# Enterprise Asset Management Foundation Training Course

Part No. AVTS-TRN-3004

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Release 5.1

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# **Module 1 – Introduction**

- Section 1 Course Introduction / Objectives / Agenda
- Section 2 Introduction to the EAM Foundation Module
- Section 3 User Interface Options

### **Module Objectives**

- Introduce the course objectives, exclusions, audience and prerequisites
- Review the course agenda
- Provide an overview of the Enterprise Asset Management software
- Define the purpose of the Foundation module within the EAM application
- Introduce the Classic and Smart Client user interface options
- Explain the basic differences between the Classic and Smart Client interface options
- Explain the multi-site functionality concept available in EAM
- Define the characteristics of database-scoped objects
- Define the characteristics of site-scoped objects
- Explain the purpose and usage of the site object
- Explain the purpose and configuration of each view and field in the site object
- Explain the purpose and use of the Business Policies
- Explain the purpose and setting options of key 'Enterprise' and 'Site' level business policies
- Create a new site and make it the primary site
- Modify a business policy setting

# Section 1 – Course Introduction / Objectives / Agenda

### **Section Objectives**

- Introduce the course objectives, exclusions, audience and prerequisites
- Review the course agenda

# **Course Overview**

The Enterprise Asset Management Foundation course is a 1-day, instructor-led class designed to provide a fundamental understanding of the features and functionality for System Administrators in EAM.

The class provides lectures and hands-on labs to supply and reinforce the knowledge to perform a wide variety of activities.

# **Course Objective**

The main course objective is to provide system administrators (business) and core team members with the knowledge necessary to perform the underlying configuration that supports the use of EAM.

# **Course Exclusions**

The EAM Foundation course is not a technical training course and <u>does not</u> cover software installs, maintenance or upgrades, nor does it cover the development of custom cabinets or the use of SAP Crystal Reports<sup>™</sup> to create reports.

# Audience

The intended audience for this course is:

- EAM System Administrators (Business)
- Core implementation team members
- Key power users
- Implementation Consultants

### **Prerequisites**

- An understanding of the corporate environment and the organization's processes and requirements
- Basic EAM navigation skills

# Agenda

# Module 1 – Introduction

### Section 1 - Course Introduction / Objectives / Agenda

This section introduces the Enterprise Asset Management Foundation course including the objectives, the intended audience, the assumed prerequisites and the agenda.

### Section 2 – Introduction to Enterprise Asset Management Foundation

This section provides a conceptual overview of the EAM application and the positioning of the Foundation module in this application.

### Section 3 – User Interface options

This section explains the two user interface options available – Classic and Smart Client – and explains the differences between the two options. It also introduces the functionality offered through the Smart Client option that is not available through the Classic mode.

## Module 2 – Database Sites and Business Policies

### Section 1 – Multi-Site Functionality

This section introduces the multi-site functionality that is available in EAM and identifies the objects that are database-scoped versus those that are site-scoped.

### Section 2 – Site Object

This section explains the purpose of the site object and the purpose and configuration of each field, tab and view on the site object and the various configuration options that are available.

### **Section 3 – Business Policies**

This section explains the purpose and characteristics of the business policy settings that are defined through the site object.

Lab 1 – Creating a Site

# Module 3 – Database Security and Employee Records

### Section 1 – Security Profile

This section explains the purpose, use and configuration of the security profile object.

Lab 2 – Creating a Security Profile

### Section 2 – Employee Record

This section explains the purpose, use and configuration of the fields, related value lists and views on the employee object.

### Section 3 – Database Authentication

This section explains the database authentication options and covers the setup of an employee database record in SQL when the SQL Server authentication from a non-trusted connection option is being used.

Lab 3 – Creating an Employee Record and a SQL Database Record

### Section 4 – Data Security Function

This section explains the use and configuration of the Database Security function for providing additional storeroom level security.

### Module 4 – Desktops

### Section 1 – Desktop

This section explains the purpose, use and configuration of the desktop function.

Lab 4 – Creating a Desktop

### Module 5 – Value Lists

### Section 1 – Foundational Value Lists

This section explains the purpose and configuration of four value lists that are foundational to the use of EAM regardless of the modules or functionality used.

### Section 2 – Functional Value Lists

This section identifies value lists that are required for certain modules or that may be required based on the specific functionality within a module that is used.

### Section 3 – User-defined Value Lists

This section explains the purpose and use of the user-defined value lists.

### Module 6 – Categories and Add-ons

#### Section 1 – Categories

This section explains the use of the category function to track additional object characteristics in a tree hierarchy format.

Lab 5 – Creating a Category

### Section 2 – Add-ons

This section explains the use of the Add-on function to track additional data characteristics of an object.

Lab 6 – Creating an Add-on

### Module 7 – Other Tools, Functions and Features

#### Section 1 – Messages

This section explains the types of messages in EAM, their purpose and the procedures for changing a message severity or the displayed contents.

### Section 2 – Notifications

This section explains the purpose and characteristics of the notification function and the basic procedures for creating a new notification.

#### Section 2 – Custom Extensions

This section explains the basic purpose of the custom extensions function along with some examples of how it has been used.

#### Section 4 – Processors and Services

This section explains the different types of processors and services that are available to support EAM System Administration functions.

### Section 5 – MEVALUELK Optimization

This section explains the ability to limit the population of the MEVALUELK table from indirect transactions.

#### Section 7 – Exchange Rates

This section explains the use of the exchange rate function in maintaining exchange rate conversions when multiple currencies are in use.

#### Section 8 – Cabinet Customization

This section introduces the concept of cabinet customization. The details are covered in the EAM.PRO Cabinet Customization course.

### Section 9 – Reports

This section introduces the types of reports that are available in EAM. The details for modifying existing reports or for creating new reports are covered in the Crystal Reports for EAM course.

# Section 2 – Introduction to EAM Foundation Module

### **Section Objective**

- Provide an overview of the Enterprise Asset Management software
- Define the purpose of the Foundation module within the EAM application

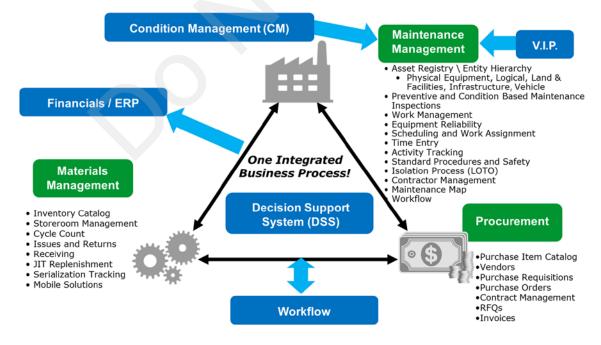
# **Introduction to Enterprise Asset Management**

The Enterprise Asset Management Foundation module is one part of the EAM software application designed to increase equipment uptime, extend equipment life, and reduce maintenance costs. The other major modules in the core product are Maintenance, Inventory and Procurement. Because these modules are fully integrated with each other you are also able to plan and track usage of spare parts maintained in a storeroom as well as the usage of services and parts ordered directly for a work order.

The separation of the different 'modules' – Foundation, Maintenance, Inventory and Procurement – is more of a logical separation based on functionality and purpose than a real separation. The functions for these modules are covered in the EAM install.

The EAM software is integrated with other AVEVA or third-party offerings to provide a seamless approach for managing your physical assets, spare parts inventory and procurement activities. Through an interface, general ledger transactions generated in EAM help to maintain the accuracy and detail required in your Financials / ERP system.

The graphic below illustrates the main functions in the core EAM application and key interfaces with other AVEVA or third-party applications.



# **Enterprise Asset Management Foundation Module**

The EAM Foundation module comprises many objects and functions that support the user interaction with the software application and the configuration of the software to reflect the corporation's business processes. The following table lists alphabetically the objects or functions typically considered to comprise the Foundation module.

Function	General Purpose
Add-ons	Provides additional fields that can be used through EAM that can be used to track client-specific information that does not have an identified location in the delivered EAM application.
Business policies	Enable the customization for how some of the functionality works to better reflect an organization's business processes.
Cabinet customization	Provides ability to customize cabinets and cabinet views to reflect client-specific requirements. This function is often delegated to selected power users.
Categories	Provide additional values in a tree structure that can be used for filtering / selection purposes.
Custom extensions	Provide the ability to customize the way that some functionality works and also provides the ability to interact with external data sources or functions.
Data security	Provides the ability to secure specified storerooms and storeroom functions from individuals generally authorized to use normal inventory-related transactional activities.
Desktops	Defines the desktops with applicable shortcuts that will simplify the user's access to objects or functions within EAM.
Employee records	Identify the individuals who will have access to EAM along with their EAM - related security authorizations, trades and roles.
Messages	Define the content of error or warning messages that might display while using EAM and provides the ability to make the completion of certain fields mandatory.
Notifications	Defines the criteria that are used to send a notification email to someone on the occurrence of an event.
Processors	Run on a given frequency to perform different types of updates or to process transactions.
Security profiles	Define the security authorization levels (Edit, Read-only, No access) for each object and function for each functional role in the organization using EAM.
Site object	Defines the site(s) that are used in the database and some of the rules, settings and default values for a site.
Value lists	Facilitate filtering and sorting needs by providing drop-down lists of valid values for selection by users when populating specific fields. Some value lists also include configuration options that are important for defining how some EAM functionality is applied.

# Section 3 – User Interface Options

### **Section Objectives**

- Introduce the Classic and Smart Client interface options
- Explain the basic differences between the Classic and the Smart Client interface options

# **Interface options**

There are currently two interface options available to users.

**Classic mode** – This option reflects the original EAM interface. Most of the objects and functions available in EAM are only offered in the Classic format.

**Smart Client** – This option incorporates Microsoft smart client technology to enhance the user experience and to provide some additional user interface options and customized functions that are not available under the classic mode.

# **Classic mode**

Under the classic mode, cabinets, objects and functions are accessed directly from a desktop object. These desktops can be customized to meet the requirements of individual user groups.

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Cabinets Functions Reports 0	pen Objects	
Entity     Entity     Entity Details     Entity Devices     Entity G/L Information     Expense Sheets     Inventory Items     Isolation Processes	Schedules Standard Activity Lists Distric Readings Trades Wark Order Task Details Work Orders Work Request Work Requests	
Large icons		
	pen	esktops Close

# **Smart Client mode**

Many objects and functions in EAM have been rewritten and enhanced using smart client architecture for easier access, better maintainability and supportability. Using Microsoft ClickOnce technology, smart client applications can be installed on a client machine simply by clicking on a URL provided by an administrator.

Under the Smart Client mode cabinets, objects and functions are accessed through the Smart Client Workspace application which incorporates the classic desktop.

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: Workspace View Help							
: 🛄 Display Options 🔹 🔍 Zoom	•						
Favorites 🚽 🕂 🗙	Cabinets						
🐃 Entity Details 🏀 Create a Work Request				-	<b>i</b>	1	^
Create a Requisition	Catalog Requests	Entity	Entity Details	Entity Devices	Entity G/L Information	Equipment Activities	
🖏 Open an Entity 🔂 Open a Work Order							
🙀 Work Order Task Details	Ĩ.	I3		<b>_</b>	<b>8</b>	2	
	Expense Sheets	Inventory Items	Isolation Processes	Labor Transactions	Parts Lists	Pick List Lines	
Desktops 🚽 🕂 🗙							
Planner					•		
Folder  Cabinets  Functions  Reports  Pen Objects	Pick Lists	PM Forecasts	PM Jobs	PM Tasks	Procedures and Safety	Purchase Catalog Items	
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🐼 Demo	Statistic	Trades	Warranties	Work Order	Work Order	Work Orders	
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Some of the additional functionality available with the Smart Client technology is:

- New workspace function allows users to create their own list of favorites for easier access
- New cabinet viewer that offers a variety of new features for the user
- New viewing format for smart client objects allows for view listing in a tree format

There are several objects that have been updated with a smart client version of the object [Classic object name identified in parenthesis]:

- Catalog Request Worksheet [Catalog request object]
- Equipment Activity Worksheet [EAR Form and Worksheet]
- Emergency Work Order [Emergency Work Order object]
- Entity [Entity object]
- Statistics Form [Statistic reading Form]
- Time Card Worksheet [Time Card object]
- Work Order [Simple and multi-task Work Order objects]
- Work Request [Work request object]
- Issue transaction worksheet
- Receipt transaction worksheet [Same name]
- Adjustment form, Count form, Reclassification form [Same names]

There is some EAM functionality that is only available using the smart client technology:

- Isolation object
- Maintenance Map function
- Mandatory add-on fields
- Development of custom forms for smart client objects



# Module 2 – Site Functionality

- Section 1 Multi-site Functionality
- Section 2 Site Object
- Section 3 Business Policies
  - Lab 1 Creating a Site

### **Module Objectives**

- Explain the multi-site functionality concept available in EAM
- Define the characteristics of database-scoped objects
- Define the characteristics of site-scoped objects
- Explain the purpose and usage of the site object
- Explain the purpose and configuration of each view and field in the site object
- Explain the purpose and use of the Business Policies
- Explain the purpose and setting options of key 'Enterprise' and 'Site' level business policies
- Create a new site and make it the primary site
- Modify a business policy setting

# Section 1 – Multi-Site Functionality

### **Section Objectives**

- Explain the multi-site functionality concept available in EAM
- Define the characteristics of database-scoped objects
- Define the characteristics of site-scoped objects

# Introduction

Enterprise Asset Management allows for the use of a multi-site configuration. This enables the segregation of data and the limiting of users to certain data records in the database when appropriate.

Sites can be geographic in nature such as when an organization has plants in different locations or even in different countries. Sites can also be logical in nature to reflect different types of assets or operational needs at the same geographic location.

Some of the objects used in EAM Foundation module are database-scoped in nature while others are site-scoped. Individual users are given editing or read-only authorization for selected objects through the security profile function. When an object is a site-scoped object, the user's authorization can be limited to a single site, can be set for multiple (but not all) sites or can apply across all sites

# **Database-scoped objects**

Database-scoped objects are available for use by authorized EAM users regardless of the site or sites to which they have security authorization. Database-scoped objects help provide consistency by all users of the database and reduce the duplication of effort when changes are made to a master file.

Database-scoped objects are owned by the database rather than by a specific site. As such, they are available for reference / use by all EAM users who have read-only or editing authorization for that object type.

Add-ons, categories and cabinets are database-scoped although cabinets can be set to filter to a specific site.

Business policies and messages are database-scoped but many of them have site-scoped attributes that allow for there to be different settings for different sites.

Value lists are database-scoped although some value lists have site-scoped attributes.

Most master files are database-scoped although the entity record is site-scoped and the PM Job record allows for either option.

# Site-scoped objects

Site-scoped objects are owned by a specific site and can only be used by EAM users who have been given authorization for its use within a given site. All transactional objects as well as documents such as work requests, work orders, requisitions, purchase orders and invoices are site-scoped. Site-scoped objects provide better control on the use, display and reporting of maintenance, inventory or procurement-related activities.

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# Section 2 – Site Object

### **Section Objectives**

- Explain the purpose and usage of the site object
- Explain the purpose and configuration of each view and field in the site object

# Introduction

The collection of site objects defines the various database sites that are available in EAM for site-scoped objects. Each site object contains information specific to the site including: the site's name, base currency, reporting currency and language.

Other site level values are also defined such as the object numbering rules, default account numbers that apply to the site and rules for determining the site ownership of purchase orders and invoices.

The site object also provides access to the business policies that can be applied on either a global or a site-specific basis. Business policies are explained in greater detail in Section 3 of this module.

For a multi-site environment, one site must be designated as the primary site. The business policy and message settings from the primary site apply unless there is a site-specific override.

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General Information			Invoice Placemei les Accoun		
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# Views

Each site object contains three views.

View	Purpose
General Information	This view provides basic descriptive information about the site record through the different tabs that are provided. Tabs are also displayed for each add-on linked to the site record (if applicable).
OLE Canvas	This view provides access to the OLE Canvas function that uses MS Word as the text editing tool. It can include additional text, graphics, pictures and tables relevant to the site object.
Export/Import Map	This view defines the definitions created for exporting schedules between EAM and MS Project <sup>™</sup> . An export/import map definition must be created in order to export or import schedules from the Schedule object. If you reorder the level definitions they are automatically renumbered.

# **Section 3 – Business Policies**

## **Section Objectives**

- Explain the purpose and use of Business Policies
- Explain the purpose and setting options of key 'Enterprise' and 'Site' level business policies

# Introduction

Business policies allow you to define rules to determine how specific business situations are to be handled in EAM. The business policies allow you to tailor EAM to suit your company's business needs.

Enterprise Asset Management includes business policies for all the product groups and each product group is found on a separate tab when viewing Business Policies. Some business policies are listed under more than one product group. All business policies are listed on the All Product groups tab.

