## **HP** Asset Manager

Software version: 5.10

## Software assets



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## Introduction

## Who is the Software assets module intended for?

The Software assets module is intended for organizations that want to manage, control and protect their software assets at each phase of their life cycle.

## What does the Software assets module do?

The *Software assets* module is generally used by people who:

- Populate the software contracts database
- Populate the software licenses database (acquisition of rights to use software applications)
- Populate the installations database (consumption of rights to use software applications)
- Monitor that installations comply with licenses
- Manage the software portfolio (installations, updates)

## How to use this guide

#### **Chapter Software Asset Management: The Stakes**

This chapter explains why the *Software assets* module was developed.

Read this chapter to learn why it is important to manage software assets and how Asset Manager lets you do this.

#### Chapter Licenses, entitlements, installations, utilizations and contracts

This chapter explains how Asset Manager has been designed to manage software assets.

Read this chapter to better understand the different mechanisms that are implemented in software asset management.

#### **Chapter Preliminary tasks**

This chapter explains the configuration needed to use the *Software assets* module.

#### **Chapter License contract management**

This chapter explains how to create, validate and update license contracts.

#### **Chapter Software license management**

This chapter explains how to request, create, modify and remove software licenses and entitlements.

### Chapter Software installations and utilizations management

This chapter explains how to request, create, modify, describe and remove software installations and utilizations.

### **Chapter Monitoring license compliance of installations**

This chapter explains how to use the counters to check that the number of acquired rights (licenses) is consistent with the number of consumed rights (installations).

Read this chapter to learn how to check the compliance of your software installations with your acquired rights, and your internal entitlement policy.

### **Chapter Viewing reports and charts**

This chapter explains how to quickly display reports that summarize the status of your software assets.

#### **Chapter Practical cases**

This chapter provides practical cases to execute using Asset Manager with the demonstration database.

Go through the practical cases to learn how to use the Software assets module.

### **Chapter Main concepts**

The glossary contains the key terms used in the Software assets module.

#### **Chapter References**

This chapter lists the references for the Asset Manager components that are used in conjunction with the Software assets module.

## Overview

## Software Asset Management: The Stakes

## Why should businesses implement software asset management?

Because of their intangible nature, software assets are more loosely managed than tangible assets.



### Important:

It is estimated that only 10% of all businesses have implemented an effective software asset management program.

Nonetheless, software assets generate a large part of IT expenses in each of the following fields:

- Acquisition
- Installation
- Support
- Maintenance
- Utilization



## Important:

In most organizations the percentage of the IT budget used to procure software assets increases year after year.

In general, software asset procurement represents 18 to 37 percent of the IT budget.

Most organizations do NOT know:

- What software is installed
- Where the software is installed
- If the software installation is compliant with licensing rights

Without this information, organizations are running severe risks:

- Illegally using software by having too few license rights
- Overspending by purchasing licenses for software that is not installed or used



## **&** Important:

Most organizations purchase too many licenses by about 10 to 15 percent.

Being incapable of evaluating and organizing software updates

More information about effective software management and the stakes involved can be found on the Business Software Alliance (BSA) web site:

▶ Just ask SAM [http://www.justasksam.co.uk/index.cfm].

## Benefits of effective Software Asset Management

Managing software assets effectively can benefit your organization in several ways:

- Know who is using what software at any time
- Know which software installations are no longer used and reassign license rights to other users instead of acquiring more rights
- Improve negotiations with your suppliers using the knowledge of your organization's current software situation and its desired evolution
- Target updates with increased precision
- Eliminate illegal installations
- Ensure that workstations receive the updates that they need and for which they qualify
- Reduce the risk of fines paid for illegal software installations
- Produce on-demand reports of your organization's software installations during unscheduled audits



### **&** Important:

Most organizations that implement an effective software asset management program reduce software procurement expenses by 25%.

## Understanding existing license types

In practice, each software publisher implements its own licensing policy. However, it is possible to define the main license types.

An interesting document on licensing schemes can be found on the BSA web site:

▶ Why does licensing matter?

[http://www.bsa.org/uk/antipiracy/upload/BSA-Licensing-Guide-July-2004.pdf]

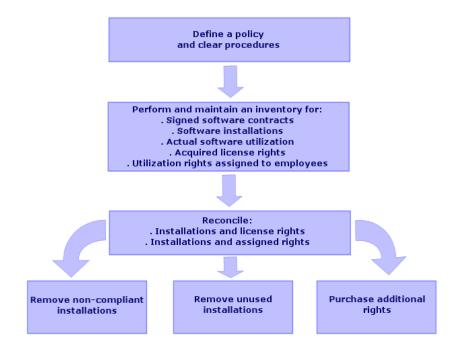
## Implementing software asset management

Implementing software asset management involves implementing procedures and tools to manage, control and protect software assets at each phase of their life cycle.

Managing software assets is not an aggregate of ad hoc operations. It is a continued, permanent effort.

Implementing software asset management is done in several stages:

Figure 1.1. Managing software assets



- 1 Define a software policy and clear procedures:
  - Reaffirm your drive to be compliant with legislation while continuing to meet the best usefulness/economy ratio for the organization
  - Centralize software procurement
  - Define a validation procedure for software purchase requests
  - Define a list of certified software
  - Select reliable vendors
  - Collect and maintain original copies of purchased software in a *Definitive Hardware Store* (protected access) (licenses, manuals, CDs, registration cards, invoices, etc).
- 2 Inventory installed software and meter actual utilization.

The most effective way to do this is by using automated inventory tools.

HP Software HP Device and Dependency Mapping can do this for you for your entire IT structure.

This task can be performed by a service provider.

Next, transfer the inventoried data to the Asset Manager database where you will be able to implement all required software management tasks.

Once the initial inventory has been performed, update it at regular intervals.

3 Collect information on the software installation rights that you have acquired (licenses, contracts, invoices, entitlements).

Two types of rights exist:

- License: A license grants the right to install a software application published by a third-party. Owning a license makes you compliant with the law.
- Entitlement: An entitlement grants employees the right to install a software application. Waiting for an entitlement before installing an application makes employees compliant with your internal policies.

Store this information in the Asset Manager database (licenses, contracts).

Once this has been done, update the Asset Manager database each time a license is acquired or an entitlement changes.

Using Asset Manager's *Procurement* module is an effective way to manage license acquisitions.

And doing so will increase the reliability of your data.

4 Reconcile installations with acquired rights (licenses) and granted rights (entitlements).

For each software application, one of three situations can occur:

- If the number of installations exceeds the number of license rights: Remove the excess installations or purchase more license rights. Metering actual software utilization will help you make a decision.
- If the number of license rights exceeds the number of installations: Do not purchase new license rights. Save the unused license rights for future use.
- If an application has been installed but not entitlement has been granted: Remove the non-compliant installation or grant the entitlement

More information about implementing an effective software management program can be found on the BSA web site:

ightharpoonup Guide to Software Management

[http://www.bsa.org/uk/antipiracy/upload/Guide-to-Software-Management-July-2004.pdf].

## How Asset Manager helps you manage software assets

Asset Manager's *Software assets* module empowers you to handle every aspect of your software asset management program.

This module is entirely integrated with other Asset Manager modules and, in particular, with the following modules:

Portfolio

- Contracts
- Procurement

Asset Manager is also integrated with HP Device and Dependency Mapping, which automatically discovers and inventories software.

Using the *Software assets* module you can:

- Manage license contracts
  - Contract validation process
  - Create new contracts
  - Modify existing contracts
- Describe licenses acquired from third party companies
- Describe internal assignments of rights
- Describe the software installations
- Describe actual software utilization
- Reconcile licenses and installations
  - Compare licenses and installations
  - Compare entitlements and installations
  - Process irregularities taking into account actual utilization
- View reports and charts

A wizard guides you through these tasks (Portfolio management/ IT/ Licenses/ Manage software... link on the navigation bar).

## Licenses, entitlements, installations, utilizations and contracts

Managing a software application means managing its corresponding license agreements, entitlements, installations/utilizations and any related contracts.

## Main concepts

This section presents the main concepts that are used in software asset management.

### Software installation/utilization

Software installations/utilizations are represented in the database by portfolio items.

When the software is physically installed on a computer, it can be declared as a component of the computer.

When the software does not require being physically installed, it can be associated with its user.

Utilization that is defined here should not be confused with actual utilization which reflects the frequency with which a software application is used.

#### Software license

A software license is an asset that describes the user rights (number of possible installations, number of database accesses, etc.).

For example: A license that grants 1000 accesses to an Asset Manager database.

The contractual aspects of the license are described at the contract level.

## License right

The software counters count off license rights and compare them with counted installations/utilizations.

#### Software counter

A software counter is used to reconcile a rights count with an installations/utilizations count.

These counts can be grouped together (by user, by cost center, etc.).

A counter enables you to:

- Verify compliance with a software provider,
- Verify compliance with internal policies.

Counters can easily be used to count other things than software.

### Named entitlements

Software counters count rights and installations/utilizations

For rights, it is often possible to use a simple query to identify the records to be used as the basis of the count (For example: All employees in the accounting department).

However, it is not always possible to define a simple query. (For example: When the records to be used do not have a common denominator).

In this case, we need to define a named entitlement in which the records to be selected are listed one by one.

### Normalization of inventoried models

Normalizing inventoried models consists of mapping software installation models from inventory databases to a limited number of software installation models in Asset Manager.

Doing this provides you with a simple and effective way of organizing and structuring software installations.

#### ITIL

ITIL (Information Technology Infrastructure Library) is an IT service management methodology.

This methodology comprises a library of tried and tested best practices.

A number of organizations provides ITIL training and certification as well as consultancy services.

## Link between installations/utilizations and licenses



#### Note:

Installation means the software is physically installed on the computer (individual workstation or server).

Utilization means the user can access and use the software without installing it. For example, this is the case for application services which can be accessed via an Internet browser.

Actual utilization of a software application is the amount of real utilization of an application that can be measured for a given user.

You have the choice of two approaches:

• Directly linking licenses with their installations/utilizations. This requires detailed tracking in the field and in the Asset Manager database.

When using this approach, start by creating the licenses, then create the installations/utilizations and link them back to the corresponding license.

• Keep licenses separate from installations/utilizations.

Even if this does not appear to be the most rigorous method, it is often the most realistic as software is most often installed from a CD-ROM or a server, regardless of the location of the license authorizing you to use it.

When using this approach, create the licenses as and when they are acquired. Create the installations separately as and when you make them or when they are inventoried via an automatic network scan.

Using software counters, you can reconcile licenses with installations/utilizations, even if there is not a direct link between them.

## Tables concerned by software management

In Asset Manager the following tables are used for software asset management:

Table 2.1. Tables

Table	Use
Natures (amNature)	Create natures of:
	<ul><li>Licenses</li></ul>
	<ul> <li>Installations/utilizations</li> </ul>
	<ul><li>Contracts</li></ul>
Models (amModel)	Create models of:
	<ul><li>Licenses</li></ul>
	<ul> <li>Installations/utilizations</li> </ul>
	<ul><li>Contracts</li></ul>
Inventoried models (amInventModel)	Mapping between installations/utilizations models from automatic inventory tools and models in the Asset Manager database
Portfolio items (amPortfolio)	Create instances:
	<ul><li>Licenses</li></ul>
	<ul><li>Installations/utilizations</li></ul>
Assets (amAsset)	Each time a portfolio item corresponding to the following items is created, a corresponding record is created in the Assets table:  ■ All licenses. ■ Installations and utilizations when they are associated with a model, itself associated with a nature whose Management constraint field (seMgtConstraint) is set to Asset tag or Unique asset tag (▶ Portfolio guide, chapter Overview, section Three management types).
Software installations (amSoftInstall)	Each time a portfolio item corresponding to a software installation/utilization is created, a corresponding record is created in the Software Installations table.
License type (amLicType)	This table contains different license types. It is linked to the models table (amModel), to the assets table (amAsset) and to the software counters table (amSoftLicCounter).

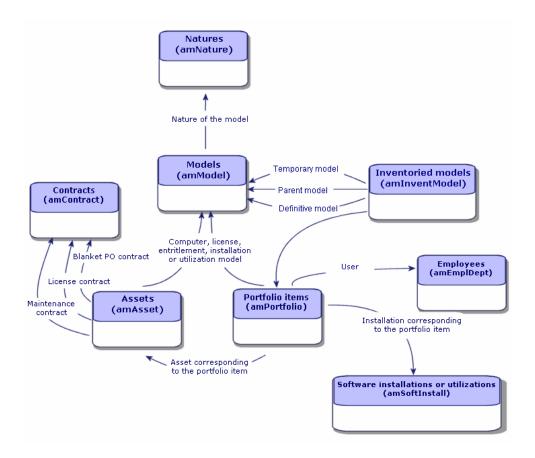
Table	Use					
Software counters (amSoftLicCounter)	Counters enable you to make sure you are in compliance with the software provider and you own internal policies.					
	Counters compare the number of installations/utilizations with the number of license rights.					
Workflow schemes (amWfScheme)	This table contains workflow schemes that					
	automate certain tasks linked to software li-					
	cense management.					
Actions (amAction)	This table holds details of "wizards" that					
	automate certain tasks linked to software li-					
	cense management.					
Contracts (amContract)	This table enables you to create:					
	<ul> <li>Acquisition contracts (linked to licenses) or maintenance contracts (generally linked to installations and sometimes to licenses) when necessary.</li> </ul>					
	<ul> <li>Microsoft Select type master lease con-</li> </ul>					
	tracts.					
	■ ASP type contracts.					



The contracts are used to describe agreements you have with software providers. Creating a contract is optional except for ASP agreements, which must be described by a contract.

You must create a portfolio item for each license acquired (whether it be due to a license contract or not).

Figure 2.1. Physical data model



## Management types

As for other assets and portfolio items, you must choose a management type for licenses and installations/utilizations.

Their management type will depend on their importance and the way in which you choose to describe them:

- Individual management for expensive and indispensable software (Asset Manager, SAP, for example).
  - ▶ Portfolio guide, chapter Portfolio items, section Assets.
- Collective management for low-cost software that you purchase in large quantities (File compression software, for example).

- ▶ Portfolio guide, chapter Portfolio items, section Batches.
- Undifferentiated management for free software for which you only want to know the number of its users (RealPlayer type multimedia software, for example).
  - ▶ Portfolio guide, chapter Portfolio items, section Untracked batches.

## Software assets module: Order of implementation

- 1 Create the software license contracts (> License contract management [page 39])
- 2 Create the software licenses(▶ Software license management [page 53])
- 3 Create the named entitlements ( Software entitlement management [page 59])
- 4 Create and/or import the software installations/utilizations ( Software installations and utilizations management [page 63])
- 5 Check compliance of installations/utilizations with respect to licenses (> Monitoring license compliance of installations [page 81])
- 6 Analyze the situation of your company (▶ Viewing reports and charts [page 107])

### How to create records

The recommended method of creating records for contracts, licenses, entitlements, installations/utilizations and software counters is by using the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ **Licenses/ Manage software...** link on the navigation bar).

This wizard gives you step-by-step guidance in creating the records.



We recommend that you use the wizard to create records, especially when you start using the Software assets module.

Once you are familiar with this module, you can also use the links on the navigation bar to directly access records in a given table (for example, the **Portfolio** management/IT/ Licenses/ Software counters link).

## Manage Software wizard structure (sysSamLauncher)

This section provides an overview of the structure of the *Manage software* wizard (**Portfolio management/IT/ Licenses/ Manage software...** link on the navigation bar).

This wizard has its own pages as well as links to other wizards.

Assistant Gérer les logiciels (sysSamLauncher)

#### Page Gérer les logiciels Page Licences logicielles et installations Page Gestion des contrats Sélectionner le contrat à traiter Créer un nouveau contrat logiciel (draft) Créer une licence logicielle De mander la validation du contrat Créer un type de licence logicielle (modèle) Créer un modèle de licence depuis une installation inventoriée Saisir un contrat validé Créer une demande type autorisée Créer une demande depuis une demande type autorisée Modifier un contrat existant Modifier une licence logicielle Régulariser les écarts Modifier un contrat de maintenance Réconcilier les installations non identifié Ajouter des biens à un contrat existant Ajouter un utilisateur ASP. Rattacher des lignes de facture au contrat Retirer un utilisateur ASP. Marquer les installations OEM Sortir des licences ou installations du parc Demander de nouvelles licences logicielles Page Réconcilier es licences logicielles Page Créer des rapports et des graphiques Attributions nominatives Créer un compteur de gestion des licences logicielles Tableau de bord général Distribution des paquets/scripts sur les ordinateurs Modifier un compteur Les 10 logiciels les moins installés Distribution des paquets/scripts sur les localisations Régulariser les écarts Les 10 logiciels les plus installés Distribution des paquets/scripts aux utilisateurs Sélectionner les compteurs à actualise Audit d'utilisation par centre de coût Logiciels non utilisés par centre de coût Fenêtre Résultats de Compteurs logiciels Nouveau Attributions Analyse d'utilisation Calculer An allyse Licence Economies potentielles sur les logiciels Installation Coût total des logiciels Régulariser Etat des licences

## Using the Software assets module

## Preliminary tasks

This chapter explains the configuration needed to use the Software assets module.

## Insert the appropriate license in the Asset Manager database

Make sure your Asset Manager license allows access to the following modules:

- Portfolio
- Contracts
- Software assets

## Windows client: Activate required modules

- 1 Start the Asset Manager Windows client.
- 2 Activate the following modules (File/ Activate modules menu):
  - Portfolio
  - Contracts
  - Software assets

## Import the line-of-business data into your existing database

In order to use the *Software assets* module with a database, you must import a specific set of line-of-business data.

## Importing the Line-of-business data when you create the database

Follow the instructions in the Administration guide, chapter Creating, modifying and deleting an Asset Manager database, section Creating the database structure with Asset Manager Application Designer.

#### On the page Data to import, select:

- Software management Line-of-business data
- Contracts Line-of-business data

### Importing the *Line-of-business* into an existing database

- 1 Start Asset Manager Application Designer.
- 2 Select the File/ Open menu item.
- 3 Select the Open database description file create new database option.
- 4 Validate (**OK** button).
- 5 Select the gbbase.xml file, which is located in the config sub-folder of the Asset Manager installation folder (in general: C:\Program Files\HP\Asset Manager 5.10 xx).
- 6 Open the file (**Open** button).
- 7 Start the database creation wizard (Action/ Create database menu).
- 8 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Value
se page
Select the connection to the database into which
you wish to import the line-of-business data.
Import line-of-business data.
Do not select this option

Fields	Value
Password	Enter the administrator's password.
	Note:
	The Asset Manager database administrator is the record in the <b>Departments and employees</b> (amEmplDept) table for which the <b>Name</b> (Name) field is set to <i>Admin</i> .
	The database connection login in stored in the <b>User name</b> (UserLogin) field. The administration name is $Admin$ .
	The password is stored in the <b>Password</b> field (LoginPassword).
Data to import page	
Available data	Select:
	■ Software management - Line-of-business data
	■ Contracts - Line-of-business data
Stop import if error	Select this option for the import to stop if a problem is encountered.
Log file	Full name of the file to which all import operations, including errors and warnings, are logged.

9 Execute the options defined using the wizard (Finish button).

# To learn more about installing Asset Manager

Refer to the Installation and upgrade guide.

# License contract management

This section explains how to manage license contracts with Asset Manager. License contracts are used to describe the terms and conditions negotiated with software providers and vendors.



# 🎸 Important:

License contracts are not to be confused with the actual licenses themselves (which are portfolio items that describe acquired license rights).

The counters use licenses and not contracts as the basis to reconcile acquired and consumed rights.

## Creating a license contract

This section explains how to create a new contract.

