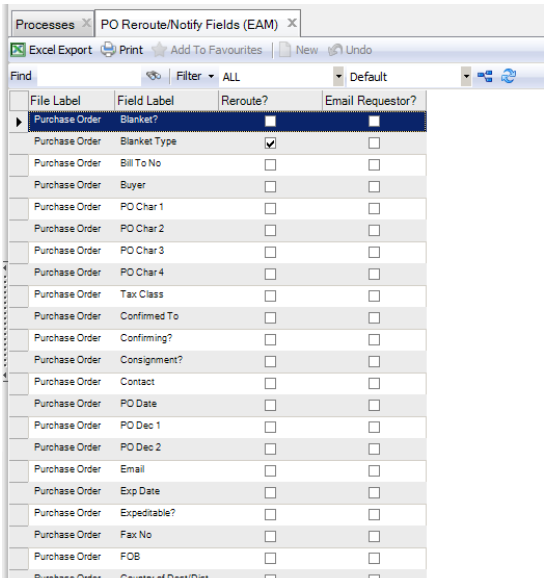
# PO Reroute/Notify Fields

Use this option to enable or disable rerouting or notification if modifications are done to certain fields on an approved purchase order. You can define which fields on a PO, if changed after authorization, cause rerouting for approval and send an e-mail to only the originator.

## PO Reroute/Notify Fields Browse

Access this browse from System Administration|PO Reroute/Notify Fields. Use it to organize and display records, to edit records, or to export data to Excel.

**Fig. 10.93**
PO Reroute/Notify Fields Browse




***Note*** You cannot add or delete any of the fields in the browse. However, you can change the columns displayed in the browse and save those settings.

## Editing a PO Reroute/Notify Fields Record

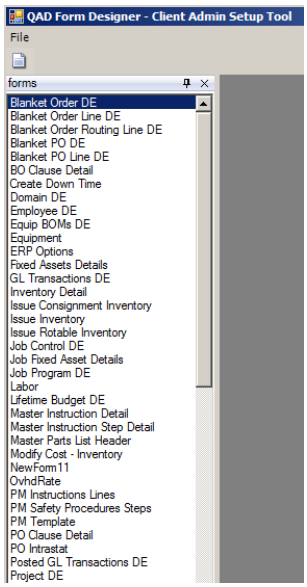
1. Highlight a record from the browse.
2. Select the check box for a field under Reroute? to cause an authorized PO to reroute, even if the cost has not changed.
3. Select or clear the check box under Email Requestor? to give you the option to send an e-mail to the originator on a PO when the selected fields are changed.
4. Close the browse by clicking the X on the top of the browse.

# Screen Editor

Navigate to System Admin|Screen Editor to use the Screen Editor to display or hide fields on tabs. If fields in the application do not apply, you can hide them. You can designate required fields and change the display order.

A Business Entity (BE) browser contains information about database linkage and field settings such as read only or group.

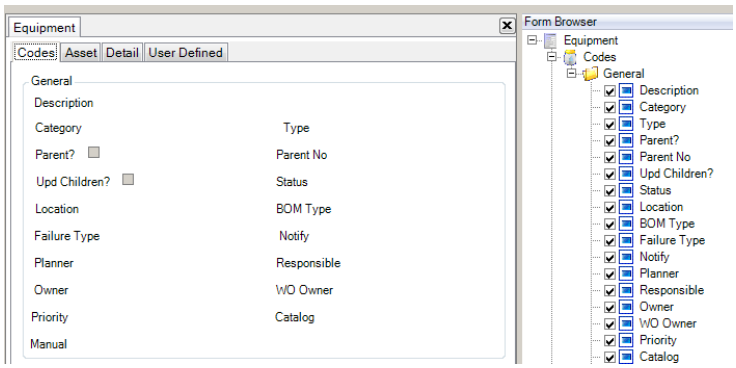
**Fig. 10.94**
Form Designer: Business Entity Browser




The left browse provides a list of business entities. Double-click the Equipment BE.

# Form Designer

**Fig. 10.95**
Form Designer: Business Entity Designer




The center panel displays the tabs in the Equipment BE and the fields on each tab that are currently selected for display. The right panel lists all of the possible fields and check boxes for the different Equipment Detail tabs.

Use the right panel to customize the fields and check boxes available on a tab. Clear the check boxes next to fields or check boxes you want to remove from the tab view. The view in Figure 10.96 reflects the changes made on the Form Browse. The check boxes for Parent? and Upd Children? are not visible, as well as the fields for Parent No, Failure Type, Priority, and Manual. These changes are also reflected on the Equipment Codes tab, shown in Figure 10.97.

**Fig. 10.96**
Form Designer: Tabs in the Equipment BE

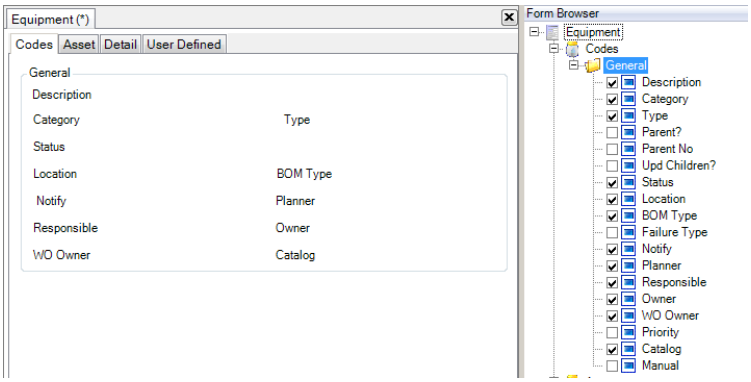
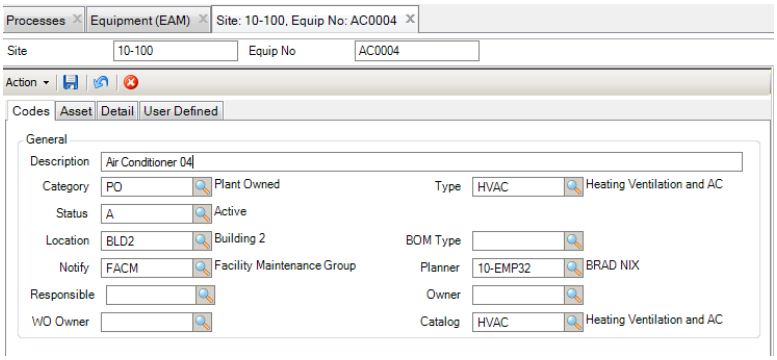


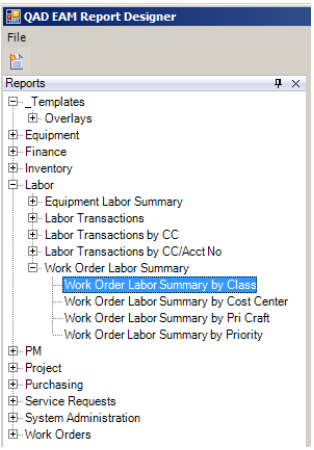

**Fig. 10.97**
Redesigned Codes Tab in the Equipment Record




# Report Designer

Navigate to System Administration|Report Designer to use the Report Designer to copy an existing report to create a report.

**Fig. 10.98**
Report Designer: Reports Browser

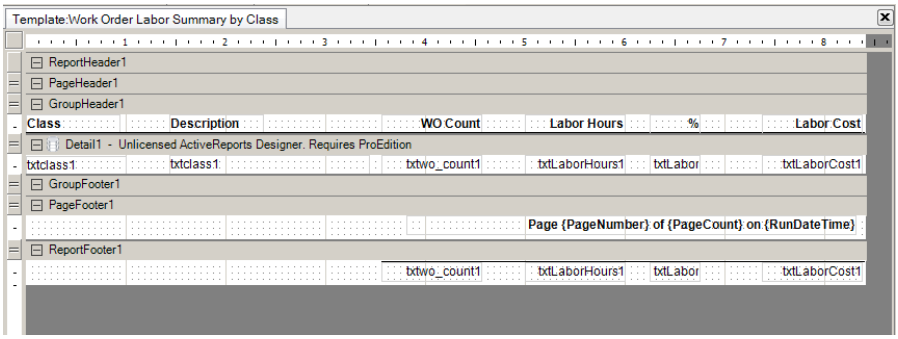


The left browse provides a list of standard reports for each module. Expand a module folder to display the reports available in the module by clicking the + (plus box to the left of a module folder).

1 Expand the Labor folder to display the Work Order Labor Summary folder. Expand the Work Order Labor Summary folder to display the Work Order Labor Summary by Class report.

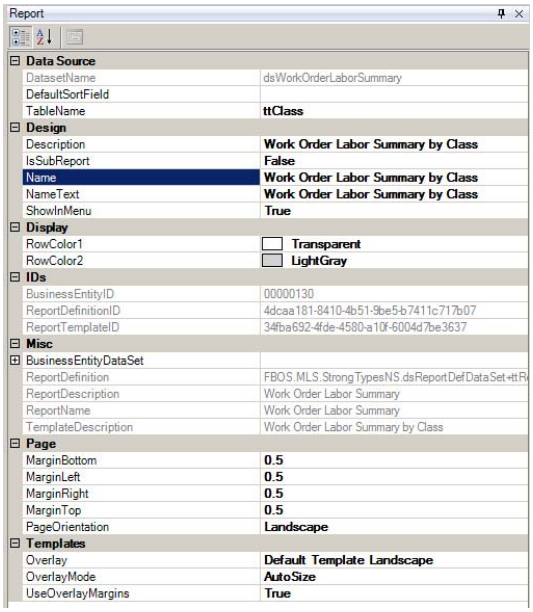
2 Double-click the Work Order Labor Summary by Class option to display the Work Order Labor Summary by Class report.