J			Business Polic	cies			X
All Product Groups	Procurement   Inventory	Foundation Maintenance	Partner Products				
Policies for this site							
	n of cabinet view queries?	>					
C Use default set			No	-			
<ul> <li>Ose deraduk sek</li> <li>Specify a settin</li> </ul>	-	Derault setting.					
<ul> <li>Specily a settin</li> </ul>	g for this site	Derived from:	Default delivery setting				
		Site setting:	Yes	• •			
Applies To	1	Policy		Value in Effect	Derived From		
Cabinet	Allow customization of c			Yes	Site setting		
Catalog Request	Allow generation of pick	list lines from catalog requests	or work documents?	Yes	Default delivery setting		
Catalog Request		uisitions from catalog requests o		Yes	Default delivery setting		
Catalog Request	Consolidate requisitions	for materials for a catalog requi	est or work document?	By vendor and	Default delivery setting		
Catalog Request	Number of days after a	requisition's creation to allow ne	ew requirements	0	Site setting		
Catalog Request	Should requirements ad	ded to a work order in the back	klog be marked for plannir	No	Default delivery setting		
Contract	Do you want to use cha	ange request / revision control f	for your contracts?	Yes	Default delivery setting		
Contract	Enable approvals for contracts?			No	Default delivery setting		
Contract	Enable workflow for contracts?			No	Default delivery setting		
Contract	Send contracts to workflow on exit?			No	Default delivery setting		
Count Form	Allow the G/L expense account to be changed on the adjustment form?			Yes	Site setting		
Cycle Count Sheet	Allow updates to item lo	cation during count entry?		Yes	Default delivery setting		
Cycle Count Sheet	Create count adjustmen	t transactions when the adjustr	ment value is zero?	Yes	Site setting		
Cycle Count Sheet	Maximum allowable tole	rance for count variance quant	tities is	5.00	Site setting		
Cycle Count Sheet	Maximum allowable tole	rance for count variance value	s is	150.00	Site setting		
Cycle Count Sheet		count cannot be updated?		Yes	Default delivery setting		
-		ties with expected quantities wit	thout counting?	Yes	Site setting		
	Enable approvals for en			No	Default delivery setting		
	Enable workflow for em	ergency work order?		No	Default delivery setting		-
	nether query customizatio which the policy applies	n is allowed for cabinets definer	d			Drder By 💙	-
						OK Apply Cane	:el

# **Enterprise level business policies**

There are a number of business policies classified as applying to the Enterprise. Typically – but not necessarily – these business policies are considered to apply across all sites based on the default setting defined on the Primary site object.

Applies To	Policy	Value in Effect	Derived From
Enterprise	Allow charging of work orders or entities to sites other than the site of the issue,	Yes	Site setting
Enterprise	Allow only common symptoms defined per entity classification?	No	Default delivery setting
Enterprise	Allow the creation of follow-up work requests for closed work orders/tasks?	No	Default delivery setting
Enterprise	Allow the unit of measure to be changed on pick list lines, spare parts and mater	Yes	Default delivery setting
Enterprise	Base numbers created from Production shadow resources on	Use the site/resource ID as	Default delivery setting
Enterprise	Enable named segments for GL accounts and segments?	No	Default delivery setting
Enterprise	Enable synchronization of inventory and catalog item numbers and names?	No	Default delivery setting
Enterprise	Enable synchronization of inventory item, catalog item and parts list descriptions'	No	Default delivery setting
Enterprise	Filter out suspended employees from the cabinet prompt drop down lists.	Yes	Default delivery setting
Enterprise	Identify a company within your account number, using named segments?	No	Default delivery setting
Enterprise	Identify the item that will act as the master for item synchronization.	Inventory Item	Default delivery setting
Enterprise	Include the catalog item's unit type on Production's expected receipt?	Yes	Default delivery setting
Enterprise	Name of the first customer-defined consequence of failure is		Default delivery setting
Enterprise	Name of the second customer-defined consequence of failure is		Default delivery setting
Enterprise	Obtain G/L information for production resources from Resource Accounting?	No	Default delivery setting
Enterprise	Processing interval for Maintenance Transaction Processor (MTP) is	10	Site setting
Enterprise	Processing interval for Procurement Integration Processor (PIP) is	10	Default delivery setting
Enterprise	Processing interval for sending invoices to Protean Financials is	-1	Default delivery setting
Enterprise	Processing interval for sending journal entries to Protean Financials is	-1	Default delivery setting
Enterprise	Production database owner name is		Default delivery setting
Enterprise	Reduce all accounting value links for entities, work orders and work tasks?	No	Site setting
Enterprise	Resource interval for Procurement Integration Processor (PIP) is	10	Default delivery setting
Enterprise	Segment group that identifies the company within an account number is	0	Default delivery setting
Enterprise	What attachment method to use when attaching a document to an Avantis doci	All	Site setting

# Site level business policies

There are also a number of business policies that are typically unique at the site level. These are classified as applying to the Site object. As with all other business policies, the initial value is based on the default setting value on the Primary site object.

Applies To	Policy	Value in Effect	Derived From
Site	Allow non-contract employees to access contractor's applications?	No	Default delivery setting
Site	Base currency for Production is	USD	Default delivery setting
Site	Business week starts on	Monday	Default delivery setting
Site	Combine work order requirement short and long descriptions when creating cata	Yes	Default delivery setting
Site	Default balance category to use for journal entries created in Procurement is	DefaultBalanceCategory	Default delivery setting
Site	Default journal to use for journal entries created in Procurement is	DefaultFinancialsJournal	Default delivery setting
Site	Default trading partner is	DefaultTradingPartner	Default delivery setting
Site	Derive maintenance G/L segments when work is planned?	Yes	Default delivery setting
Site	Enable approval process for all site objects?	Yes	Default delivery setting
Site	Enable FactorySuite integration with Avantis?	No	Site setting
Site	Enable Financial Integration Processor for this site.	No	Default delivery setting
Site	Enable Procurement Integration Processor (PIP) for this site?	No	Default delivery setting
Site	Enable receipt label printing using Crystal Reports?	Yes	Default delivery setting
Site	Enable validation for G/L accounts?	No	Default delivery setting
Site	Enable validation for G/L segments?	No	Default delivery setting
Site	Enforce allocations and/or reservations for this site?	Allow allocations and reserv	Site setting
Site	Expired prices are to be defaulted if no effective price can be found	Yes	Site setting
Site	Identify your workflow engine as	Avantis Approvals	Site setting
Site	Include held item storerooms when creating parts usage documents or inventory	Yes	Default delivery setting
Site	Include held item storerooms when creating procurement documents?	Yes	Default delivery setting
Site	Include naming convention prefixes used with G/L accounts when passing the	No	Default delivery setting
Site	Launch the smart client application when opening an object from a classic appli	No	Default delivery setting
Site	Number of entities to condense is	1,000	Default delivery setting
Site	Print receipt labels for direct purchases?	No	Site setting
Site	Print receipt labels for inventory purchases?	No	Site setting

# LAB 1 – Creating a Site

# Introduction

In this lab you are going to create a new site object representing the corporation and make it the primary site. The various settings for this site – such as business policies, object numbering and message settings – will apply across the database unless overridden by a site specific setting.

# **Objectives**

On completion of this lab you will be able to:

- Create a site
- Make the new site the primary site
- Modify a business policy setting on a non-primary site

# Create a site

In this section of the lab you are going to create a new site and set up basic site level information.

- 1. Log into EAM as instructed by the trainer.
- 2. Click the Desktops button and select the EAM Administrator desktop.
- 3. Click **OK**.
- 4. Select the Templates/Functions tab.
- 5. Launch the **Site Template**.
- 6. Type **CORP** in the **New Name** field.

🖃 Cr	eate New Site	×
Create		
New name:	CORP	
Template to use:	(none)	<b>_</b>
	ОК	Cancel

- 7. Click **OK**.
- 8. Type **Corporation site** in the **Description** field.
- 9. Select the Canadian Dollar value from the Base Currency field drop-down list.
- 10. Select the Canadian Dollar value from the Reporting Currency field drop-down list.

<u></u>	Site CORP - Gen	eral Information	- 🗆 🗙	
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>W</u> indov	/ <u>H</u> elp			
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General Information		er Placement   Invoice Placement   Iress   Rules   Accounts	Description Transfer	
Ⅲ Export/Import Map	Description:	Corporation		
	Base currency:	Canadian Dollar		
	Reporting currency:	Canadian Dollar	•	
	Language:	English	•	
	Primary site informa	tion		
	Current primary site	Burlington		
				00
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For Help, press F1			1	

- 11. Select the Address tab.
- 12. In the Mailing address field type: 1200 King St. West, Toronto ON N5Y 2T8
- 13. Select Canada from the Country drop-down list.
- 14. Select Ontario from the Region drop-down list.
- 15. Type N5Y 2T8 in the Zip/postal code field.

<u></u>	Site CORP - General Information – 🗖 🗙
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General Information	Numbering         Order Placement         Invoice Placement         Description           General         Address         Rules         Accounts         Transfer           Mailing address         1200 King St. West         Toronto ON N5Y 2T8         Toronto ON N5Y 2T8         Toronto ON N5Y 2T8
	Country: Region: Zip/postal code: Canada

**NOTE:** The contents of the Mailing address field are picked up for use on site-related documents such as purchase orders and contracts, so it needs to be complete. The Country, Region and Zip/Postal code fields are used to facilitate filtering and sorting.

- 16. Select the Rules tab.
- 17. Leave the default **Labor** cost group field blank.

- 18. Select the Material Direct value from the drop-down list in the Direct purchase field.
- 19. Select the Material Stores value from the drop-down list in the Inventory materials field.
- 20. Select the Accounts tab.

**NOTE:** The Production resource account field applies to companies using EAM in conjunction with Protean. Default account numbers are required for the other three accounts listed on this tab. While normally they must be valid G/L account numbers, in this database validation is turned off.

- 21. Type **CORP RNI** in the **Received-not-invoiced account** field.
- 22. Type CORP APL in the A/P Liability account field.
- 23. Type **CORP COUNT** in the **Count expense account** field.

<u></u>	Site CORP - General Information – 🗖 🗙
<u>File Edit View Windo</u>	ow <u>H</u> elp
🖉 🔊 🔁 🖬 🖥 🗉	
🛗 CORP	
General Information	Numbering Order Placement Invoice Placement Description General Address Rules Accounts Transfer Production resource
⊞ Export/Import Map	account: Named Segment Group Segment
	Received-not-invoiced corp RNI account:       Named Segment Group       Segment
	Named Segment Group Segment
	Count expense CORP COUNT

24. Select the Transfer tab.

**NOTE**: The account numbers on this tab are optional. For purposes of this lab, the Transfer account number is not being defined at the CORP site level.

25. Select the Numbering tab.

**NOTE**: This tab defines the rules for the numbering of objects. If the system-assigned option is used – either alone or in conjunction with manual numbering – the starting number is also defined. Numbering rules defined on the primary site object can be overruled at a specific site for site-specific objects. In this lab the default values will be used on the primary site.

26. Select the Order Placement tab.

**NOTE**: This tab enables you to define rules that EAM uses to determine which site owns a given purchase order. This option allows you to control the ownership of different types of purchase orders. For example, an

organization can have all POs exceeding \$50,000 owned (and managed) by the corporate site with lower value POs owned by the originating site. In this lab, POs are assumed to be owned by the originating site.

27. Select the Invoice Placement tab.

**NOTE**: This tab enables you to define rules as to which site owns invoices. Since invoicing is often done at the corporate level, this allows you to centralize the invoicing function regardless of the originating site of the related PO. In this lab, invoices are owned by the same site as the site that owns the PO.

### Make the new site the primary site

You are now going to save this site and make it the primary site.

- 28. Click the Save icon in the toolbar.
- 29. Select the General tab.
- 30. Click the Primary site check box. A warning message displays.

	Site	×
affe in th	u are about to change the primary site. This will ect the behavior of all messages and business policies he system. you want to continue? (30996)	
	Yes No	

31. Click the **Yes** button.

The name in the Current primary site field updates with the name of the new primary site.

<u></u>	Site CORP - General Information – 🗖 🗙						
<u>File Edit View Window H</u> elp							
	poration						
General Information	Numbering       Order Placement       Invoice Placement       Description         General       Address       Rules       Accounts       Transfer         Description:       Corporation         Base currency:       Canadian Dollar         Reporting currency:       Canadian Dollar         Language:       English         Primary site information         Image:       CORP						

# Modify a business policy on a non-primary site

In this section of the lab you are going to modify a business policy on the primary site then go into one of the other sites and modify the site level policy so that it differs from the primary site setting. Site-specific override settings can only be made on objects that are not considered to be database scoped.

- 32. Ensure that the site object is in editing mode.
- 33. Select the View / Business Policies menu option.
- 34. Scroll through the list of business policies to the **Applies to Work Request** section and select the **Copy work** request attachments when linking a work request to a work order policy.
- 35. Refer to the area in the upper part of the window and note that the current setting of **Yes** is the default delivery setting.

You are now going to change the setting on the primary site to No.

- 36. Click the **Specify a setting for this site** radio button.
- 37. Select the No value from the Site setting drop-down list.

Policies for this site	t attachments when link	Bu: ry Foundation Maintena ing a work request to a wor Default setting: Derived from:		£	9	
		Site setting:	No	• •		
Applies To		Policy		Value in Effect	Derived From	<b>_</b>
Vendor Bid Sheet	Enable approvals for	vendor bid sheets?		No	Default delivery setting	
Vendor Bid Sheet	Enable workflow for v	endor bid sheets?		No	Default delivery setting	
Vendor Bid Sheet	Send vendor bid shee	ets to workflow on exit?		No	Default delivery setting	
Work Request	Copy work request at	tachments when generating	work orders through workflow	Yes	Default delivery setting	
Work Request	Copy work request at	tachments when linking a v	vork request to a work order?	No	Site setting	
Work Request	Default activity title ar	nd description on follow up	work requests?	No	Default delivery setting	
Work Request	Enable approvals for	work requests?		No	Default delivery setting	
Work Request	Enable workflow for w	vork requests?		No	Default delivery setting	
Work Request	Generate a repair wor	rk request when a repairabl	e item is issued.	No	Default delivery setting	
Work Bequest	Name of the workflow	i object for a work request i	\$	WorkBequest	Default deliveru setting	•
	her work request attach ed to an existing work o	ments are copied when a v rder.	vork			Order By 🔻
					OK <u>A</u> pply	Cancel

- 38. Click the green check mark to lock in the change.
- 39. Click **OK** to close the business policies window.
- 40. Click the **Save** icon in the toolbar.
- 41. Exit from the CORP site.

You are now going to change the setting for the same business policy in the Burlington site so that it differs from the setting in the primary site.

- 42. Select the Cabinets tab on the EAM Administrator's desktop.
- 43. Launch the Site cabinet.
- 44. Click **OK** to close the prompted filter.
- 45. Launch the Burlington site.

- 46. Select the **Allow editing** icon from the toolbar.
- 47. Select the View / Business Policies menu option.
- 48. Scroll through the list of business policies to the **Applies to Work Request** section until you locate the **Copy** work request attachments when linking a work request to a work order business policy.

**NOTE:** The business policy currently shows that the value in effect is **No** and that it originates from the **Primary site CORP**.

]	Business Policies					×
All Product Groups	Procurement Inventory	y Foundation Maintena	ance Partner Products			
Policies for this site						
Copy work reques	st attachments when linkir	ng a work request to a wor	k order?			
Ose default set	etting	Default setting:	No			
🔘 Specify a setti	ing for this site	Derived from: Primary site CORP				
		Derived nom.	Frimary site CURP			
		Site setting:				
Applies To				Value in Effe	Derived From	
Applies To Vendor Bid Sheet	Enable workflow for ve	Site setting:		Value in Effe	Derived From Default delivery setting	
	Enable workflow for ve Send vendor bid sheet	Site setting: Policy endor bid sheets?				
Vendor Bid Sheet	Send vendor bid sheet	Site setting: Policy endor bid sheets? s to workflow on exit?	g work orders through workflow	No No	Default delivery setting	
Vendor Bid Sheet Vendor Bid Sheet	Send vendor bid sheet Copy work request atta	Site setting: Policy endor bid sheets? s to workflow on exit? achments when generating		No No	Default delivery setting Default delivery setting	

- 49. Click the Specify a setting for this site radio button.
- 50. Select the **Yes** value from the **Site setting** drop-down list.

Ē		Business Policies					×
	Policies for this site		y   Foundation   Maintenance				
	Copy work request attachments when linking a work request to a work order?         C Use default setting       Default setting:         No         If Specify a setting for this site       Derived from:         Primary site CORP         Site setting:       Yes						
	Applies To		Policy		Value in Effect	Derived From	
	Vendor Bid Sheet	Enable workflow for ve	ndor bid sheets?		No	Default delivery setting	
	Vendor Bid Sheet	Bid Sheet Send vendor bid sheets to workflow on exit? No Default delivery setting					
	Work Request	Copy work request attachments when generating work orders through workflow' Yes D			Default delivery setting		
	Work Request	Copy work request atta	pp work request attachments when linking a work request to a work order? Yes Site setting				
	Work Request	Default activity title and	d description on follow up work	< requests?	No	Default delivery setting	

- 51. Click the green check mark to lock in the change.
- 52. Click **OK** to close the business policies window.
- 53. Click the Save icon in the toolbar.
- 54. Exit from the **Burlington** site.

You have now completed the requirements of this lab.



# Module 3 – Database Security and Employee Records

Section 1 – Security Profile Object

- Lab 2 Creating a Security Profile
- Section 2 Employee Record
- Section 3 Database Authentication

Lab 3 – Creating an EAM Employee Record and a SQL Database Record Section 4 – Data Security Function

### **Module Objectives**

- Define the purpose, use and configuration of the security profile object
- Create a security profile
- Define the purpose and use of the employee record
- Define the purpose and configuration of each field, tab and view in the employee record
- Create an employee record and link it to a trade and a security profile
- Identify the database authentication options when using EAM
- Create and validate an employee login authentication record in the SQL database
- Define the purpose, use and configuration of the data security function
- Define the options for selecting individuals covered by the data security function
- Define the options for selecting the security restrictions in the data security function

# Section 1 – Security Profile Object

### **Section Objectives**

• Define the purpose, use and configuration of the security profile object

# Purpose

Security profiles are the means by which system users are given the authority to create and edit a type of object, to open an object without editing privileges or are denied access to the type of object.

An employee can be linked to multiple security profiles. The employee's ability to access objects or use different functions is determined based on the highest level of security authorization offered by the assigned security profiles.