#### Method 1: Using the *Manage software* wizard (sysSamLauncher)

- 1 Collect together the contract signed with software providers and vendors.
- 2 Start the Manage software wizard (Portfolio management/ IT/ Licenses/ **Manage software...** link on the navigation bar).

- 3 On the Manage software page, select the Create/Modify software contracts option.
- 4 Click **Next**.
- 5 On the Create/Modify software contracts page, click Create a contract in the Software contracts section.
- 6 This starts the *Create a software contract* (sysSamCreateSoftContract) wizard.

Populate the wizard according to your needs.

Validate all parameters of the contract (Finish button).

The Create a software contract wizard creates the contract.

## Method 2: Using the menus

- 1 Collect together the contract signed with software providers.
- 2 Display the contracts (**Contracts/ Contracts** link on the navigation bar).
- 3 Add a new record (**New** button).
- 4 Populate in particular the following fields and links:

Field or link	Description
Type (seType)	<ul> <li>Master lease: If there is a master lease with the software vendor</li> </ul>
	<ul> <li>License: For the license contract strictly speaking</li> </ul>
	<ul> <li>Insurance: For support contracts, upgrades, software assurance, etc.</li> </ul>
General tab	
Attached to (Parent)	To link a license contract to a master lease or an insurance contract to a license contract
Licenses tab	
License contract type (seLicenseType)	Specifies the license type
Tab list ( <b>Licenses</b> (Licenses) link)	Assets describing the license rights acquired in
	a license contract

# Selecting the current contract in the *Manage software* wizard (sysSamLauncher)

This section explains how to associate a contract by default with the *Manage software* wizard.

The default contract is taken into account by some of the other wizards that are triggered by the *Manage software* wizard.



The selected contract remains associated with the wizard, even if you exit the wizard. The current contract is associated with the Asset Manager database login and is therefore different for each login.

- 1 Start the Manage software wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, click the Select the current software contract button.
- 3 This starts the Select your current software contract (sysSamGetEnv) wizard. Populate the wizard according to your needs. Validate the contract selection (**OK** button).

In this guide, current contract will refer to the current contract associated with the *Manage software* wizard for a given login to the Asset Manager database.

## Automating contract validation

This section explains how contract validation is automated by Asset Manager and how to configure and implement this.

#### Overview

The system data belonging to the Software assets module contains a workflow entitled Contract validation (sysSam CNTR APPR).

This workflow schema automates the validation of license contracts.

The following is a description of this workflow scheme:

Table 4.1. License contract validation - Contract validation workflow scheme

ger the workflow scheme

Events that trig- The workflow scheme starts if one of the following events occurs:

- Record added to the **Contracts** (amContract) table.
- Updated Contracts (amContract) table, Status (Status) field.

Conditions required for the workflow to continue running

The workflow scheme continues running if the following fields are set to the following values:

Table name	Field name	Field value
Contracts (am-	Status (Status)	SAM_WORKFLOW
Contract)		
Contracts (am-	Contract status (seStatus)	Awaiting approval (13) or
Contract)		Awaiting approval for re-
		newal (33)

Is Asset Manager
Automated Process Manager required to trigger
and run the
workflow
scheme?
Simplified de-

scription of the

workflow scheme

The workflow scheme creates a budgetary validation request assigned to a group that is selected by the workflow scheme.

This validation request is shown by a workflow activity assigned to the group supervisor. This workflow activity is visible to all members of the group. A message is also sent to the group supervisor.

2 If this validation request is accepted by one of the budgetary validation group members, the workflow creates a validation request for the *Billing approval*, *Legal approval*, *Financial approval* and *Technical approval* groups.

These validation requests are each shown by a workflow activity assigned to the group supervisor. These workflow activities are visible to all members of the corresponding group. A message is also sent to the supervisor of each group.

- 3 If the four validation requests are approved, the contract supervisor receives a message.
- 4 If the contract is refused by one or more of the validation groups, a message informs the contract supervisor who can choose to leave the contract as-is, or to make changes and resubmit it for validation.

## Configuring how the budgetary validation group is selected

By default, to select the appropriate budgetary validation group, the workflow scheme proceeds as follows:

- 1 It looks for all groups linked to the contract (**Contracts** tab in the group detail).
- 2 It selects the groups whose **Barcode** (BarCode) field begins with *STRBUDGET*.
- 3 If no group is found, it assigns the request validation to the group whose **Barcode** (BarCode) field is set to *sysSam\_CNTR\_BUD*.

Before you can use the Contract validation workflow scheme, you must perform the following operations:

- 1 Display the groups (Organization/ Employee groups link).
- 2 For each contract validated by a specific group:
  - a Create a new group (**New** button) or display the detail of an existing group.
  - b Make sure that the following fields and links have the appropriate values:

Field or link	Value
Bar code (code)	A name starting with STRBUDGET.
Supervisor (Supervisor)	The person designated by this link receives a
	message when a workflow activity for the con-
	tract validation request is created by the <i>Con-</i>
	tract validation workflow. The person also re-
	views these workflow activities.
Composition tab	
Tab list (Members (Members) link)	The members of the group view the workflow
	activities for the contract validation request
	created by the Contract validation workflow
	and can accept or reject validation requests.
Contracts tab	
Tab list (Contracts (Contracts) link)	Add the contracts that are validated from a
	budgetary standpoint by the group.



## **&** Important:

In order for this system to work, a contract to validate must only be included in one single group for which the **Barcode** (BarCode) field starts with STRBUDGET.

- 3 For contracts to be validated using the default group:
  - a Display the detail of the *Budgetary approval* group whose **Barcode** (BarCode) field is set to sysSam\_CNTR\_BUD.
  - b Make sure that the following fields and links have the appropriate values:

Field or link	Value
Supervisor (Supervisor)	The person designated by this link receives a
	message when a workflow activity for the con-
	tract validation request is created by the Con-
	tract validation workflow. The person also
	views these workflow activities.
Composition tab	

Field or link	Value
Tab list (Members (Members) link)	The members of the group view the workflow
	activities for the contract validation requests
	created by the Contract validation workflow
	and can accept or reject the validation requests.



In order for this group to be used for a given contract, this contract must not be included in a group whose  ${\bf Barcode}$  (BarCode) field begins with STRBUDGET.

## Configuring the other validation groups

The other validations are handled by the following validation groups:

- Billing approval (sysSam\_CNTR\_BILL)
- Legal approval (sysSam\_CNTR\_JURI)
- Financial approval (sysSam\_CNTR\_FINA)
- Technical approval (sysSam\_CNTR\_OPER)

You must define these groups as follows:

- 1 Display the groups (Organization/ Employee groups link).
- 2 Display the details of these groups one after the other.
- 3 Populate the following fields and links:

Field or link	Value
Supervisor (Supervisor)	The person designated by this link receives a message when a workflow activity for the contract validation request is created by the <i>Contract validation</i> workflow. The person also reviews these workflow activities.
Composition tab	
Tab list ( <b>Members</b> (Members) link)	The members of the group view the workflow activities for the contract validation requests created by the <i>Contract validation</i> workflow and can accept or reject the validation requests.

### Customize the Contract validation workflow scheme



This operation can only be done using the Windows client.

This *Contract validation* is only an example.

It is more than likely that you will need to tailor it to suit your own validation processes, in the following areas in particular:

- Validation types to perform (budgetary, financial, technical, etc.)
- The way in which validators are selected (named user, calculated user, named group, calculated group)

Here is how, for example, you can change the way in which the financial validation group is selected, so that it is deduced and not simply named:

- 1 Display the workflow schemes (Administration/ Workflow/ Workflow **schemes** link on the navigation bar).
- 2 Select the Contract validation (sysSam\_CNTR\_APPR) scheme.
- 3 Display the detail of the Contract validation: Financial (SAM\_APPR\_CNTR\_FINA) activity (shortcut menu **Detail of activity** on the Contract validation: Financial box).
- 4 Display the **Parameters** tab.
- 5 Display the detail of the **Assignee** link (click on the magnifier)
- 6 Modify the following fields and links:

Field or link	Value
Context (ContextTable)	Contracts (amContract)
Type (seType)	Calculated group

Field or link	Value
Script (memScript)	Const STR <validation type="">="CNTR<validatio< th=""></validatio<></validation>
	n type>"
	RetVal=amDbGetLong("SELECT g.lGroupId FROM
	amRelEmplGrpCntr r, amEmplGroup g WHERE r.
	lGroupId=g.lGroupId AND r.lCntrId="& [lCnt rId] & " AND g.BarCode LIKE '" & STR <valid< th=""></valid<>
	ation type> & "%'")
	if RetVal=0 Then RetVal=amDbGetLong("SELEC
	T lGroupId FROM amEmplGroup WHERE BarCode
	='sysSam_CNTR_ <validation type="">'")</validation>
	by replacing the <i><validation type=""></validation></i> variable with
	FINA.
	Tim.
	Tip:
	If you wish to customize how another validation
	group type is selected, you can use the same script,
	and replace <i><validation type=""></validation></i> with another value:
	Billing approval: BILL
	■ Legal approval: <i>LEGA</i>
	Technical approval: OPER

- 7 Save the modifications (**Modify** button) and close the detail of the workflow role (**Close** button).
- 8 Close the detail of the activity (**Close** button).
- 9 Close the detail of the workflow scheme (Close button).
- 10 Display the groups (Organization/ Employee groups link).
- 11 For the contracts that are validated by a specific group:
  - a Create a new group (**New** button) or display the detail of an existing group.
  - b Make sure that the following fields and links have the appropriate values:

Field or link	Value
Bar code (code)	A name starting with CNTR <validation type="">,</validation>
	where <i><validation type=""></validation></i> is the value defined
	in the validation group selection script; In this
	example: FINA.
Supervisor (Supervisor)	The person designated by this link receives a
	message when a workflow activity for the con-
	tract validation request is created by the Con-
	tract validation workflow. The person also re-
	views these workflow activities.
Composition tab	

Field or link	Value
Tab list ( <b>Members</b> (Members) link)	The members of the group view the workflow activities for the contract validation requests created by the <i>Contract validation</i> workflow and can accept or reject the validation requests.
Contracts tab	
Tab list (Contracts (Contracts) link)	Add that contracts that are validated from a financial standpoint by the group.

#### 12 For contracts to be validated using a named group:

- a Display the detail of the group whose **Barcode** (BarCode) field is set to  $sysSam\_CNTR\_FINA$ .
- b Make sure that the following fields and links have the appropriate values:

Field or link	Value
Supervisor (Supervisor)	The person designated by this link receives a message when a workflow activity for the contract validation request is created by the <i>Contract validation</i> workflow. The person also reviews these workflow activities.
Composition tab	
Tab list ( <b>Members</b> (Members) link)	The members of the group view the workflow activities for the contract validation requests created by the <i>Contract validation</i> workflow.



## **&** Important:

In order for this group to be used for a given contract, this contract must not be included in a group whose **Barcode** (BarCode) field begins with CNTRFINA.

### Requesting validation for the current contract

- 1 Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 In the **Manage software** page, check that the wizard is accessing the current contract and select the **Create/Modify software contracts** option.
- 3 Click **Next**.
- 4 On the Create/Modify software contracts page, click the Request contract validation button

5 This starts the *Request validation for a contract* (sysSamReqContractApproval) wizard.

Validate the contract validation request (**Finish** button).

This wizard modifies the following fields and links of the current contract:

Field name	Field value
Status (Status)	SAM_WORKFLOW
Contract status (seStatus)	Awaiting approval

These modifications trigger the *Contract validation* (sysSam\_CNTR\_APPR) workflow for the current contract (**>** Overview [page 41].)

### Viewing the validation progress status of the current contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the **Manage software** page, check that the current contract in the wizard is the contract for which you want to check the validation process and select the **Create/Modify software contracts** option.
- 3 Click Next.
- 4 On the Create/Modify software contracts page, click the View validation progress status button.
- 5 This displays a screen showing the progress of the *Contract validation* (sysSam\_CNTR\_APPR) workflow (▶ Overview [page 41]).

#### Accepting or refusing a contract validation request

For each requested validation, the *Contract validation* workflow scheme creates a workflow activity.

These workflow activities are assigned to the group supervisor in charge of the different validations.

A workflow scheme is visible to the supervisor and the members of the group to which the task is assigned.

To accept or refuse a validation request:

- 1 Connect to the Asset Manager database with the supervisor login or the one of a group member.
- 2 Display current tasks (Portfolio management/ My workflow tasks link on the navigation bar).
- 3 Select the task corresponding to the validation request.

- 4 Take a look at the workflow task.
- 5 Click either the **Validate the contract** or **Refuse the contract** button.

### Restarting a contract validation cycle

If a contract is refused, the workflow scheme sends a message to the contract supervisor.

To make a decision on how to process the contract:

- 1 Connect to the Asset Manager database with the contract supervisor login.
- 2 Display the messages (Administration/ System/ My messages link on the navigation bar).
- 3 In the detail of the refusal notification message, consult the contract detail (**Ref. obj.** button .)
- 4 Modify the contract.
- 5 Display current tasks (Portfolio management/ My workflow tasks link on the navigation bar).
- 6 Select the task corresponding to the validation refusal
- Take a look at the workflow task.
- 8 Click **Yes** to restart the validation circuit or **No** to guit the process.

When you click **Yes**, the workflow activity modifies the following fields and links in the contract being validated:

Field name	Field value
Status (Status)	SAM_WORKFLOW
Contract status (seStatus)	Awaiting approval

These modifications trigger the Contract validation (sysSam CNTR APPR) workflow for the current contract ( Overview [page 41].)

## Modifying a license contract

This section explains how to modify an existing contract.

#### Method 1: Using the *Manage software* wizard (sysSamLauncher)

1 Start the Manage software wizard (Portfolio management/IT/ Licenses/ **Manage software...** link on the navigation bar).

- 2 In the Manage software page, select the Create/Modify software contracts option.
- 3 Click **Next**.
- 4 On the Create/Modify software contracts page, click Modify a contract in the Software contracts section.
- 5 This starts the *Create a software contract* (sysSamCreateSoftContract) wizard.

Populate the wizard according to your needs.

Validate all parameters of the contract (**Finish** button).

The wizard modifies the contract.

#### Method 2: Using the menus

- 1 Display the contracts (**Contracts/ Contracts** link on the navigation bar).
- 2 Select the contract to be modified.
- 3 Modify the contract.
- 4 Validate the modifications (**Modify** button).

## Associating a new maintenance contract to a license contract

- Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Create/Modify software contracts option.
- 3 Click **Next**.
- 4 On the Create/Modify software contracts page, click Create a contract in the Maintenance contracts section.
- 5 This starts the *Create a contract* wizard (BstCntrCreateContract). Populate the pages in the wizard.

Validate what you entered (Finish button.)

The *Create a software contract* wizard creates the maintenance contract and links it to the current contract.

## Modifying a maintenance contract associated with the current contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the **Manage software** page, check that the current contract in the wizard is the license contract for which you want to modify the maintenance contract that is associated with it. Then select the **Create/Modify software** contracts option.
- 3 Click **Next**.
- 4 On the Create/Modify software contracts page, click Modify a contract in the Maintenance contracts section.
- 5 This displays the list of maintenance contracts associated with the current contract.

Modify the associated contracts.

Validate what you entered (**Modify** button.)

## Adding assets to the current contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the **Manage software** page, check that the wizard is associated with the current contract to which you want to add assets. Then select the **Create/Modify software contracts option.**
- 3 Click **Next**.
- 4 On the Create/Modify software contracts page, click the Add assets to a contract button.
- 5 This displays the list of records in the **Assets** (amAsset) tab that are not already linked to the current contract.
- 6 Select one or more assets.
- 7 Populate the other pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).
- 8 Validate what you entered (**Finish** button.)
  - This links the assets to the current contract (visible on the **Assets** tab in the contract detail and **Contracts** tab in the asset detail).

9 Exit the wizard (**OK** button).

#### Link invoice lines to the current contract

- Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the **Manage software** page, check that the wizard is associated with the current contract to which you want to add invoice lines. Then select the **Create/Modify software contracts** option.
- 3 Click **Next**.
- 4 On the Create/Modify software contracts page, click the Link invoice lines button.
- 5 This starts the *Link invoice lines to the contract* (sysSamLinkInvoices2Cntr) wizard.
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).
- 7 Validate what you entered (Finish button.)
  This links the invoice lines to the current contract (Associated contract (CntrInvLine) link of the invoice lines).
- 8 Exit the wizard (**OK** button).

# 5 Software license management

A software license is a portfolio item ( Portfolio guide, chapter Portfolio items). Just like for any other portfolio item, you can choose an individual, collective or undifferentiated management for this item.

## Create a software license nature

- 1 Display the natures (**Portfolio management/ Natures** link on the navigation bar).
- Add a new record (**New** button).
- Populate in particular the following fields and links:

Field	Value	
Also create (seOverflowTbl)	Nothing	
License (bSoftLicense)	Yes	



You will note that you only need to create one nature. It can be used to create all license models.

For more information about natures, refer to the *Portfolio* guide, chapter *Portfolio items*, section *Natures*.

#### Create a software license model

### Method 1: Using the Manage software wizard (sysSamLauncher)

▶ Create a software license [page 55]

### Method 2: Using the menus

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Add a new record (**New** button).
- 3 Populate in particular the following fields and links:

Field or link	Comment on the value
General tab	
Nature (Nature)	Nature for which the <b>Also create</b> (seOver-
	flowTbl) field is set to <i>Nothing</i> and the <b>Software</b>
	license option is selected

## Create a software license type

- 1 Display the *License types* (amLicType) table (**Portfolio management/IT/Licenses/License types** link on the navigation bar).
- 2 Add a new record (**New** button).
- 3 Check the May be selected (models, assets, counters) (bSelectable) box.



If you do not check this box the record that is created can only be used as a hierarchy group for the table and cannot be selected as a license type.

#### Create a software license

#### Method 1: Using the *Manage software* wizard (sysSamLauncher)

- 1 Start the Manage software wizard (Portfolio management/IT/ Licenses/ **Manage software...** link on the navigation bar).
- 2 On the Manage software page, select the Create/Modify software licenses and installations option.
- 3 Click Next
- 4 On the Licenses and software installations page, click the Create a license button.
- 5 This starts the Create a new software license (sysSamCreateLicpfi) wizard. Populate the wizard according to your needs.

In particular, if there is not yet an appropriate model to create the software license, click Prepare licenses and software installations on the Create a new software license page.

This starts the *Prepare licenses and software installations* (sysSamLicenseProcess) wizard.

Click one of the following two buttons:

- Create a software license type (model): This starts the wizard Create a software license type (model) (sysSamCreateLicModel).
  - This wizard is used to create a software license model from an existing model (amModel table) or from a catalog product (amCatProduct table).
- Create a software license model from an inventoried installation: This starts the *Create a software license model from installations* (sysSamCreateLicModFromInst) wizard.
  - This wizard is used to create a software license model from inventoried installations.
- 6 Validate all parameters (**Finish** button). The wizard creates the license.

## Method 2: Using the menus

- 1 Display the portfolio items (Portfolio management/ Portfolio items link on the navigation bar).
- 2 Create a portfolio item based on an appropriate model.
- 3 Populate the **License** tab in particular.

## Modify a software license

#### Method 1: Using the Manage software wizard (sysSamLauncher)

- 1 Start the *Manage software* wizard (**Portfolio management/IT/ Licenses/Manage software...** link on the navigation bar).
- 2 On the Manage software page, select the Create/Modify software licenses and installations option.
- 3 Click **Next**.
- 4 On the Licenses and software installations page, click the Modify a license button.
- 5 Triggers the *Modify a software license* (sysSamModifyLicpfi) wizard.
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).
- 7 Validate all parameters (**Finish** button).
  The wizard modifies the license.
- 8 Exit the wizard (**OK** button).