**Fig. 10.99**
Report Template: Work Order Labor Summary by Class




The center panel displays all the details of the report header.

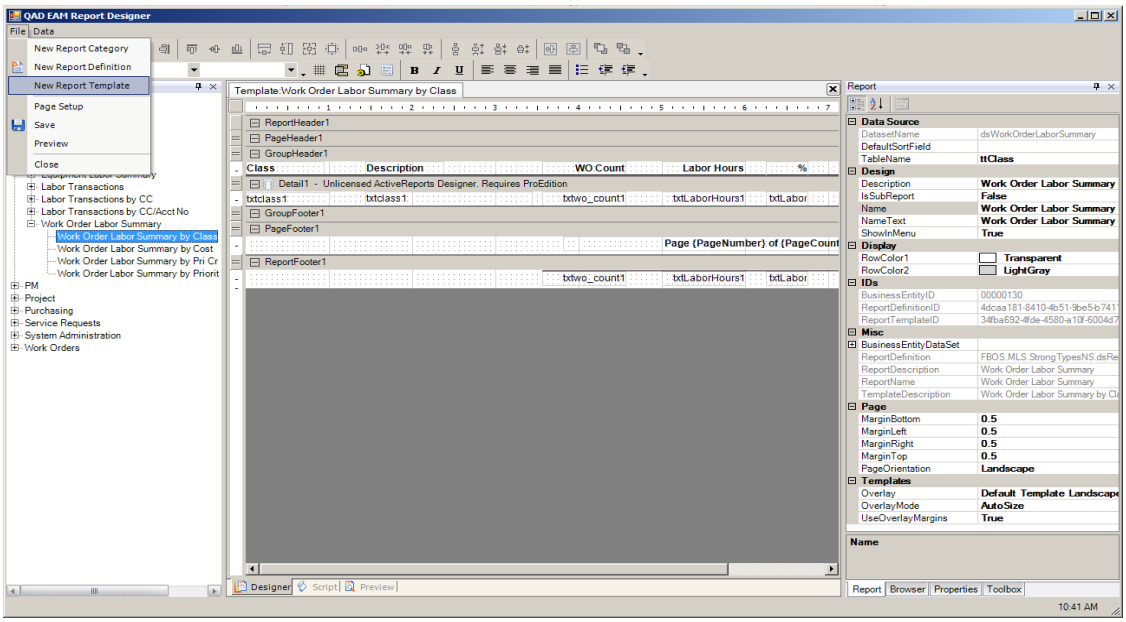
**Fig. 10.100**
Report Detail: Work Order Labor Summary by Class




The right panel displays all the specifications of the Report - Work Order Labor Summary by Class.

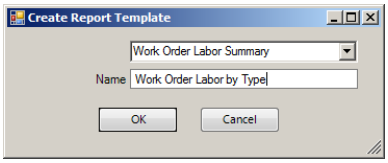
3 Add a report by copying an existing one. With the target report highlighted, click the File option on the menu bar. Select New Report Template.

**Fig. 10.101**
Report Designer: Add New Report Template



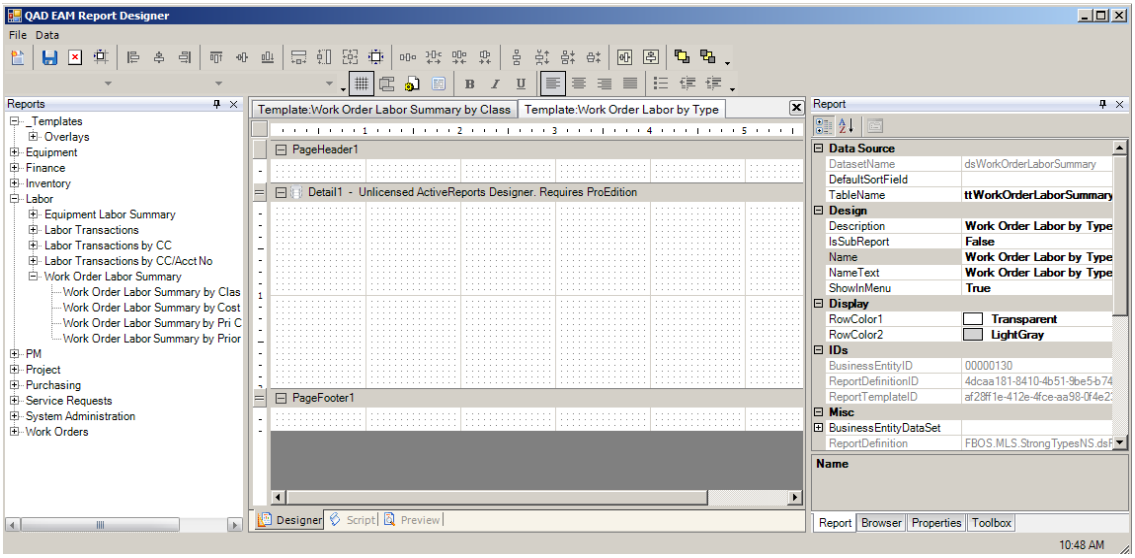

**4** Give the new report template a name.

**Fig. 10.102**
Report Designer: Create Report Template




EAM presents the new report template header and details. To ensure that your new report is available as a template in Report Xref, set the ShowInMenu option to True in the right panel under Design.

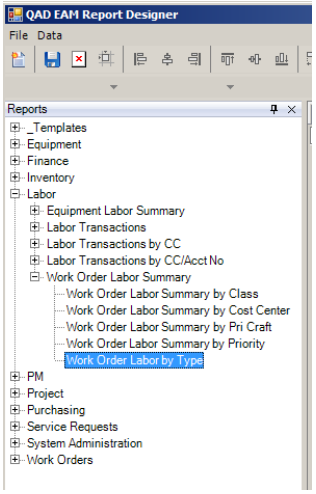
**Fig. 10.103**
Report Designer: New Report Template




**5** Save the new report template.

EAM presents the new report template in the Report Designer: Reports Browse.

**Fig. 10.104**
Report Designer: Reports Browse

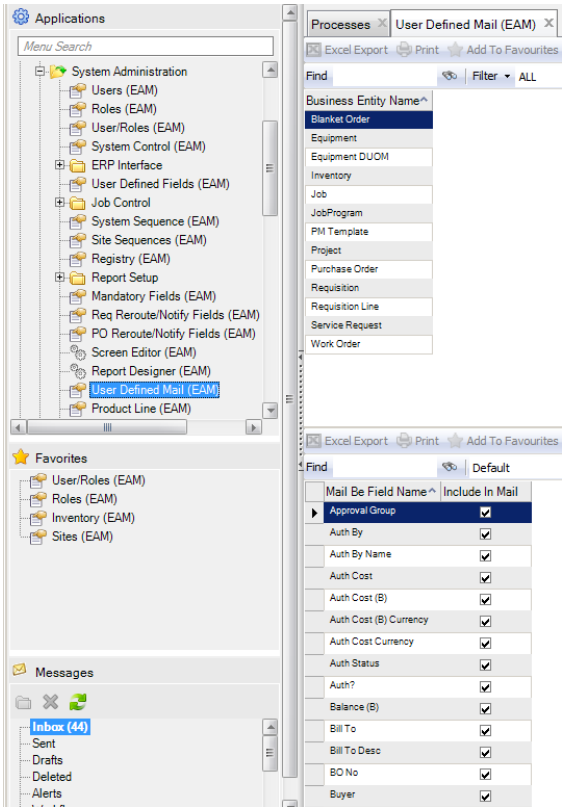



# User-Defined Mail

EAM creates many system-generated mail messages throughout the Maintenance, Inventory, Purchasing, and Project modules. For each type of mail message, EAM gives the user access to the relevant module while reading the mail message. For example, when the user receives a message indicating that the status of a work order has changed, EAM provides a link to the Work Order module so that the user can go to the work order browse.

You can define which fields are displayed in the system-generated mail messages, allowing different organizations using EAM to view only the details relevant to each group.

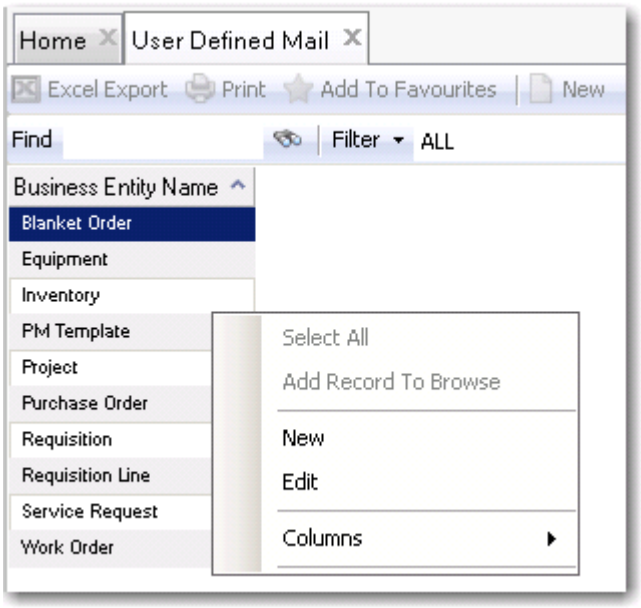
**Fig. 10.105**
User Defined Mail Option




## User Defined Mail Browse

Access this browse from System Administration|User Defined Mail. Use it to organize and display records, to edit or create new records, or to export data to Excel.