The security profile object is only available in the Classic format. If custom forms are being used through the Smart Client functionality, the security profile identifies the custom forms that are available to users with that profile.

# **Security levels**

There are three levels of security for each object:

- Allow no actions A user cannot open or modify this type of object.
- Allow open as A user can open this type of object but cannot modify it. The options to add and delete attachments can also be set.
- Allow edit A user can open, modify and possibly create objects of this type.

The security functionality for some objects provides additional security options. For example, a user:

- Might be authorized to edit an object but not create a new record
- Might be authorized to edit an object but not authorized to add or remove attachments
- Might be authorized to delete a record that he or she created but not one that was created by another user

2	Profile Details - Entity		×
Security Access	ata Restrictions   Form Layout		1
Allow the following Allow the following Create New Data Manager Delete Delete Attachr Entity Movement	nt	Select All	

*	Security Profile Planner - G	eneral Inf	ormation	- 🗆 🗙
File Edit View Window	v Help			
) 🖉 🏷 🔁   🖀 🖼	1 <b>4</b> 10			
Planner Pl	anner			
E General Information	General Desktops Description			
CLE Canvas	Usage: Planner			
	Abbreviation:			
	Object-actions available to users of	this profile —		
	Object Name	Open Edi	t Class	Actions Selected
	🔊 Cabinet	Yes Yes	Cabinet	Not applicable
	Adjustment Form	No No	Document	No
	Approve Failure Info	No No	Document	Not applicable
	🧳 Catalog Request	Yes Yes	Document	Yes
	🧳 Catalog Request Worksheet	No No	Document	Not applicable
	Contract	No No	Document	No
	😫 Contract Change Request	No No	Document	No
	🛒 Contractor's Employee	No No	Document	No
	🔶 Contractor's Equipment	No No	Document	No
	📻 Count Form	No No	Document	No
	107 Fucle Count Sheet	No No	Document	No
	Sele	cted 🔻	Include 🔻	Order By 🔻
For Help, press F1				

# Authorized desktops

Security profiles are linked to one or more desktops. A user can access any desktops permitted by any of the security profiles associated with the employee. If a security profile is not linked to a desktop and the user only has this one security profile, they are not able to launch EAM.

*	Security Profile Planner - General Information		x
File Edit View Windo	w Help		
🖉 🔊 🔁 🖬 🖥 🖬	3 🚑 💯		
Planner Pl	anner		
E	General Desktops Description		
Real OLE Canvas	Desktops available for security profile		- 11
	Accounting Accounts Payable Avantis Administrator Buyer Contractor Demo DEM0 Inventory Manager VGeneral User Human Resources Inventory Manager Maintenance Manager Materials Coordinator VPlanner Purchasing Manager	Selected	

# Lab 2 - Creating a Security Profile

# Introduction

In this lab you are going to create a security profile for an entry-level planner who is only able to perform some of the maintenance-related functions.

# **Objectives**

On completion of this lab you will be able to:

- Create a basic security profile
- Define read-only access security to selected objects
- Define editing access security to selected objects
- Link the security profile to a desktop

# Create a security profile

In this section of the lab you are going to create the basic security profile with the default setting.

**NOTE:** The default setting for a new security profile is that the Cabinet object is set to **Open** (Read only) as **Yes** and all other objects set to **No** for both the **Open** and **Edit** options.

- 1. Select the Templates/Functions tab of the EAM Administrator's desktop.
- 2. Launch the Security Profile Template function.
- 3. Type Planner-Level 1 in the New name field.

🖃 🛛 Create N	lew Security Profile	
Create		
<u>N</u> ew name:	Planner-Level 1	ľ
Template to use:	(none)	
	OK Cancel	

- 4. Click OK.
- 5. Type Entry level planner in the Usage field.
- 6. Click the **Save** icon in the toolbar.

Se	curity Profile Planner-Level	1 - Gei	neral	Information	- 🗆 🗙	
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>W</u> indow	/ <u>H</u> elp					
📗 🥟 🔁 🖬 🖷 🖾	69					
😽 Planner-Lev	vel 1 Entry level pla	annei	r			
i General Information	General Desktops Description					
🔁 OLE Canvas	Usage: Entry level plan	iner				
	Abbreviation:					
	Object-actions available to users of	of this prof	ile —			
	Object Name	Open	Edit	Class	Actions Selected 🔺	
	🔊 Cabinet	Yes	No	Cabinet	No	
	torm 🚓 Adjustment Form	No	No	Document	No	
	🥑 Approve Failure Info	No	No	Document	Not applicable	
	🧳 Catalog Request	No	No	Document	No	

## Define read-only access security to selected objects

In this section of the lab you are going to allow read-only access for a number of the available objects. For these objects, the security profile will not allow the addition or removal of attachments.

The step-by-step procedures will be given only for the first object.

- 7. Scroll until the PM Job object is displayed in the list and select the line for that Document type of object.
- 8. Click the Selected / Details option.
- 9. Select the Allow Open As check box.

Profile Details - PM Job	
Security Access Object Permissions Data Restrictio	ns
Add Attachment Delete Attachment	Select All

- 10. Select the **Object Permissions** tab.
- 11. Select the Shared PM Jobs and Site specific PM jobs check boxes in the Authorized to open section.

**NOTE**: The **Object Permission** tab is unique to the PM Job object. It reflects the fact that individual PM jobs can be configured as a database scoped record or as a site specific record.

Security Access Object Permissions Data Restrictions Authorized to edit						
Shared PM Jobs						
☐ Site specific PM Jobs						
Authorized to open						
✓ Shared PM Jobs						
Site specific PM Jobs						

### 12. Click OK.

The Security Profile is updated to reflect the Open authorization for the PM Job object.

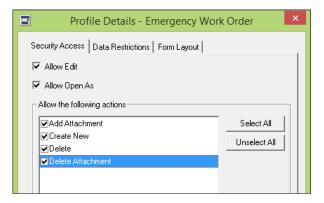
🕫 S	ecurity Profile Planner-Level	1 - Genera	Informatio	on – 🗆	×		
<u>File Edit View Windo</u>	w <u>H</u> elp						
🥥 🏷 🖬   🕤 🖬	1 🚑 💷						
A Planner-Level 1 Entry level planner							
General Information	General Desktops Description	nner					
	Abbreviation:						
	Object-actions available to users (	of this profile					
	Object Name	Open Edit	Class	Actions Selected	▲		
	🛃 Pick List	No No	Document	No			
	🐉 Pick List Line	No No	Document	No			
	🔚 PM Forecast	No No	Document	No			
	🎘 PM Job	Yes No	Document	No			
	N Task	No No	Document	No			

- 13. Repeat steps 7 through 9 and step 12 for each of the following objects:
  - PM Task
  - Entity
  - Item
  - Parts List
  - Purchase Catalog Item
  - Vendor

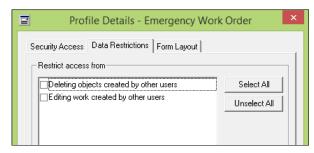
# Define editing access security to selected objects

In this section of the lab you are going to set up security to authorize the user to both create and edit records for a number of object types. Users will also be authorized to add and remove attachments.

- 14. Locate the Emergency Work Order object.
- 15. Click the Selected button select the Details option and click the Allow edit check box.
- 16. Select the Add Attachment and Delete Attachment check boxes.



17. Click the Data Restrictions button.



**NOTE**: If one or more check boxes on this tab are selected, users with this profile will be restricted from performing those actions. For purposes of this lab, ignore any of the restrictions listed on the data Restrictions tab.

18. Select the Form Layout tab.

Profile Details - Emergency Work	Order ×
Security Access Data Restrictions Form Layout	
Emergency Work Order	Select All

**NOTE:** When the Smart Client functionality is used, there is the ability to customize the way that selected objects display in EAM through the creation of custom forms. Through a custom form you are able to hide tabs and fields that are not being used and move the remaining fields around and perhaps combine them on a single tab. When a custom form is created, it displays on the Form Layout tab. A security profile can therefore be authorized to use one form and not another. The EAM Custom Solutions group is required to create a custom form. The default EAM form automatically displays and doesn't need to be selected. **For purposes of this exercise ignore the Form Layout tab**.

19. Click OK.

- 20. Repeat steps 14 17 and step 20 for each of the following objects.
  - Multi-task work order
  - Procedures and Safety
  - Warranty

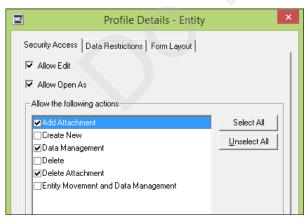
- Work Request
- Simple Work Order
- Work Task

You are now going to set up basic editing ability for a number of other objects.

- 21. Select the Equipment Activity Worksheet object
- 22. Click the **Selected / Details** option and click the **Allow edit** check box.
- 23. Click OK.
- 24. Repeat steps 22 through 24 for each of the following objects:
  - Requisition
  - Time Card
  - Equipment Activity Form
  - Equipment Activity Statistic
  - Parts List
  - Requisition Line
  - Standard Activity List
  - Statistic Reading
  - Trade
  - Manufacturer (value list)

You are now going to define security settings for the entity record. There are a few unique options for this object. The entry level planner role will be defined to allow the adding and removal of attachments, but an assigned user will not be able to create a new entity record, delete an existing entity record or use the Entity Movement and Data Management functionality.

- 25. Select the **Entity** object.
- 26. Click the **Selected / Details** option.
- 27. Click the **Allow edit** check box.
- 28. Select the Add Attachment and Delete Attachment check boxes.
- 29. De-select the Create New, Delete and Entity Movement and Data Management check boxes.



#### 30. Click OK.

The final security option you are going to set up is the PM Triggering function. You will enable individuals with this profile to trigger any shared or site-specific PM programs.

- 31. Select the Trigger PM function.
- 32. Select the **Details** option.

- 33. Click the Allow Edit check box.
- 34. Select the Object Permissions tab.
- 35. Select the Shared PM Jobs and Site specific PM Jobs check boxes.

Security Access Object Permissions Authorized to trigger for		
✓ Shared PM Jobs		
✓ Shared PM Jobs		
☑ Site specific PM Jobs		

36. Click OK.

# Link the security profile to a desktop

In this section of the lab you are going to link the new security profile to the existing Planner desktop.

- 37. Click the **Desktops** tab.
- 38. Select the **Planner** desktop check box.

🤻 S	ecurity Profile Planner-Level 1 - General Information		х
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>W</u> indo	w <u>H</u> elp		
🖉 🖉 😓 🔁 🖬 🖉 🗉	2 🥞 💯		
😽 Planner-Le	evel 1 Entry level planner		
General Information	General Desktops Description		
Real OLE Canvas	Desktops available for security profile		
	Accounting         Accounts Payable         Avantis Administrator         Buyer         Contractor         Demo         DEMO Inventory Manager         General User         Human Resources         Inventory Manager         Maintenance Manager         Maintenance Manager         Maintenance Manager         Maintenance Manager         Maintenance Manager         Planner         Purchasing Manager	Selected -	

- 39. Click the **Save** icon in the toolbar.
- 40. Exit the security profile.

You have now completed the requirements of this lab.

# Section 2 – Employee Object

#### **Section Objectives**

- Define the purpose and use of the employee record
- Define the purpose and configuration of each field, tab and view in the employee record

# Introduction

Each employee using EAM or being referenced in EAM must have an employee record in EAM. For example, if a maintenance clerk is entering time cards against an individual, that individual must have an employee record in EAM even if they have no login ID.

Contractors working on site who need to charge time to a work order, receive items from the storeroom or request materials/services through EAM must also have an employee record

The employee record is a database-scoped object with site-specific attributes.

2	Employee 7654567	- General Information	- 🗆 🖊 ×	
File Edit View Window	w Help			
🥖 📎 🔁 🔲 🗑 🖼	1 🚄 📁 🖓			
🔏 7654567 G	eorge Green	. 0		
: deneral Information	-	Keywords Description	Training	î
CLE Canvas	General Conta	ict User Roles	Approvals	
III Time Cards	Employee details			
	Name:	George Green		
	Abbreviation:			
	Job title:	Tradesperson		
	Home site:	Burlington 💌		
	Preferred language:	English		
	Department:	Maintenance		
	Crew:	Crew 2		
	Reports to:	Thomas Smith 🗨		
				~
•				•
For Help, press F1				//

# Security profile assignment

An employee record indicates that the user is an EAM user, provides the Login name and defines the security authorization that the individual for each database site.

The Login name must match with a user record in the SQL or Oracle database or the LDAP directory services value.

2	Employee 7654567 - General Information – 🗖 🗙	
File Edit View Windo	w Help	
i 🖉 🏷 🔁 🖬 🖥 🗉		
	George Green	
General Information	Categories Keywords Description Training General Contact User Roles Approvals	
🔢 Time Cards	Employee is a Maintenance and Procurement user	
	Login name: GREEN	
	Security profiles for this user	
	Site Authorized on Security Profiles	
	Burlington Tradesperson	
	▼ ↓	
	Add Selected -	
+		
For Help, press F1		

A user can have multiple security profiles for the same site. When this happens, any security profile authorization levels assigned to a specific site take precedence over any assignment for All Sites.

For example, if an individual has a security profile with editing ability for a specific site and a different security profile assigned at the 'All sites' level that allows for read-only access for the same object, the individual will have editing ability in the one site and read only in the other sites.

Security Profiles For Site	×	
C All sites	_	
<ul> <li>This site: Burlington</li> </ul>		
Security profiles for this user		
✓ Planner-Level 1	^	
SAMC		
Stock Transfer Ship		
Time Entry Payroll		
Time Entry Supervisor		
Time Entry User		
✓ Tradesperson		
JUVIP ADMINISTRATOR	~	
Selected 🗸 🛛 OK 🛛 Car	icel	

# Trade / role assignment

Employees can be assigned one or more roles or trades. These can be assigned for individual sites or for use in all sites. As with the security profile configuration, a site level setting takes precedence over an 'All sites' setting.

2	Employee 7654567 - General Information – 🗖 🗙	
File Edit View Windo	w Help	
🖉 🏷 🗅 🖬 🖥 🗉		
실 7654567 C	George Green	
General Information	Categories Keywords Description Training	
CLE Canvas	General Contact User Roles Approvals	
Time Cards	Work week starts on: Monday	
	Trades for this user	
	Site Trade Primary Trade	
	Burlington Millwright Yes	
	Mechanic	
	Add Selected 🕶	
	Roles for this user	
	Site Buyer Planner Schi▲	
	Burlington No No No	
	Add Selected 🕶	

Employees can have multiple trades with one of the trades set as the primary trade.

There are six roles settings:

- Buyer
- Planner
- Scheduler
- Supervisor
- Requestor
- Approver

**NOTE:** Individuals can have multiple roles. Every user should be assigned the Requestor role. If the approver role is assigned, the fields on the **Approvals** tab are enabled.

2	Employee 7654567 - General Information – 🗖 💌
File Edit View Windo	w Help
🦉 🏷 🔁 🔚 🗑 🗉	1 🚑 💯 🖓
실 7654567 G	George Green
 i≡ General Information	Categories Keywords Description Training
R OLE Canvas	General Contact User Roles Approvals
Time Cards	Work week starts on: Monday
	Trades for this user
	Site Trade Primary Trade ▲ Burlington Millwright Yes
	Mechanic
	Add Selected 🗸
	Roles for this user
	Site Buyer Planner Sch
	Burlington No No No
	Add Selected 🗸
•	V ►
For Help, press F1	

Any roles, trades or security profiles assigned to specific sites take precedence over any assigned for All Sites. For example, if you have a security profile for read-only authority for objects in Site 1 as well as a security profile that allows full authority on all objects in All Sites, you will be able to open and edit objects in all sites but Site 1.

# **Section 3 – Database Authentication**

#### **Section Objectives**

• Define the database authentication options when using Enterprise Asset Management

## Introduction

The Enterprise Asset Management database tracks a user's login ID but not password. The maintenance and authentication of passwords are maintained external to EAM. The security object in EAM does not control one's access to EAM but only the allowable functions and access within EAM.

**NOTE**: This course uses a SQL Server database.

There are three basic options for managing the login accounts on the database side:

- Using Windows authentication from trusted connections
- Using SQL Server authentication from non-trusted connections
- Using LDAP authentication from LDAP directory services

**NOTE:** SQL / Oracle database security is typically managed by the IT group rather than the EAM System Administer. This section is not intended to provide all the information required by the SQL / Oracle database administrator. It is intended to provide some basic background information to the EAM System Administrator and to support a database setup activity included in Lab 3. Detailed information on these options are contained in the applicable EAM Administrator's Guide (Microsoft SQL Server or Oracle)

# Windows authentication from trusted connections

Under this option, the EAM user name and password are the same as the user name and password in Windows. The EAM logon dialog is not displayed to the user when an object is launched in EAM. This option may be beneficial as you do not have to create separate logins from EAM users and users do not need to log into EAM once they have logged into Windows.

8	Login - New	- 🗆 🗙
Select a page	🖾 Script 🔻 🚺 Help	
Server Roles	Login name: DOMAIN\User	Search
Securables	Windows authentication	
	O SQL Server authentication	
	Password:	
	Confirm password:	
	Specify old password	
	Old password:	
	Enforce password policy	
	Superior Contraction Enforce password expiration	
	User must change password at next login	

# SQL Server authentication from non-trusted connections

Under this option, the EAM user name and password must be set up in SQL. The EAM logon dialog is displayed to the user when an object is launched in EAM and the user must enter their EAM login as defined in SQL. This may or may not be the same as their Windows login as it must be maintained separately. This option is beneficial in training or testing environments and is the approach used in this course.