## Method 2: Using the menus

- 1 Display the portfolio items (**Portfolio management/ Portfolio items** link on the navigation bar).
- 2 Select the license to modify and modify it.
- 3 Validate the modifications (**Modify** button).

## Request new software licenses

## Method 1: Using the Manage software wizard (sysSamLauncher)

- 1 Connect to the database using the login of the user associated to the named entitlement.
- 2 Start the *Manage software* wizard (**Portfolio management/IT/ Licenses/Manage software...** link on the navigation bar).
- 3 On the Manage software page, select the Create/Modify software licenses and installations option.
- 4 Click **Next**.

5 On the Licenses and software installations page, click the Request licenses button.

This starts the *Request software licenses* (sysSamCreateLicReq) wizard.

6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).

In particular, if there is not yet an appropriate model to create the software license, click Prepare licenses and software installations on the Create a new software license page.

This starts the *Prepare licenses and software installations* (sysSamLicenseProcess) wizard.

Click one of the following two buttons:

• Create a software license type (model): This starts the wizard Create a software license type (model) (sysSamCreateLicModel).

This wizard is used to create a software license model from an existing model (amModel table) or from a catalog product (amCatProduct table).

Create a software license model from an inventoried installation: This starts the Create a software license model from installations (sysSamCreateLicModFromInst) wizard.

This wizard is used to create a software license model from inventoried installations.

7 Validate all parameters (**Finish** button).

The wizard creates the request.

8 Exit the wizard (**OK** button).

## Method 2: Using the menus

- 1 Display the internal requests (Portfolio management/ Extended portfolio/ Internal requests link on the navigation bar).
- 2 Add a new record (**New** button).

## Retiring a license

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Create/Modify software licenses and installations option.

- 3 Click **Next**.
- 4 In the Software licenses and installations page, click the Remove licenses or installations from the portfolio button.
- $5 \quad \text{This starts the $Retire$ portfolio items (AstRetire) wizard.} \\$

Populate the wizard according to your needs.

Validate all parameters (Finish button).

The wizard executes the defined tasks.

# 6 Software entitlement management

#### Create a named entitlement for a license

This section explains how to create a new named entitlement that assigns license rights to designated users or computers.

## Method 1: Using the *Manage software* wizard (sysSamLauncher)

- 1 Start the Manage software wizard (Portfolio management/ IT/ Licenses/ **Manage software...** link on the navigation bar).
- 2 On the Manage software... page, select Define user rights and add or remove software.
- 3 Click Next.
- 4 On the Define user rights and add or remove software page, click Assign software (user/installation rights).
  - This starts the Assign software (sysSamEntitleUserOrItem) wizard.
- 5 On the Assign software licenses... page, select the Add a named entitlement option.
- 6 Populate the rest of the wizard according to your needs.
- 7 Validate all parameters (**Finish** button).
- 8 Exit the wizard (**OK** button).

### Method 2: Using the menus

- 1 Display the named entitlements (**Organization/ Named entitlements** link on the navigation bar).
- 2 Add a new record (**New** button).

## Modifying named entitlements for licenses

This section explains how to modify a named entitlement that assigns license rights to designated users or computers.

## Method 1: Using the Manage software wizard (sysSamLauncher)

- 1 Start the *Manage software* wizard (**Portfolio management/IT/ Licenses/ Manage software...** link on the navigation bar).
- 2 On the Manage software... page, select Define user rights and add or remove software.
- 3 Click Next.
- 4 On the Define user rights and add or remove software page, click Assign software (user/installation rights).
  - This starts the Assign software (sysSamEntitleUserOrItem) wizard.
- 5 On the Assign software licenses... page, select the Modify a named entitlement option.
- 6 Populate the rest of the wizard according to your needs.
- 7 Validate all parameters (**Finish** button).
- 8 Exit the wizard (**OK** button).

## Method 2: Using the menus

- 1 Display the named entitlements (**Organization/ Named entitlements** link on the navigation bar).
- 2 Select the entitlement to modify.
- 3 Modify the selected entitlement.
- 4 Save the modifications (**Modify** button).

# Deleting a named entitlements for a license

This section explains how to delete a named entitlement that assigns license rights to designated users or computers.

- 1 Display the named entitlements (Organization/ Named entitlements link on the navigation bar).
- 2 Select the entitlement to delete.
- 3 Delete the selected entitlement (**Delete** button).

# 7 Software installations and utilizations management

The software installations table (amSoftInstall) contains all software installations. These software installations can be described in two different ways in the database:

- By being linked with a portfolio item that has the same model. As a portfolio item is created, these software installations can be described with more detail. For example, they can be linked with business services. However, creating a portfolio item for each software installation can considerably increase the size of the database and, thus, hinder performance.
- By not being linked with any portfolio item. Having this type of installation reduces the load on the *Portfolio item* (amPortfolio) table and helps avoid any performance issues.

## Create installations/utilizations automatically

The most effective and reliable way to represent the status of your installations/utilizations is to use automatic network inventory tools such as HP Device and Dependency Mapping.



You can, of course, use other inventory tools. You must make the required changes to the HP Connect-It scenarios and the Asset Manager Automated Process Manager modules for them to work with your inventory software.

Using such tools, you can identify the installations by computer and then transfer this information to the Asset Manager database.



All software installations imported by this process are not linked with a portfolio item (the *Do not link the installation with a portfolio item* box is checked)

If you decide to link portfolio items to the imported software installations at a later date, please read paragraph After creating the installation/utilization [page 75].

# Configure your environment to import the results from a database obtained with HP Device and Dependency Mapping

- 1 Perform a software inventory using HP Device and Dependency Mapping. Use the version specified in the HP Connect-It Compatibility Matrix that ships with Asset Manager 5.1.
- 2 Install HP Connect-It in the version as provided with Asset Manager 5.1.
- 3 Start HP Connect-It.
- 4 Open the scenario edac-swnorm.scn (located in the scenario\ed\ed<HP Device and Dependency Mapping version number>\ed<HP Device and Dependency Mapping version number>ac<Asset Manager version number> sub-folder of the HP Connect-It installation folder) (File/ Open menu).
  - For example: C:\Program Files\HP\Connect-It <Version number>
    <language>\scenario\ed\ed25ac51.
- 5 Configure the *Enterprise Discovery* connector (select the connector in the scenario diagram, **Configure connector** shortcut menu).
  - On the *Select a connection type* wizard page, select a connection type and then populate the related pages in the wizard.
- 6 Configure the *Asset Management* connector (select the connector in the scenario scheme, shortcut menu **Configure connector**).
  - Populate the *Define the connection parameters* page of the configuration wizard.
- 7 Save your modifications and then exit HP Connect-It.
- 8 Start Asset Manager Automated Process Manager.

- 9 Connect to the Asset Manager database (File/Connect to database).
- 10 Display the modules (Tools/ Configure modules menu).
- 11 Select the Update the database using Enterprise Discovery inventory results module (EdAc).
- 12 Select the **Enabled** option.
- 13 Modify the **User data item** field as follows:

```
"$connectit exedir$/conitsvc.exe" -once -wpplog '$connectit exedir$/../
scenario/ed/ed2ac$version$/edac.scn' -dc:'Asset Management.SERVER'=$cnx
$ -dc:'Asset Management.LOGIN'=$login$ -dc:'Asset Management.TEXTPASSWO
RD'=$pwd$
```

- Replace the number 2 with the version number of HP Device and Dependency Mapping that is installed on your station.
- Replace *edac.scn* with *edac-swnorm.scn*
- 14 Define the frequency of the *Update the database using Enterprise Discovery* inventory results module (Verification schedules frame.)
- 15 Save your modifications (**Modify** button).
- 16 Exit Asset Manager Automated Process Manager.

## Configure the *Model normalization* (sysSam ModelNorm) group.

This group is used to assign workflow schemes from the *Model normalization*: 'amInventModel' added (sysIvtExtModelNew) (> If a new record is created in the Inventoried models (amInventModel) table or if an existing record in the Inventoried models table is linked for the first time to a software installation [page 68]).

To define who can handle the workflow tasks:

- 1 Display the groups (Organization/ Employee groups link).
- 2 Display the *Model normalization* (sysSam\_ModelNorm) group.
- 3 Populate at the least the following links:

Field or link	Comment
Supervisor (Supervisor)	The person designated by this link views the tasks created by the
	${\it Model normalization: 'am Invent Model' added work flow scheme}.$
Composition tab	

Field or link	Comment
Members (Members)	The members of the group view the workflow schemes created by
	the $Model\ normalization$ : 'am $Invent Model$ ' added workflow.

## Importing the inventory database obtained by HP Device and Dependency Mapping

#### Importing the inventory database

Asset Manager Automated Process Manager, when running in the background with the appropriate modules activated, automatically imports the information from the HP Device and Dependency Mapping inventory database.

#### What is imported from the inventory database

The inventory database contains all the inventoried computers.

To each inventoried computer is attached the components (screen, printer, etc.) and the identified software.

#### Result of the import in the Asset Manager database

A portfolio item is created for each computer and each computer component, and a record is created in the software installations table for each software application that is identified on the computer.

All software installations imported during the model normalization process do not have a linked portfolio item with the same model (the *Do not link the* installation with a portfolio item (bCompact) box is checked). Consequently, no portfolio item with the same model linked to these software installations is created.

Let's now take a closer look at software.

For every inventoried software item:

- 1 HP Connect-It searches in Asset Manager if a record already exists in the Inventoried models (amInventModel) table for which the **Key** (InventoryKey) field is the concatenation of:
  - the string PDI
  - the *applicationdata.application.versionid* field value from the inventory database record to import

If such a record is not found, HP Connect-It:

- Creates the record.
- Populates the Temporary model (ModelTmp) link with the unknown software installation model.



The unknown software installation model corresponds to the record in the **Model** (amModel) table whose **Barcode** (BarCode) field is set to sysUNKNOWN\_SOFT and whose Name (Name) field equals Unknown software installation.

If it exists, HP Connect-It updates the record.



The line-of-business data from the Software assets module populates the **Inventoried models** (amInventModel) table with the models that correspond to the HP Device and Dependency Mapping version given in the HP Connect-It compatibility matrix that ships with Asset Manager 5.1.

These temporary models are not associated to the records in the **Model** (amModel) table so that only the installation models that are available in your portfolio are created. The creation of models that corresponds to the inventoried models is automated (▶ If a new record is created in the Inventoried models (amInventModel) table or if an existing record in the Inventoried models table is linked for the first time to a software installation [page 68].)

- 2 HP Connect-It searches in the Asset Manager database if there already is a record in the **Software installations or utilizations** (amSoftInstall) table:
  - Linked to a computer on which the software was identified
  - Whose **Installation folder** (folder) field is set to the value of the SWSubComponents.SWVersion.Version\_ID field of the record to import
  - Linked to the record in the **Inventoried Models** (amInventModel) table whose **Key** (InventoryKey) field results from the concatenation of the PDI string and the SWSubComponents.SWVersion.Version ID field value.

If such a record is not found, HP Connect-It:

- Creates the record
- Populates the **Models** (amModel) link with the unknown software installation model.



The unknown software installation model corresponds to the record in the **Model** (amModel) table whose **Barcode** (BarCode) field is set to sysUNKNOWN\_SOFT and whose **Name** (Name) field equals Unknown software installation model.

If it exists, HP Connect-It updates the record.

### Automatic mechanisms triggered by the import

If a new record is created in the **Inventoried models** (amInventModel) table or if an existing record in the **Inventoried models** table is linked for the first time to a software installation

The *Model normalization: 'amInventModel' adds* (sysIvtExtModelNew) workflow is automatically triggered in the following cases:

- When HP Connect-It adds a record to the Inventoried models (amInventModel) table
- When HP Connect-It creates a software installation associated with an existing record in the **Inventoried models** table that is not yet associated with a record in the **Models** (amModel) table.
- When HP Connect-It associates an existing software installation with an already existing record in the **Inventoried models** table that is not yet associated with a record in the **Models** (amModel) table.

In the first case, this workflow creates a workflow task assigned to the *Model normalization* (sysSam\_ModelNorm) group.

This workflow task asks you to manually map the **Inventoried models** record to a **Model** (amModel) record.

To perform the workflow task:

- 1 Connect to the Asset Manager database using the supervisor login or a *Model normalization* (sysSam\_ModelNorm) group member login:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the Logout icon at the upper right to disconnect, then reconnect.
- 2 Display current tasks (Portfolio management/ My workflow tasks link on the navigation bar).
- 3 Select the task.
- 4 Click the **Wizard** button.

Asset Manager starts the Reconcile unknown installations with known software installations (sysSamNormalizeModels) wizard.

- 5 Populate the **Definitive model** link.
- 6 Click **OK**.

Asset Manager associates the record in the **Inventoried models** table with the record in the **Models** table.

This automatically triggers the *Normalize models: 'amInventModel' resolved* (sysIvtExtModelEnd) workflow scheme.

This workflow scheme triggers the *Propagate the resolution of an inventoried model* (SYS\_RES\_MOD\_ACT01) action.

#### This action:

- a Searches all software installations linked to the record in the **Inventoried** models table that was resolved.
- b Links every software installation that was found to the record in the Models table associated with the record in the Inventoried models table.

In both of the other cases, this workflow scheme triggers the Create a model from an inventoried model automatically (sysSamCreateModelFinal).

#### This action:

- 1 Creates a new record in the **Models** table using the following fields from the Inventoried models table:
  - Brand (BrandName)
  - Model (ModelName)
  - Parent model (ModelParent)

This model is linked to the nature as the parent model.

2 Links the software installation to a record in the **Models** table that was associated to the record in the **Inventoried Models** table.

#### Flagging software missing from the last computer inventory

This section explains how Asset Manager automates the flagging of software installations/utilizations missing from the last computer inventory.

This task is performed by the workflow Detection of software missing from last scan (BST SAM20).

This workflow scheme is part of the line-of-business data of the Software assets module.

Table 7.1. Inventory import - Detection of software missing from last scan workflow scheme

Events that trigger the workflow	Modification of the <b>Computers</b> (amComputer) table, <b>Last</b> software scan (dtSoftScan) field.
Execution conditions of the workflow scheme	No conditions
Is Asset Manager Automated Process Manager required to trigger and run the workflow scheme?	No

Simplified description of the
workflow scheme

The workflow scheme triggers the *Missing software assignment* (BstSamMissingSoftware) action.

This action looks at each software installation/utilization associated with the computer.

If the **Inventory date** (dtInvent) field of an installation/utilization is older than the Last software scan (dtSoftScan) of the computer, then the action updates the **Assignment** (seAssignment) field of the installation/utilization by setting it to *Missing*.

## Creating installations/utilizations manually



## Warning:

Creating installations/utilizations manually can prove to be tedious and unreliable:

- Tedious, because of the large numbers involved.
- Unreliable, because you rarely have control over what is installed.

The creation of a software installation generates a record in the *Software* installations (amSoftInstall) table and, if necessary, a record in the Portfolio items (amPortfolio) table ( Portfolio guide, chapter Portfolio items). Just like for any other portfolio item, you can choose an individual, collective or undifferentiated management for this item.

#### Creating a software installation/utilization nature

- 1 Display the natures (Portfolio management/ Natures link on the navigation bar).
- 2 Add a new record (**New** button).
- 3 Populate in particular the following fields and links:

Field	Value
Create (seBasis)	Portfolio item
Also create (seOverflowTbl)	Software installations or utilizations (amSoftInstall)

For more information about natures, refer to the Portfolio guide, chapter Portfolio items, section Natures.

### Creating software installation/utilization model

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Add a new record (**New** button).
- 3 Populate in particular the following fields and links:

Field or link	Comment on the value
General tab	
Nature (Nature)	Nature whose <b>Also create</b> field (seOverflowTbl) is set to <i>Software</i>
	$installations\ or\ utilizations\ (am SoftIn stall).$
Software inst. tab	
Useful fields and links	The values of the fields in the tab will be inherited by all the software installations/utilizations created referencing this model.
Do not link the installation with a portfolio item (bCompact)	Check this box if you do not want to create a linked portfolio item with the same model each time a software installation is created from this model.
	▶ Method 2: Create an installation via the Software installations table [page 72]
	Note:
	This option is only taken into account when software installations are created.
	No changes are made to the installations that have already been created when you check or uncheck this box. Whether they are linked to a portfolio item or not remains unchanged.

## Manually creating a software installation/utilization

#### Method 1: Create an installation from Portfolio items

- 1 Display the *Portfolio items* (Portfolio management/ Portfolio items link on the navigation bar).
- 2 Add a new record (**New** button).
- 3 Populate in particular the following fields and links:

Field or link	Comment on the value
Model (Model)	A model linked to a nature whose <b>Also create</b> field (seOver-
	flowTbl) is set to <i>Software installations or utilizations</i> (amSoftInstall).
Software inst. tab	

Field or link	Comment on the value
No of points (lUseCount)	For certain licenses, the software installation/utilization corresponds to the consumption of a certain number of points. Example: A Microsoft Select license indicates that installing Microsoft Word corresponds to the consumption of 3 points. Thus, 100 of these such installations corresponds to 300 points.
	The number of points to be counted for each installation is specified in the <b>No of points</b> field (lUseCount).
	When you use software installation counters ( Practical case 1d: Take into account effective software usage [page 147]), you can specify if the installation count should also count the number of points related to each installation/utilization.
Utilization tab	•
Last use (dtLastUse)	The <b>Utilization</b> tab in the software installation/utilization detail gives information on how the software is used.
	Among the fields in this tab, the <b>Last use</b> field (dtLastUse) may be used by software counters ( <b>Practical case 1b: Limit the scope of the counter to a given department [page 142]): At the level of the counter, you specify whether the installation/utilization count takes the last use date into account.</b>

Information entered in the **Software inst.** tab of the model used for the software installation are reused by the record that is created.

Each time a record corresponding to a software installation/utilization is created in the portfolio item's table, a corresponding record is automatically created in the software installations table. This table is an overflow table (> Portfolio guide, chapter Overview, section Overflow tables.

Click the **Portfolio management/IT/ Software installations** link on the navigation bar to access the software installations table.

The record created in the software installations table reuses the information for the record that was created in the portfolio items table (**Portfolio management/ Portfolio items** link on the navigation bar).

#### Method 2: Create an installation via the Software installations table

- 1 Display the Software installations (Portfolio management/IT/ Software installations link on the navigation bar).
- 2 Add a new record (**New** button).
- 3 Populate in particular the following fields and links:

Field or link	Comment on the value
General tab	

Field or link	Comment on the value
Model (Model)	A model linked to a nature whose <b>Also create</b> field (seOverflowTbl) is set to <i>Software installations or utilizations</i> (amSoftInstall).
Software inst. tab	
No of points (lUseCount)	For certain licenses, the software installation/utilization corresponds to the consumption of a certain number of points. For example: A Microsoft Select license indicates that installing Microsoft Word corresponds to the consumption of 3 points. Thus, 100 of these such installations corresponds to 300 points.
	The number of points to be counted for each installation is specified in the <b>No of points</b> field (IUseCount).
	When you use software installation counters ( Practical case 1d: Take into account effective software usage [page 147]), you can specify if the installation count should also count the number of points related to each installation/utilization.
Utilization tab	
Last use (dtLastUse)	The <b>Utilization</b> tab in the software installation/utilization detail gives information on how the software is used.
	Among the fields in this tab, the <b>Last use</b> field (dtLastUse) may be used by software counters ( <b>Practical case 1b: Limit the scope of the counter to a given department [page 142]): At the level of the counter, you specify whether the installation/utilization count takes the last use date into account.</b>

- If the model that you specified in the **Model** (Model) field requires that a portfolio item with the same model be created and linked to the installation/utilization (the *Do not link the installation with a portfolio item* (bCompact) field is not checked in the model's detail), then a record that corresponds to the installation is created in the *Portfolio items* table when the installation/utilization is created in the Software installations table. This portfolio item describes the installation/utilization in more detail.
- If the model that you specified in the **Model** (Model) field does not require that a portfolio item with the same model be created and linked to the software installation (the *Do not link the installation with a portfolio item* (bCompact) field is checked in the model's detail), then no record is created in the portfolio items table when the installation/utilization is created. If you decide to link a portfolio item to this installation at a later date, please read paragraph Link/unlink an installation to/from a portfolio item [page 74].