**Fig. 10.106**
User Defined Mail Upper Browse

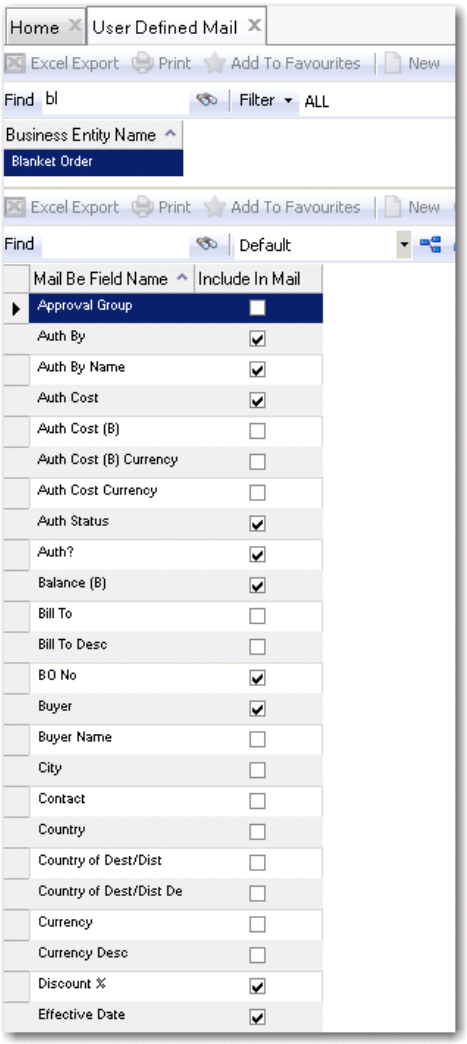



***Note*** You cannot update any of the fields in the upper browse.

### Columns

A list of columns available to the browse displays here. Select a column header to display it. Clear the column header to hide it.

**Fig. 10.107**
User Defined Mail Lower Browse for Blanket Order




## Creating a User Defined Mail Record

The upper browse lists each module that sends e-mails.

1 Select the module from the upper browse.

The lower browse lists available fields and indicates whether they are included in the EAM e-mail message for the selected module.

2 Select the check box to add a field in the EAM e-mail message.

3 Close the browse by clicking the X on the top of the window.

### Editing a User Defined Mail Record

Follow these steps to modify the fields included in EAM e-mail messages.

1 Highlight the module that you want to change in the upper browse.

The lower browse lists available fields and indicates whether they are included in the EAM e-mail message for the selected module.

2 Select the check box to add a field or clear the check box to remove a field.

3 Close the User Defined Mail browse by clicking the X on the tab.

***Note*** Because User Defined Mail fields are modified at the site level, any changes you make apply only to that particular site.

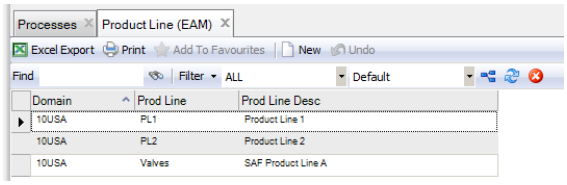
## Product Line

Use this module to add Product Lines to each domain. Then, assign them to selected parts records on the General tab. Add or edit product line codes at System Administration|Product Line. The codes entered here are exclusively for accounting/SAF purposes, and should match the corresponding SAF data found in Product Line Maintenance in the QAD ERP.

### Product Line Browse

Access this browse from System Administration|Product Line. Use it to organize and display records, to access supporting functions, and to edit or create new records.

**Fig. 10.108**
Product Line Browse




#### Creating a Product Line Record

1 Click New to open a blank product line record.

2 Assign a domain code to match one set up in both EAM and the QAD ERP.

3 Assign a product line code.

4 Enter product line description information.

5 Close the Product Line browse by clicking the X on the top of the browse.

#### Editing a Product Line Record

1 Double-click a record from the site browse or click Edit to open the product line record.

2 Enter information in relevant fields on the product line record.

3 Close the Product Line browse by clicking the X on the top of the browse.

### Product Line Right-Click Menu

The right-click menu contains administrative functions.

New

Use New to open the product line browse to create a record.

Edit

Use Edit to open the product line browse to edit the selected record.

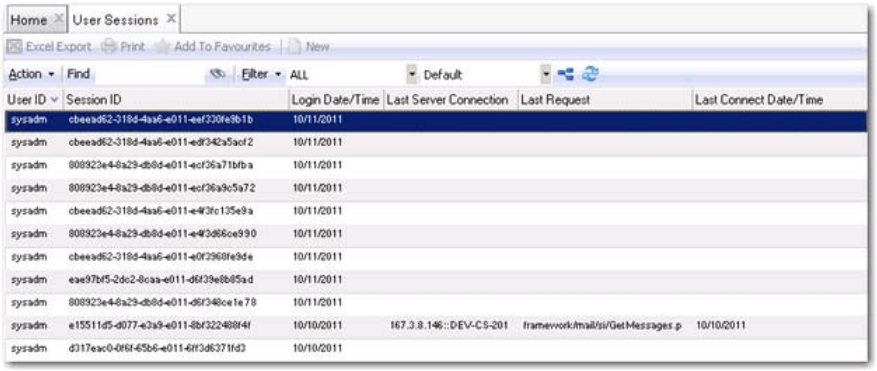
Columns

A list of columns available to the product line browse displays here. Select a column header to display it. Clear the column header to hide it.

## User Sessions Browse

Access this browse from System Administration|User Sessions. Use it to organize and display records. The browse displays the log information about the users, and the time and date of the requests each user made to all programs and modules.

**Fig. 10.109**
User Sessions Browse




## Equipment Mapping to ERP Browse

The Equipment Mapping to ERP browse within System Administration is a second link to the same option in Maintenance. For more information, see “Equipment Mapping to ERP” on page 206.

### Production Line Mapping to ERP Browse

This feature has not been implemented.

# Progress Editor

The Progress Editor can be used inside of the EAM .NET UI. This is similar to the `mgeditor.p` program in QAD SE and EE, with some distinct differences:

- Telnet is not supported. Only SSH/SSH2 is supported.
- Windows-based servers are not supported, only Unix/Linux. In other words, if your AppServers and databases are on a Windows server, you cannot use this feature.
- Users and system administrators cannot modify key mapping, font settings, and colors.

# Custom Programs

You can run custom Progress/OpenEdge programs directly from the main application menu, without having to run the Progress Editor first. Custom Programs are run on a UNIX server, not on the user's client machine. System administrators must compile the Custom Program and place the programs on the server via FTP, SCP, or another mechanism.

EAM's Progress Editor functionality must be fully configured before the Custom Programs functionality will work. It is not necessary to have the Progress Editor enabled in Role maintenance.

***Note*** The Custom Programs are automatically connected to the EAM and ERP databases but cannot share PROPATH with EAM or other QAD applications.

Custom Programs are secured by user through User/Role maintenance. Users must have proper role access to add and run Custom Programs, and to access the Custom Menus folder. See "Roles" on page 664 for information on editing or adding roles.

## Adding a Custom Program

To add a custom program:

1. Log into EAM as a user with access to Custom Programs.
2. Navigate to System Administration|Custom Programs.
3. Click New. A new line appears in the table and EAM assigns an Order number.
4. Enter a unique title and tab to the Program field.
5. Enter a unique, compiled .r program name, including its path.
6. Press Enter to save.

Chapter 11

# EAM Maintenance Manager Dashboard

This chapter describes how to view and leverage the EAM Maintenance Manager Dashboard, which is one of the dashboards available in QAD .NET UI.

***Introduction 764***

***General Information 764***

***EAM Operational Metrics 769***

# Introduction

The QAD .NET UI provides one EAM dashboard that brings together a variety of operational metrics within a single panel. QAD provides the Operational Metrics functionality with an active maintenance contract. For more information, contact QAD Support.

You can customize this off-the-shelf dashboard, or you can create your own dashboards. To configure the dashboards, assign them, and perform other customizations, see *Introduction to QAD Enterprise Applications User Guide* and *QAD .NET UI Administration Guide* for 2016 EE.