8	Login - N	Vew	- 🗆 🗙
Select a page	🖾 Script 🔻 📑 Help		
Server Roles Control Server Mapping Securables	Login name:	DOMAIN\User	Search
Status	Windows authentication     SQL Server authentication		
	Password:		]
	Confirm password:		
	Old password:		
	<ul> <li>Enforce password policy</li> <li>Enforce password expiration</li> </ul>	on	
	<ul> <li>User must change passwo</li> </ul>	ord at next login	

# LDAP authentication from LDAP directory services

Under this option, the network login information (IDs and passwords) is defined and maintained in an LDAP services directory and the information is pulled from there when needed. No separate setup is required in the SQL or Oracle database. This is the typical approach used in a business environment.

# Lab 3 – Creating an EAM Employee Record and a SQL Database Record

# Introduction

In this lab you are going to create an employee record, link it to the security profile that you created in Lab 2, define trades and roles and set up the matching login ID in the SQL database.

# **Objectives**

On completion of this lab, you will be able to:

- Create a basic employee record
- Define an employee as an EAM user
- Define the security profile
- Define trades and roles
- Set up an employee in the SQL database using trusted connection authentication
- Verify the trusted connection authentication

# Create a basic employee record

In this stage of the lab you are going to create an employee record in EAM for yourself as a new EAM System Administrator.

**NOTE**: The creation and suspension of employee records in EAM is typically performed through an electronic integration with the human resource system. However, there is setup unique to EAM that must be done in EAM since the required information does not usually exist in the source system.

- 1. Select the **Templates** tab on the **EAM Administrator** desktop.
- 2. Launch the Employee Template.
- 3. Type your surname and first initial in the New number field (e.g. SMITHJ).

Create	e New Employee
Create New number:	SMITHJ
Template to use:	(none)
	OK Cancel

- 4. Click OK.
- 5. Type your First name Last name in the Name field.

**NOTE:** The **Name** field should be populated according to company standards. This is typically **Last name**, **First name** to facilitate the locating of an employee's record based on the last name. In this database the names are entered in the format First name Last name.

- 6. Type Entry level planner in the Job title field.
- 7. Select the **Burlington** value from the **Home site** drop-down list.

- 8. Select the Maintenance value from the Department drop-down list.
- 9. Select a name from the Reports to field drop-down list.

🧟 Em	ployee SMITHJ - Ge	neral Information	- 🗆 🗙	
<u>File Edit View W</u> indov	v <u>H</u> elp			
🦉 🏷 🔂 🔚 🗑 🖼	a 📁 ଟ 🖉			
🔏 SMITHJ Jo	hn Smith			
General Information	Categories General Contact Employee details Name: Abbreviation: Job title: Home site: Preferred language: Department: Crew: Reports to:		escription Approvals	5
•				
For Help, press F1				

10. Select the **Contact** tab.

**NOTE:** The email field is typically the only field that gets populated on the Contact tab. It is used in conjunction with email notifications. You will not be able to email from this training database as emailing has not been enabled.

## Define an employee as an EAM user

In this section of the lab you are going to define the login ID for this individual.

- 11. Select the User tab.
- 12. Select the Employee is a Maintenance and Procurement User check box.

**NOTE:** A better label for this check box would be 'This employee is an EAM user'. It must be checked as a part of the steps to enable a user to login to EAM but it has nothing to do with the EAM functionality available to the user.

13. Type your surname and first initial in the Login name field.

NOTE: For purposes of this lab, this should match your employee record ID as recorded in step 3.

14. Press the Tab key.

**NOTE**: When you tab out of the **Login name** field a yellow box displays. This indicates that there is a warning message connected with this field. If you click back in the box, the message displays in the status bar of the window. The message indicates that you do not have a matching record on the database side. This setup will be done later in this lab.

# Define the security authorization

In this section of the lab you are going to define the security profile(s) that apply to the employee and the applicable site(s).

- 15. Click the **Add** button.
- 16. Click the This site radio button and select Burlington from the drop-down list.
- 17. Select the **Planner Level 1** check box relating to the security profile that you created in Lab 2.

**NOTE:** For purposes of this course, you are also going to link your employee record to the **Full Authority** security profile so that you will be certain of having access to all objects and functions. When multiple profiles are selected, the individual's access to a specific object of function is based on the profile that provides the highest level of authorization

18. Select the Full Authority check box.

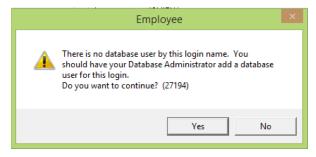
Security Profiles For Site
O All sites
<ul> <li>This site: Burlington</li> </ul>
Security profiles for this user
Full Authority
Planner
✓ Planner-Level 1
SAMC
Stock Transfer Ship
Time Entry Payroll
Time Entry Supervisor
Time Entry User
Selected  OK Cancel

19. Click OK.

# Define trades and roles

In this section of the lab you are going to link two trades with your profile. One of the trades will be set as the primary trade. You will also assign various roles to your profile so that your name will display in related drop-down lists.

20. Click the Roles tab.



### 3-20 Lab 3 – Creating an EAM Employee Record and a SQL Database Record

**NOTE:** A message displays indicating that your name still needs to be set up in the database by the Database Administrator. This message is an official confirmation of the yellow box that displayed in the Login name field. This setup is required before you can use this login ID. This setup activity will be completed later in this lab.

- 21. Click Yes to continue.
- 22. Select Monday from the Work week starts on field drop-down list.
- 23. Click the Add button relating to the Trades for this user section.
- 24. Select the Employee is a tradesperson check box.
- 25. Select the Time cards for this employee must reference a work order check box.
- 26. Select the Electrician and Millwright trade check boxes.
- 27. Select the Millwright value in the Primary Trade field drop-down list.

**NOTE**: When multiple trades are added, the first one selected always defaults as the Primary trade but this can be changed as was the case in step 27. The employee is able to enter time cards for either trade but the primary trade is the default value on a time card.

	Employee Trades For Site	
C All sites		
This site:	Burlington	
Tradesperse	on information	
🔽 Employ	ee is a tradesperson	
🔽 Time ca	ards for this employee must reference a work order	
- I rades that	this employee can perform	
✓Electrici		
Laborer	r	
Mechan	ic	
Mechan	ical Engineer	
✓ Millwrigh	it	
Painter	×	
Primary Tra	ide: Millwright	
	,	
	OK Cancel	

- 28. Click **OK**.
- 29. Click the Add button in the Roles for this user section.
- 30. Click the This site radio button and select Burlington from the drop-down list.
- 31. Select all check boxes in the Other roles for this user section except for the Approver check box.

🖃 Em	ployee Roles For Site			
C All sites				
This site:	Burlington 🗾 💌			
Contractor infor	mation			
🔲 🗖 Employee is	s on contract			
Contracting ver	ndor:			
Name:				
Other roles for this user				
🔽 Buyer	🔽 Scheduler 🔽 Requester			
🔽 Planner	🔽 Supervisor 🔲 Approver			
	OK Cancel			

**NOTE**: With the exception of the Approver option, the other five check boxes link this employee with the matching drop-down list. For example, if the planner check box is selected, this employee's name displays in a Planner drop-down list for the applicable site. The Approver option enables the employee to be available for the electronic routing of documents requiring approval. Selection of this check box also enables the fields on the Approval tab of the employee record. Approval routing is not being used in this course.

- 32. Click the **OK** button.
- 33. Click the **Save** icon in the toolbar.

🧟 En	nployee SMITHJ - General Information 🛛 🗕 🗖 💌
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>W</u> indo	w <u>H</u> elp
🥖 🔊 🖒 🖬 🖥 🖬	1 🖨 💯 🗟
🔬 SMITHJ J	ohn Smith
i General Information	Categories Keywords Description
🗟 OLE Canvas	General Contact User Roles Approvals
III Time Cards	Work week starts on: Monday
	Trades for this user
	Site Tradesperson Trade F
	Burlington Yes Millwright Electrician
	Electrician
	Add Selected 🗸
	Roles for this user
	Site Buyer Planner 🔺
	Burlington Yes Yes Y
	• • • • • • • • • • • • • • • • • • •
	Add Selected 🗸
•	•
For Help, press F1	

34. Exit the employee record.

You are now going to logout of EAM so that you can set up and then test the trusted connection authentication.

- 35. Right click on the EAM Session Manager icon in the status bar of the virtual machine desktop.
- 36. Select the Close all objects and log off menu option.

### Set up an employee in the SQL server database

In this section of the lab you are going to set the employee up in the SQL server database so that the SQL server authentication option can be used for logging into EAM.

**NOTE:** This activity is not normally carried out by the EAM System Administrator nor is it normally a manual process. Normally the LDAP approach is used for managing connections and authentications. This activity is being performed in this lab to help you understand that there is more to being able to use EAM than the creation of an employee record with a defined security profile.

37. Click the Start button and select the SQL Server Management Studio tile.



**NOTE:** If your desktop does not have tiles, the function can be located through the **All Programs | Microsoft SQL Server | SQL Server Management Studio** path.

eļ.	Connect to Server
Microsoft*	Server: 2008 R2
Server type:	Database Engine 🗸
Server name:	AVW864VM
Authentication:	SQL Server Authentication
Login:	sa 🗸 🗸
Password:	
	Remember password
Connec	ct Cancel Help Options >>

- 38. Click the **Connect** button.
- 39. Expand the **Security** tree option in the Object Explorer section.

<b>1</b> 5	Microsoft SQL Server Management Studio
File Edit View Debug Tools Window Community H	lelp
📜 New Query   🛅   📸 📸 🔀   📑   📂 🖃 🎯   🚟 💂	
Object Explorer	<b>→</b> ‡ X
Connect 🕶 📑 📑 🍸 🛃 🍒	
🖃 🐻 AVW864VM (SQL Server 10.50.2500 - sa)	
🕀 🧰 Databases	
🖃 🧰 Security	
🕀 🧰 Logins	
🕀 🚞 Server Roles	
🕀 🚞 Credentials	
🕀 🚞 Cryptographic Providers	
🗉 🚞 Audits	
🗉 🚞 Server Audit Specifications	
🕀 🚞 Server Objects	
🕀 🚞 Replication	
🕀 🚞 Management	
🕀 📸 SQL Server Agent	

- 40. Right-click on the Logins folder.
- 41. Select the New Login option.

New Login	
Filter	•
Start PowerShell	
Reports	•
Refresh	

42. Type your <last name first initial> in the Login name field.

**NOTE**: The entry in this field must match the entry made in the **Login name** field on the EAM employee record. (Step 13)

- 43. Select the SQL Server Authentication radio button.
- 44. Type avantis as the password in the Password field.
- 45. Type avantis in the Confirm password field.
- 46. Uncheck the **Enforce password policy** check box.
- The other two check boxes are automatically de-selected and disabled.
- 47. Select demo from the Default database drop-down list.
- 48. Select English from the Default language drop-down list.

8	Login -	New		- 🗆 ×
Select a page	🔄 Script 🔻 🛐 Help			
Servera Server Roles Securables Securables Status	Login name: <u>Windows authentication</u> SQL Server authentication Password: Confirm password: Specify old password Old password: Enforce password expira User must change password Mapped to certificate	tion		Sgarch
	Mapped <u>to</u> asymmetric key     Map to Credential			✓
Connection				✓ <u>A</u> dd
Server: AVW864VM Connection: sa View connection properties	Mapped Credentials	Credential	Provider	2
Progress				Remove
Ready	Default <u>d</u> atabase: Default language:	demo English		<b>&gt;</b>
	·		ОК	Cancel

- 49. Select the **User Mapping** page.
- 50. Click the **Demo** database check box.
- 51. Select the marcam#u check box.
- 52. Leave the **public** option checked.

8	Login - N	lew	- 🗆 🗙
Select a page General Server Roles Muser Mapping	Script Vers mapped to this login:		
Securables	Map       Database         ArchestrAServicesDB         demo         Holding         master         model         Runtime         tempdb		Default Schema
Connection	db_accessadmin		
Server: AVW864VM Connection: sa <u>View connection properties</u> Progress	db_backupoperator db_datareader db_datawriter db_ddladmin db_denydatareader db_denydatawriter db_owner db_securityadmin marcam#s <b>v</b>		- 02
Ready	✓ marcam#u mcxuser ✓ public		
			OK Cancel

53. Click **OK**.

54. Exit from the SQL Management Studio function.

You should now be able to log into EAM using this login ID and password.

# Verify the trusted connection authentication

In this section of the lab you are going to verify that you can log into EAM using the new database user account.

- 55. Launch EAM from the virtual desktop.
- 56. Type the Login ID of the employee record you created in step 13 and step 42.
- 57. Type your **Password** as entered in step 44.

# 3-26 Lab 3 – Creating an EAM Employee Record and a SQL Database Record

	Avantis Asset Management	×
Login informat Login name: Password: Environment: Site:	SMITHJ	OK Cancel
Avantis® is a re subsidiaries and respective owne	protected by US and international copyright	ks of their

#### 58. Click OK.

The Classic EAM Administrator desktop displays. You have now completed the requirements of this lab.

# **Section 4 – Data Security Function**

#### **Section Objectives**

- Define the purpose, use and configuration of the Data Security function
- Define the options for selecting individuals covered by the data security function
- Define the options for selecting the security restrictions in the data security function

# Introduction

The Data Security function provides you with the ability to add an additional level of security for individuals or user groups (based on a security profile) who are authorized to use various inventory-related transactional forms. The Data Security function allows you to grant or prohibit this ability on a storeroom by storeroom basis.

	Data Security - Ge	neral Information	- 🗆 🗙
File Edit View Help			
🧏 Data Securi	ty Detail		
E General Information	General Description		^ ^
🔁 OLE Canvas	Security profile data restrictions		
	Profile Obje	st Storeroom	<u>A</u> dd
			Selected 👻
			Order by 👻
		-	
		•	
	Employee data restrictions		
	Employee Obje		A <u>d</u> d
	8362716 Issue For		Selected 🔻
	8362716 Issue Tra	nsact Main Stores	
			Order by 🔻
	,,		
For Help, press F1			· · · · · · · · · · · · · · · ·

# **Restricted users**

Restrictions can be assigned:

• To all employees linked to a specified security profile

2	Data Security Detail	×
General Storerooms		1
Profile:		
Name:		

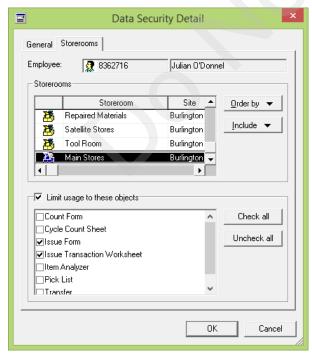
#### • To individual employees

<b></b>	Data Security Detail	×
General Storerooms		1
Restrictions apply to- Employee:		
Name:		

## **Data restrictions**

Data restrictions are assigned:

- By storeroom, and
- By inventory transactional object





# Module 4 – Desktops

Section 1 – Desktop Object Lab 4 – Creating a desktop

# **Module Objectives**

- Define the purpose, usage and structure of the desktop object
- Identify the procedures for linking different types of objects to a desktop
- Create a desktop and define the desktop folders
- Link different types of objects to the desktop
- Link the desktop to a security profile

# Section 1 – Desktop Object

#### **Section Objectives**

- Define the purpose, usage and structure of the desktop object
- Identify the procedures for linking different types of objects to a desktop

# **Desktop object**

The Desktop object is a database-scoped object that defines the objects or functions available to an individual user or to a group of users. EAM is delivered with a series of role-based desktops but custom desktops can be created to reflect client-specific requirements. Desktop shortcuts typically represent different EAM objects or functions but can include external links such as Word, Excel or pdf documents or other non-EAM functions.

Each desktop requires at least one folder in which the objects are placed. Multiple folders are typically used when there are a significant number of functions or objects available to the desktop user. This allows for the organization of the icons onto different folders by type or purpose.

<b>≝</b>	Desktop 101 - General Information – 🗖 🗙
File Edit View Window	v Help
🖉 🔊 🔁 🖬 📖 🖉	ý 😰
🕵 101 Planne	er
i≡General Information	General Description
CLE Canvas	Name: Planner Preview
Translations	Language: English
	Folders
	Folder name A Move V
	Cabinets Functions Selected
	Reports
	Folder: Add
	Contents of selected folder
	Icon Shortcut name Command line
	Labor Transactions scpro.exe ~viewID=88 ~classi
	Parts Lists scpro.exe ~viewID=88 ~classI
	Pick List Lines scpro.exe ~viewID=88 ~classI
	✓     ✓       ✓     Auto arrange       Add ▼     Selected ▼
	Add  Add  Add  Add  Add  Add  Add  Add
•	•
For Help, press F1	

A desktop must be linked to at least one security profile for it to be available for use.

If any users are using a Smart Client login, the desktop or desktop available to the individual based on their assigned security profiles are available through the Workspace.

The following table identifies the different types of links that can be made through the **Add** button.

Add button menu option	Purpose
By security profile	When a specific security profile is selected under this menu option, templates are added for all objects for which the security profile indicates that the user has editing authorization. There is an option to add cabinets and / or the open object function for any object that the security profile allows read only or editing authorization.
Templates	This menu option allows for the selection of EAM delivered and / or custom templates for specific objects. Note that if a template is linked to the desktop but the user's security profile does not allow for editing / creating ability, the template will not display.
Other	This menu option allows for the linking to various worksheets, wizards, as well as some specialized functions such as the data security function, the exchange rate object, the PM triggering function and the Chart of Accounts.
Value lists	This menu option allows for the linking to any of the EAM-delivered or user-defined value lists.
Cabinets	This menu option allows for the linking to any EAM-delivered or custom cabinets.
Reports	This menu option allows for the linking to any EAM-delivered or custom-developed KPI reports.
Utilities	This menu option allows for the linking to the Maintenance Transaction Processor, the Pick List Processor and the Invoice Processor. It also enables linking to various functions that might be used in conjunction with the Approvals module.
Documents	This menu option allows for the linking to various technical reference manuals provided with EAM if the manuals were installed as recommended.
Custom	This menu option allows for the linking to other documents or applications available on the network.