# Link/unlink an installation to/from a portfolio item

Linking an installation/utilization with a portfolio item with the same model adds more detail to the installation/utilization (for example: linking a software installation with business services).

Not linking a portfolio item with an installation/utilization reduces the amount of data in the *Portfolio items* (amPortfolio) table and reduces the risk of performance issues which could arise because of the link between the *Software installations* (amSoftInstall) table and the *Portfolio items* (amPortfolio) table.

#### When creating the installation/utilization

#### Link a portfolio item with an installation using the same model

- 1 Check that the model (**Portfolio management/ Models** link on the navigation bar) used by the installation/utilization requires that a portfolio item linked to the software installation be created (the *Do not link the installation with a portfolio item* (bCompact) box on the **Software inst.** tab should not be checked).
- 2 Create an installation/utilization as described in paragraph Manually creating a software installation/utilization [page 71] (you can use method 1 or 2 indifferently).
- 3 You should see that a record has been created in the *Portfolio items* table (Portfolio management/ Portfolio items link on the navigation bar) and in the *Software installations* table (Portfolio management/ IT/ Software installations link on the navigation bar).

These two records describe the same installation/utilization. The portfolio item is used to describe the installation/utilization in more detail.

#### Create an installation without a linked portfolio item

- 1 Check that the model (**Portfolio management/ Models** link on the navigation bar) used by the installation/utilization does not require that a portfolio item linked to the software installation be created (the *Do not link the installation with a portfolio item* (bCompact) box on the **Software inst.** tab should be checked).
- 2 Create an installation/utilization as described in paragraph Method 2: Create an installation via the Software installations table [page 72].
- 3 You can check that no record corresponding to this software installation was created in the *Portfolio items* table (**Portfolio management/ Portfolio items** link on the navigation bar).

#### After creating the installation/utilization

If you want to add a link between a software installation and a portfolio item using the same model and/or if you want to delete a portfolio item that is linked with a software installation:

- 1 Start the Link/unlink an installation to/from a portfolio item... (sysCompactInstall) wizard (Portfolio management/ IT/ Link/unlink an installation to/from a portfolio item... link on the navigation bar).
- 2 In the first list, select the software installations from which you want to unlink the existing portfolio item and click **Unlink**.
- 3 In the second list, select the software installations to which you want to link a portfolio item and click **Link**.
- 4 Software installations to which you want to link a portfolio item and from which you want to unlink an existing portfolio item are displayed in the third list.

Click Next.

5 The wizard displays a summary.

Click Finish

If you requested that a portfolio item be created and linked to the software installation, then this portfolio item completes the record's information in the Software installations table (amSoftInstall).

If you requested that a portfolio item be unlinked from the software installation, then the link between the installation and the portfolio item is deleted and the portfolio item is deleted from the database.

# Sending an automatic message when an unauthorized installation occurs

This section explains how to send an automatic notification when a user makes an unauthorized installation/utilization.

This task is performed by the *Installation not authorized* (BST\_SAM03) workflow scheme.

#### Main features of the *Installation not authorized* workflow scheme

This workflow scheme is part of the line-of-business data of the Software assets module.

Table 7.2. License control - Installation not authorized workflow scheme

Parameter	Description
Events that trigger the work-	Creation of a new installation/utilization
flow	
Execution conditions of the workflow scheme	PortfolioItem.Model.seAuthorization = 2
Is Asset Manager Automated	No
Process Manager required to	
trigger and run the workflow	
scheme?	
Simplified description of the workflow scheme	A message is sent to the person designated by the <i>Mail to administrator concerning unauthorized installation</i> (BstSamUnauthinstallation_found) action.
	By default, this person corresponds to the record in the <b>Departments and employees</b> (amEmplDept) table for which the <b>Name</b> (Name) field is set to $Admin$ .
	The message is sent to the address given in the $\textbf{EMail}$ (EMail) field.

#### Defining which installations/utilizations are not authorized

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Display the model to not authorize.
- 3 Modify the following fields and links:

Field or link	Value
Software inst. tab	
Authorization (seAuthorization)	Non authorized

# Selecting another recipient, changing the subject or body of the warning message

- $1\quad \text{Display the actions } (\textbf{Administration/Actions}\ link\ on\ the\ navigation\ bar).$
- 2 Display the action *Mail to administrator concerning unauthorized installation* (BstSamUnauthinstallation found).
- 3 Modify the following fields and links:

Field or link			
<b>Messaging</b> tab			
To (MsgTo)			

#### Defining the recipient address for the notification message

- 1 Display the departments and employees (**Organization/ Employees** link on the navigation bar).
- 2 Display the recipient of the action *Mail to administrator concerning* unauthorized installation (BstSamUnauthinstallation found).
- Modify the **EMail** (EMail) field.

# Retiring an installation/utilization

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 In the Manage software page, select the Create/Modify software licenses and installations option.
- Click Next.
- 4 In the Software licenses and installations page, click the Remove licenses or installations from the portfolio button.
- 5 This starts the *Retire portfolio items* (AstRetire) wizard. Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).
- 6 Validate all parameters (**Finish** button). The wizard creates the request.
- 7 Exit the wizard (**OK** button).

#### Reconcile unknown installations

This task consists of associating inventoried models with a definitive model if this is not already the case.

1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).

- 2 On the Manage software page, select the Create/Modify software licenses and installations option.
- 3 Click **Next**.
- 4 In the Licenses and software installations page, click the Reconcile unknown installations button.
- 5 This starts the *Reconcile unknown installations with known software installations* (sysSamNormalizeModels) wizard.
  - Populate the wizard according to your needs.
- 6 Validate all parameters (**Finish** button).

The wizard associates the records in the **Inventoried models** table with the record in the **Models** table:

This automatically triggers the *Normalize models: 'amInventModel' resolved* (sysSamExtModelEnd) workflow scheme.

This workflow scheme triggers the  $Propagate\ reconciliation\ of\ external\ model\ (SYS\_RES\_MOD\_ACT01)\ action.$ 

#### This action:

- a Searches all the portfolio items linked to the record in the **Inventoried** models table that was resolved.
- b Links every portfolio item that was found to the record in the **Models** table associated with the record in the **Inventoried models** table.
- 7 Exit the wizard (**OK** button).

# Flagging installations as OEM installations

The purpose of this action is to flag installations that you may use without having to acquire a specific license.

Such installations are called "OEM" installations because the license is granted directly by the software provider to the vendor of the hardware you bought.

This is case, for example, when you purchase a computer: Computers often ship with pre-installed software that you may legally use without having to acquire a specific license separately.

Flagging consists of setting the **Installation type** (seType) field to *OEM installation* for OEM installations.

This enables you to exclude OEM installations from calculations made by the counters.



In order for OEM installations to be excluded from installation counts, you must modify the guery associated with the Scope of the installations or utilizations to be counted (SoftlnstQuery) link of the counter as appropriate.

For example, if the query that does not exclude OEM installations is:

```
Model.ModelRef = 'PC1 - PowerPoint - Installation'
change it to:
(Model.ModelRef = 'PC1 - PowerPoint - Installation') AND (SoftInstall.seTy
```

#### To flag an OEM installation:

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 Make sure that the current contract is the OEM contract to which you want to link the software installations.
- 3 On the Manage software page, select the Create/Modify software licenses and installations option.
- 4 Click **Next**.
- 5 In the Licenses and software installations page, click the Flag OEM installations button.
- 6 This starts the Flag OEM installations (sysSamFlagOEMInst) wizard. Populate the wizard according to your needs.
- 7 Validate all parameters (**Finish** button). The wizard sets the **Installation type** (seType) field to *OEM installation* for the selected installations.
- 8 Exit the wizard (**OK** button).

# Adding a user to the current ASP contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 In the **Manage software** page, check that the ASP contract ise selected as the current contract and select the **Create/Modify software licenses** and installations option.

- 3 Click **Next**.
- 4 In the Licenses and software installations page, click the Add an ASP user button.
- 5 This starts the *Add an ASP user* wizard (sysSamAddAspUsers2Cntr).
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).
- 7 Validate what you entered (Finish button.)
  This links the selected users to the current ASP contract (Employees tab of the contract detail).
- 8 Exit the wizard (**OK** button).
- ▶ Contracts guide, part II Utilization, chapter Day-to-day management of ASP contracts, section Managing user accounts/ Processes/ Creating a user account.

# Removing a user from the current ASP contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 In the **Manage software** page, check that the ASP contract is selected as the current contract and select the **Create/Modify software licenses** and installations option.
- 3 Click **Next**.
- 4 In the Licenses and software installations page, click the Remove an ASP user button.
- $5 \quad \text{This starts the } Remove \ an \ ASP \ user \ wizard \ (sysSamDelAspUsersFromCntr).}$
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons).
- 7 Validate what you entered (Finish button.)
  This removes the selected users from the current ASP contract (Employees tab of the contract detail).
- 8 Exit the wizard (**OK** button).
- ▶ Contracts guide, part II Utilization, chapter Day-to-day management of ASP contracts, section Managing user accounts / Processes / Deleting a user account.

# 8 Monitoring license compliance of installations

#### Overview

#### Objectives of software control

Software control aims to check compliance:

- With software providers
- With your internal policies

#### Using software counters

Software control is achieved using the software counters.

Software counters are used to reconcile a license rights and entitlements count with an installations/utilizations count.

Effective software utilization can be taken into account.

These counts can be grouped by records of a table of your choice (by employee or cost center, for instance).

#### Manage software compliance on a global scale

Asset Manager lets you manage counters on a global scale.

To include a counter in corporate software management, the **Is part of corporate software management** (bFamily) option must be enabled.

A given software license model and a given software installation/utilization model can only be counted in one global compliance management counter at a time.

Doing so ensures that rights, entitlements, installations and utilizations are counted only once by the global compliance management counters.

Counters whose **Is part of corporate software management** (bFamily) option is cleared can reference license and installation/utilization models that are already included in other counters.

#### Using wizards to create and modify counters

A counter can be created and modified with or without a wizard

To modify a counter using a wizard, it must be created using a wizard and only modified using a wizard.

Counters that are maintained by wizards have their **Edit the counter using the wizards** (bAutomated) option enabled.

A corporate software management counter must be created and modified by wizards.

Wizards simplify counter creation and modification.

#### Link between counters, licenses and installations/utilizations

The definition of counters is extremely flexible.

You can adapt them to:

- the way in which you describe licenses and installations/utilizations (there are numerous different ways of doing this)
- the way in which you want to analyze the data (by employee, by site, etc.)



You can use the counters for other purposes than for software rights and installations/utilizations.

These guidelines for constructing counters do not cover all the different possibilities.

#### Main tables linked to counters

Figure 8.1. Tables linked to counters

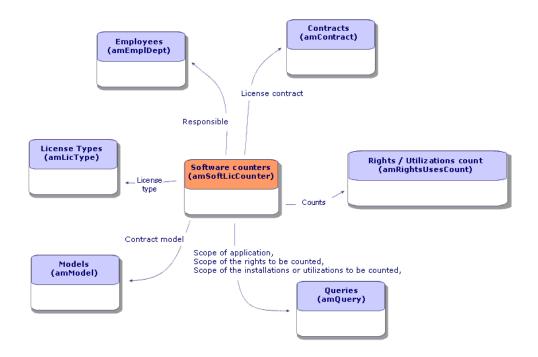


Figure 8.2. Tables involved in named entitlements

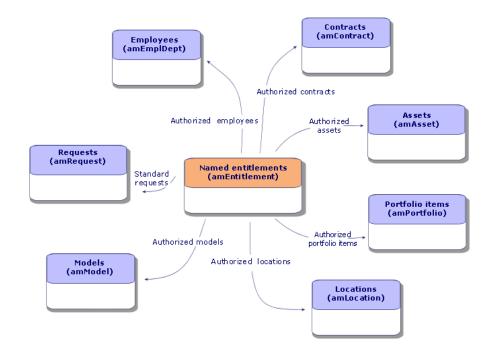
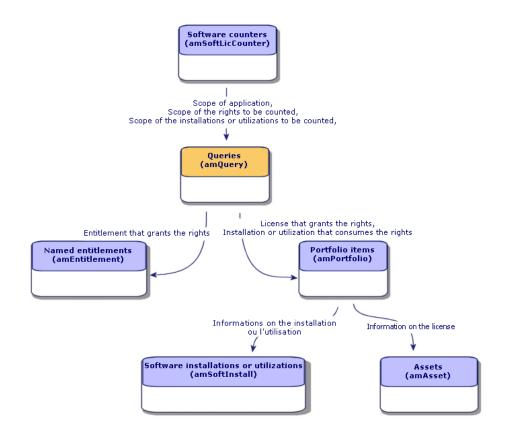


Figure 8.3. Link between counters, entitlements and portfolio items



You will notice that there is no direct link between the counters and the objects that are counted. Queries are used to establish this link.

This method greatly increases the flexibility of counters. However, it requires appropriate queries to be designed.

# Creating software counters

### Method 1: Create a counter using the *Create a software license management* counter... (sysSamCreateSoftwareCounter) wizard

#### **Prerequisites**

The Create a software license management counter... wizard requires counter templates to function.



Several counter templates are included in the line-of-business data in the datakit specific to the Software assets module.

(> Import the line-of-business data into your existing database [page 36]).

#### To start the *Create a software license management counter...* wizard

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Manage software license compliance option.
- 3 Click **Next**.
- 4 On the Manage software license compliance page, click the Create a counter button.
- 5 This starts the Create a software license management counter... wizard (svsSamCreateSoftwareCounter).

Populate the wizard according to your needs.

Validate the parameters of the counter (**Finish** button).

#### Method 2: Creating a counter directly

To create a counter directly:

- 1 Display the counters (Portfolio management/ IT/ Licenses/ Software **counters** link on the navigation bar).
- 2 Click **New**.
- 3 Populate the top half of the detail, and in particular the following fields and links:

- **Group By** (Context): Select the *Employees and departments* (amEmplDept) table, for example, if you want the **Results** tab to display a count line per employee.
- Scope of application (Definition): Create and select a query if you only want to take into account certain records in the table indicated in the Group by field.
- 4 Check the **Rights count** (bCountLic) box if necessary, and populate the **Rights** tab, with special attention to the following fields and links:
  - **Rights counter context** (LicContext): Select the *Assets (amAsset)* table, for example, if you want to account for license rights.
  - Scope of the rights to be counted (LicQuery): Create and select a query to identify the records whose rights you want to count.
  - Rights -> Group By link (EntGroupBy): Specify the link from the table specified in the **Rights counter context** field to the table specified in the **Group by** field. For example, from the *Assets (amAsset)* table to the *Employees and departments (amEmplDept)* table, the link can be PortfolioItem.User.
  - **License type** (LicType): Select a license type.



# Warning:

The *License type* (LicType) is not taken into account in the rights count. Records for which you want to count rights must be defined in the Scope of the rights to be counted (LicQuery) field.

- Populate also the lower part of the tab, which describes the calculation required to obtain the rights count.
- 5 Check the Installations/Utilizations count (bCountInst) box if necessary, and populate the **Installations/Utilizations** tab, with special attention to the following fields and links:
  - Installation/Utilization counter context (InstContext): Select. for example, the Software installations or utilizations (amSoftInstall) table if you want to account for software installations.
  - Scope of the installations or utilizations to be counted (SoftInstQuery): Create and select a query to identify the records whose installations/utilizations you wish to count.
  - Installations/Utilizations -> Group By link (InstGroupBy): Specify the link from the table specified in the Installation/Utilization counter **context** field to the table specified in the **Group by** field. For example, from the Software installations or utilizations (amSoftInstall) table to

the *Employees and departments (amEmplDept)* table, the link can be PortfolioItem.Parent.User.

• Include usage information (bUseMetering): Select this option if you want the Last Use date of the installations/utilizations to be taken into account by the counter (Last use field (dtLastUse) in the installations/utilizations detail).



The unused installations/utilizations are not removed from the installations/utilizations count in the following places:

- General tab of the counter, Installations/Utilizations count field (dSoftInstallCount)
- Results tab of the counter, No of installations/utilizations column They are simply accounted for by the following fields:
- General tab of the counter, Unused installations field (dUnusedInstall)
- Results tab of the counter, Number of unused installations field
- Include usage information (bUseMetering):
- **Period of non use** (tsUnusedDuration): Select this option to take into account actual software utilization.
- Definition of unused installations (UnusedQuery): Create and select a query if you wish to restrict the list of records that may be considered as potentially no longer used.
- Populate also the lower part of the tab, which describes the calculation required to obtain the installations/utilizations count.
- 6 Check the **Entitlements count** (bCountEnt) box if necessary, and populate the **Entitlements** tab, with special attention to the following fields and links:
  - Entitlements counter context (EntContext): Select the *Employees and* departments(amEmplDept) table, for example, if you want to assign rights to employees and departments.
  - Scope of the entitlements to be counted (EntQuery): Create and select a query to identify the records whose rights you want to count.
  - Entitlements -> Group By link (EntGroupBy): Specify the link from the table specified in the **Entitlements counter context** field to the table specified in the **Group by** field. For example, from the *Employees* and departments (amEmplDept) table to the Companies (amCompany) table the link could be *CostCenter.Company*.
  - Populate also the lower part of the tab, which describes the calculation required to obtain the entitlements count.
- Click Create.

#### Interesting reference fields

The information relating to licenses, entitlements and installations/utilizations is found in several places.

The following table suggests fields to be used in the counts:

Table 8.1. Counters - Useful fields for counts

Table	Field
Portfolio items (amPortfolio)	Quantity (fQty)
Software installations or utilizations (am-	Counts for (lUseCount)
SoftInstall)	
Assets (amAsset)	Rights (lSoftLicUseRights)

The following table suggests fields to be used to identify utilizations and installations:

Table 8.2. Counters - Useful fields for identifying installations/utilizations

Also create (seOverflowTbl)
Name (Name)
Authorization (seAuthorization)
Installation type (seType)
Local/Remote (bLocal)
Is a software suite component (bSuiteCom-
ponent)
Name (Name)
System (SoftOS)
Version level (VersionLevel)
Technical ref. (ModelRef)

The following table suggests fields to be used to identify a license:

Table 8.3. Counters - Useful fields for identifying licenses

Table	Field
Natures (amNature)	License (bSoftLicense)
	Name (Name)
Assets (amAsset)	Installation date (dInstall)
	License type (LicType)

Table	Field
	Single/Multiple (seSoftLicMulti)
Models (amModel)	Name (Name)
	System (SoftOS)
	Version level (VersionLevel)
	Technical ref. (ModelRef)

The following table suggests fields to be used to define an entitlement:

Table 8.4. Counters - Useful fields for identifying entitlements

Table	Field
amEntitlement (Named entitlements)	Code (Code)
	Name (Name)
Entitlements of the employee (amRelEmplEntitl)	Employee Id (lEmplDeptId)
	Entitlement ID (lEntitlId)
$\hline \textbf{Contract entitlements}  (amRelEntitlContract) \\$	Contract (lCntrId)
	Entitlement (lEntitlId)
Entitlements of the location (amRelEntitl-	Location (lLocaId)
Loc)	
	Entitlement (lEntitlId)
Entitlements of the portfolio item (amRelEntitlPortf)	Portfolio item (lPortfolioItemId)
	Entitlement ID (lEntitlId)
Entitlements (amRelModelEntitl)	Model ID (lModelId)
	Entitlement ID (lEntitlId)
<b>Employees and departments</b> (amEmplDept)	Bar code (BarCode)
	ID # (IDNo)
Contracts (amContract)	Reference (Ref)
Locations (amLocation)	Bar code (BarCode)
Portfolio items (amPortfolio)	Code (Code)

# Modifying software counters

# Counters modified by wizards

#### **Prerequisites**

A counter can be modified by a wizard only if it was created by the *Create a*  $software\ license\ management\ counter\ (sysSamCreateSoftwareCounter)\ wizard$ and if the **Edit the counter using the wizards** (bAutomated) option is enabled.