# General Information

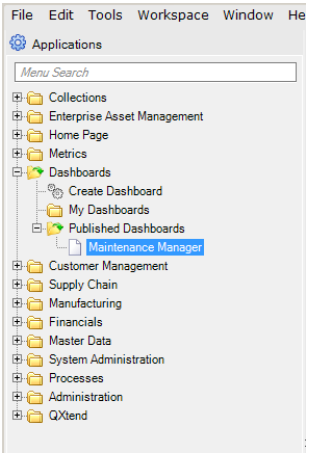
The following topics apply to the EAM dashboard:

- Accessing the Dashboard
- Tools
- Dashboard Colors
- Navigation

## Accessing the Dashboard

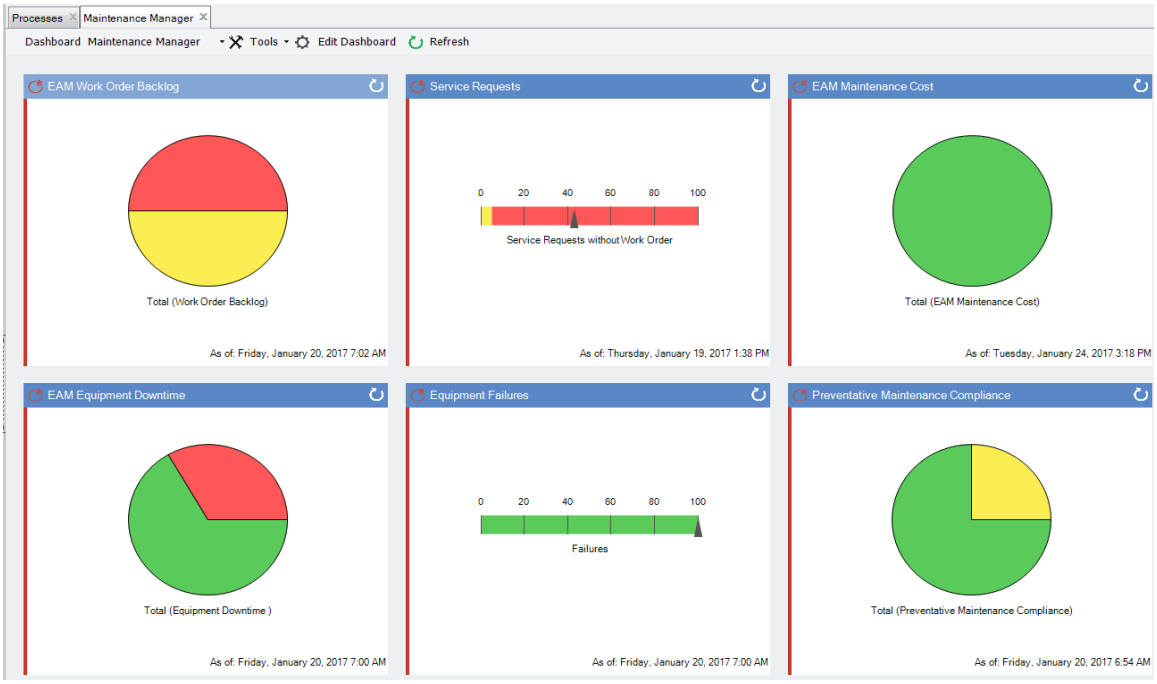
The Maintenance Manager dashboard is part of the Dashboards module in the QAD .NET UI. It is not accessible from within the Enterprise Asset Management module in the QAD Enterprise Application. To work with the EAM dashboard, open the Published Dashboards folder within Dashboards and select Maintenance Manager, or type Maintenance Manager into the Applications search.

**Fig. 11.1**
Maintenance Manager in Dashboard Folder




Double-click Maintenance Manager to open the EAM dashboard.

**Fig. 11.2**
Maintenance Manager Dashboard

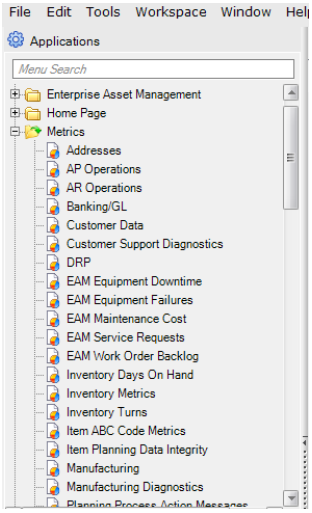



The Maintenance Manager dashboard displays six metrics.

- EAM Work Order Backlog
- Service Requests
- EAM Maintenance Cost
- EAM Equipment Downtime
- Equipment Failures
- Preventive Maintenance Compliance

In addition to viewing the metrics on the dashboard, you can access the six metrics directly from the Metrics module, which is also part of the main QAD .NET UI.

**Fig. 11.3**
EE Metrics Menu

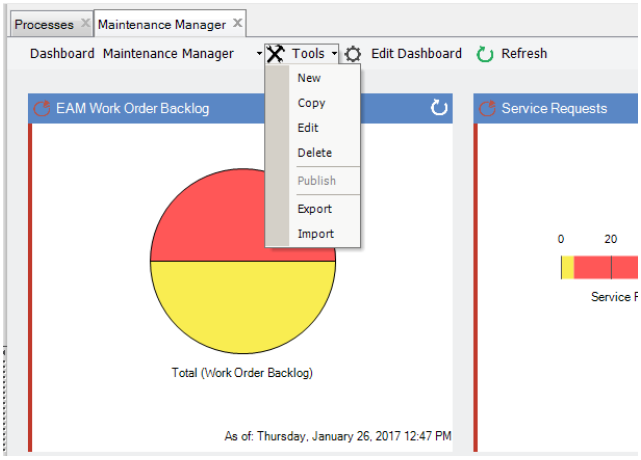



## Tools

You can create, edit, and delete dashboards directly in the QAD .NET UI. The Tools drop-down menu contains options for creating and editing dashboards. You also can copy and edit an existing dashboard.

System administrators can share the dashboard with others and assign it to one or more roles, change the maximum number of panels allowed in a dashboard, copy dashboards between systems, and modify access and display settings. For additional information on configuring dashboards, see *QAD .NET UI Administration Guide*.

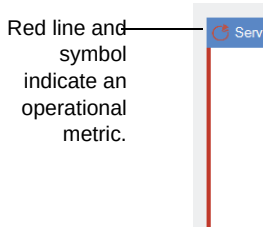
**Fig. 11.4**
Tools



## Dashboard Colors

Colors show the source for each of the panels and, in the case of operational metrics and browse-based panels, show how actual performance compares to preset limits. Colors indicate the source of the panel data. A thin color line on the border as well as the color of the symbol adjacent to the name indicate the source of the data in the panel. For EAM, all panels are operational metrics and display a thin red line.

**Fig. 11.5**
Panel Source Colors



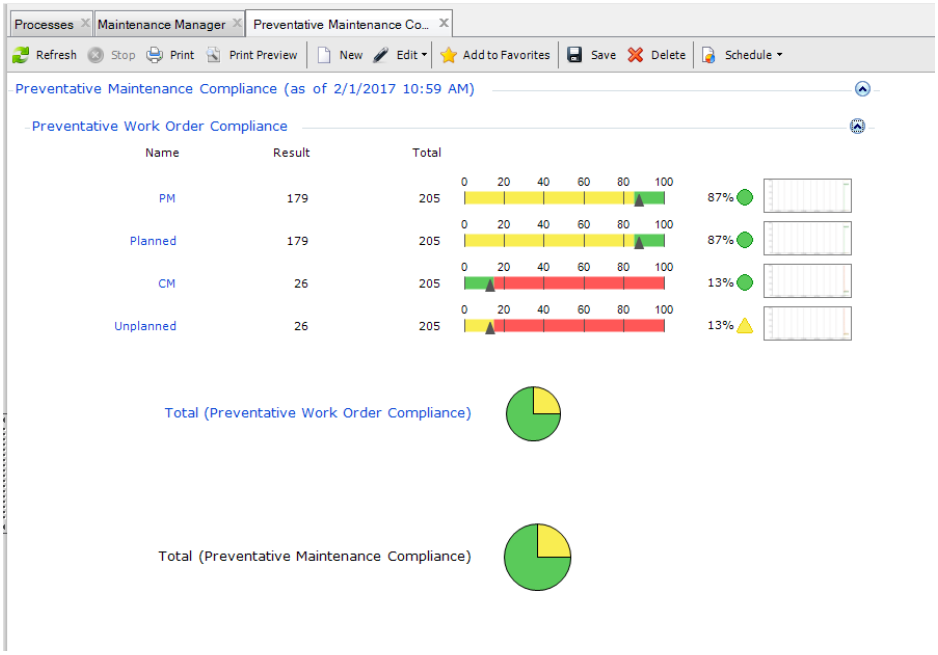

Operational metrics are shown as pie charts or sliders. Colors displayed within the operational metric panels indicate the following:

- Green indicates good performance.
- Yellow indicates fair performance but with a caution to watch the performance.
- Red indicates the metric is in poor performance.

***Important*** Each operational metric has a different user-set range—or threshold—for green, yellow, and red.

The Total pie chart indicates the percentage of results for the whole metric group that appear in each color band. In Figure 11.6, 75% of results appear in the green band and 25% appear in the yellow.