# LAB 4 – Creating a Desktop

# Introduction

The Enterprise Asset Management desktop provides the shortcuts that the user needs to perform their functional role. Desktops are completely customizable by the EAM System Administrator and are linked to one or more security profiles.

# Objective

On completion of this lab you will be able to:

- Create a desktop and define the desktop tabs
- Link cabinets to the desktop
- Link templates to the desktop
- Link a special function and a value list to the desktop
- Link the open object function to the desktop
- Link the desktop to two security profiles

# Create a desktop and define the desktop folders

In this section of the lab you are going to create the desktop shell and set up the folders. Your desktop will partially reflect the requirements for the Planner-1 security profile that you created in Lab 2 for an entry level planner. If time permits, you can use the guidelines in this lab to complete the setup to match the Planner-1 security profile.

- 1. Select the **Templates** tab of the EAM Administrator desktop.
- 2. Launch the Desktop Template.
- 3. Type **100** in the **New number** field.

Create New Desktop
Create New number: 100 Template to use: [none]
OK Cancel

- 4. Click OK.
- 5. Type Entry level planner in the Name field.
- 6. Press the **Tab** key to update the banner.

You are now going to create the desktop tabs. In this instance you are going to create only three tabs: Cabinets, Functions, Open objects.

7. Type **Cabinets** in the **Folder** field.

2	Desktop 100 - General Information	- 🗆 🗙
File Edit View Windo		
4	level planner	
General Information	General Description	<u>P</u> review ▲ <u>M</u> ove ▼ Selected ▼
	Folder: Cabinets	Add

- 8. Click the **Add** button to the right of the **Folder** field.
- 9. Repeat steps 7 and 8 to create a Functions folder and an Open Objects folder.

25	Desktop 100 - General Information	- 🗆 🗙
File Edit View Windo	w Help	
🖉 🔊 🔁 🖬 🖥 🗉		
🕵 100 Entry	level planner	
General Information	General Description	1
Translations	Name: Entry level planner Language: English	<u>P</u> review
	Folders Folder name Cabinets	▲ <u>M</u> ove ▼
	Functions Open Objects	Selected 🗸
	Folder:	Add

# Link cabinets to the desktop

In this section of the lab you are going to create the short cuts on the desktop for selected cabinets applicable to the entry level planner role. You will also re-arrange the order of a couple of cabinets and change the displayed name of one of the cabinets.

- 10. Click the **Add** button near the bottom of the window.
- 11. Select the Cabinets option.

By Security Profile
Templates
Other
Value Lists
Cabinets
Reports
Utilities
Documents
Custom

**NOTE**: All cabinets in the database display in this window. This includes EAM delivered cabinets that cannot be modified (generally located near the bottom of the list) as well as EAM-delivered copies of these cabinets that can be modified (prefaced with an \*). The list also includes any custom cabinets developed by authorized users in the client organization. Organizations typically have a cabinet naming format that eases the identification of custom cabinets. Any of the cabinets in the list can be added to a custom desktop.

- 12. Select the check boxes for a selection of cabinets such as:
  - \*All Work Orders
  - \*Entity Cabinet
  - \*Equipment Activity Log
  - \*Inventory Look-up
  - \*PM Job Cabinet
  - \*Procedures / Safety Look-up
  - \*Purchase Item Catalog
  - \*Standard Activity List
  - \*Statistic Readings
  - \*Time Card Lookup
  - \*Work Order Cabinet
  - \*Work Order Tasks Backlog
  - \*Work Request Cabinet

Desktop Shortcut Sel	elector	x
Folder: Cabinets		
Open the object		
* Add -On Listing Look Up	∧ Check All	
✓* All Work Orders		- 1
🗆 * Area A Backlog	Uncheck All	
Cabinet of Cabinets	Selected 🔻	
* Catalog Request Look Up		
* Category Catalog Look Up		
🔲 * Customer Billing		
* Cycle Count Sheets		
* Employee Look Up		
* Entity Budget		
Entity Cabinet		
Equipment Activity Log		
* Expedite Look Up		
× Inspection PMe		
ОК Аррі	oly Cancel	

13. Click **OK** to add the cabinets to the desktop.

lcon	Shortcut name	Command line	_
₽	* Timecard Lookup	scpro.exe ~viewID=88 ~classI	
@	* Work Order Cabinet	scpro.exe ~viewID=88 ~classl	
₽	* Work Order Tasks - Backlog	scpro.exe ~viewID=88 ~classl	
Ð	* Work Request Cabinet	scpro.exe ~viewID=88 ~classI	-
L]			•
	o arrange		Move .

You are now going to adjust the order of a couple of cabinets.

- 14. De-select the Auto arrange check box.
- 15. Select the **\*Work Request Cabinet** and click the up arrow until the cabinet moves to the top of the cabinet listing above the \*All Work Orders cabinet.
- 16. Click the **\*Work Order Tasks Backlog** cabinet and click the up arrow until the cabinet is the second cabinet in the list.

You are now going to change the name of a cabinet as it is to display on the desktop.

- 17. Double-click on the **\*Work Request Cabinet**.
- 18. Change the content of the **Name** field to **All Work Requests**.

**NOTE**: When the cabinet name is changed in the setup of the desktop, it is only the displayed name that changes. Once the cabinet is launched, the actual cabinet name displays. Changes to the official cabinet name can be done in the cabinet by a user authorized to edit cabinets.

	Shortcut Details	×
Folder: 	Cabinets	
Name:	All Work Requests	
🔲 Use classic	application	
Command line:	scpro.exe ~viewID=88 ~classID=	
Icon:	200	
	ОК	Cancel

**NOTE:** Each shortcut for cabinets or templates includes the check box **Use classic application**. If this check box is selected, the classic version of the cabinet or object launches when a user selects the icon from the desktop. All cabinets can be displayed in either classic or Smart Client mode. If an object does not have a Smart Client version, the check box is automatically selected and the field is disabled. The setup of a database to use either the classic or the Smart Client version is normally done through the running of a script that in essence selects or deselects this check box. When the manual approach is used, the organization can have the users of one desktop using the classic cabinet format and the users of a different desktop using the Smart Client format. For purposes of this lab, either approach can be used.

19. Click OK.

## Link templates to the desktop

In this section of the lab you are going to link some templates to the custom desktop.

- 20. Select the Functions folder.
- 21. Click the Add button at the bottom of the dialog box and select the Templates option.
- 22. Select the Multi-task work order value from the Templates for drop-down list.

Deskto	op Shortcut Selecto	or ×
Folder: Function:	\$	
Templates for: Multi-task	Work Order	
-Select one or more templa	ates to add to the folder—	
Template	Title 🔺	Select all
🖓 TIRE CHG	Flat Tire	Clear selection
🐴 MOTOR RPR	Motor Repair	
🖓 SEAL LEAK	Pump Leaking at Se	Selected 💌
🖓 REPK PUMP	Repack pump	
		Include 🔻
Create additional shortcut Create from scratch Open Cabinets 0	is for Multi-task Work Orde	ar

**NOTE**: When a specific object is selected, a list of all custom templates associated with the object also displays. If there is a desire to include any of these templates on the desktop, they need to be selected. These can be multi-selected if applicable. The EAM delivered template for the object does not display. Therefore, if the **Select one or more templates to add to the folder** section is empty, there are no custom templates – only the EAM-delivered template. The selection of the EAM-delivered template is controlled by the **Create from scratch** check box. If that option is selected, the EAM-delivered template is added to the desktop. If it is not selected, it isn't added.

You are now going to add the EAM-delivered template and a couple of custom multi-task work order templates to the desktop.

23. Hold the Ctrl key down and select a couple of templates such as MOTOR RPR and REPK PUMP.

**NOTE**: The **Open** check box in the lower area of the Desktop Shortcut Selector dialog box determines whether or not the **Open objects** function for the selected object is added to the desktop. In this lab we are going to place this type of function on a separate folder. Similarly, the **Cabinets** check box determines whether or not all cabinets based on this object get linked to this folder. Normally this check box should be deselected with selected cabinets using the function covered earlier n this lab.

- 24. Keep the **Create from scratch** check box selected.
- 25. De-select the **Open** check box.
- 26. De-select the Cabinets check box.

	Deskt	op Shortcut Seled	cto	r ×
Folder:	Function	15	_	
Templates for:	Multi-tas	k Work Order 🔹	•	
C Select one or	more templ	ates to add to the folder	r —	
Tei	mplate	Title	•	Select all
🔏 TIRE CH		Flat Tire		Clear selection
🐴 мотор		Motor Repair		
SEAL LE		Pump Leaking at Se		Selected 💌
REPK P		Repack pump	•	Include 👻
		F		
_ ⊢ Create additio	nal shortcu	ts for Multi-task Work C	Orde	r
🔽 Create fro	m scratch			
🗖 Open				
🗖 Cabinets				
	0	K Apply		Cancel

- 27. Click OK.
- 28. Use steps 21 through 27 as a guideline and add the generic EAM-delivered templates for the following objects:
  - Time card
  - Statistic reading
  - Work request (Include the REPAIR customer template)
- 29. Click OK.

2	Desktop 100 - General Information – 🗖 🗖	ĸ
File Edit View Windo	w Help	
🖉 🖉 🔁 🐨	1 <b>2 p</b>	
🅵 100 Entry	level planner	
General Information	General Description	
Real OLE Canvas	Name: Entry level planner Preview	
Translations	Language: English	
	- Folders	
	Folder name	
	Functions Selected	
	Open Objects	
	•	
	Folder: Add	
	Contents of selected folder	
	Icon Shortcut name Command line	
	Create MOTOR RPR scpro.exe ~viewID=12 ~classI	
	Create Multi-task Work Order scpro.exe ~viewID=12 ~classI	
	Create REPAIR scpro.exe ~viewID=1 ~classID	
	Create REPK PUMP scpro.exe ~viewID=12 ~classI	
	Create Statistic Reading scorp eve ~viewID=6801 ~cla	
	Add   Selected   Moye  Moye	
•		•
For Help, press F1		
or neip, press ri		11

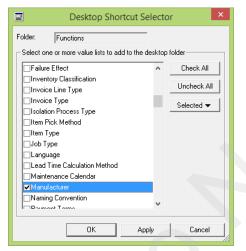
# Link a special function and a value list to the desktop

In this section of the lab you are going to link the PM triggering function and the Manufacturer value list to the custom desktop. These will be added to the **Functions** tab.

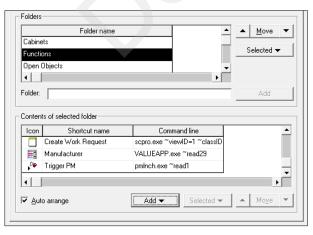
- 30. Select the Functions folder.
- 31. Click the Add button at the bottom of the dialog box.
- 32. Select the **Other** option.
- 33. Select the Trigger PM check box.



- 34. Click OK.
- 35. Select the Value lists option.
- 36. Select the Manufacturer check box.



37. Click OK.



Both the value list and the Trigger PM utility display in the folder contents section.

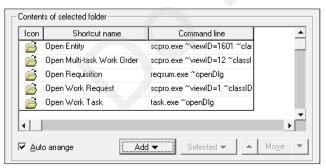
# Link open objects to the desktop

In this section of the lab you are going to add the open objects function for the same objects to match the selected templates. This function is only required once for each type of object regardless of the number of templates that were previously selected.

- 38. Select the **Open Objects** folder.
- 39. Click the **Add** button at the bottom of the dialog box and select the **Templates** option.
- 40. Select the Multi-task work order value from the Templates for drop-down list.
- 41. De-select the Create from scratch check box.
- 42. De-select the Cabinets check box.

E Deskto	op Shortcut Sele	ctor		×
older: Open Ob	ojects			
emplates for: Multi-task	K Work Order	•		
Select one or more templa	ates to add to the folde	er —		
Template	Title	•	Select all	
💐 TIRE CHG	Flat Tire		Clear selectior	-
🐴 MOTOR RPR	Motor Repair		cleal selection	<u>'</u>
🖓 SEAL LEAK	Pump Leaking at Se		Selected 💌	
💐 REPK PUMP	Repack pump			
	<u>► + + </u>	· _	Include 🔻	
Create additional shortcut Create from scratch Create from scratch	ts for Multi-task Work	Order		
Cabinets				
01	K Apply		Cancel	

- 43. Click OK.
- 44. Repeat steps 39 through 43 to add the Open objects icon for the **Work task, Entity, Work Request** and **Requisition** objects.



You are now going to set each of the open object functions to launch the classic version of the object.

- 45. Double-click on the first listed open object.
- 46. Select the Use classic application check box.

	Shortcut Details
Folder: 	Open Objects
Name:	Open Entity
🔽 Use classic	application
Command line:	ent.exe ~openDlg
Icon:	
	OK Cancel

- 47. Click OK.
- 48. Select the next listed item in the list and repeat steps 45 through 47 until this setting has been applied to all listed functions.

Icon	Shortcut name	Command line	-
Ê	Open Entity	ent.exe ~openDlg	_
õ	Open Multi-task Work Order	multi.exe ~openDlg	
Ê	Open Requisition	reqsum.exe ~openDlg	
Ê	Open Work Request	wr.exe ~openDlg	
Ê	Open Work Task	task.exe ~openDlg	
<ul> <li>▲ut</li> </ul>	o arrange Ado	d ✔ Selected ✔ ▲	Mo <u>v</u> e

49. Click the **Save** icon in the toolbar to save the desktop.

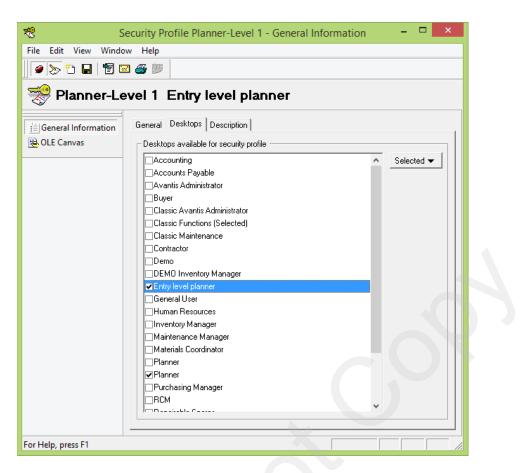
**NOTE**: Before exiting from a custom desktop, you can see its visual image to see if there are any changes that you would like to make. For example, you might want to change the displayed shortcut name or the displayed order. To view the desktop, take it out of edit mode then click the **Preview** button. You will not be able to test the connections as this is read only.

- 50. Exit the custom desktop.
- 51. Close the **Desktops** cabinet.

## Link the desktop to two security profiles

In this final section of the lab you are going to link your desktop to two security profiles so that it will be available to any user who is linked to either of those profiles. This is done through the security profiles.

- 52. Launch the Security Profiles cabinet.
- 53. Type planner in the Security profile contains field.
- 54. Click OK.
- 55. Double-click on the security profile for the entry level planner that you created in Lab 2.
- 56. Select the **Allow editing** icon in the toolbar.
- 57. Select the **Desktops** tab.
- 58. Select the Entry level planner desktop.



- 59. Save the security profile.
- 60. Exit the security profile.
- 61. Click the Filter button in the cabinet view.
- 62. Type full in the Security profile contains filter.
- 63. Click **OK**.
- 64. Double-click on the Full Authority profile.
- 65. Repeat steps 56 through 61 to link the Entry level planner desktop to the Full authority security profile.
- 66. Click the Save icon in the toolbar.
- 67. Exit the security profile.
- 68. Exit the cabinet.

You have now completed the requirements of this lab.

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# **Module 5 – Value Lists**

- Section 1 Foundational Value Lists
- Section 2 Functional Value Lists
- Section 3 User-defined Value Lists

### **Module Objectives**

- Define the purpose and general types of value lists
- Define the configuration of key foundational value lists
- Identify the functional value lists by applicable module
- Define the purpose, usage and configuration of user-defined value lists

# **Section 1 – Foundational Value Lists**

#### **Section Objectives**

- Define the purpose and general types of value lists
- Define the configuration of key foundational value lists

The following table identifies the value lists that can be considered as being a foundational value list. Although they are not identified anywhere as such, these value lists are required by the EAM application regardless of the module(s) being used.

Value list name	General purpose	Sample value
Cost group	Defines the chargeable and summary cost groups used for tracking costs on work orders and entities. Chargeable cost groups include a G/L account segment that reflects the tracking of the chargeable cost in the G/L accounting system. Default cost groups are defined on item records, purchase catalog items and on trades.	Cost group:       Material Store:         Abbreviation:       MaStr         Cost group type       Used with         Cost group type       Used with         Cost group type       Used with         Summary cost group       Itabor transactions         Used for fixed assets       MatStr B01         Summary group information       Segment         List of available       Cost groups included in this summary group:         Cost groups       Add ≥         OK       Cancel

Value list name	General purpose	Sample value
Currency	Defines the currencies that can be used in EAM along with the currency symbol (must be unique) and the number of decimal places displayed for an individual price and for the extended value.	Currency Details  General Local  Identifier:  CDN  International information  Symbol:  C\$  ISO code:  C\$  Singular name:  Canadian Dollar  Plural name:  Canadian Dollars  Precision details  Price:  6  Amount:  2  Euro currency information  Cutrover date:  DK  Cancel  Canadian  Cancel  Cancel
Maintenance calendar	Defines the time groups and the start and end date for each group in which costs and statistics will be tracked and summarized on entities. The time groups are normally structured in a Life-to-date, Year and Month although others options are possible.	Time Group Details         ×           Time group:         Yearly           Level:         2           Life to date           Abbreviation:           Time periods           Description           Start Date           2016           1/1/2016           12/31/2016           2015           1/1/2014           2013           1/1/2013           2012           1/1/2014           2013           1/1/2013           2012           1/1/2014           2013           1/1/2013           1/1/2014           1/1/2015           1/1/2014           1/1/2015           1/1/2014           1/1/2015           1/1/2014           1/1/2015           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010           1/1/2010

Value list name	General purpose	Sample value
Unit of measure	Defines the unit of measurement 'families' and the values within each family that are used throughout EAM. Each value within a family (usually the smallest value) is defined as the base value and all other values must be defined relative to the base or another value. The database comes populated with some common default families.	Unit of Measure Category Details

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# Section 2 – Functional Value Lists

#### **Section Objectives**

• Identify the functional value lists by applicable module

The value lists referred here as functional-value lists are used in one or more of the four major functions – Foundation, Maintenance, Inventory, Procurement – in the core EAM product. The following table identifies these value lists and the module or modules in which they are encountered.