▶ Method 1: Create a counter using the Create a software license management counter... (sysSamCreateSoftwareCounter) wizard [page 86].

#### To modify a counter

- 1 Display the Results of the software counters page
  - Method 1: Using the *Manage software* wizard (sysSamLauncher)
    - a Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
    - b On the Manage software page, select the Manage software license compliance option.
    - c Click Next.
    - d On the Manage software license compliance page, click the Modify a counter button.
  - Method 2: Using the Windows client menus Click the Software/ Results of the software counters menu.
- 2 Select the counter to be modified.
- 3 Use the following buttons:
  - **License**: Triggers the *Modify the list of license models to take into account* (sysSamAddLic2Counter) wizard
  - **Installation:** Triggers the *Modify the list of installation models to take* into account (sysSamAddInst2Counter) wizard
  - **Scope**: Triggers the *Define or redefine the counter's scope of application* (sysSamAddScope2Counter) wizard



These buttons are displayed depending on the value of the following fields in the counter's detail:

- User-rights count (bCountLic)
- Installation/Utilization counter context (InstContext)
- Include usage information (bUseMetering):

#### Counters modified without the wizard

The following fields and links in a counter's detail can only be modified if the counter's **Edit the counter using the wizards** (bAutomated) option is not enabled.

- Scope of application link (definition)
- Fields and links on the **Rights** tab:
- Fields and links on the **Entitlements** tab:
- Fields and links on the **Installations/Utilizations** tab:

To modify a counter without using a wizard:

- 1 Display the counters (Portfolio management/ IT/ Licenses/ Software counters link on the navigation bar).
- 2 Select the counter to be modified.
- 3 Modify the counter.
- 4 Save the modifications (**Modify** button).

# Updating the results of a software counter

#### To update the results of a counter

#### Counters modified by wizards

#### **Prerequisites**

A counter can be modified by a wizard only if it was created by the *Create a software license management counter* (sysSamCreateSoftwareCounter) wizard and if the **Edit the counter using the wizards** (bAutomated) option is enabled.

▶ Method 1: Create a counter using the Create a software license management counter... (sysSamCreateSoftwareCounter) wizard [page 86].

#### To modify a counter

- 1 Display the Results of the software counters page
  - Method 1: Using the *Manage software* wizard (sysSamLauncher)
    - a Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
    - b On the Manage software page, select the Manage software license compliance option.
    - c Click Next.
    - d On the Manage software license compliance page, click the Modify a counter button.
  - Method 2: Using the Windows client menus Click the Software/Results of the software counters menu.
- 2 Select the counter to update.
- 3 Click Calculate.



The **Calculate** button starts the action *Refresh the software counter* (sysCoreSoftLicCountCalc). This is seamless for the user.

- 4 The list at the top displays count totals for all counters.
- 5 The list at the bottom displays detailed results of the counter that is selected in the list at the top.

One line is given per record in the group by table (**Group by** (Context) field) within the limits of the scope defined for the counter (Scope of the rights to be counted (Definition) field).

#### All counter types

To modify a counter without using a wizard:

- 1 Display the counters (Portfolio management/ IT/ Licenses/ Software **counters** link on the navigation bar).
- 2 Select the counter to update.
- 3 Click Calculate.



The **Calculate** button starts the action *Refresh the software counter* (sysCoreSoftLicCountCalc). This is seamless for the user.

4 Examine the results on the **General** and **Results** tabs.

### Periodical cleaning

Each time you click **Calculate**, you create a record in the **Rights / Utilizations count** table (amRightsUsesCount) for each line displayed in the **Results** tab.

The **Results** tab only shows the results of the last calculation made by clicking the Calculate button.

The previous results are not erased, however.

Using these results, you can track the evolution of licenses and installations/utilizations, and use them, for example, to create reports.

We recommend that you periodically delete the records in the **Rights / Utilizations count** table that you no longer require, if the table becomes too large.



#### Q Tip:

The records that have been generated by the same calculation have the same values in the **Results identifier** (IResultId) and **Count date** (dtCountRequest) fields.

# Processing irregularities between installations/utilizations and licenses

This section explains how to achieve software license compliance:

- Ordering missing license rights
- Remove the excess installation/utilizations

#### **Prerequisites**

Only corporate software management counters can be used to solve irregularities between installations/utilizations and licenses

To include a counter in corporate software management, the **Is part of** corporate software management (bFamily) option must be enabled.

The Solve software compliancy issues (sysSamIdentifyIllegalInstall) wizard uses a work order model whose **Barcode** (BarCode) field equals *SOFTUNINST*. Make sure this model is present in the database.

#### Solve the irregularities

- 1 One of the following methods can be used:
  - Method 1: Using the Manage software wizard (sysSamLauncher)

- a Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- b On the Manage software page, select the Manage software license compliance option.
- c Click Next.
- d On the Manage software license compliance page, click the Solve software compliance issues button.
- Method 2: Using the Windows client menus
  - a Click the Software/Results of the software counters menu.
  - b Select the counter to solve.
  - c Click Solve.
- 2 This starts the *Process software irregularities* (sysSamIdentifyIllegalInstall) wizard.

Select the counter to examine.

Click **Next** and then follow the instructions in the wizard.

If you are short of license rights, the wizard enables you to make a license request or to remove the software.

- 3 Validate the parameters (**Finish** button).
- 4 Exit the wizard (**OK** button).

# Optimizing compliance via software upgrades and license rights transfers

This section is of interest:

- 1 If you have:
  - Several software applications (or several software versions) that can transfer user rights.
  - And/or software upgrade licenses which allow you to use, provided you possess the licenses from previous versions, more recent versions of the software and do so without acquiring a new software license.
- 2 And you want to know if you are compliant with your licenses and installations/utilizations by taking into account:
  - Your license rights for a software application.
  - Your rights acquired by software upgrade licenses.
  - Your rights acquired by a more recent version of the software which allow you to use previous versions of the software.

As for software licenses and associated installations/utilizations, the software upgrade licenses count is managed by software upgrade counters that are created in the same way as other counters ▶ Creating software counters [page 86].

In Asset Manager you will need to specify:

- Rights to use previous software versions granted by a license for a given version.
- Rights to use the latest software versions granted by a software upgrade license.

This is also done in the software counters and the software upgrade counters > Specifying transferable user rights in the counters [page 96].

The View linked counters (sysSamSoftLicLinkedCount) link is used to display the relationships between counters and compliance results.



This wizard does not modify license rights.

The counters only display information, which is gathered dynamically, for you to use to monitor your compliance.

#### Specifying transferable user rights in the counters

The transfer of user rights is specified in the detail of the counters.

This can be specified when the counters are created or you can modify a counter at a later date.

A differentiation is made between:

- Rights to use previous software versions granted by a license for a given version.
- Rights to use the latest software versions granted by a software upgrade license.



#### Note:

You can only transfer rights to one other counter (from a previous software version) only. However, rights can be transferred to earlier versions by transitivity if rights transfers have been authorized.

For example, if you can

- Transfer software license rights from SoftApp v4 to SoftApp v3
- Transfer software license rights from SoftApp v3 to SoftApp v2
- Transfer software license rights from SoftApp v2 to SoftApp v1

Then, by transitivity, you can transfer license rights from SoftApp v4 to SoftApp v2 (via SoftApp v3) and from SoftApp v4 to SoftApp v1 (via SoftApp v3 and SoftApp v2).

#### Prerequisites

The counter associated with the previous and/or latest version of the software must already exist.

The previous version of the software is the software version to which rights can be transferred from the current version (more recent version).

The latest version of the software is the software version from which rights can be transferred to the current version (older version).

Method 1: If you create your software counter using the Create a software license management counter... wizard

Start and populate the Create a software license management counter... (sysSamCreateSoftwareCounter) wizard (Portfolio management/ IT/ Licenses/ Create a software license management counter... link on the navigation bar). ▶ Method 1: Create a counter using the Create a software license management counter... (sysSamCreateSoftwareCounter) wizard [page 86]

On the Select the counter consolidation action to perform page, select Link the counter to another counter.

Then, on the **Select counters to link** page, select the counter for the previous version and/or the counter for the latest version and indicate whether or not rights can be transferred.

Method 2: If you create or want to modify your counter manually



#### Note:

This method lets you only specify license rights transfers to previous software versions.

Select the existing counter or create a counter (**Portfolio management/IT/Licenses/ Software counters** link on the navigation bar) as specified in paragraph > Method 2: Creating a counter directly [page 86].

#### Then:

- 1 On the **Consolidation** tab of the counter's detail:
  - a Check the Has counter for a previous version (bHasPreviousCntr) box.
  - b Specify the counter associated with the previous version of the software in the *Counter for the previous version* (Previous) field.



You do not authorize the transfer of rights at this stage. You only describe links between two versions of the same software.

- c If you want to authorize the transfer of license rights to previous versions: Check the *Can transfer rights* box (bLicRightsTransfer).
- 2 Save the modifications.

Specifying rights transfers via license upgrades to more recent software versions

#### **Prerequisites**

Counters that are associated with the software version from which and to which you want to perform the upgrade must already exist.

Method 1: If you create your software counter using the *Create a software license management counter...* wizard

Start and populate the *Create a software license management counter*... (sysSamCreateSoftwareCounter) wizard (**Portfolio management/IT/Licenses/Create a software license management counter...** link on the navigation bar). Method 1: Create a counter using the Create a software license management counter... (sysSamCreateSoftwareCounter) wizard [page 86]

On the **Select the counter consolidation action to perform** page, select *Declare the counter as a software upgrade counter* and, on the following pages, populate the counters from which and to which the upgrade is performed.

Method 2: If you create or want to modify your counter manually

Select the existing counter or create a counter (**Portfolio management/IT/Licenses/Software upgrade counters** link on the navigation bar) as specified in the paragraph > Method 2: Creating a counter directly [page 86]. Then:

1 Note that the *Software upgrade counter* (bLicUpgrade) box is checked.

This option is used to distinguish the counter from standard software counters.

- 2 On the **Consolidation** tab of the counter's detail, specify the counter from which and the counter to which you want to perform the upgrade.
- 3 Save the modifications.

#### Viewing links between counters that can transfer rights and check compliance

To view the counters that can transfer rights to a given counter:

- 1 Display the counter's detail (Portfolio management/ IT/ Licenses/ **Software counters** link on the navigation bar).
- 2 For the most recent rights counts and rights calculations, click the **Calculate** button to calculate rights and installation data for the selected counter and any counters that are linked to it.
- 3 Look on the **General** tab to view the compliance check summary.
- 4 To display the compliance information:
  - Windows client: Click the Linked counters button.
  - Web client: Select **Linked counters** from the *Actions...* drop-down list.

This starts the View linked counters wizard (sysSamSoftLicLinkedCount).

The wizard displays a summary of the different links, if any exist, between this counter and the other counters, and provides the results of the compliance calculations.

▶ How the View linked counters wizard works [page 100]

### Carrying out the upgrade process

#### **Prerequisites**

Before carrying out an upgrade process, you need to:

- Create counters that are associated with the software version from which and to which you want to perform the upgrade ▶ Creating software counters [page 86].
- Create the associated software upgrade counter ▶ Specifying rights transfers via license upgrades to more recent software versions [page 98].

#### Transferring rights per software upgrade

You want to upgrade from a previous software version (V1) to a later version (V2).

You have a counter that is associated with V1. a counter that is associated with V2 and a software upgrade counter that is associated with V1->V2.

Suppose that you have N1 license rights for V1, N2 rights for V2 and Nm upgrade rights associated with counter V1->V2.

Transferring software license rights per upgrade from V1 to V2 consists in taking X rights from V1, associating them with X V1->V2 upgrade rights in order to get X additional rights for V2. Thus, X must be less than N1 and Nm.

After upgrading the software, you have N1-X rights for V1, N2+X rights for V2 and Nm-X upgrade rights associated with counter V1->V2 remain.

- In the *Maximum consolidated rights count* (▶ How the View linked counters wizard works [page 100]), it is understood that the N1 license rights can be taken from V1 (or Nm rights if Nm < N1) and transferred to V2. Whether or not certain license rights are already being used by V1 is not taken into consideration and the transferable rights count is performed regardless of whether or not V1 becomes non-compliant.
- In the *Consolidated rights count* (▶ How the View linked counters wizard works [page 100]), licenses that are already used for V1 are taken into account to prevent V1 from becoming non-compliant.

Let N1u be the number of licenses that are used by V1:

- If N1-N1u < Nm: The maximum number of rights that can be transferred to V2 per software upgrade is equal to N1-N1u.
- If N1-N1u > Nm: The maximum number of rights that can be transferred to V2 per software upgrade is equal to Nm.

#### How the View linked counters wizard works

The calculation rule of the *View linked counters* (sysSamSoftLicLinkedCount) wizard is as follows:

- 1 Linked counters are calculated to determine rights and software installations for each counter.
- 2 The software upgrade process is applied (software upgrade counters are used to upgrade rights of source and destination counters to which they are linked). The following rules are applied:
  - The maximum number of rights that can be transferred is equal to the number of rights of the software upgrade counter.
  - The number of transferred rights via the upgrade is limited so that the source remains compliant.
  - Unused rights from the latest versions are, if possible, transferred to previous versions in order to increase the source's number of rights.
- 3 Compliance is calculated: difference between the number of rights after the upgrade and the number of installations/utilizations.

4 Consolidated compliance is calculated. If possible, license rights are transferred to previous non-compliant versions (without making the latest versions non-compliant).

The results displayed by the wizard are as follows:

- 1 In the first screen: Summary of the linked counters, rights and installations/utilizations count, and consolidated compliance calculation.
- 2 In the second screen: This screen is more detailed and displays:
  - The list of linked software counters with the following information:

Column	Description
Rights count	Number of available license rights (direct rights)
Installations/Utilizations count	Number of actual installations/utilizations
Maximum consolidated rights count	Maximum number of available rights by combining the direct rights with the rights which can be obtained via software upgrades (may make the counters transferring rights non-compliant)
	▶ Transferring rights per software upgrade [page 99]
Consolidated rights count	Number of available rights by combining the direct rights with the rights which can be obtained via software upgrades (counters transferring rights remain compliant)  Transferring rights per software upgrade [page 99]
	Note:
	If a source counter does not have a sufficient amount of transferable rights per upgrade process to remain compliant with its installations, the following counters can transfer rights to it to enable the transfer of rights for the upgrade.
Compliance	Difference between the number of rights (after upgrade)
	(Consolidated rights count column) and the number of
	installations/utilizations.
Consolidated compliance	Compliance after transferring rights, if possible (includes rights that were inherited following upgrades and transfers between versions)

The list of software upgrade counters, with the rights and transferred rights count

Actual transfers and/or upgrades are listed in the counter's detail.

The number of actual upgrades also appears in the detail of the software upgrade counters.



This wizard will help you optimize your software licenses with your installations and show you if you are compliant. It does not modify licenses and license rights.

# "Previous mode" software counters



#### Warning:

This section only applies to the Windows client.

In version 4.3.0 of Asset Manager, the counters were fully overhauled.

However, so that you can use the counters you have migrated from previous versions of Asset Manager as-is, "previous mode" counters are supported.

#### Accessing "previous mode" counters

- 1 Display the list of screens (**Administration/List of screens** menu).
- 2 Click **Screen** on the list header.
- 3 Search for Software counters (previous format) (sysOldamSoftLicCounter).
- 4 Open this screen.

#### Information on "previous mode" counters

For information on the "previous mode", refer to the guide AssetCenter 4.2.0 -Portfolio, chapter Software, section Software counters.

#### Converting "previous mode" counters

When you migrate a database version earlier than 5.1, the counters are imported as-is.

You can carry on using them as they worked before.

If you wish to upgrade them, we recommend creating new counters using the old ones to guide you.

# Sending an automatic message in case of license overrun

This section explains how to send automatic notification when software license rights are overrun.

This task is automatically performed by the *No more licenses available* (BST\_SAM01) workflow scheme.

This workflow scheme is part of the line-of-business data of the Software assets module.

▶ Import the line-of-business data into your existing database [page 36].

The following is a description of this workflow scheme:

Table 8.5. License control - No more licenses available workflow scheme

Parameter	Description
Events that trigger the	Creation of a new counter
workflow	Or modification of one of following fields in the <b>Software counters</b>
	(amSoftLicCounter) table:
	■ No of rights (lLicUseRights)
	■ No of install. (lSoftInstallCount)
	$\blacksquare  \text{Rights count } (\text{dLicUseRights})$
	$\blacksquare  Installations/Utilizations \ count \ (dSoftInstallCount)$
Execution conditions of	(lSoftInstallCount > lLicUseRights) OR (dSoftInstallCount >
the workflow scheme	dLicUseRights)
Is Asset Manager Auto-	No
mated Process Manager	
required to trigger and	
run the workflow scheme?	
Simplified description of the workflow scheme	A message is sent to the person designated by the action <i>Mail to administrator concerning licenses overrun</i> (BstSamLicenses_exceeded).
	By default, this person corresponds to the record in the <b>Depart-</b>
	ments and employees (amEmplDept) table for which the Name (Name) field is set to Admin.
	The message is sent to the address specified in the $\textbf{E-mail}\ (EMail)$ field of the designated employee.

To select another recipient, modify the body or subject of the warning message:

- 1 Display the actions (**Administration/ Actions** link on the navigation bar).
- 2 Display the action *Mail to administrator concerning licenses overrun* (BstSamLicenses exceeded).
- 3 Modify the following fields and links:

Field or link
Messaging tab
To (MsgTo)
Subject (Subject)
Message (memMsgText)

To define the recipient address for the notification message:

1 Display the departments and employees (**Organization/ Employees** link on the navigation bar).

- 2 Display the recipient of the action *Mail to administrator concerning licenses* overrun (BstSamLicenses\_exceeded).
- 3 Modify the **EMail** (EMail) field.

# Automate periodical calculation of the software counters

This section explains how to automatically recalculate all the counters on a regular basis.

This task is performed by the *Periodic verification of licenses* (BST\_SAM02) workflow.

#### Main features of the Periodic verification of licenses workflow scheme

This workflow scheme is part of the line-of-business data of the *Software assets* module.

▶ Import the line-of-business data into your existing database [page 36].

Table 8.6. License control - Periodic verification of licenses workflow scheme

Parameter	Description
Triggering of the workflow scheme	According to the frequency defined by the cal-
	endar of the initial event in the workflow
	scheme
Is Asset Manager Automated Process Manager	Yes
required to trigger and run the workflow	
scheme?	
Simplified description of the workflow scheme	The workflow scheme executes the action
	$Calculate\ all\ software\ installations\ (BstSam-$
	$Compute All Lic And Install), which \ recalculates$
	all counters.