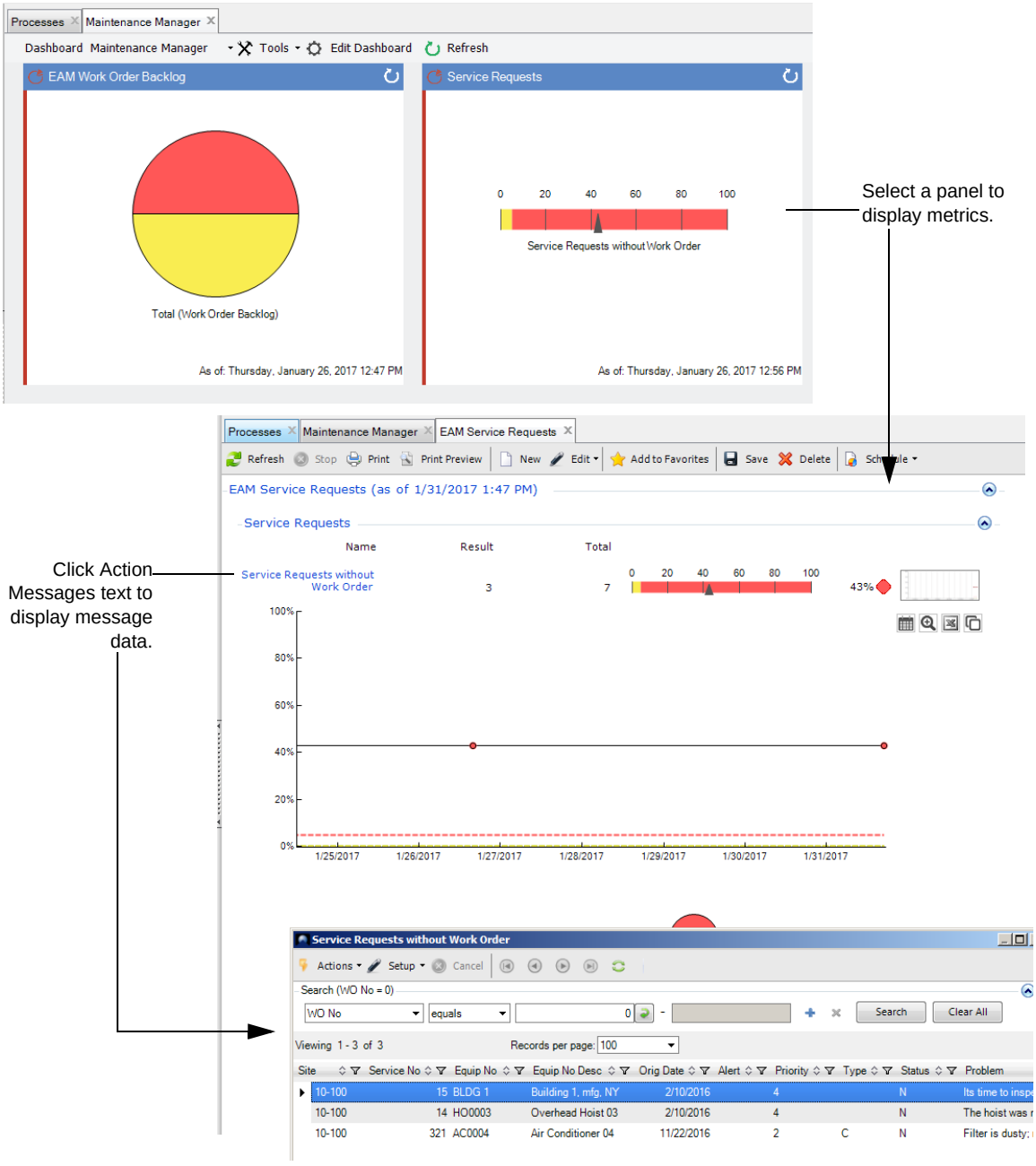
**Fig. 11.6**
Dashboard Colors



## Navigation

When you click on a panel, you go to the operational metric itself, and from there you can drill into the data used to create the graphics.

**Fig. 11.7**
Metrics Panel and Resulting Metrics Display



# Role-Based Dashboards

The role-based dashboards in the system attempt to achieve the following basic goals:

1. Provide focus to daily work. What are the key activities that a worker in a particular role must do each and every day? What kinds of data or information would help that worker prioritize the daily work? Is it possible to provide an effective index to the current backlog of work, isolating the vital few problems that need to be addressed from the trivial many that can be safely deferred? Where can workers best spend their limited time?
2. Wherever possible, extend the existing capabilities of EAM. In some cases, this takes the form of additional functionality; in other cases, it reorganizes the way existing data displays for you, which, in effect, improves the user interface to key system functions.
3. Show current performance against key metrics and key performance indicators as well as how performance has changed over time.
4. Provide more real-time metrics as alerts to issues while there is still time to take action. While there are still many displays of historical performance and trends, the key to improving performance is to shorten the response time between when a problem occurs and when workers know about it.

# EAM Operational Metrics

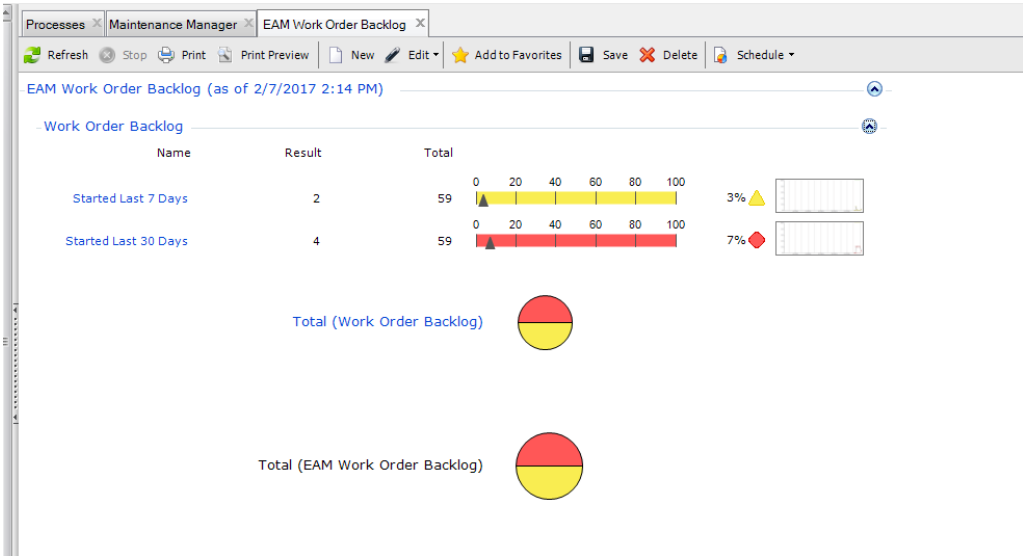
This section describes the six panels on the EAM Maintenance Manager Dashboard. The top three panels focus on your maintenance activity and expenses. The lower three panels focus on equipment availability and preventive maintenance compliance.

These metrics can be used as provided, or you can create your own operational metrics. To configure the metrics, schedule them, and perform customizations, see the Creating Browse Operational Metrics section of the Browses chapter in the *Introduction to QAD Enterprise Applications User Guide* and the *QAD .NET UI Administration Guide* for 2016 EE.

## EAM Work Order Backlog

The EAM Work Order Backlog metric illustrates how many work orders that were started in the past 7 days and past 30 days remain open in the system.

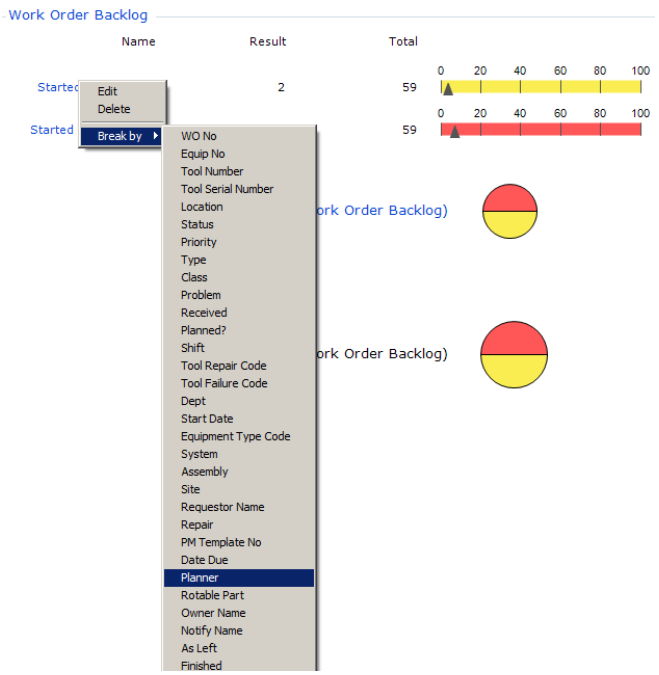
**Fig. 11.8**
EAM Work Order Backlog




The Result and Total columns list the raw data values of WOs that have been opened during the respective time periods and the system-wide total number of open WOs. That data is used to determine the percentage of WOs that remain open. The percentage is displayed to the right of the colored line graphs. The triangle along the yellow line marks the percentage of work orders that were started in the past seven days and remain open. The triangle along the red line marks the percentage of work orders that were started in the past 30 days and remain open.

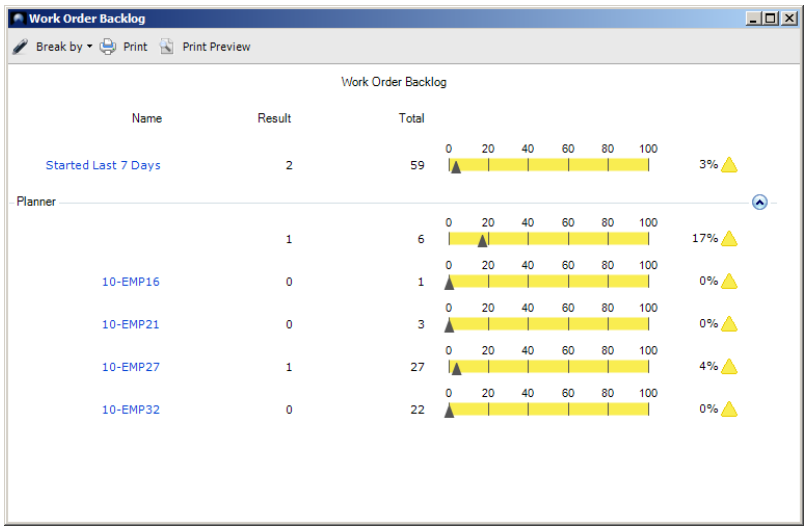
You can drill into the data by using the Break By option in the right-click menu.