Value list	Foundation	Maintenance	Inventory	Procurement
ABC Usage			x	
Action taken		x		
Activity result		х		
Activity type		X		
Business unit				x
Common symptoms		х		
Conditions				X
Contact type				x
Contract set-up rules				x
Contract type				Х
Country				X
Crew		х		
Criticality		Х		
Custom extension		х	х	Х
Cycle count frequency			х	
Cycle count priority			х	
Deliver to location			х	Х
Department	x			
Device type		х		
Entity classification		х		
Entity status		х		
Entity type		х		
Failure effect		Х		
Inventory classification			х	
Invoice line type				Х
Invoice type				Х
Item pick method			х	

Value list	Foundation	Maintenance	Inventory	Procurement
Item type			х	x
Job type		х		
Language	x			x
Lead time calculation method			х	
Manufacturer		х		x
Naming convention	х			
Payment terms				х
Performance indicator				x
Price tolerances				х
Priority		х		
Purchase order type				х
Reason canceled		x	x	х
Reason for delay		x		
Reason for downtime		x		
Reason for failure		x		
Reason for lost time		x		
Reason for transaction		x	х	
Reason held		x	х	x
Reason not performed		х		
Reason rejected		х	х	х
Reference classification			х	
Replenishment group			х	
Replenishment message			х	
Request for quotation type				х
Requisition priority		x	х	x
Requisition type		x	х	x
Root cause		x		
Schedule type		x		
Schedule priority		x		
Service level target			х	
Shift		x		
Shutdown period		x		
Sourcing list		x		
Standard price break				Х
Statistics		х		
Storeroom			x	
Supplementary document type			x	
Taxes				X

Value list	Foundation	Maintenance	Inventory	Procurement
Unit type				Х
Vendor resource type				х
Vendor type				х
Work classification				Х
Work region				Х
Work type		x		

The purpose and configuration of the key functional value lists are covered during the detailed object discussions in one or more of the following courses:

- Enterprise Asset Management Maintenance
- Enterprise Asset Management Inventory
- Enterprise Asset Management Procurement

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# Section 3 – User-defined Value Lists

#### **Section Objectives**

• Define the purpose, usage and configuration of user-defined value lists

### **User-defined value lists**

EAM includes 60 user-defined value lists that can be used when there is a need for the add-on field to reflect a specific list of values. These lists require basic configuration:

- Value
- Abbreviation (optional)
- Sequence (number greater than 0 required)

	Value Details ×	
Value: Abbreviation:		
Sequence:	0	
	OK Cancel	

While appropriate values can be added to this value lists through the EAM Administrators desktop, these value lists are only used through an add-on linked to the applicable object record.

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# Module 6 – Categories and Add-Ons

Section 1 – Categories Lab 5 – Creating a Category Section 2 – Add-Ons Lab 6 – Creating an Add-On

#### **Module Objectives**

- Define the purpose of the category function
- Define the characteristics of categories
- Create a category
- Define the purpose and usage of the add-on function
- Define the characteristics of an add-on
- Identify the login ID required to create or modify an add-on
- Identify the types of fields that are available for selection in an add-on
- Create an add-on

## Section 1 – Categories

#### **Section Objectives**

- Define the purpose of the category function
- Define the characteristics of categories

#### Introduction

Categories are a user-defined means of organizing objects with similar characteristics into meaningful groups. When categories are used to classify objects, a cabinet view can be used to search easily and quickly for all objects that share a specific category value.

For example, an organization might want to have a category that identifies the category code of materials used by the maintenance department. Some broad category code values might be Abrasives, Adhesives, Belts and Fasteners. Classifying a large collection of objects such as maintenance entities, items, and work orders into smaller groups allows you to search easily and quickly for specific objects, to group similar objects on reports and lists, and to analyze objects according to their similarities.

Categories can be shared across object types. When you define a category you indicate what types of objects can use the category.

E Cate	gory Commodity - General Information 🛛 – 🗖 💌	
File Edit View Window	w Help	
i 🖉 🏷 🖒 🖬 i 🖥 🖬	1 🚑 🔛	
i General Information	General Description	
Real OLE Canvas	Category name: Commodity	
E Values	Description:	
	Category usage         Available object types:         Catalog Request         Catalog Request         Contract         Contractor's Engineer         Contractor's Equipmer         Add All >         Entity         Item Storeroo	Shared across different object types Each object type can have up to 8 categories
For Help, press F1		

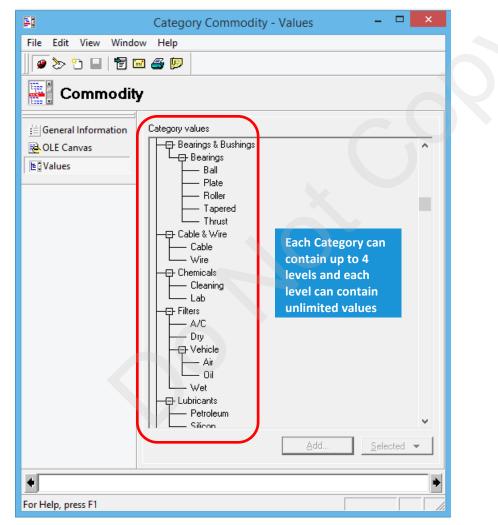
Categories share the following characteristics:

- Each object type is permitted to have up to eight different categories.
- Each category can have up to four levels.
- Each level is permitted an unlimited number of values.

#### **Category structure**

For each category, values are identified that reflect how objects should be grouped in the category. It is possible to use the category function with only a single value but most categories have multiple values and even multiple levels of values up to the maximum of four levels.

For example, the commodity code value 'Abrasives' might have the following values on the second level: Belts, Blades, Discs, Emery, Paper, Stones and Wheels. Each of the values might have multiple sub-category values.



Categories can be made mandatory on a given object type through the messages function.

# LAB 5 – Creating a Category

### Introduction

In this lab you are going to create a category that will be used in conjunction with the entity object. This category is going to be a work order class category that displays on all PM tasks and all work order tasks. This category allows for a broader filtering / sorting of work order tasks than that which is available through the work type value.

### **Objectives**

On completion of this lab you will be able to:

- Create a category and link it to two object types
- Define category values on two levels
- Verify the category on a valid object and select a value

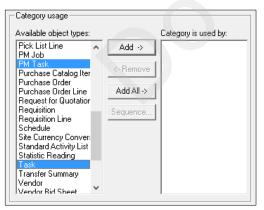
#### Create a category and link it to two objects types

In this section of the lab you are going to create a category and add it to the work order task and PM task objects. Your category is going to contain two values.

- 1. Select the **Functions** tab on your desktop.
- 2. Double-click the Category Template icon.
- 3. Type Work order class in the New Name field.

2	Create New Category ×
New name:	Work order class
	OK Cancel

- 4. Click OK.
- 5. Hold the Ctrl key down and multi-select the PM task and Task options under the Available Object Types list.



6. Click Add to add the two object types to the Category is Used By list on the right.

Category usage		
Available object types:		Category is used by:
Catalog Request	Add ->	PM Task
Class Element Alias Contract		Task
Contractor's Employee	<- Remove	
Contractor's Equipmer		
Count Sheet Employee	Add All ->	
Entity	Sequence	
Entity Status History		
Equipment Activity Expense Sheet		
Inventory Transaction		
Invoice		
Invoice Line		
Isolation Process		
Item Storeroom		

### Define the category values

In this section of the lab you are going to define the category value. In setting up the values you will add some values to the first level and some to the second level.

- 7. Select the **Values** view of the category object.
- 8. Click on the Work order class category name.
- 9. Click the Add button and type Capital in the Value field.

	Add New Work order class	×
Value:	Capita	
	OK Cancel	

10. Click **OK** to add the value under the Work order class category.

Category values	
E Work order class Capital	

11. Repeat steps 9 and 10 and add the values Routine and Standing.



You are now going to add values that are a sub of the **Routine** value.

- 12. Select the Routine value.
- 13. Click Add.
- 14. Type Electrical.

Category values	
Work order class	
Capital Boutine	
Standing	
Add to Routine	
Value: Electrical	
OK Cancel	

- 15. Click OK.
- 16. Repeat steps 13 to 15 and add the values Mechanical and Instrumentation.
- 17. Save and exit the new category.

You are now going to verify the category listing on a work order task.

- 18. Select the Cabinets tab on the EAM Administrator's desktop.
- 19. Launch the Cabinet of Cabinets.
- 20. Type task in the **Cabinet name contains** field.

Prompted Filter Details	x
Include Cabinets with the following characteristics:	^
Cabinet name	
Contains: task	
Limit number of rows to: 0	•
OK Clear All Cancel	

- 21. Click **OK**.
- 22. Launch the \* Work Order Tasks Backlog cabinet.
- 23. Click **OK** to close the prompted filter and display a number of records.
- 24. Launch the task for work order 10033.

**NOTE:** If the selected work order task is not a task from a multi-task work order form, you will get a message indicating this. Click **OK** to proceed or select a different record. If the work task you launch relates to a simple work order form or an emergency work order form, the work order is displayed in classic mode and the Category is available from the Category tab on the General view. The following instructions assume that you have launched a multi-task work order in Smart Client.

- 25. Click the **Allow editing** button in the Tasks area in the lower half of the window. This enables all the views on the work order tasks for editing.
- 26. Select the Categories sub-view.
- 27. Click the icon to the right of the Work order class field.
- 28. Select the Mechanical option under the Routine value.

Work order class	×
Capital Routine Electrical Instrumentation Mechanical Standing	
OK Cancel	

29. Click **OK** to add the category value to the work order task.

Categories for task 1					
Work order class:	Routine,Mechanical	i=			

**NOTE:** Category values display with each tier level value separated from the higher level value by a comma with no spaces. When using the category value as a filter criterion in the prompted view of a cabinet view, the field should be set with a 'contains' operator.

- 30. Save the work order task
- 31. Exit the work order task.

You have now completed the requirements of this lab.

# Section 2 – Add-Ons

#### **Section Objectives**

- Define the purpose and usage of the add-on function
- Define the characteristics of an add-on
- Identify the login ID required to create or modify an add-on
- Identify the types of fields that are available for selection in an add-on

### Introduction

An add-on is a user-defined set of fields that collects information currently not collected by the Asset Management software. In a classic display of EAM, add-ons appear as a tab in an object's General Information view. In a Smart client display of EAM, add-ons display as sub-views under the General Information view.

Add-ons are database-scoped and are available for use by all designated objects within any database site. Unlike the category functionality, add-ons are not automatically added to all objects of the assigned object type(s) but can be added selectively when appropriate.

### **Characteristics of add-ons**

Add-ons share the following characteristics:

- Can be linked to one or more object types.
- Can be attached to a user-defined template so that all objects subsequently created from that template automatically include the add-on.
- Can be manually linked to any existing records of a valid object type.
- Addition of a new field in an add-on is automatically reflected in all objects using that add-on.
- Deletion of an add-on field results in the deletion of the field and all stored data across all objects in the database.
- Data in an add-on field on one object generally flows to the matching field on another object when the add-on is linked to both types of objects and the second object is created from the first.

### Login ID for creating / modifying an add-on

Because the add-on function requires the addition of tables to the database, all users must be logged out of EAM before an add-on is created. This includes users such as the approvals engine and the maintenance transaction processor.

A special login ID is required: MCX. The password is controlled by the IT group.

The MCX login ID only works if there are no other users logged into the database environment. When MCX is logged in, no other users can log in.

### Types of add-on information fields

The following types of fields can be used in add-ons:

- Free-form text (10, 20, 30, 40, 50 or 200 characters in length)
- Value from a user-defined value list
- Reference to another object
- Number (No decimal places)
- Quantity (Maximum of 6 decimal places)
- Currency amount
- Price (Includes unit of measure)
- Check box
- Date
- Date and time

### LAB 6 – Creating an Add-On

#### Introduction

In this lab you are going to create an add-on that you will link to two objects – work order task and work request. The add-on will include a field of every type of field available with the field name reflecting the type of field. This allows you to see the characteristics of each type of field when it displays on a specific record.

### **Objectives**

On completion of this lab you will be able to:

- Create an add-on and link it to one or more object types
- Create the fields to display on the add-on
- Link the add-on to a specific record and check the field set-up

### Create an add-on and link it to an object type

In this section of the lab you are going to log into EAM using the login ID required for creating an add-on. You will then create a basic add-on and link it to the entity object.

- 1. Ensure that you are logged out of EAM.
- 2. Launch the avlaunch.exe shortcut on the EAM desktop.

NOTE: You must use the classic option when logging in to the add-on function.

- 3. Type MCX in the Login name field.
- 4. Type client in the Password field.



5. Click OK.



#### 6-12 Lab 6 – Creating an Add-On

- 6. Click **OK** to close the message that reminds you that other users are unable to login.
- 7. Select the **Desktop** button.
- 8. Select the Classic EAM Administrator desktop.
- 9. Click OK
- 10. Select the Templates/Functions tab.

Α	Avantis Asset Management - Avantis Administrator	- 🗆 🗙
Administration Utilities/Tools/Reports	Templates/Functions Cabinets Open Objects Regular Value Lists User-Defined Value Lists Documentation	
Add-On Template Category Template Data Security Desktop Template Employee Template Popen Chart of Accounts Report Template Science Profile Template Site Template Site Template Site Template		

- 11. Double-click the **Add-on Template**.
- 12. Type Sample All fields in the Name field.

Crea	te New Add-On 🛛 🗙
Create New name: Template to use:	Sample all fields
	OK Cancel

13. Click **OK**.

**NOTE**: The value in the **Tab name** field defaults from the add-on name but can be changed. It is limited to 10 characters including spaces.

- 14. Select one or more object types from the **Available object types** section of the window.
- 15. Click the Add button to move the type(s) to the Associated object types section.

🛄 Add-C	n Sample all fields	s - General Information 😑 🗖 📉
File Edit View Window	w Help	
/ / >> 🔁 🖬 🖷 🗉	1 <b>6 1</b>	
Sample all		
ii General Information	General Description	
CLE Canvas	Name:	Sample all fields
≣ ☐ Fields	Description:	<ul> <li>Untitled&gt;</li> </ul>
	Notebook tab name:	Sample all
	Add-On can be used Available object type Chart of Accounts Class Element Alias Contractor Contractor's Employ Contractor's Equipm Count Sheet Employee Entity Status History Equipment Activity Expense Sheet Inventory Transactio Invoice Invoice Line Isolation Process	Add -> Entity <- Remove Add All ->
For Help, press F1		

### Create the fields to display on the add-on

In this section of the lab you are going to define the fields that will display on the add-on and provide the field name. In this example, you are going to add every available type of field to the add-on and use the field name to indicate the field type. For the text fields, you will include the 10 character text field and the 200 character text field options

- 16. Click the **Fields** view.
- 17. Click the **Add** button.
- 18. Type Text (10) in the Label for field.

Sample all fields Field	
Label for field: Text (10)  Type of information to enter in field  Free-form text, not exceeding 10  Characters Value from the ABC Usage value list Reference to a Catalog Request object Number Quantity Currency amount Price Check box Date Date A value is mandatory when used on smart client applications	OK Cancel

- 19. Click OK.
- 20. Click the Add button.
- 21. Type Text (200) in the Label for field.
- 22. Select the 200 value from the Free-form text not exceeding

Sample all fields Field	×
Label for field: Text (200)	ОК
Type of information to enter in field	Cancel
• Free-form text, not exceeding 200 - characters	
O Value from the ABC Usage value list	
C Reference to a Catalog Request object	

#### 23. Click OK.

You are now going to link to a value list and select one of the user-defined value lists.

- 24. Click the Add button.
- 25. Select the Value from the... radio button option.
- 26. Type Value list in the Label for field.
- 27. Select the User Value List option from the drop-down list.

Sample all fields Field	×
Label for field: User-defined value list	ОК
Type of information to enter in field	Cancel
C Free-form text, not exceeding 10 characters	
C Reference to a Catalog Request object	

#### 28. Click **OK**.

You are now going to create a field that is linked to another object.

- 29. Click the Add button.
- 30. Type Object reference (Employee) in the Label for field.

\_\_\_\_ characters field drop-down list.

- 31. Select the Reference to a... radio button option.
- 32. Select the Employee object from the drop-down list.

Sample all fields Field	×
Label for field: Object reference (Employee)	ОК
Type of information to enter in field	Cancel
C Free-form text, not exceeding 10 characters	
C Value from the ABC Usage value list	
Reference to a Employee     object	

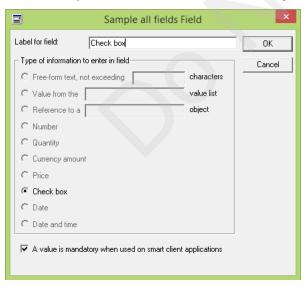
#### 33. Click OK.