# Configuring Asset Manager Automated Process Manager

Asset Manager Automated Process Manager tests whether the *Periodic* verification of licenses workflow should be triggered using the information given in the calendar of the initial event of the *Periodic verification of licenses* workflow scheme.

To make sure Asset Manager Automated Process Manager performs this task:

- 1 Start Asset Manager Automated Process Manager.
- 2 Connect to the Asset Manager database (File/ Connect to database menu).

- 3 Display the modules (**Tools/ Configure modules** menu).
- 4 Select the Execute workflow rules for execution group 'SYS SAM' (WkGroupSYS\_SAM) module.
- 5 Define the triggering calendar for the module (**Verification schedules** frame).

#### Executing Asset Manager Automated Process Manager as background task

Asset Manager Automated Process Manager must be executed as a background task in order for the Execute workflow rules for execution group 'SYS SAM' module to be executed periodically.

### Consequences of recalculating counters

When recalculating counters, the following fields in particular are updated:

Field
No of rights (lLicUseRights)
No of install. (lSoftInstallCount)
Rights count (dLicUseRights)
Installations/Utilizations count (dSoftInstallCount)
Entitlements count (dEntCount)

When one of these fields is modified, the *No more licenses available* (BST\_SAM01) is triggered (▶ Sending an automatic message in case of license overrun [page 102]).

# 9 Viewing reports and charts

# Display the software dashboard

### Displaying the dashboard

Method 1: Using the *Manage software* wizard (sysSamLauncher)

- a Start the Manage software wizard (Portfolio management/ IT/ Licenses/ **Manage software...** link on the navigation bar).
- b On the Manage software page, select the View reports and charts option.
- c Click Next.
- d In the Create reports and charts page, click the General dashboard button.

Method: Using the links on the navigation bar

Click the Portfolio management/ IT/ Licenses/ Software dashboard link on the navigation bar.

#### Customizing the dashboard

To modify the list of reports that make up the dashboard:

- 1 Display the actions (**Administration/ Actions** link on the navigation bar).
- 2 Select the action Software dashboard (BstSamDashBoard).
- 3 Select the **Indicators** tab.
- 4 Modify the list of statistics and reports in the dashboard.
- 5 Save the modifications (**Modify** button).

# Displaying a report on software

#### Method 1: Using the Manage software wizard (sysSamLauncher)

- 1 Start the *Manage software* wizard (**Portfolio management/IT/ Licenses/Manage software...** link on the navigation bar).
- 2 On the Manage software page, select the View reports and charts option.
- 3 Click **Next**.
- 4 In the **Create reports and charts** page, click the button corresponding to the report of your choice.

#### Method 2: Using the menus



This operation can only be done using the Windows client.

- 1 Display the reports (**Administration / Reporting/ Reports** link on the navigation bar).
- 2 If the **Domain** column is not displayed in the list:
  - a Right click within the list.
  - b Select Utilities/ Configure list from the shortcut menu.
  - c Add the **Domain** (Domain) link to the columns in the list.
  - d Click OK.
- 3 Sort the list on the **Domain** column.
- 4 Reports that are part of the *Software assets* module can be selected via the option paths / *Portfolio management/IT/Licenses*/ or / *Portfolio management/IT/Reports*/.

# III Practical cases

## 10 Practical cases

## General information and prerequisites

#### **General information**

The practical cases demonstrate how to manage software assets with Asset Manager.

Each practical case concentrates on a particular aspect of software control.

To ensure that the practical cases work correctly, make sure you carry out each step in full and follow the order shown. Only essential fields and links are mentioned. You may have a look at the other fields and links by yourself.

## **Prerequisites**

To execute the practical cases, you must first:

- 1 Connect to the Asset Manager demonstration database using the *Admin* login (the corresponding password is empty).
- 2 If you are using the Windows client: Enable, at minimum, the *Portfolio*, *Software assets*, *Procurement*, *Financials*, *Contracts* and *Administration* modules using the **File/ Activate modules** menu.
- 3 Import line-of-business data from the  $Software\ assets$  module.
  - ▶ Import the line-of-business data into your existing database [page 36].

## Practical case 1: Create required items

#### Presentation

This practical case explains how to create the items to be used in the practical cases that will follow.

### Create the natures

- 1 Display the natures (**Portfolio management/ Natures** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	PC1 - Computer
General tab	
Create (seBasis)	Portfolio item
Also create (seOverflowTbl)	Computers (amComputer)
Management constraint (seMgtConstraint)	Unique asset tag
Has software installed (bHasSoftInstall)	Yes

Field or link	Value
Name (Name)	PC1 - License
General tab	
Create (seBasis)	Portfolio item
Also create (seOverflowTbl)	(No table)
Management constraint (seMgtConstraint)	Unique asset tag
License (bSoftLicense)	Yes

Field or link	Value
Name (Name)	PC1 - Installation
General tab	
Create (seBasis)	Portfolio item
Also create (seOverflowTbl)	Software installations or utilizations (amSoftIn-
	stall)

Field or link	Value
Management constraint (seMgtConstraint)	Free

## Practical case 4: creating a contract license

## Prerequisites

This practical case can only be carried out after practical case 1 has been carried out in full.

#### Presentation

This practical case explains how to create and modify a license contract.

#### Scenario

Mr. PC4 - Seagul is the MIS at his company's head office.

Mr. *PC4 - Seagul* acquires a license, *PC4 - PowerPoint*, off the global license agreement. He records this license in the Asset Manager database.

At a later stage, Mr. *PC4 - Seagul* signs a global license agreement, *PC4 - Microsoft license contract* with the company *PC4 - Microsoft*.

He creates the contract PC4 -  $Microsoft\ license\ contract$  in the database, then updates it. He also sets up an alarm for the end of term date in order to terminate the contract within the notice period.

Mr. *PC4* - *Seagul* reincorporates the license *PC4* - *PowerPoint* in the contract *PC4* - *Microsoft license contract*, which is designated as a blanket contract.

Since the contract PC4-001 is linked to a maintenance contract, Mr. PC4-Seagul creates the maintenance contract in the Asset Manager database and links it to the contract PC4-Microsoft license contract.

## Main stages of the practical case

- 1 Creating the contract supervisor [page 114]
- 2 Creating the location of the company [page 115]
- 3 Creating a file representing the scan of the paper document signed with the supplier [page 115]
- 4 Connecting to the database as PC4 Seagul [page 115]
- 5 Creating the reseller for the PC4 PowerPoint license [page 115]
- 6 Create the model for the PC4 PowerPoint license [page 117]
- 7 Creating the asset corresponding to the PC4 PowerPoint license [page 117]

- 8 Creating the contract [page 116]
- 9 Modifying the contract PC4-001 [page 118]
- 10 Examining the contract created and modified by the wizard [page 119]
- 11 Creating the action associated to the alarm on the end of contract date [page 120]
- 12 Associating an alarm with the end date [page 120]
- 13 Triggering the Verify alarms (Alarms) module in Asset Manager Automated Process Manager [page 121]
- 14 Reconnecting to the database as PC4 Seagul [page 121]
- 15 Creating the invoice associated to the PC4 PowerPoint license [page 122]
- 16 Add a line to the invoice corresponding to the license PC4 PowerPoint [page 122]
- 17 Linking the invoice line of the license PC4 PowerPoint License to the contract PC4-001 [page 123]
- 18 Associating a maintenance contract with the contract PC4-001 [page 124]
- 19 Modifying the maintenance contract [page 125]

### Steps to carry out

#### Creating the contract supervisor

- 1 Display the employees (**Organization/ Employees** link on the navigation bar).
- 2 Create the following record (**New** button), by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	PC4 - Seagul
General tab	
EMail (EMail)	AM:seagul
Profile tab	
Access type (seLoginClass)	Floating
Status of the user account (seLoginStatus)	Active
User name (UserLogin)	seagul
Password (LoginPassword)	Leave empty.
Administration rights (bAdminRight)	Yes

3 Windows client: Close all windows.

#### Creating the location of the company

- 1 Display the locations (**Organization/ Locations** link on the navigation har).
- 2 Create the following record (**New** button), by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	PC4 - Headquarters
City (City)	PC4 - Paris
	Note:
	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .

3 Windows client: Close all windows.

### Creating a file representing the scan of the paper document signed with the supplier

- 1 Start a text editor.
- 2 Enter the text:

```
This document represents the scanned paper document signed with the sup plier.
```

- 3 Save this file as  $C:\mathbb{C}$ .
- 4 Exit the text editor.

#### Connecting to the database as PC4 - Seagul

- 1 Connect to the database as *PC4 Seagul*:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	seagul
Password	Leave empty.
Use integrated NT security	No

#### Creating the reseller for the PC4 - PowerPoint license

1 Display the companies (**Portfolio management/ Companies** link on the navigation bar).

2 Create the following record, by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	PC4 - Microsoft

3 Windows client: Close all windows.

#### Creating the contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Create/Modify software contracts option.
- 3 Click **Next**.
- 4 On the **Manage contracts** page, click the **Create a contract** button. This starts the *Create a software contract*... (sysSamCreateSoftContract) wizard.
- 5 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Create a software contract page	
From scratch	Yes
Determine the contract type page	
Select the type of contract to create	Generic software contracts
Specify information about the contract page	
Contract number	PC4-MSNUM001
Select the supplier (company) for this con-	
tract page	
Name	PC4 - Microsoft
New supplier	No
Define supplier's address page	
New contact	Yes
Define a new contact page	
Name	PC4 - Kramer
Title	PC4 - Sales engineer
Define the supplier's location page	
New location	Yes
Define the supplier's location page	
Location name	PC4 - French Subsidiary
City	PC4 - Paris

Field or link	Record
Define general contract information page	
Internal contract reference (Ref)	PC4-001
Purpose	PC4 - Microsoft license contract
Contract number	PC4-MSREF001
Start	January 1st, 2005
End	December 31, 2005
Notice	60 days
Define financial information page	
Nature of payments	None
Define internal company contacts page	
Supervisor	PC4 - Seagul
Notification address	/PC4 - Headquarters/
Specify contractual terms and conditions	Do not enter anything
page	
Add new documents to the contract page	Do not enter anything
Summary page	
Choose the step you wish to perform after creat-	None
ing the contract	

- 6 Validate all the parameters defined with the wizard (Finish button). The wizard creates the contract, the location of the supplier and the supplier contact.
- 7 Exit the wizard (**OK** button).
- 8 Exit the wizard (**Finish** button).

#### Create the model for the PC4 - PowerPoint license

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Create the following record, by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	PC4 - PowerPoint - License
Nature (Nature)	PC1 - License

3 Windows client: Close all windows.

### Creating the asset corresponding to the PC4 - PowerPoint license

1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).

- 2 In the Manage software page, click on the Select a contract to work on button.
- 3 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Select your current software contract page	
Contracts list	Select the PC4-001 (PC4 - Microsoft license con-
	tract) Microsoft standard Pc4 - Seagul, Pc4 -
	Seagul contract.

- 4 Validate all the parameters defined with the wizard (**OK** button).
- 5 In the Manage software page, select the Create/Modify software licenses and installations option.
- 6 Click **Next**.
- 7 In the Licenses and software installations page, click the Create a software license button.
  - This triggers the *Create a new software license...* (sysSamCreateLicpfi) wizard.
- 8 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Create a new software license page	
Select a license type (model) for this new	Select the PC4 - PowerPoint - License record
license from existing software application	
licenses list:	
Populate license information page	
Label (Asset tag)	PC4-001
Financial information page	
Contracts	PC4-001 (PC4 - Microsoft license contract)
Summary: page	
None	Yes

9 Validate all the parameters defined with the wizard (Finish button).
The wizard creates the license and links it to the contract.

#### Modifying the contract PC4-001

Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).

- 2 Make sure that the current contract is *PC4-001*. If this is not the case, select it (*Select a contract to work on* button).
- 3 On the Manage software page, select the Create/Modify software contracts option.
- 4 Click **Next**.
- 5 In the **Manage contracts** page, click the **Modify a contract** button. This starts the *Create a software contract*... (sysSamCreateSoftContract) wizard.
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record	
Modify a software contract page		
Which contract would you like to modify?	Modifying the current contract PC4-001	
Select the part of the contract you wish to modify page		
Select the part of the contract you want to modify	Add documents to the contract	
Add new documents to the contract page		
Designation	PC4 - Contract with ISP	
Full file name	C:\Temp\Contract.txt	
Category	PC4 - Scanned contract	
Status	Validated	
Click Add to the list		
Summary page		
Choose the step you wish to perform after creating the contract	None	

- Validate all the parameters defined with the wizard (Finish button).
  The wizard adds the document to the contract.
- 8 Exit the wizard (**OK** button).
- 9 Exit the wizard (**Finish** button).

## Examining the contract created and modified by the wizard

- 1 Display the contracts (**Contracts/ Contracts** link on the navigation bar).
- 2 Display the detail of the PC4-001 contract (**Reference** (Ref) field).
- 3 Pay close attention to the following fields and links in particular:

Field or link	Value
Reference (Ref)	PC4-001
Type (seType)	The value <i>License</i> is automatically assigned by
	the wizard without having to select it.
Purpose (Purpose)	PC4 - Microsoft license contract

Field or link	Value
General tab	
Supervisor (Supervisor)	PC4 - Seagul
Nature (Nature)	Microsoft
Number (ContractNo)	PC4-MSREF001
Company (Company)	PC4 - Microsoft
Start (dStart)	January 1st, 2005
End (dEnd)	December 31, 2005
Notice (tsNotice)	2 months
Contacts tab	
Notification address (NotiffAddress)	/PC4 - Headquarters/
Contact (Contact)	PC4 - Kramer
Documents tab	You will find the document you linked with the wizard.
Licenses tab	You will find the license PC4 - PowerPoint - License (PC4-001).

4 Windows client: Close all windows.

#### Creating the action associated to the alarm on the end of contract date

- 1 Display the actions (**Administration/ Actions** link on the navigation bar).
- 2 Create the following record (**New** button), by populating the fields and links as shown in the following table:

Field or link	Value
Name	PC4 - End of term alarm
Context	Contracts (amContract)
Type	Messaging
Messaging tab	
To	AM:seagul
Subject	Approaching end of term
Message	The contract [Ref] expires on [dEnd].
	Notice period: [tsNotice]

3 Windows client: Close all windows.

#### Associating an alarm with the end date

- $1\quad Display\ the\ contracts\ (\textbf{Contracts/Contracts}\ link\ on\ the\ navigation\ bar).$
- 2 Display the detail of the *PC4-001* contract (**Reference** (Ref) field).
- 3 Select the **General** tab.
- 4 Click the **Alarm** icon to the right of the **End** (dEnd) field.
- 5 Populate the fields and links shown in the following table:

Field or link	Value
Alarm on	Yes
Trigger	90
Action	PC4 - End of term alarm

- 6 Save the alarm (**OK** button).
- 7 Modify the contract (**Modify** button).
- 8 Windows client: Close all windows.

#### Triggering the Verify alarms (Alarms) module in Asset Manager Automated Process Manager

- Start Asset Manager Automated Process Manager (Start/ Programs/ HP Software/ Asset Manager 5.1 < language>/ Asset Manager Automated Process Manager menu in Windows).
- 2 Connect to the database as *Admin* (**File/ Connect to database** menu):

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	Admin
Password	Leave empty.
Use this connection in service mode	No

- 3 Display the actions to trigger (**Action/Trigger** link).
- 4 Select the action *Verify alarms*.
- 5 Execute the selected action (**OK** button).
- 6 Exit Asset Manager Automated Process Manager (File/ Exit menu).

### Reconnecting to the database as PC4 - Seagul

- 1 Enable the Asset Manager client.
- 2 Reconnect to the database as PC4 Seagul:
  - Windows client: File/ Connect to database menu.
  - $\,\blacksquare\,$  Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	seagul
Password	Leave empty.
Use integrated NT security	No

Asset Manager displays the following message *You have unread messages*. *Do you want to read them now?*.

- 3 Display the unread messages (Yes button).
  This triggers the Read messages (sysCoreReadMsg) wizard.
- 4 Click **Next**.

The wizard displays the detail of the message informing you that a contract is approaching end of term.

- 5 Display the detail of the contract (**Referenced object** button).
- 6 Close the contract detail.
- 7 Exit the wizard (**Finish** button).

#### Creating the invoice associated to the PC4 - PowerPoint license

- 1 Display the invoices (**Procurement/ Supplier invoices** link on the navigation bar).
- 2 Create the following record, by populating the fields and links as shown in the following table:

Field or link	Value
Number (InvoiceNumber)	PC4-001
Supplier (Supplier)	PC4 - Microsoft
General tab	
Purpose (Purpose)	PC4 - PowerPoint - License
Invoice status (seStatus)	Paid

3 Leave the detail of the invoice displayed.

### Add a line to the invoice corresponding to the license PC4 - PowerPoint

- 1 Make sure that the detail of the *PC4-001* invoice is displayed.
- 2 Select the **Composition** tab.
- 3 Add the following record (+ button), by populating the fields and links as shown in the following table:

Field or link	Value
Quantity (fQty)	1
Description (Description)	PC4 - PowerPoint - License

- 4 Add the line (**Add** button).
- 5 Modify the invoice (**Modify** button).
- 6 Windows client: Close all windows.

#### Linking the invoice line of the license PC4 - PowerPoint - License to the contract PC4-001

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 Make sure that the current contract is *PC4-001*. If this is not the case, select it (*Select a contract to work on* button).
- 3 In the Manage software page, select the Create/Modify software contracts option.
- 4 Click **Next**.
- 5 On the **Manage software** wizard page, click the **Link invoice lines** button. This starts the *Link invoice lines to the contract* (sysSamLinkInvoices2Cntr) wizard.
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Link invoice lines to the contract page PC4-001 (PC4 - Microsoft license contract)	
Filter on the contract supplier	Yes
Link invoice lines to the contract pag	ge
Supplier invoices	Select the invoice PC4-001 PC4 - Microsoft
Link invoice lines to the contract pag	ge
Invoice lines	Select the line PC4-001 1 PC4 - PowerPoint li-
	cense 1 0,00

- 7 Validate what you entered (**Finish** button.)
  This links the invoice line to the contract.
- 8 Exit the wizard (**OK** button).
- 9 Exit the wizard (**Finish** button).
- 10 Display the contracts (**Contracts/ Contracts** link on the navigation bar).
- 11 Select PC1-004 (Reference (Ref) field).
- 12 Pay close attention to the following fields and links in particular:

Field or link	Value
Invoice lines tab	You will find the invoice line 1 PC4 - PowerPoint
	license 0,00 /PC4-001/.

13 Windows client: Close all windows.

#### Associating a maintenance contract with the contract PC4-001

- 1 Make sure that you are connected to the database as *PC3 Seagul*.
- 2 Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 3 Make sure that the current contract is *PC4-001*. If this is not the case, select it (*Select a contract to work on* button).
- 4 On the Manage software page, select the Create/Modify software contracts option.
- 5 Click **Next**.
- 6 On the Manage contracts page, click Create a new contract in the Maintenance contracts section.
  - This starts the *Create a contract* wizard (BstCntrCreateContract).
- 7 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
You are going to define an maintenance co	ontract linked to software contract PC4-001
page	
Number	PC4-MAINT001
Purpose	Support and upgrades
Start	January 1, 2008
End	November 30, 2008
Linking assets to the maintenance contract	Yes
Link the assets to the contract page	
Date included	January 1, 2008
Planned removal date	November 30, 2008
List of assets	Select the <i>PC4-001</i> record ( <b>Asset tag</b> field).
Create a contract page	
Supervisor	PC4 - Seagul
Notification address	/PC4 - Headquarters/
Create a contract page	Do not enter anything
Contract documentation and notes page	Do not enter anything
Summary page	
Display the contract detail	Yes

- 8  $\,$  Validate all the parameters defined with the wizard ( Finish button).
- 9 Exit the wizard (**OK** button).
  The wizard creates and displays the maintenance contract.
- 10 Pay close attention to the following fields and links in particular:

Field or link	Value
Type (seType)	The value <i>Maintenance</i> is automatically assigned
	by the wizard without having to select it.
Purpose (Purpose)	Support and upgrades
General tab	
Attached to (Parent)	The contract is automatically linked to the cur-
	rent contract PC4-001 (PC4 - Microsoft license
	contract).
Supervisor (Supervisor)	PC4 - Seagul
Number (ContractNo)	PC4-MAINT001
Company (Company)	PC4 - Microsoft
Start (dStart)	January 1, 2008
End (dEnd)	November 30, 2008
Notice (tsNotice)	2 months
Contacts tab	
Notification address (NotiffAddress)	/PC4 - Headquarters/
Contact (Contact)	PC4 - Kramer
Assets tab	You will find PC4 - PowerPoint - License.