**Fig. 11.9**
EAM Work Order Backlog Break By



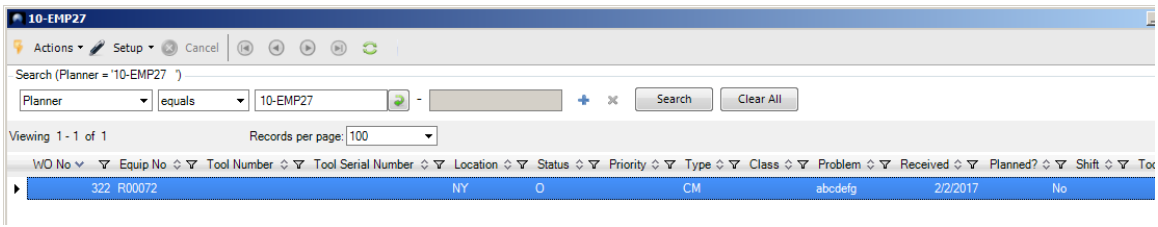
For example, you can generate a new graphic that displays open WOs by Planner for the WOs that were started in the past seven days, as shown in Figure 11.10.

**Fig. 11.10**
EAM Work Order Backlog Break By Planner




You can continue to drill into the data by selecting one of the planners in the left column to view the details about the specific WO that is still open.

**Fig. 11.11**
EAM Work Order Backlog Break By Planner Browse

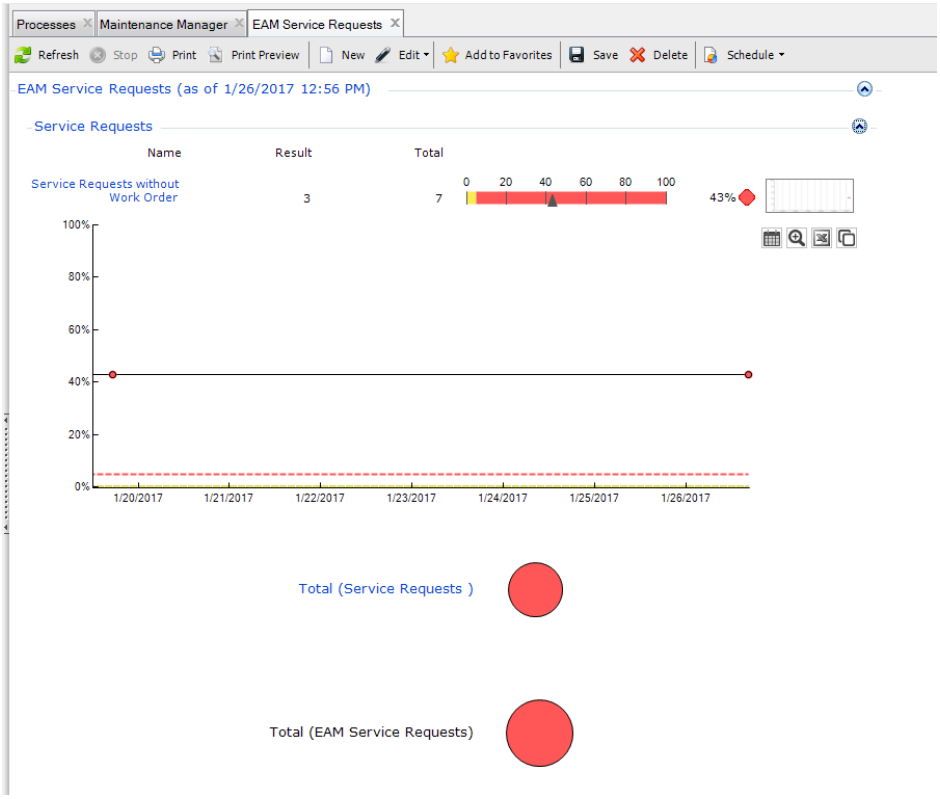



## Service Requests

You want to ensure service requests entered into your system are being turned into WOs. The Service Request metric answers that question quickly with its color graph.

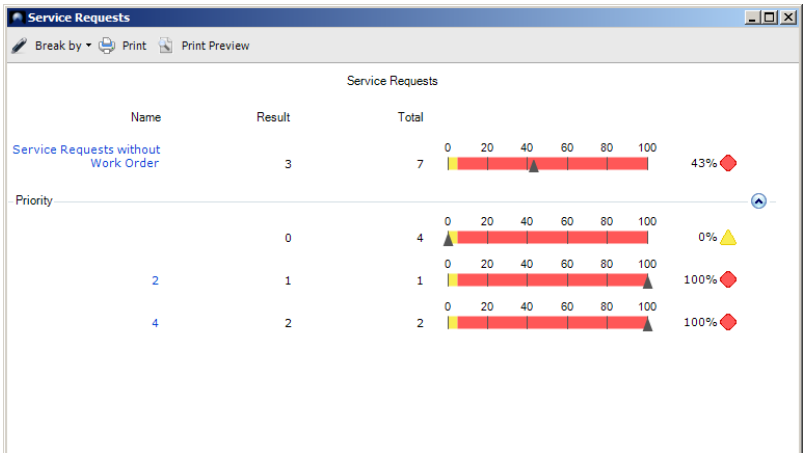
The Result and Total columns list the raw data values of service requests without WOs and total service requests. That data is used to determine the percentage of service requests that have not been turned into WOs. The percentage is displayed to the right of the colored line graph. The yellow on the graph's line is set at five percent, which is considered a tolerable number of service requests to have not been turned into WOs.

**Fig. 11.12**cl
Service Requests



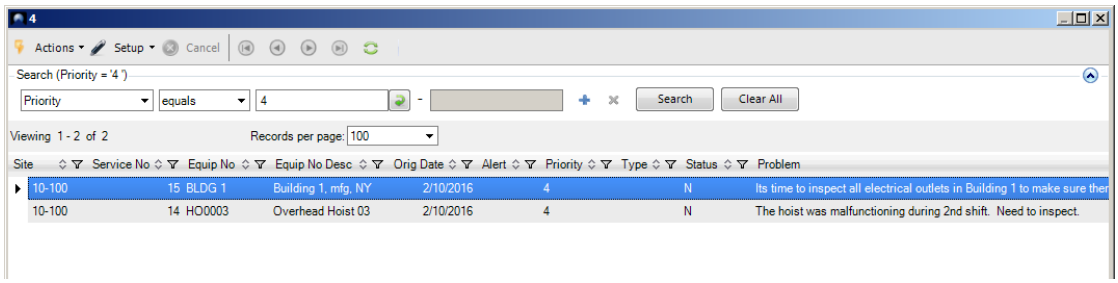

You can drill into the data by using the Break By option in the right-click menu. Figure 11.13 shows the service requests without work orders by priority.

**Fig. 11.13**
Service Requests without Work Orders Break By Priority




You can continue to drill into the data by selecting a priority in the left column to view the details about the specific service requests that have not been turned into WOs.

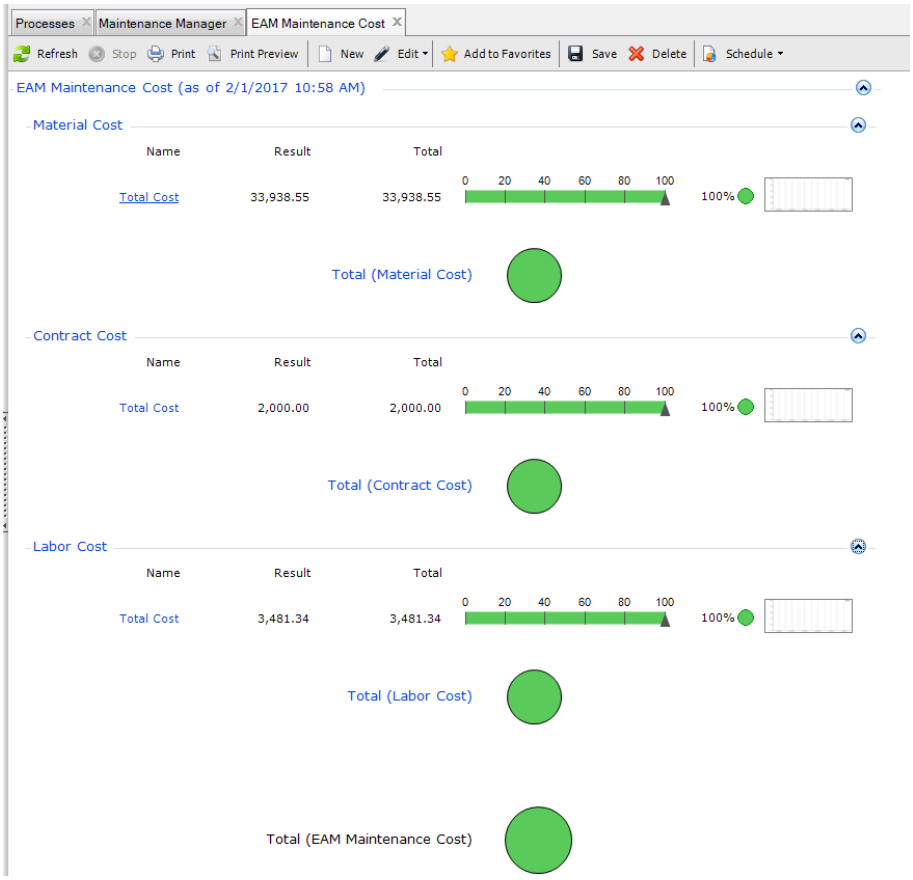
**Fig. 11.14**
Service Requests without Work Orders




## EAM Maintenance Cost

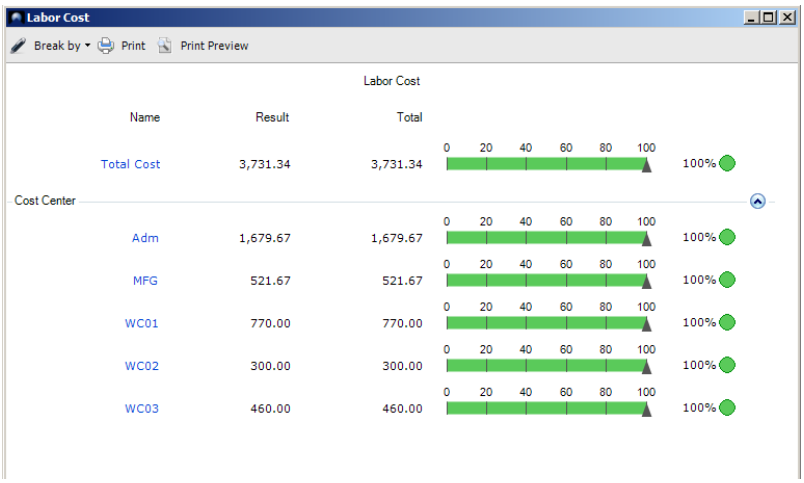
The EAM Maintenance Cost metric gives you a visual representation of your spending and lets you see where your costs are.