You are now going to set up an add-on field for tracking a number.

- 34. Click the Add button.
- 35. Type Number in the Label for field.
- 36. Select the Number radio button option.

Sample all fields Field	×
Label for field: Number	ОК
Type of information to enter in field C Free-form text, not exceeding 10 characters	Cancel
C Value from the ABC Usage value list	
C Reference to a Catalog Request object	
Number	

- 37. Click OK.
- 38. Use steps 34 through 37 as a guideline and create fields for the other available options. When you get to the Check box option, also select **A value is mandatory when used on smart client** applications check box.



**NOTE:** An add-on field can only be made mandatory when it is created. Once you click OK, this option is disabled and the only way to change the setting (on or off) is to delete the field from the add-on and re-add it. The deletion process deletes all values populated in the field in any of the objects. The only change that can be made to an existing add-on field is the label name. The mandatory option is only available on Smart Client applications.

Once you have completed the creation of the add-on, it should look similar to the following screen shot.

<b>a</b>	Add-On Sample all fields - Fi	elds 🗕 🗆 🗙
File Edit View Windo	ow Help	
🥒 🏷 🖒 🖬 🖥 🗉	2 🎒 💹	
Sample all	fields	
E General Information	Fields appearing on this add-on page:	
Real OLE Canvas	Field Name	Data Type 🔺
Fields	Text (10)	Text
1	Text (200)	Text
	User-defined value list	Value List
	Object reference (Employee)	Object Reference
	Number	Number
	Quantity	Quantity
	Currency amount	Currency Amount
	Price	Price
	Check box	Check Mark
	Date	Date
	Date and time	Text
	•	Add Selected
For Help, press F1	Γ	

- 39. Click the Save icon to save the add-on.
- 40. Exit the add-on.
- 41. Log out of EAM.

### Link the add-on to a record and check the field set-up

In this section of the lab you are going to link the add-on to a specific entity record and check its set-up. You are also going to test the mandatory nature of the check box field in both a smart client venue (setting is applied) and in a classic venue (setting is not applied). In the first example, you are going to launch an entity in classic mode.

- 42. Log in using the avlaunch.exe function and the regular training login name and password.
- 43. Click the **Desktops** button.
- 44. Select the Classic Maintenance desktop option and click OK.
- 45. Launch the Entity Details cabinet.
- 46. Click **OK** on the prompted filter dialog box.
- 47. Double-click on any of the listed entities.

You are now going to link the add-on you created with entity.

- 48. Select the Allow Editing icon in the toolbar.
- 49. Select View / Entity Add-Ons menu option.
- 50. Select the Sample All fields add-on option from the add-ons listed on the left-hand side.
- 51. Click the **Add** button to transfer the selected add-on to the right-hand side.

E A	Add-Ons for Entity 2116		
Add-Ons associated with	this object		
A <u>v</u> ailable Add-Ons:		Associated Add-Ons:	
1998Budget 1999Budget Address Billing Bleeder Cable CostDistr Igniters Lease Loader Progress	▲dd -> <- <u>R</u> emove Add All ->	Customer Inventory Motor Sample all fields	
		Close	

52. Click the **Close** button.

A new tab with the name **Sample all** displays in the **General information** view.

- 53. Click the Sample all tab.
- 54. Enter data in each field except for the **Check box f**ield to see how it displays.

4	Entity 2116 - G	eneral Information 🚽 🗖 🗙
File Edit View Window	Help	
🖉 🔊 🖱 🖬  🖼	a 🖻 👒	
Component 2	2116 pnous motor	
General Information		Statistics   Shutdown   Retention   Device   Origins   Reliability ription   Fixed Asset   Motor   Inventory   Customer   Sample all Page 1 of 2
Activities       Activity History       Hierarchy	Техt (10): Техt (200):	10 charact 200 characters can be entered in this field. 200 characters can be
III Open Work III Work History III PM Program	User-defined value list: Object reference (Employee):	Journeyman 237652
PM Triggering History	Number: Quantity:	15,678.00
Cost Transactions	Currency amount: Price:	\$1,678.00 \$1,890.000000 per lea 🔻
Purchases     Statistic Summary	Check box:	
E Statistic Readings	Date:	5/14/2015
♦ ७ थ For Help, press F1		Burlington

**NOTE:** When an add-on displays in classic mode, only 10 fields can display at a time. Additional fields are placed on another page. EAM keeps adding additional pages as needed. The pages are accessed through the upper right corner of the add-on tab. When an add-on displays in Smart Client mode, all fields are listed in the same window and a scrolling option is available if there are too many fields for the size of the window.

- 55. Select the next page and complete the entry of sample data.
- 56. Save and exit the entity record.

**NOTE**: Since the 'mandatory' function does not apply to classic objects, no error or warning message displays and the entity record saves.

- 57. Exit the cabinet.
- 58. Click the **Desktops** button, select the **Planner** desktop and click **OK**. This desktop opens applicable records in smart client mode.
- 59. Launch the Entity Details cabinet.
- 60. Double click on the same entity that you launched earlier.
- 61. Scroll through the views and sub-views on the left side of the entity record until you locate the Sample all add-on.

**NOTE:** If the add-on didn't exist on this record, you can add it using the same approach that was followed on the classic version of the record.

You have now completed the requirements of this lab.

**NOTE**: If you want to delete a complete add-on, you must log in using the MCX login ID. You then remove the fields from the add-on and remove the link to the different objects. The fields should be deleted and the object links should be removed. Once this has been done, you can delete the add-on. A deletion action cannot be reversed. When an add-on field or add-on is deleted all data stored in any deleted add-on fields in any object also permanently disappears.



# Module 7 – Other Tools, Functions and Features

- Section 1 Messages
- **Section 2 Notifications**
- **Section 3 Custom Extensions**
- Section 4 Processors and Utilities
- Section 5 MEVALUELK optimization
- Section 6 Accounting Options / Chart of Accounts
- Section 7 Exchange Rates
- Section 8 Cabinet Customization
- Section 9 Reports

#### **Module Objectives**

- Define the purpose and configuration options of the Message object function
- Define the purpose and general configuration of the Notification function
- Define the use and general set up of the Custom Extensions function
- Identify and explain the purpose of the main processors and services used to support EAM functionality
- Explain the ability to reduce the number of transactions in the MEVALUELK table
- Define the characteristics of the numbered segments approach to G/L accounts
- Define the characteristics of the named segments approach to G/L accounts
- Define the purpose and use of the Chart of Accounts object
- Identify the location of default general ledger account numbers
- Define the purpose and usage of the Exchange rate function
- Explain the ability to create custom cabinets and views
- Identify the different types of reports available through EAM
- Identify the basic usage and characteristics of each type of report

## Section 1 – Messages

#### **Section Objectives**

• Define the purpose and configuration options of the Message object function

### Introduction

Messages inform users of existing or potential problems with the data. There are thousands of message objects in the EAM system. Each message object defines not only the severity of the message but also the specific text that is displayed by the system.

Messages are classified as database-scoped. Message severities are classified as site-scoped. If a message relates to a site-scoped object it is possible to set a different severity level and displayed text for each site in the database. If the message relates to a database-scoped object, its severity and displayed text can only be modified for the primary site.

If the severity of a message is not fixed by EAM, an authorized user can change the severity level to meet a specific need of the organization. This feature allows an organization to change the mandatory nature of a field that is not critical to the operation of the application.

File Edit View Window Help	🛆 Message Mainter	nance Cost Group: 12 - General Information 🛛 – 🗖 📑	×
Maintenance Cost Group Message Number 12         id General Information	File Edit View Windo	w Help	
✓       Message Number 12         ✓       Severity Text Description         Status bar text:       You must enter a G/L account segment.         ✓       Maximum possible severity is         ✓       Error         ▲       ♥         ✓       Informational         ✓       ©         ✓       On to display message         Your severity is       ✓         ✓       In Effect Severity         ✓       Ø         ✓       Default	🦉 🥭 🖬   🖼		
Status bar text:     You must enter a G/L account segment.     Maximum possible severity is	Aaintenano Message N	ce Cost Group umber 12	
Status bar text: You must enter a G/L account segment.     Maximum possible severity is   Image: Construction of the second segment of the second sequence of the second segment of the second sequence of the second segment of the second segment of the second segment of the second sequence of the second segment of the second segment of the second segment of the second segment of the second sequence of the second segment of the second segme	i≡General Information	Severity Text Description	^
Image: Severity is fixed         Your severity is         Site       In Effect Severity         Derived         Burlington         Image: Severity         Image: Site		Status bar text: You must enter a G/L account segment.	
		Maximum possible severity is Default severity is	
Informational       Image: Construction of the second secon		S C Error	
Severity is fixed C Do not display message Your severity is Site In Effect Severity Derived Burlington & Warning Default Calgary & Warning Default		⚠ C Warning 🕅 💽 Warning	
Your severity is Site In Effect Severity Derived Burlington Marning Default Calgary Marning Default I		C Informational	
Site In Effect Severity Derived A Burlington A Warning Default Calgary A Warning Default		Severity is fixed 🚳 C Do not display message	
Burlington A Warning Default Calgary A Warning Default		Your severity is	
Calgary A Warning Default		Site In Effect Severity Derived 🔺	
		Calgary <u>A</u> Warning Default	
		_	
Selected 🗸		Selected 👻	
			~
For Help, press F1	For Help, press F1	< >	. /

### Message severity levels

There are three message severity levels and one display option that applies to warning or informational messages:

8	Error	An error message displays if a mandatory field has not been populated with valid data. When this situation occurs, the user is unable to save the object until the error is correct. A red frame highlights the field that contains the error.
	Warning	A warning message displays as a reminder that a value has not been entered in a field. The user is not prevented from saving objects that contain warning messages. A warning message is often used when a field is very important but not mandatory and you want to ensure that its completion is considered by the user. A yellow frame highlights a field that contains a warning.
٩	Informational	An informational message displays to inform a user of an event that has occurred. For example it might confirm that a receipt transaction has been posted.
$\bigotimes$	Do Not Display	This option is not a message severity as such but if the severity level is not error, this option can be selected if you do not need to have a message displayed. The severity is still considered to be either 'Warning' or 'Informational'.

### Message content

The displayed content of a message can be changed to reflect an organization's terminology. Care must be taken to ensure that the new content correctly reflects the purpose of the message and the way it is applied.

E	Message Text
Delivered status bar text:	&1{Object Name} has been released.
Language:	English
Message text to c	display if severity is error or informational
Status bar text:	&1{Object Name} has been released.
Dialog box text:	&1{Object Name} has been released.
	~
Message text to c	display if severity is warning
Status bar text:	<none></none>
Dialog box text:	<none></none>
	×
	OK Cancel

Default message text

#### **Customized message text (example)**

	Message Text ×
Delivered status bar text:	&1{Object Name} has been released.
Language: Message text to d	Icnglish
Status bar text:	&1{Object Name} is available for use.
Dialog box text:	&1{Object Name} is available for use.
Message text to d	isplay if severity is warning ————
Status bar text:	<none></none>
Dialog box text:	<none></none>
	OK Cancel

# **Section 2 – Notifications**

#### **Section Objectives**

• Define the purpose and general configuration of the Notification function

#### Introduction

The notification function provides a means of setting up EAM to automatically notify users when specified criteria are met. Some examples of situations that could involve the sending of a notification are:

- A notification is sent to the individual who requisitioned some material on the posting of the receipt
- A notification is sent to an equipment supervisor when a work order is initiated against a critical piece of equipment
- A notification is sent to the managing buyer when a contract is close to the expiry date
- A notification is sent to the assigned buyer when a purchase order is placed on hold or cancelled
- A notification is sent to the material coordinator when the on-hand balance of a critical item drops below a specified value
- A notification is sent to both the maintenance manager and the area supervisor when an emergency work order is created
- A notification is sent to all buyers when a payment dispute is recorded that prevents further ordering

EAM does not provide any default notifications.

The subject of a notification is determined by a standard SQL query. Therefore, any data in the EAM database can essentially be used as a basis for generating a notification. A notification can be set up to be sent to a specific individual or the individual in the specified role on the object that meets the selection criteria.

۶	Notification 2 - General Information – 🗖 🗙
File Edit View Window	Help
🥖 🖉 🔁 🔁 🖉	<b>5</b> 💹
📲 2 Notify requ	uestor on posting of receipt
General Information	Beneral       Notification Criteria       Message         Notification type: <ul> <li>Monitored at this interval</li> <li>Triggered by an event</li> </ul> Selection SQL <ul> <li>Selection SQL</li> <li>Selection SQL</li> <li>Selection SQL</li> <li>Selection SQL</li> <li>NVTRANS1.introi, INVTRANS1.con, PODEL1, podeloi, POLINE1, polnoi, POLINE1, subtyplmp, POSUM1.posumoi, POSUM1.id, POTEM1.pcitoi, POLINE1.subtyplmp, POSUM1.posumoi, POSUM1.id, PUTEM1.pcitoi, POLINE1.subtyplmp, POSUM1.posumoi, INVTRANS1.taty_amt, INVTRANS1.tant_cur, INVTRANS1.taty_amt, INVTRANS1.posted, SITE1.siteoi FROM ( ( ( ( MC.INVTRANS1.NVTRANS1 INTRANS1 LEFT OUTER JOIN MC.PODEL 1 ON INVTRANS1.podel_oi = PODEL1.podeloi ) LEFT OUTER JOIN MC.POSUM POSUM1 ON PODEL1.poline_oi = POLINE1.poline() LEFT OUTER JOIN MC.POSUM POSUM1 ON POLINE1.PO_oi = POSUM1.posumoi) LEFT OUTER JOIN MC.PCITEM         Use SQL statement from an existing cabinet view              </li></ul> Cabinet: <ul> <li>* Purchasing Transactions Log</li> <li></li> <li>Cabinet view:</li> <li>Receipts by Date</li> </ul>
	Append C Replace     Get Query
For Help, press F1	

A notification is a database-scoped object. The only persons who require security access to the notification function are users who will set up or modify the notification event. Individuals receiving a notification only require an email address in their EAM employee record.

There are two basic options for initiating a notification:

**Triggering notification** – The initiation of the notification is based on the triggering of an event such as the posting of a receipt

**Monitoring of specific values** – The initiation of the notification is based on the monitoring for the existence of specific values by a poller that runs on a scheduled frequency

#### **Triggered notifications**

Notifications can be set up to be triggered by a change of state or status of a specific EAM objects. Examples of typical changes of state are:

- Posting of a time card
- Posting of a statistic reading
- Posting of an activity record
- Posting an inventory transaction
- Posting of a receipt
- Posting of an invoice

Examples of a change in status are:

- Added to backlog
- Closed
- Cancelled
- Held
- Approved
- Executed
- Sent to vendor

When changes to an EAM object are saved, EAM checks all 'triggered' notifications defined for the object class. If the saved object meets the criteria of a notification, the notification message is sent to the recipients.

#### **Monitored notifications**

Notifications can be set up to monitor for specific values in your data. Typically monitored notifications are set up to track values that meet or exceed a specified value, such as accumulated purchases reaching a contract ceiling.

Monitored notifications are picked up by the notifications poller at intervals specified on each notification. At the specified interval, the notification poller submits the notification query and if any objects meet the criteria a notification message is sent to the recipient(s).

For example, you can set up a notification to find all contracts that will expire in 10 days or less. The notification can be set up to send a message for each contract that meets the selection criteria, to each contract's buyer (identified by role) and to the department head (identified by name).

## Notification message

Setup of the notification includes the definition of the message that will be communicated to the recipient(s). Through the use of a series of substitution codes in a generic message, the recipient can be provided with specific information that helps them understand the situation and the reason for the notification.

<b>9</b>	Notification 2 - Gen	eral Information	-		
File Edit View Windo	w Help				
🥥 🏷 🖒 🔒 🛅 🗉	3 6 10				
2 Notify re	questor on posting	of receipt			
General Information	Message text Your catalog item &12 for a qua on &17.]	requestor on posting of rec		- b	
	Field name substitution	Substitution Code			
	INVTRANS1.introi	&1		74	
	INVTRANS1.Subtyplmp	&2			
	INVTRANS1.trntyp	&3			
	INVTRANS1.tmplt	&4			
	INVTRANS1.icon	&5		- I N	
	4				
For Help, press F1					

The available substitution codes are based on the object on which the notification is based.

## **Section 3 – Custom Extensions**

#### **Section Objectives**

• Define the use and general set up of the Custom Extensions function

### Introduction

Custom extensions are a means within EAM to call customer-written applications or files or to perform some type of action that is essential to business operations but that is not a part of the normal EAM functionality. Custom extensions are defined in EAM via the Custom extension value list, located on the Regular Value Lists tab of the EAM System Administrator desktop. Custom extensions may be associated with most EAM objects.

Custom Extension Deta	ils 🛛 🔀
<u>E</u> xtension name:	
Abbreviation:	
Program information	
Eull extension path name:	
Web application extension	n
✓ Use default parameters	
Extension parameters:	/OID=%OID% /UKEY=%UKEY% /SITE=%SITE% /OBN=%OBN% /TBN=%TBN% /ENV=%ENV
Applies to:	
	OK Cancel

One can either use the custom extension toolbar button or the custom extension menu option in order to call the custom extension. Using either approach, the result is a dialog window from which the user selects the custom extension desired.

The Custom Extension menu option and the icon are always available, no matter if the object is in edit mode or not, with or without custom extensions available for the object.

How applications are used depends completely upon the custom application. In addition to running executable programs, custom extensions can also be used to access documents relating to the object from which the extension is being called, or just a general document file.