#### 11 Windows client: Close all windows.

#### Modifying the maintenance contract

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 Make sure that the current contract is *PC4-001*. If this is not the case, select it (*Select a contract to work on* button).
- 3 On the Manage software page, select the Create/Modify software contracts option.
- 4 Click **Next**.
- 5 On the Manage contracts page, click Modify a contract in the **Maintenance contracts** section.
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Modify a maintenance contract page	
Contracts	Select the sub-contract of the PC4-001 contract
Link the contract to an existing contract	No
Change your contract details page	
End	December 31, 2008

7 Validate all the parameters defined with the wizard (**Finish** button).

The wizard creates the contract, the location of the supplier and the supplier contact.

- 8 Exit the wizard (**OK** button).
- 9 Exit the wizard (Finish button).
- 10 Windows client: Close all windows.

## Practical case 3: Managing the validation process of a license contract

#### Presentation

This practical case leads you through the implementation of a full license contract validation procedure.

#### Scenario

Mr. *PC3 - Hawk*, MIS, wishes to establish a contract between his company and one of its suppliers.

A contract of this sort must be validated from a budgetary standpoint by a group called *PC3 - Budgetary validation*. This group is lead by *PC3 - Azeman*, CFO, and includes Mr. *PC3 - Delmar*, an accountant.

If the contract is validated from a budgetary standpoint, it must also be validated from a legal standpoint by a group called PC3 -  $Legal\ validation$ . This group is lead by Mr. PC3 - Delaney, legal counsel, and includes Mr. PC3 - Bertini, a lawyer.

Validation can be given either by the group leader or by one of its members.

### Main stages of the practical case

- 1 Creating the validators [page 127]
- $2\quad Create\ the\ contract\ (Mr.\ Pc3\ -\ Hawk)\ [page\ 129]$
- 3 Creating the validation groups [page 130]
- 4 Customize the Contract validation (sysSam\_CNTR\_APPR) workflow scheme [page 131]
- 5 Request validation (Mr. Pc3 Hawk) [page 132]
- 6 Refusing budgetary validation for the contract (Mr. Pc3 Azeman) [page 132]
- 7 Modifying the contract and resubmitting it for validation (Mr. Pc3 Hawk) [page 134]
- 8 Validating the contract from a budgetary standpoint (Mr. Pc3 Delmar) [page 134]

## Steps to carry out

Field or link

### Creating the validators

- 1 Display the employees (**Organization/ Employees** link on the navigation bar).
- 2  $\,$  Create the following records ( $\pmb{\mathsf{New}}$  button), by populating the fields and links as shown in the following tables:

Value

Name (Name)	PC3 - Azeman
Title (Title)	CFO
	Note:
	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .
	ies.
General tab	
EMail (EMail)	AM:azeman
Profile tab	
Access type (seLoginClass)	Floating
Status of the user account (seLoginStatus)	Active
User name (UserLogin)	azeman
Password (LoginPassword)	Leave empty.
Administration rights (bAdminRight)	Yes
Field or link	Value
Name (Name)	Pc3 - Delmar
Title (Title)	Accountant
	Note:
	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click
	Yes.
General tab	
EMail (EMail)	AM:delmar
Profile tab	
Access type (seLoginClass)	Floating
Status of the user account (seLoginStatus)	Active
User name (UserLogin)	delmar
Password (LoginPassword)	Leave empty.

Field or link	Value
Administration rights (bAdminRight)	Yes
Field or link	Value
	Pc3 - Bertini
Name (Name)	
Title (Title)	Legal counsel
	Note:
	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .
General tab	
EMail (EMail)	AM:bertini
Profile tab	
Access type (seLoginClass)	Floating
Status of the user account (seLoginStatus)	Active
User name (UserLogin)	bertini
Password (LoginPassword)	Leave empty.
Administration rights (bAdminRight)	Yes
Field or link	Value
Name (Name)	Pc3 - Delaney
	Note:
	. (0.0)
	If the message Would you like to add the value
	. (0.0)
Title (Title)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .
Title (Title)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click
General tab	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer
General tab EMail (EMail)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .
General tab EMail (EMail) Profile tab	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney
General tab EMail (EMail) Profile tab Access type (seLoginClass)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)  User name (UserLogin)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active delaney
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)  User name (UserLogin)  Password (LoginPassword)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active delaney Leave empty.
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)  User name (UserLogin)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active delaney
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)  User name (UserLogin)  Password (LoginPassword)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active delaney Leave empty.
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)  User name (UserLogin)  Password (LoginPassword)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active delaney Leave empty.
General tab  EMail (EMail)  Profile tab  Access type (seLoginClass)  Status of the user account (seLoginStatus)  User name (UserLogin)  Password (LoginPassword)  Administration rights (bAdminRight)	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click Yes.  Lawyer  AM:delaney  Floating Active delaney Leave empty. Yes

Value
CIO
Note:
If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click
Yes.
_
AM:hawk
Floating
Active
hawk
Leave empty.
Yes

3 Windows client: Close the list of employees (**Close** button).

#### Create the contract (Mr. Pc3 - Hawk)

- 1 Connect to the database as *Pc3 Hawk* CIO:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	hawk
Password	Leave empty.
Use integrated NT security	No

- 2 Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 3 On the Manage software page, select the Create/Modify software contracts option.
- 4 Click **Next**.
- 5 On the **Manage contracts** page, click the **Create a contract** button. This starts the *Create a software contract* (sysSamCreateSoftContract) wizard.
- 6 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons. Pages that you do not modify are omitted.):

Field or link	Record
Create a software contract page	
From scratch	Yes
Determine the contract type page	
Generic software contracts	Yes
Define general contract information page	
Internal contract reference (Ref)	PC3-001
Define financial information page	
Init. payment	10000
Define internal contacts page	
Supervisor	PC3 - Hawk
Summary page	
None	Yes

- 7 Validate all the parameters defined with the wizard (**Finish** button).
- 8 Exit the wizard (**OK** button).
- 9 Exit the wizard (**Finish** button).

## Creating the validation groups

- 1 Display the groups (Organization/ Employee groups link).
- 2 Create the following records (**New** button), by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	PC3 - Budgetary validation
Supervisor (Supervisor)	PC3 - Azeman
Bar code (code)	CNTRBUDGET-PC3
Create the new record (click Create) to proceed	
Composition tab	
Members (Members)	Add PC3 - Delmar.
Contracts tab	
Contracts (Contracts)	Add <i>Pc3</i> - 001.

Field or link	Value
Name (Name)	PC3 - Legal validation
Supervisor (Supervisor)	PC3 - Delaney
Bar code (code)	CNTRLEGA-PC3
Create the new record (click Create) to proceed	
Composition tab	
Members (Members)	Add PC3 - Bertini.
Contracts tab	

Field or link	Value
Contracts (Contracts)	Add Pc3 - 001.

3 Windows client: Close the list of groups (**Close** button).

#### Customize the Contract validation (sysSam CNTR APPR) workflow scheme



This operation can only be done using the Windows client.

- 1 Display the workflow schemes (Administration/ Workflow/ Workflow **schemes** link on the navigation bar).
- 2 Select the Contract validation (sysSam CNTR APPR) scheme.
- 3 Display the **Activities** tab.
- 4 Delete the Contract validation: Technical (SAM APPR CNTR OPER) activity (shortcut menu **Delete** on the *Contract validation: Technical* box).
- 5 Delete the Contract validation: Financial (SAM APPR CNTR FINA) activity (shortcut menu **Delete** on the *Contract validation: Financial* box).
- 6 Delete the Contract validation: Billing (SAM\_APPR\_CNTR\_BILL) activity (shortcut menu **Delete** on the *Contract validation: Billing* box).
- 7 Display the detail of the Contract validation: Legal (SAM\_APPR\_CNTR\_JURI) activity (shortcut menu **Detail of activity** on the Contract validation: Legal box).
- 8 Display the **Parameters** tab.
- Display the detail of the **Assignee** link (click on the magnifier)
- 10 Modify the following fields and links:

Context (ContextTable)  Type (seType)  Script (memScript)  Const STRJURI="CNTRJURI"  RetVal=amDbGetLong("SELECT g.lGroupId FROM amRelEmplGrpCntr r, amEmplGroup g WHERE r. lGroupId=g.lGroupId AND r.lCntrId="& [lCnt rId] & "AND g.BarCode LIKE '" & STRJURI & "%!")	Field or link	Value
Script (memScript)  Const STRJURI="CNTRJURI"  RetVal=amDbGetLong("SELECT g.lGroupId FROM amRelEmplGrpCntr r, amEmplGroup g WHERE r. lGroupId=g.lGroupId AND r.lCntrId="& [lCnt rId] & " AND g.BarCode LIKE '" & STRJURI &	Context (ContextTable)	Contracts (amContract)
RetVal=amDbGetLong("SELECT g.lGroupId FROM amRelEmplGrpCntr r, amEmplGroup g WHERE r. lGroupId=g.lGroupId AND r.lCntrId="& [lCnt rId] & " AND g.BarCode LIKE '" & STRJURI &	Type (seType)	Calculated group
amRelEmplGrpCntr r, amEmplGroup g WHERE r. lGroupId=g.lGroupId AND r.lCntrId="& [lCnt rId] & " AND g.BarCode LIKE '" & STRJURI &	Script (memScript)	Const STRJURI="CNTRJURI"
lGroupId=g.lGroupId AND r.lCntrId="& [lCnt rId] & " AND g.BarCode LIKE '" & STRJURI &	-	RetVal=amDbGetLong("SELECT g.lGroupId FROM
rId] & " AND g.BarCode LIKE '" & STRJURI &		amRelEmplGrpCntr r, amEmplGroup g WHERE r.
		lGroupId=g.lGroupId AND r.lCntrId="& [lCnt
11 % I 11 \		rId] & " AND g.BarCode LIKE '" & STRJURI &
• /		"%'")
if RetVal=0 Then RetVal=amDbGetLong("SELEC		if RetVal=0 Then RetVal=amDbGetLong("SELEC
T lGroupId FROM amEmplGroup WHERE BarCode		T lGroupId FROM amEmplGroup WHERE BarCode
='sysSam_CNTR_JURI'")		='sysSam_CNTR_JURI'")

- 11 Save the modifications (**Modify** button) and close the detail of the workflow role (**Close** button).
- 12 Close the detail of the activity (**Close** button).

#### 13 Windows client: Close all windows.

#### Request validation (Mr. Pc3 - Hawk)

- 1 If not done so already, connect to the database as *Pc3 Hawk*, CIO:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	hawk
Password	Leave empty.
Use integrated NT security	No

- 2 Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 3 Make sure that the current contract is *PC3-001*. If this is not the case, select it (*Select a contract to work on* button).
- 4 In the Manage software page, select the Create/Modify software contracts option.
- 5 Click **Next**.
- 6 Click on the **Request validation for a contract** button.

  This triggers the *Request contract validation* (sysSamReqContractApproval) wizard.
- 7 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Request validation for a contract page	
Request contract validation	Yes

- 8 Validate all the parameters defined with the wizard (**Finish** button).
- 9 Exit the wizard (**OK** button).
- 10 Exit the wizard (Finish button).

### Refusing budgetary validation for the contract (Mr. Pc3 - Azeman)

- 1 Connect to the database as *Pc3 Azeman* CFO:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	azeman
Password	Leave empty.
Use integrated NT security	No

- 2 Asset Manager displays the following message You have unread messages. Do you want to read them now?.
- 3 Display the unread messages (**Yes** button).
  This triggers the *Read messages* (sysCoreReadMsg) wizard.
- 4 Click Next.

The wizard displays a message to inform you that validation is pending for the contract.

- 5 Exit the wizard (**Finish** button).
- 6 Display current tasks (**Portfolio management/ My workflow tasks** link on the navigation bar).
- 7 Select the Contract validation: Budget task.
- 8 Refuse the contract (Refuse the contract, then Modify).
- 9 Close the list of tasks (**Close** button).
- 10 Connect to the database as *Pc3 Hawk* CIO:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	hawk
Password	Leave empty.
Use integrated NT security	No

- 11 Asset Manager displays the following message You have unread messages. Do you want to read them now?.
- 12 Display the unread messages ( $\bf Yes$  button). This triggers the *Read messages* (sysCoreReadMsg) wizard.
- 13 Click **Next**.

The wizard displays the detail of the message informing  $Mr.\,Pc3$  - Hawk that the contract has been refused and that the validation circuit may be started once more.

14 Exit the wizard (Finish button).

#### Modifying the contract and resubmitting it for validation (Mr. Pc3 - Hawk)

- 1 Make sure that you are connected to the database as *Pc3 Hawk*.
- 2 Display current tasks (Portfolio management/ My workflow tasks link on the navigation bar).
- 3 Select the task *Refused contract to reprocess*.
- 4 Display the detail of the contract that has just been refused (**Detail** button).
- 5 Modify the fields and links shown in the following table:

Field or link	Value	
General tab		
Init. payment (mIntPay)	3000	

- 6 Save the modifications (**Modify** button).
- 7 Close the contract detail (**Close** button).
- 8 Restart the contract validation circuit (click **Yes**, then **Modify**).
- 9 Close the list of tasks (**Close** button).

### Validating the contract from a budgetary standpoint (Mr. Pc3 - Delmar)

- 1 Connect to the database as *Pc3 Delmar*, accountant:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	delmar
Password	Leave empty.
Use integrated NT security	No

- 2 Asset Manager does not inform you that there is a message because the *Contract validation* workflow scheme only sends a message to the validation group supervisor.
- 3 Display current tasks (**Portfolio management/ My workflow tasks** link on the navigation bar).



Pc3 - Delmas is able to access the budgetary validation tasks as a member of the PC3 -  $Budgetary\ validation$  group.

 ${\it 4} \quad {\it Select the } \ {\it Contract validation: Budget } \ {\it task}.$ 

- 5 Accept the contract (Click Validate the contract, then Modify).
- 6 Close the list of tasks (**Close** button).

#### Accepting the contract from a legal standpoint (Mr. Pc3 - Delaney)

- 1 Connect to the database as Pc3 Delaney, legal counsel:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	delaney
Password	Leave empty.
Use integrated NT security	No

- 2 Asset Manager displays the following message You have unread messages. Do you want to read them now?.
- 3 Display the unread messages (**Yes** button).
  This triggers the *Read messages* (sysCoreReadMsg) wizard.
- 4 Click **Next**.

The wizard displays a message to inform you that validation is pending for the contract.

- 5 Exit the wizard (**Finish** button).
- 6 Display current tasks (**Portfolio management/ My workflow tasks** link on the navigation bar).
- 7 Select the Contract validation: Legal task.
- 8 Accept the contract (Click Validate the contract, then Modify).
- 9 Close the list of tasks (**Close** button).

## Keeping informed of the validation status (Mr. Pc3 - Hawk)

- 1 Connect to the database as *Pc3 Hawk* CIO:
  - Windows client: File/ Connect to database menu.
  - Web client: Click the icon at the upper right to disconnect, then reconnect.

Field	Value
Connection	Connection to the database in which you perform
	the practical case.
Login	hawk
Password	Leave empty.

Field	Value
Use integrated NT security	No

- 2 Asset Manager displays the following message *You have unread messages*. *Do you want to read them now?*.
- 3 Display the unread messages (**Yes** button).
  This triggers the *Read messages* (sysCoreReadMsg) wizard.
- 4 Click **Next**.

The wizard displays the detail of the message informing you that the contract has been validated.

- 5 Exit the wizard (Finish button).
- 6 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 7 On the Manage software page, select the Create/Modify software contracts option.
- 8 Click Next.
- 9 Click on the View validation progress status button.

This displays the progress status.

Consult the information available.

- 10 Close the progress status (**Close** button).
- 11 Exit the wizard (Finish button).

## Practical case 1a: Create a simple counter for licenses and installations

#### Presentation

This simplified practical case aims to illustrate the basics of using counters. Scenario of the practical case:

- The purpose is to examine how the *PowerPoint* application is deployed.
- User rights for *PowerPoint* are recorded as licenses called *PC1 PowerPoint* in the Portfolio Items table.

Licenses are directly linked to the user.

■ Installations of *PowerPoint* are recorded as installations called *PC1* - *PowerPoint* - *Installation* in the Portfolio Items table.

Installations are directly linked to their users.

Each installation consumes 2 license rights.

■ The right to use the *PowerPoint* software license is granted to the *PC1* - *Marketing* cost center.

Main stages of the practical case:

- 1 Creating departments and users.
- 2 Creating a license, installation and computer models.
- 3 Creating a portfolio item for the computer, the license and the installation.
- 4 Creating the counter.

## Steps to carry out

#### Create the departments

- 1 Display the departments and employees (**Organization/ Departments** link on the navigation bar).
- 2 Create the following records by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	Pc1 - Marketing
Field or link	Value
Name (Name)	Pc1 - Training

#### Create the cost centers

- 1 Display the cost centers (**Portfolio management/ Cost centers** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value	
Label (Title)	PC1 - Marketing	
Field or link	Value	
Label (Title)	PC1 - Training	

### Create the employees

1 Display the departments and employees (**Organization/ Employees** link on the navigation bar).

2 Create the following records by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	Pc1 - Doe
Department (Parent)	Pc1 - Marketing
Finances tab	
Cost center (CostCenter)	PC1 - Marketing
Field or link	Value
Name (Name)	Pc1 - Smith
Department (Parent)	Pc1 - Training
Finances tab	
Cost center (CostCenter)	PC1 - Training

#### Create the models

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	PC1 - Computer
Nature (Nature)	PC1 - Computer
Field or link	Value
Name (Name)	PC1 - PowerPoint - License
General tab	
Nature (Nature)	PC1 - License
Technical ref. (ModelRef)	PC1 - PowerPoint - License
License tab	
License type (LicType)	Per named workstation
Field or link	Value
Name (Name)	PC1 - PowerPoint - Installation
Nature (Nature)	PC1 - Installation

Field or link	Value
Technical ref. (ModelRef)	PC1 - PowerPoint - Installation

#### Create the portfolio items

- 1 Display the portfolio items (Portfolio management/ Portfolio items link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value	
Model (Model)	PC1 - Computer	
General tab		
User (User)	Pc1 - Doe	
Cost center (CostCenter)	Pc1 - Marketing	

Field or link	Value
Model (Model)	PC1 - PowerPoint - License
General tab	
User (User)	Pc1 - Doe
License tab	
Rights (lSoftLicUseRights)	2

Field or link	Value
Model (Model)	PC1 - PowerPoint - Installation
General tab	
Quantity (fQty)	1
User (User)	Pc1 - Doe
Component of (Parent)	Select the PC1 - Computer record from the list

- 3 Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 4 On the Manage software page, select the Create/Modify software licenses and installations option.
- 5 Click **Next**.
- 6 On the Licenses and software installations page, click the Create a license button.