**Fig. 11.15**
EAM Maintenance Cost



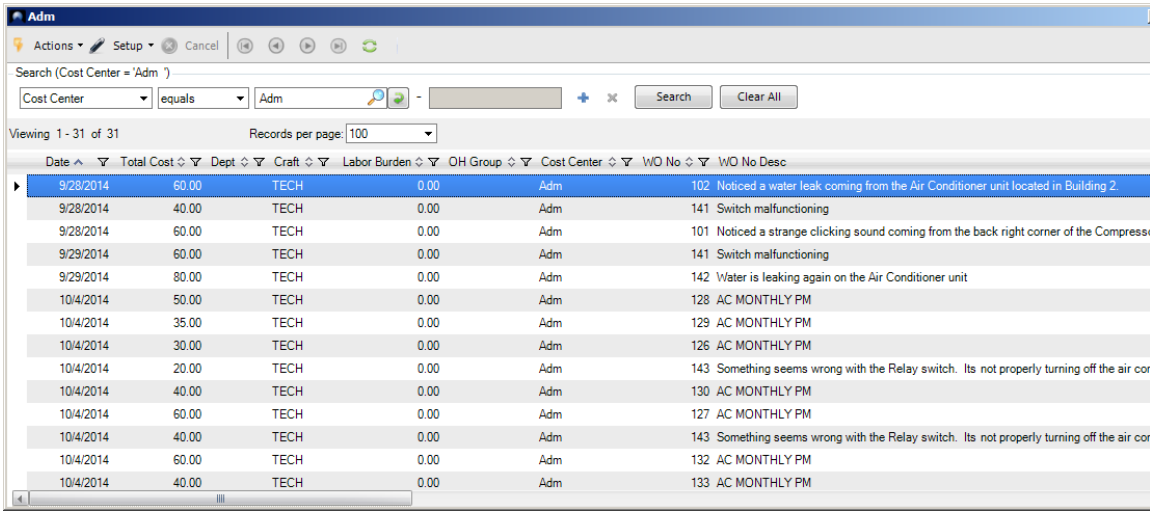

You can drill into the data by using the Break By option in the right-click menu. Figure 11.16 displays labor costs broken by cost center.

**Fig. 11.16**
Labor Costs by Cost Center




You can continue to drill into the data by selecting a cost center in the left column to view the labor costs associated with that cost center.

**Fig. 11.17**
Labor Cost by Cost Center Browse




## EAM Equipment Downtime

The Equipment Downtime metric is based on the reason codes that explain why your equipment is not in operation. It shows all the equipment that has recorded downtime and also can help you asses the health of your data. If you have equipment listed that was down but has no reason specified, then you know people are recording downtime but not specifying why the equipment was not operational.

**Fig. 11.18**
EAM Equipment Downtime




You can drill into the data by using the Break By option in the right-click menu, as shown in Figure 11.9.

**Fig. 11.19**
Break By for EAM Equipment Downtime

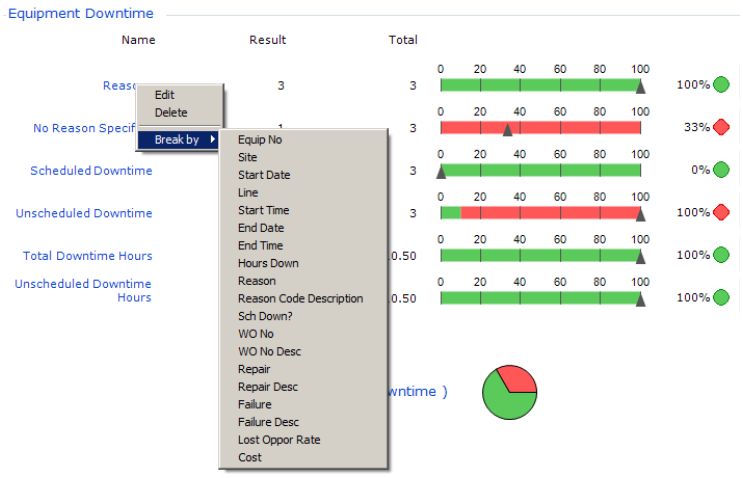
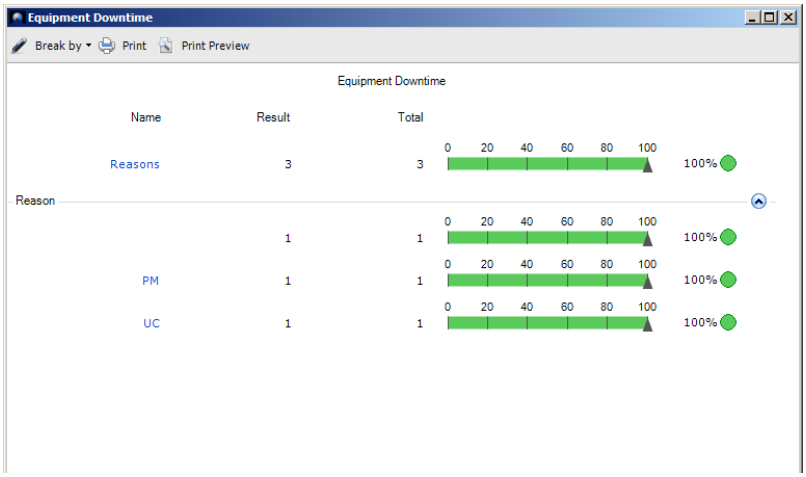



Figure 11.20 shows equipment downtime broken by reason.

**Fig. 11.20**
Equipment Downtime by Reason




The Name column displays the reason code, if one was entered. If a reason code was not entered into the system, then the Name column entry is blank but you can still click on the empty space where the code would be to view a browse with the associated downtime data.

**Fig. 11.21**
Equipment Downtime Browse

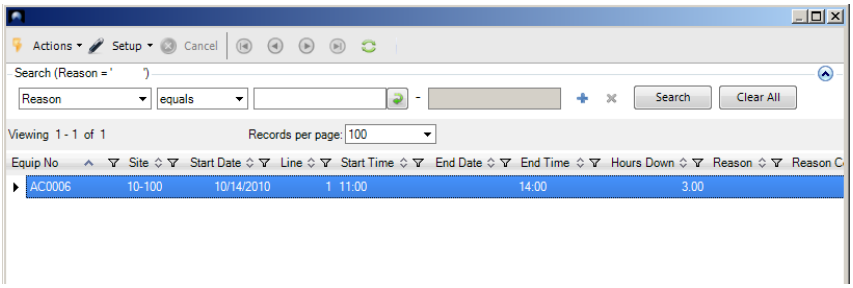
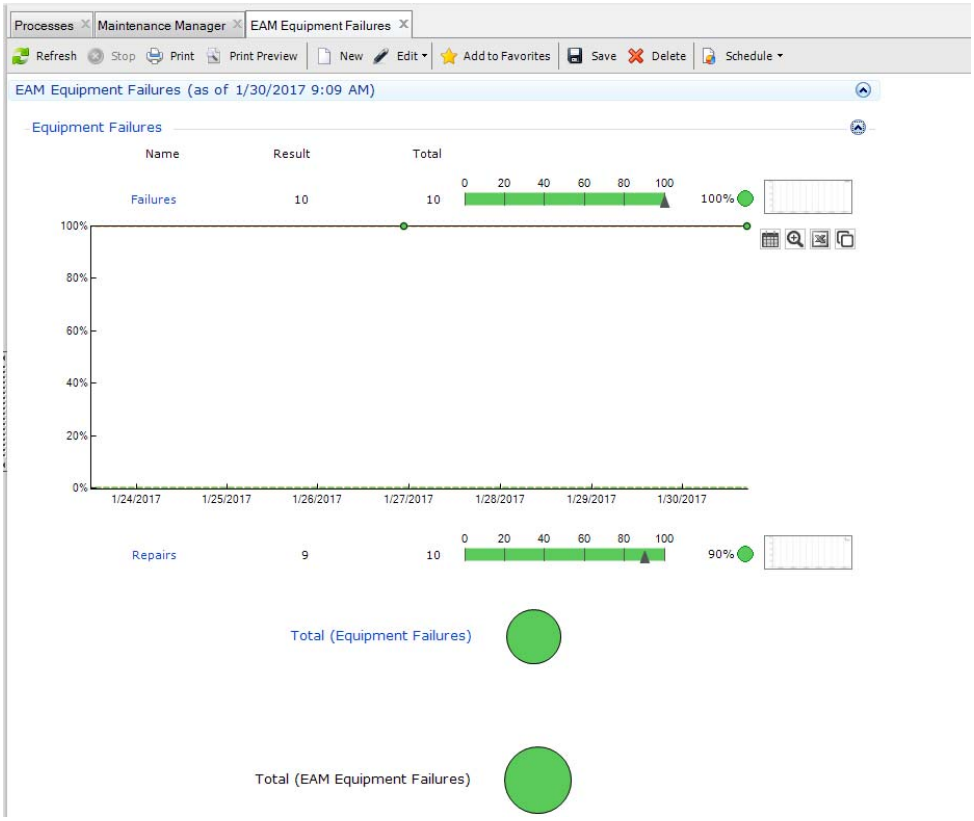



Figure 11.21 does not contain a Reason Code but you can still view the equipment number and the time the equipment was down.