#### Custom extension value list entry fields

The following table explains the purpose of each field in the Custom Extensions value list.

Field	Purpose
Extension name	This field contains the name of the custom extension to be launched by EAM, and can handle a length of up to 30 characters.
Abbreviation	This field identifies the short form name of the custom extension to be launched by EAM. The abbreviated name displays in drop-down lists or on reports when the full name of the custom extension is too large for the display space.
Full extension path name	This field identifies the custom application to be launched. If all users are to be allowed to access the custom application from the same network location, the value entered should use either the company's standard drive mappings or the Universal Naming Conventions (UNC) format. This field may be left blank if the custom extension is located in a system search
Web application extension	This flag indicates if the custom extension to be launched is a web application.
Use default parameters	This flag indicates if the default custom extension parameters are to be used.
Extension parameters	In this field, the valid EAM tokens and default parameter flags used to launch the external application are identified. If the 'use default parameters' is selected, this field is display only.
Applies to	This drop-down, lists the EAM objects from which the custom extension is available.

#### Launching a custom extension

Custom extensions are accessed through the Custom Extension icon in the toolbar of the applicable object type.



The function is then launched by selecting the applicable function and clicking the **Run** button.

Custom Extension for Entity		×
Custom extension to run	Run	
Calibration Datasheet Component Datasheet LOTO Vault SpatialLink Entity	Cancel	
$\checkmark$ Close this dialog after running the custom extension		

# **Section 4 – Processors and Services**

#### **Section Objectives**

• Identify and explain the purpose of the main processors and services used to support EAM functionality

#### Introduction

There are several processors or services that support the EAM functionality. The main processors/ services are:

- Maintenance Transaction Processor
- Invoice Processor
- Pick List Processor
- Notification Poller Service and Notification Sender Service

There are a couple of other processors that may be in use:

- Financial Integration Processor
- Procurement Integration Processor

## Maintenance Transaction Processor (MTP)

The Maintenance Transaction Processor processes transactions entered in EAM and transfers selected information between the Maintenance, Inventory and Procurement modules. The MTP processes:

- Labor transactions
- Entity statistic readings
- Inventory issues, adjustments, receipts and counts
- Purchase invoices
- G/L journal entries

When transactions are processed, the associated costs are applied to the work order header, work order task and entity. They are also rolled up the entity hierarchy as permitted by the entity type values and reflected in the totals on the Cost Summary view.

When statistical transactions are processed, the current and life-to-date values are updated on the Statistic Summary view the readings are added to the Statistic Transactions view. Statistic-driven PM triggers are also updated.

The MTP also performs the following actions:

- Updates entities and work orders/tasks with the costs from inventory, direct purchases (from a receipt or invoice) and labor transactions
- Updates statistics on entities and updates PM triggering for statistic-driven triggering links
- Generates balanced G/L transactions
- Processes catalog requests and updates allocations and reservations
- Process deferred actions (usually caused by a locked object)

#### **Invoice Processor**

The Invoice Processor creates and posts invoices for:

- Consignment items based on issue transactions
- Non-consignment items set up as an Evaluated Receipt Settlement (ERS) item based on posting of
  receipt
- Invoice-not-received items based on purchase order being 'Sent to vendor"

The rules used by the invoice processor are defined on the **Invoicing Rules** tab of the vendor record. The processor does not create any invoices for vendors lacking the setup on the Invoicing rules tab.

#### **Pick List Processor**

This processor processes open pick lists by automatically:

- Suggesting that the items be picked
- Suggested that the items be picked and printing the pick list
- Suggesting that the items be picked, printing the suggesting, printing and issuing

The action taken is determined by the business policy:

Pick list lines will automatically be ...

There are two other business policies that need to be configured.

Days in advance to print pick lists...

Processing interval for the Pick List Processor is...

A setting in the Storeroom value list is used to identify the default storeroom printer for printing the pick lists.

#### **Notification Poller Service and Notification Sender Service**

There are two services that work in conjunction with the notification functionality.

**Notification Poller Service** – This service runs on a designated frequency and checks the related SQL statement for changes that require the sending of a notification. The Poller service relates to monitored notifications only – not to notifications that are triggered by an event.

**Notification Sender Service** – This service runs on a designated frequency to forward messages to the designated individual(s).

The following business policies apply to the use of the notification function:

Enable notification processing? (Y/N)

Notification Administrator email address

Start processing notification at this time of day

# **Section 5 – MEVALUELK Optimization**

#### **Section Objectives**

• Explain the ability to minimize the number of transactions in the MEVALUELK table

#### Introduction

MEVALUELK table is the largest table in the database and grows substantially because of indirect transactions. The speed at which the table grows going forward can be reduced through the MEVALUELK optimization option.

The number of records created in the MEVALUELK table for a single transaction is impacted by:

- Number of time period levels
- Number of cost group levels
- Number of ancestor entities where costs are tracked
- Number of cost-tracking hierarchies in use

There are three options for the tracking of indirect costs:

- Continue to track indirect transactions
- Change the tracking method going forward without purging past values
- Change the tracking method going forward and purge past transaction values

#### Changing the tracking method

This option requires removing the **Keep indirect costs by transactions** flag in each value in the **Entity Type** value list where costs can be applied. The default setting is to keep the transactions. When the flag is deselected, the rollup of costs to a higher level entity is blocked regardless of the flag setting on ancestor entities.

#### Purging past transaction values

This option is performed through the running of the MEVALUELK Purge and Archive Utility.

MEVAL	UELK Purge & Archive Utility ×
Source DSN:	
Target DSN: Table:	
General User ID: Password:	
Seconds between:	1
Progress	
Transactions processe	ed: 0
Rows removed:	0
	Start Quit

## Impact of restricting creation of indirect transactions

When EAM is configured to restrict the creation of indirect transactions, the following impacts are encountered:

- The MEVALUELK table does not grow as fast
- Performance may be improved since there are less transactions created
- The indirect transactions are still available for display through the ancestor entities but the cost details are built on request
  - There may be a short delay as the cost details are built

# Section 6 – Accounting Options / Chart of Accounts

#### **Section Objectives**

- Define the characteristics of the numbered segments approach to G/L accounts
- Define the characteristics of the named segments approach to G/L accounts
- Define the purpose and use of the Chart of Accounts object
- Identify the location of default general ledger account numbers

### Introduction

There are two basic options in EAM for generating and tracking G/L transactions:

- Using Numbered segments
- Using Named segments

### **Numbered segments**

This is a simple approach for generating a tracking G/L account numbers. While a G/L segment can be alphanumeric, there is no name that explains the purpose of the segment.

The numbered segment approach allows for up to three segments – each reflecting a different purpose:

- Who pays Originating an entity record typically at a high level in the entity hierarchy
- What type of work was performed originating from the work type
- What type of expense This is the cost group segment and it originates from the posting of a time card, issue transaction, receipt transaction or invoice

Collectively the first two segments are referred to as the maintenance segment. A business policy defines the order in which these are placed.

A second business policy defines the order in which the maintenance segment and the cost group segment are placed.

#### Named segments

This approach allows for a more complex G/L account number structure. Up to ten different segments can be defined with multiple segments coming from the same source and not necessarily arranged consecutively. Rules are used to define the length of each segment, its source and the documents /transactions on which a segment is available for selection.

EAM can derive G/L account numbers up to a maximum of 125 alphanumeric characters in length. If the derived G/L account number exceeds 125 characters, only the first 125 characters display.

## **Chart of Accounts**

The Chart of Accounts function is used in conjunction with the Named Segments approach for managing G/L account segments.

File Edit View Help     Image: Segment Broups   Image: Segment Broups <th>Branch Chart of Account</th> <th>s Chart Of Accounts - General Information 🛛 – 🗖 🛛 🗙</th> <th></th>	Branch Chart of Account	s Chart Of Accounts - General Information 🛛 – 🗖 🛛 🗙	
Chart Of Accounts  Ceneral Information  Control Canvas  Control Canvas  Control of accounts name: Chart Of Accounts  Chart of accounts name: Chart Of Accounts  Description:  Separator rules  Cuse a separator between segments  Cuse a separator during export to financial system  Include separator during export to financial system  Include separator twice for empty segments  Derivation rules for work orders  Cuse G/L derivation	File Edit View Help		
General Information	> - 1 🖥 🎒		
Chart of accounts name: Chart Df Accounts Chart of accounts name: Chart Df Accounts Description: Separator rules Use a separator between segments Use a separator during export to financial system Include separator twice for empty segments Derivation rules for work orders Chart of Precedence Maintenance entity Work type Move Move Move Move	Chart Of A	ccounts	
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C Use G/L derivation Order of Precedence Maintenance entity Work type Move  Move		□ Derivation rules for work orders □ □ Derivation rules for other objects □	
Order of Precedence         Maintenance entity         Work type         Move         Move         Move			
Maintenance entity       Work type       Move         Move         Move         Move         Move			
Work type  Move  M			
Move         Move         Move         Move			
		Employee's trade	
		DWork document	
Ear Help press E1		Move 🔽	
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The Chart of Accounts object:

- Defines the separators that are used between segments when displayed in EAM and when exported to the financial system
- Defines the derivation rules for work orders and for other objects
- The segment groups including:
  - o Segment name
  - Segment uniqueness (Y/N)
  - o Segment length
  - o Objects where the segment is used and if it is required

The Chart of Accounts also lists the full G/L accounts and G/L segments that have been loaded into EAM tables for account validation purposes.

## **Default G/L account numbers**

The following table identifies the location of default G/L account numbers that are required as the offsetting entry for various transactions when the MTP generates balanced G/L transactions. When there is a Storeroom value list value, it takes precedence over the value defined on the Site object.

Site object	Storeroom value list	Department value list
Received-Not-Invoiced account	Inventory account	Payroll offset account
Accounts Payable Liability account	Count Expense account	G/L account segment
Count Expense account	Price Variance Expense account	
Transfer account	Transfer account	
Miscellaneous Charge account		-

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# Section 7 – Exchange Rates

#### **Section Objectives**

• Define the purpose and usage of the Exchange rate function

#### Introduction

Enterprise Asset Management allows for the tracking of transactions in different currencies. However, since a given site is in a given currency, transactions in an alternate currency must be converted to the site currency for compilation of the totals. The conversion rates used in conversions are taken from the Exchange rate function.

## **Currency definitions**

Any currencies used in EAM are defined in the Currency value list. Setup includes defining:

- Currency symbol
- Number of decimal places for prices
- Number of decimal places for extended amounts

<b>=</b>	Currency Details ×	
General Local		
Identifier:	CDN	
- International informa	ation	
Symbol:	C\$	
ISO code:	C\$	
Singular name:	Canadian Dollar	
Plural name:	Canadian Dollars	
Precision details		
Price:	6	
Amount:	2	
Euro currency infor	nation	
Currency is in th	e European Monetary Union	
Cut-over date:		
	OK Cancel	

**NOTE**: The same currency symbol cannot be used for different currencies. A prefix or suffix is required to make the symbol unique.

## Exchange rate settings

Exchange rates are defined in the **Exchange Rate** function in the Templates/Functions folder of the EAM Administrator's desktop. It can be added to other desktops if appropriate.

Exchange	ge Rate Entry Form
Exchange from:	US Dollar
To:	Canadian Dollar
Rate type:	Actual
Precision:	6
Exchange rate	
Effective date:	
1 US Dollar =	Canadian Dollars
	OK Cancel

Exchange rates can be maintained manually or through a custom interface with some external exchange rate source.

# **Section 8 – Cabinet Customization**

#### **Section Objectives**

• Explain the ability to create custom cabinets and views

#### Introduction

Enterprise Asset Management comes with many predefined cabinets and cabinet views. These cabinets / views provide a starting point for users to use Avantis.PRO EAM within an object or function but often need to be modified to meet specific searching / monitoring needs of an organization. New cabinets can also be created and built from scratch.

EAM-delivered cabinets with an asterisk (\*) can be modified directly whereas EAM-delivered cabinets without the asterisk cannot be modified although they can be copied and the copy then modified. Any view within a modifiable cabinet can be modified as well and even deleted if necessary. New views can also be created.

The ability to create / edit cabinets is a securable function that is typically delegated to key power users in each functional area.

### **Editing options**

The following tables identify the types of changes that can be made at the cabinet level and at the cabinet view level.

Level	Tab	Editing options	Cabinet properties dialog box
Cabinet	General	Cabinet name Cabinet description Primary view	General Filter   General cabinet information Name: * Entity Cabinet
	Filter		Description: Entity Cabinet Primary view: By Name          Primary view:       By Name         OK       Apply

Level	Tab	Editing options	View properties dialog box
View	View description General Filter View type	General   Filter   Prompts   Columns   Order   General view information View name: Costs by Work Type	
	Filter	Filters to be applied to the view	Description: Costs by Work Type View type:   Normal
	Prompts	Instance-specific filtering options available to end-users	C <u>S</u> preadsheet
	Columns	Displayed columns Column heading name Column type (Normal, Group by, Count, Calculated sum, Average, Sum) Alignment (Left, Center, Right) Width	OK Apply Cancel
	Order	Default display order Default ordering of displayed data	

Specific training on the customization of cabinets is provided in the *Enterprise Asset Management Cabinet Customization* course.

## Section 9 – Reports

#### **Section Objectives**

- Identify the basic types of reports available through EAM
- Identify the basic usage and characteristics of each type of report

#### Introduction

There four basic types of reports used in EAM:

- Database reports
- Object reports
- Business Analysis reports
- Cabinet reports

Reports are designed using the SAP Crystal Reports<sup>™</sup> application software.

#### **Database reports**

The database reports are EAM-delivered reports that provide IT / EAM System Administrator with information about the database schema and identify the changes that have been made to it. These reports can be found through the Reports cabinet or on the Administration Utilities/Tools/Reports tab of the EAM Administrator's desktop. The delivered database reports are:

- Add-on Schema (mcx)
- Approvals Schema (es)
- EAM Logical Model/Class Inheritance
- Base Schema (mc)
- Changed Columns
- Dropped Columns
- Dropped Tables
- New Columns
- New Tables
- Summary of Transactions Waiting to be Processed by the MTP

Administration Utilities/Tools/Reports Templat	es/Functions   Cabinets   Open Objects   Regular Value Lists   User-Defined Value Lists   Documentation
Add-on Schema (mcx)	
💽 Approvals Schema (es)	
Avantis Logical Model/Class Inheritance	
💽 Base Schema (mc)	<ul> <li>Database reports</li> </ul>
Changed Columns	
Columns Dropped Columns	
Dropped Tables	
Kinancials Integration Processor	
Invoice Processor	
Maintenance Transaction Processor	
New Columns - Database ro	enorts
New Ladies 🤳	sports
🖉 Pick List Processor	
Rocurement Integration Processor	
Release Conversion	
Summary of Transactions Waiting to be Pro	icessed by the MTP Database report

### **Object reports**

Many objects in EAM contain at least one predefined report. These reports are intended to list the field level data for the selected object or for the objects listed in the cabinet view. Object reports can only be previewed or printed from within the object or a cabinet view based on that object. The following screen shots show examples of the types of reports available through the Print function of three different types of objects.

Print Reports	×	E	Print	×
Entity reports Sort By	Print Preview Options Close	Requisition Repo	neral Information	Print Preview Options Close
Maintenance Entity - Isolation Processes         Maintenance Entity - Open Work Orders         Maintenance Entity - Parts List         Maintenance Entity - PM Program         Maintenance Entity - Safety Instructions         Maintenance Entity - Work History		PM Job Reports PM Forecast Re PM Job - Activiti PM Job - Entity PM Job - Gener	ies Links	Print Preview Options Close

#### **Business analysis reports**

EAM provides several predefined business analysis reports that allow you to review and analyze information that spans the entire organization. Business analysis reports can include comparisons, calculations and/or summarizations.

Analysis reports can also be generated from a cabinet view.

All business analysis reports can be previewed and printed from the standard Report cabinet. Business analysis reports – whether EAM delivered or created by the client – can have a link added to a custom desktop for ease of access.

The following table lists the EAM-delivered business analysis reports by related module.

Module	Enterprise Asset Management-delivered Business Analysis Report		
Maintenance	Contractor/In-house Employee Labor Hours Comparison		
	Contractor/In-house Employee Time Card		
	Entity Cost Analysis by Entity Classification and Entity Type		
	Entity Cost Analysis Top-N Entities by Cost		
	Equipment Failure Analysis by Time Period, Root Cause and Reason for Failure		
	Entity Cost Analysis Top-N Entities by Cost		
	Hours Worked by Work Type		
	Number of New Work Requests by Work Type		
	Number of New Work Tasks by Work Type		
	Overtime by Trade		
	Planned versus Actual Hours Summary by Planner and Trade		
	Repair Delay Analysis		
	Scheduled versus Unscheduled Hours		
	Time to Repair Analysis by Time Period and Reason for Downtime		
	Work Tasks Closed Summary by Work type and Priority		
Inventory	Inventory Turns Report by Item Type		
	Item value and Usage by Type and Storeroom		
	Top 20 Inventory Items		
Procurement	Over Invoiced Line Price by Vendor		
	Top 20 Vendors by Orders		
	Vendor Performance		

2	Reports - All Reports - 🗖 🗖							
File Edit View	File Edit View Window Help							
🗝 🏷 쑵   🔤 🚑 🖪 👹   🥃 隆 📰								
Reports								
		Number	Title					
All Reports	3	AM-WM-101-1	Hours Worked by Work Type					
	3	AM-VN-100-1	Individual Vendor Performance					
	٢	AM-IV-100-1	Inventory Turns Report by Item Type					
	3	AM-IV-102-1	Inventory Value by Item Type and Storeroom					