## Equipment Failures

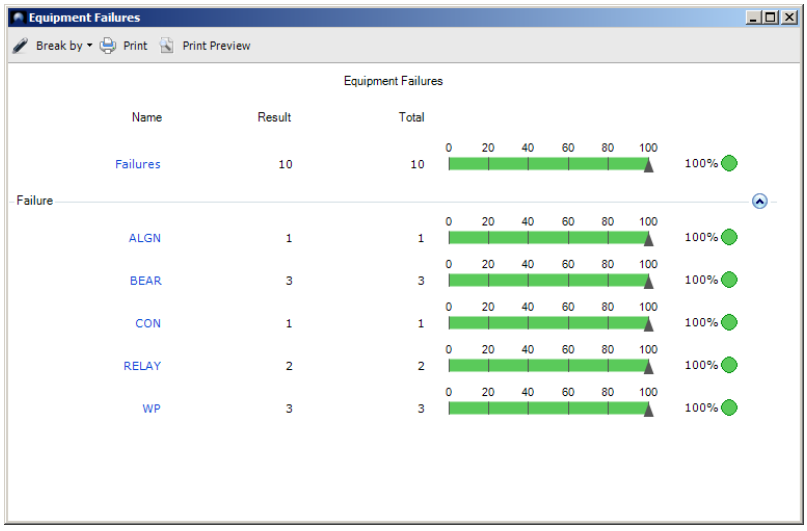
The Equipment Failures metric shows all failures that have been recorded against the system's equipment and also displays what repairs have been made.

**Fig. 11.22**
Equipment Failures



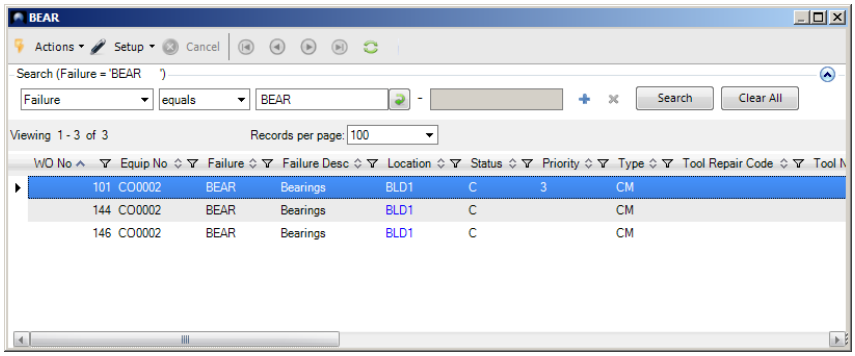

You can drill into the data by using the Break By option in the right-click menu. Figure 11.23 shows Equipment Failures broken by Failure.

**Fig. 11.23**
Equipment Failures by Failure




You can continue to drill into the data by selecting a failure code in the left column. The resulting browse displays the WOs associated with that failure code.

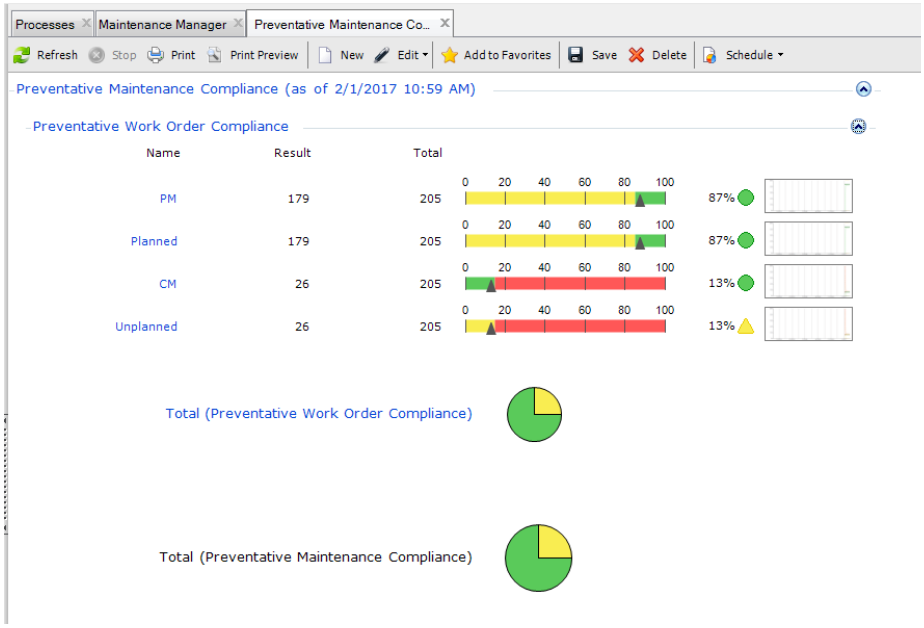
**Fig. 11.24**
Equipment Failures Browse




## Preventive Maintenance Compliance

Preventive Maintenance Compliance allows you to visually compare how many preventive maintenance WOs are in the system compared with corrective maintenance WOs. Systems with more PMs tend to have healthy PM programs and do not have to take as many unplanned corrective actions.

**Fig. 11.25**
Preventive Maintenance Compliance

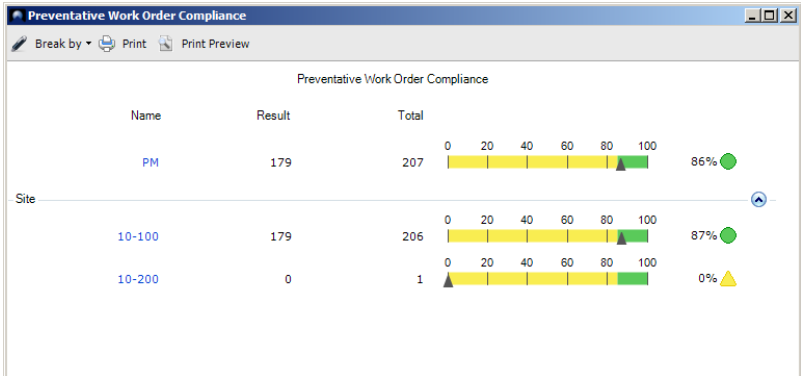



The colors in the Preventive Maintenance Compliance metric indicate benchmarks for a healthy system. The black triangles show where your system is in relation to those benchmarks.

***Note*** The number of planned WOs could be larger than the number of PM WOs because corrective maintenance WOs can be planned.

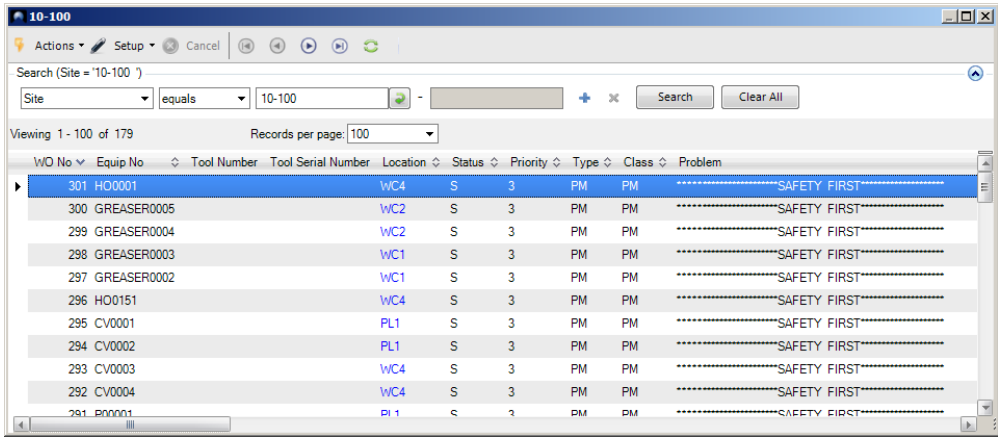
You can drill into the data by using the Break By option in the right-click menu. Figure 11.26 shows preventive maintenance broken by site.

**Fig. 11.26**
Preventive Maintenance by Site




You can continue to drill into the data by selecting a site from the Name column. The browse then displays all of the WOs associated with that site.

**Fig. 11.27**
Preventive Maintenance by Site Browse



# Product Information Resources

QAD offers a number of online resources to help you get more information about using QAD products.

QAD Forums (community.qad.com)
Ask questions and share information with other members of the user community, including QAD experts.

QAD Knowledgebase (knowledgebase.qad.com)*
Search for answers, tips, or solutions related to any QAD product or topic.

QAD Document Library (http://documentlibrary.qad.com)
Get browser-based access to user guides, release notes, training guides, and so on; use powerful search features to find the document you want, then read online, or download and print PDF.

QAD Learning Center (learning.qad.com)*
Visit QAD's one-stop destination for all courses and training materials.

*Log-in required

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