This triggers the *Create a new software license...* (sysSamCreateLicpfi) wizard.

7 Populate the pages of the wizard as follows (navigate through the wizard pages using the **Next** and **Previous** buttons):

Field or link	Record
Create a new software license page	
Select a license type (model) for this new license	Select the PC1 - PowerPoint - License record
from existing software application licenses	
Populate license information page	
Label (Asset tag)	PC1-001
Total qty.	1
Rights	1
User name	Pc1 - Doe
Financial information page	Do not change
Summary page	
Choose the step you wish to perform after creat-	None
ing the software license	

- 8 Click Finish.
- 9 Click OK.
- 10 Windows client: Close all windows.

#### Create the counter

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Manage software license compliance option.
- 3 Click **Next**.
- 4 On the Manage software license compliance page, click the Create a counter button.
- 5 Populate the fields and links shown in the following table:

Field or link	Record
Select how software installations/utiliza-	Select the Per named workstation option
tions are to be counted page	
Select a counter template page	
Counter templates	Select the Installations, entitlements and actual utilization by cost center (Type: per named work-
	station) model
Use this counter for global software compliance	No
management	
Do not publish in the compliance report	Yes

Field or link	Record
Select software licenses based on software	Select the PC1 - PowerPoint - License model.
application type page	
Select software installations based on soft-	$Select the {\it PC1-PowerPoint-Installation}\ model.$
ware application type page	
Select cost centers covered by the entitle-	Select the Pc1 - Marketing cost center.
ment page	
Define non use criteria page	
Period of non use	0
Select the way entitlements are defined page	Define the list of entitlements
Select cost centers covered by the entitle-	Select the PC1 - Marketing record
ment page	
Define the counter's scope of application pa	ge
Limit counter's scope of application	No
Enter the other parameters of the counter p	age
Counter name	PC1 - PowerPoint - Simple count of licenses and
	installations
No contract	Yes
Create a software license management	Select the Display/Adjust/Calculate counts op-
counter page	tion

- 6 Click Finish.
- 7 Click OK.
- 8 Examine the Results of the software counters window.

Pay special attention to the *PC1* - *Marketing 0 1 2 2* line.

This cost center is not compliant: The installations use two rights. The cost center has one license right and one entitlement.

#### Examine the counter created by the wizard

- 1 Display the counters (Portfolio management/ IT/ Licenses/ Software counters link on the navigation bar).
- 2 Select the PC1 PowerPoint Simple count of licenses and installations counter.
- 3 Examine the top of the screen:
  - **Group By** (Context): This field is set to *Cost centers (amCostCenter)* (this is the default value). You will see in Practical case 1b: Limit the scope of the counter to a given department [page 142] what this field is used for and how it can be associated to the **Scope of application** (Definition) field.
- 4 Display the **General** tab: The counts are summarized here.
- 5 Display the **Rights** tab:

The wizard has created a query associated with the *Scope of the rights to be counted* (LicQuery) link which is used to identify portfolio items whose model is *PC1 - PowerPoint - License*.

**Rights-calculation mode** (seLicCountMode) is set to *Point count*: The counter takes rights points into account.

6 Display the **Entitlements** tab:

The wizard has created a query associated with the *Scope of the entitlements* to be counted (EntContext) link which is used to identify employees and departments that are associated with the *PC1* - *Marketing* cost center.

7 Display the Installations/Utilizations tab:

The wizard has created a query associated with the *Scope of the installations* or utilizations to be counted (SoftInstQuery) link which is used to identify portfolio items whose model is *PC1 - PowerPoint - Installation*.

**Installations/Utilizations calculation mode** (seInstallCountMode) is set to *Point count*: The counter takes consumption of rights points into account.

## Practical case 1b: Limit the scope of the counter to a given department

#### Presentation

This simplified practical case aims to illustrate the principles of counters, when:

• A scope is defined to filter the records in the table selected by the **Group By** (Context) link.

The scenario of the practical case is identical to practical case 1a, except for the following points:

• For each user in the department *Pc1* - *Marketing*, the counter compares the license rights acquired for *PowerPoint* with declared installations.

Main stages of the practical case:

- 1 The Initial steps correspond to practical case 1a.
- 2 Modifying the license.
- 3 Creating the counter.

## Prerequisites

This practical case can only be carried out after practical cases 1 and 1a have been carried out in full.

## Steps to carry out

#### Modify the license

- 1 Display the portfolio items (**Portfolio management/ Portfolio items** link on the navigation bar).
- 2 Select the portfolio item whose model is *PC1 PowerPoint License*.
- 3 Modify the record, by populating the fields and links as shown in the following table:

Field or link	Value
General tab	
User (User)	Pc1 - Marketing
License tab	
License type (LicType)	Per installation or utilization

#### Create the counter

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio management/IT/ Licenses/ Manage software...** link on the navigation bar).
- 2 On the Manage software page, select the Manage software license compliance option.
- 3 Click **Next**.
- 4 On the Manage software license compliance page, click the Create a counter button.
- 5 Populate the fields and links shown in the following table:

Field or link	Record
Select how software installations/utiliza-	Select the Per installation or utilization option.
tions are to be counted page	
Select a counter template page	
Counter templates	Select the Installations, entitlements and actual
	utilization by department/employee (Type: per
	installations and utilizations) model
Use this counter for global software compliance	No
management	
Do not publish in the compliance report	Yes
Select software licenses based on software	Select the PC1 - PowerPoint - License model.
application type page	
Select software installations based on soft-	$Select \ the \ PC1 - PowerPoint - Installation \ model.$
ware application type page	
Define non use criteria page	

Field or link	Record
Period of non use	0
Select the way entitlements are defined page	Define the list of entitlements
Select cost centers covered by the entitle-	Select the PC1 - Marketing record
ment page	
Define the counter's scope of application pa	ge
Limit counter's scope of application	Yes
Define the counter's scope of application pa	ge
Employees and departments	Select the <i>Pc1</i> - <i>Marketing</i> record
Select entire department	Yes
Enter the other parameters of the counter p	age
Counter name	PC1b - PowerPoint installations in the Marketing
	department
No contract	Yes
Create a software license management	Select the Display/Adjust/Calculate counts op-
counter page	tion

- 6 Click Finish.
- 7 Click **OK**.
- 8 Examine the Results of the software counters window.

Pay special attention to the *PC1* - *Marketing 0 1 2 2* line.

This cost center is not compliant: The installations use two rights. The cost center has one license right and one entitlement.

## Practical case 1c: Internal assignment of rights

#### Presentation

This simplified practical case aims to illustrate the principles of counters that use named entitlements.

Scenario of the practical case:

- The purpose is to examine how *PowerPoint* is deployed with regard to the internal entitlement policy of the company.
- Internal user rights for *PowerPoint* are declared in the Named Entitlements table.
- Installations of PowerPoint are recorded as installations called PC1 -PowerPoint - Installation in the Portfolio Items table.

Installations are linked to the user's computer.

Each installation consumes 1 license right.

• For each user listed in the named entitlement *PC1c - Named user rights for PowerPoint*, the counter compares the user rights declared for *PowerPoint* with recorded installations.

Main stages of the practical case:

- 1 The initial steps are the same as in practical cases 1, 1a and 1b.
- 2 Creating a named entitlement.
- 3 Creating the counter.

## Prerequisites

This practical case can only be carried out after practical cases 1, 1a and 1b have been carried out in full.

## Steps to carry out

#### Create the models

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	PC1c - PowerPoint - License
General tab	
Nature (Nature)	PC1 - License
License tab	
License type (LicType)	Per named user

Field or link	Value
Name (Name)	PC1c - PowerPoint - Installation
General tab	
Nature (Nature)	PC1 - Installation

## Create the portfolio items

- 1 Display the portfolio items (**Portfolio management/ Portfolio items** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Model (Model)	PC1c - PowerPoint - License
General tab	
Cost center (CostCenter)	PC1 - Training
License tab	
Rights (lSoftLicUseRights)	1

Field or link	Value
Model (Model)	PC1c - PowerPoint - Installation
General tab	
Quantity (fQty)	1
Component of (Parent)	Select the PC1 - Computer record from the list

#### Creating the named entitlement

- 1 Display the named entitlements (**Organization/ Named entitlements** link on the navigation bar).
- 2 Create the following record, by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	PC1c - Named user rights for PowerPoint
Click <b>Create</b> to continue.	
Entitled Employees/Departments tab	
	Pc1 - Doe
	Pc1 - Smith

## Creating the counter

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Manage software license compliance option.
- 3 Click **Next**.
- 4 On the Manage software license compliance page, click the Create a counter button.
- 5  $\,$  Populate the fields and links shown in the following table:

Field or link	Record
Select how software installations/utiliza-	Select the Per named user option.
tions are to be counted page	
Select a counter template page	
Counter templates	Select the Compliance and assignments by cost
	center (per named user) model
Use this counter for global software compliance management	No
Do not publish in the compliance report	Yes
Select software licenses based on software	Select the PC1c - PowerPoint - License model.
application type page	
Select software installations based on soft-	$Select the {\it PC1c-PowerPoint-Installation}\ model.$
ware application type page	
Define non use criteria page	Leave the page as is.
Select the way entitlements are defined page	Select a named entitlement
Select named entitlements covered by the	Select the PC1c - Named user rights for Power-
entitlement page	Point entitlement
Define the counter's scope of application pa	ge
Limit counter's scope of application	No
Enter the other parameters of the counter p	age
Counter name	PC1c - Named user rights for PowerPoint
No contract	Yes
Create a software license management	Select the Display/Adjust/Calculate counts op-
counter page	tion

- 6 Click Finish.
- 7 Click **OK**.
- 8 Windows client: Close all windows.

#### Examine the results of the counter

There is one line for Pc1 - Marketing and one for Pc1 - Training.

Both cost centers are compliant with your internal policy (entitlements).

The Pc1 - Marketing cost center is not license compliant.

# Practical case 1d: Take into account effective software usage

#### Presentation

This simple practical case illustrates how the counters work when you take the effective usage of installations/utilizations into account.

The scenario is the same as in practical case 1b, except that the counter takes into account the effective usage of software.

Main stages of the practical case:

- 1 The initial steps are the same as in practical cases 1, 1a and 1b.
- 2 Adding information on usage of the installation.
- 3 Creating the counter.

## Prerequisites

This practical case can only be carried out after practical cases 1, 1a and 1b have been carried out in full.

## Steps to carry out

#### Populate usage information for the installation

- 1 Display the software installations (Portfolio management/ IT/ Software installations link on the navigation bar).
- 2 Select PC1 PowerPoint Installation.
- 3 Modify the record, by populating the fields and links as shown in the following table:

Field	Value
Utilization tab	
Last use (dtLastUse)	Current date and time minus 2 months

#### Define non use criteria for the counter

- Start the Manage software (sysSamLauncher) wizard (Portfolio management/IT/ Licenses/ Manage software... link on the navigation bar).
- 2 On the Manage software page, select the Manage software license compliance option.
- 3 Click **Next**.
- 4 On the Manage software license compliance page, click the Modify a counter button.
- 5 Select the PC1 PowerPoint Simple count of licenses and installations record.
- 6 Click the **Installation** button.
- 7 This triggers the *Modify the list of installation models to take into account...* (sysSamAddInst2Counter) wizard.

8 Populate the fields and links shown in the following table:

Field or link	Record	
Modify the list of installation models to take into account page		
Period of non use	1 month	
Recalculate the results of the counter after execut-	Yes	
ing the wizard		

- 9 Click Finish.
- 10 Click OK.
- 11 Examine the upper part of the **Results of the software counters** window for the *PC1 PowerPoint Simple count of licenses and installations* counter. The **Installations/Utilizations count** field (dSoftInstallCount) is set to 2 as in practical case 1b, but the **Unused installation counts** field (dUnusedInstall) is now set to 2.
- 12 Examine the lower part of the **Results of the software counters** window for the *PC1 PowerPoint Simple count of licenses and installations* counter. There is a line for *PC1 Marketing*, as for practical case 1b.

  This result shows you that you do not have enough licenses for the number of installation points and that the software is not used by the *Pc1 Marketing* cost center. If the software is not really used, remove it.

# Practical case 5: Transfer license rights

## Prerequisites

This practical case can only be carried out after completing Practical case 1: Create required items [page 112].

#### Presentation

This practical case explains how to transfer license rights and calculate compliance for your software installations.

#### Scenario

You have 5 licenses for *SoftApp v1*, 20 licenses for *SoftApp v2* and 5 licenses for *SoftApp v3*.

You have 10 installations for *SoftApp v1*, 12 installations for *SoftApp v2* and 8 installations for *SoftApp v3*.

You also have 10 upgrade licenses to upgrade *SoftApp v2* to *SoftApp v3*.

In addition, you can transfer license rights from  $SoftApp\ v3$  to  $SoftApp\ v2$  and from  $SoftApp\ v2$  to  $SoftApp\ v1$ .

This is summarized in the following table:

Software	Number of li-	Number of installa-	Can transfer rights to
	censes	tions	
SoftApp v3	5	10	SoftApp v2
SoftApp v2	20	12	SoftApp v1
SoftApp v1	5	8	
Upgrade SoftApp v2 ->	10		
SoftApp v3			

You want to optimize your software licenses to find out if you are in compliance with your installations.

#### Main stages of the practical case

- 1 Create the software licenses and the software upgrade licenses [page 150]
- 2 Create the software installations [page 152]
- 3 Create and link the software counters [page 153]
- 4 Create the software upgrade counters [page 156]
- 5 Launch the wizard to calculate compliance [page 156]

## Steps to follow

## Create the software licenses and the software upgrade licenses

- 1 Start the *Manage software* (sysSamLauncher) wizard (**Portfolio** management/ IT/ Licenses/ Manage software... link on the navigation bar).
- 2 Populate the pages of the wizard as specified in the following table (navigate through the wizard pages using the *Next* and *Previous* buttons):

Field or link	Value		
Manage software page			
What would you like to do?	Create/Modify software licenses and installations		
Software licenses and installations page			
Click Create a software license			
The Select your current software contract (sysSamGetEnv) wizard starts.			
Do not select anything and click <b>OK</b> .			
This starts the Create a new software license (sysSamCreateLicpfi) wizard.			
Create a new software license page			

Field or link Value Click Prepare licenses and software installations to create a new model The Select your current software contract (sysSamGetEnv) wizard starts. Do not select anything and click **OK**. This starts the Prepare licenses and software installations (sysSamLicenseProcess) wizard. Prepare licenses and software installations page This starts the Create a software license type (model) (sysSamCreateLicModel) wizard. Click Create a software license type (model) Create a software license type (model)... page Select Create from an existing model Click Next. Create a software license type (model)... page Do not select anything and click **Next**. General information on the software license model page PC5 - SoftApp v3 Name Sub-type (model) of Software license Management constraint (Nature) PC1 - License Software vendor (Brand) Hewlett Packard Click Next. General information on the software license model page Per installation or utilization License types Click Next. General information on the software license model page Rights Click Next. Summary page Click Finish. Prepare licenses and software installations page Click OK. This exits the Prepare licenses and software installations (sysSamLicenseProcess) wizard. Create a new software license page of the Create a new software license (sysSamCreateLicpfi) wizard. Select a license type (model) for this new license PC5 - SoftApp v3 from existing software application licenses: Populate license information page Asset tag PC5 - 001 Total qtv. Financial information page Click Next. Summary page Click Finish. This exits the Create a new software license (sysSamCreateLicpfi) wizard. Software licenses and installations page of the Manage Software (sysSamLauncher) wizard

3 This brings you back to the *Software licenses and installations* page of the *Manage Software* (sysSamLauncher) wizard as in the previous step.

Repeat the previous step three times to create the software licenses PC5 -  $SoftApp\ v2$  and PC5 -  $SoftApp\ v1$ , and the software upgrade licenses PC5 -  $SoftApp\ v2$  ->  $SoftApp\ v3$  by only modifying the following fields:

Field	PC5 - SoftApp v2	PC5 - SoftApp v1	PC5 - SoftApp v2 -> SoftApp v3
Name	PC5 - SoftApp v2	PC5 - SoftApp v1	PC5 - SoftApp v2 -> SoftApp v3
Asset tag	PC5 - 002	PC5 - 003	PC5 - 004
Total qty.	20	5	10

4 You can now exit the *Manage software* (sysSamLauncher) wizard by clicking **Finish**.

#### Create the software installations

#### Create the models

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Create the following records by populating the fields and links as shown in the following tables:

Field or link	SQL Name	Value	
Name	Name	PC5 - SoftApp v3 installation	
General tab			
Nature	Nature	PC1 - Installation	
Field or link	SQL Name	Value	
Name	Name	PC5 - SoftApp v2 installation	
General tab			
Nature	Nature	PC1 - Installation	
Field or link	SQL Name	Value	
Name	Name	PC5 - SoftApp v1 installation	
General tab			
Nature	Nature	PC1 - Installation	

#### Create the portfolio items

1 Display the portfolio items (**Portfolio management/ Portfolio items** link on the navigation bar).

2 Create the following records by populating the fields and links as shown in the following tables:

Field or link	SQL Name	Value		
Model	Model	PC5 - SoftApp v3 installation		
General tab				
Quantity	fQty	10		
Field or link	SQL Name	Value		
Model	Model	PC5 - SoftApp v2 installation		
General tab				
Quantity	fQty	12		
Field or link	SQL Name	Value		
Model	Model	PC5 - SoftApp v1 installation		
General tab				
Quantity	fQty	8		

#### Create and link the software counters

A counter associated with each software license  $SoftApp\ v1$ ,  $SoftApp\ v2$  and  $SoftApp\ v3$  needs to be created.

In addition, license rights need to be available for transfer from  $SoftApp\ v3$  to  $SoftApp\ v2$  and from  $SoftApp\ v2$  to  $SoftApp\ v1$ .

Use the *Create a software license management counter*... wizard (sysSamCreateSoftwareCounter) to fulfill these needs.

- 1 Start the Create a software license management counter... wizard (Portfolio management/IT/ Licenses/ Create a software license management counter... link on the navigation bar).
- 2 To create a counter to count PC5 SoftApp v3 licenses and installations, populate the pages of the wizard as specified in the following table (navigate through the wizard pages using the *Next* and *Previous* buttons):

Field or link	Value			
Select how software installations/	utilizations are to be counted page			
License type	Per installation or utilization			
Select a counter template page				
Counter templates Installations, entitlements and actual utilization by cost center				
(per installations and utilizations)				
Select software licenses based on software application type page				
Software license models PC5 - SoftApp v3				
Select software installations based on software application type page				

Field or link	Value			
Software installations (models)	PC5 - SoftApp v3 installation			
Define non use criteria page				
Click Next.				
Select the way entitlements are defi	ned page			
Check the Do not count entitlement	s box			
Enter the other parameters of the co	ounter page			
Counter name	PC5 - SoftApp v3 licenses and installations count			
Select the counter consolidation action to perform page				
Select None				
Create a software license managem	ent counter page			
Select task to execute after wizard	Display the counter dashboard			
executes				
Click Finish.				
Click <b>OK</b>				

This finishes the wizard and displays the *Software counters*. Display the detail of the counter you just created to see the results of the counts.

 $3\,\,$  Create the counter that will be used to count PC5 - SoftApp v2 licenses and installations using the same procedure.

Start the *Create a software license management counter...* wizard and populate the fields as specified in the following table.:

Field or link	Value			
Select how software installations / utilizations are to be counted page				
License type	Per installation or utilization			
Select a counter template page				
Counter templates	Installations, entitlements and actual utilization by cost center			
	(per installations and utilizations)			
Select software licenses based on so	oftware application type page			
Software license models	PC5 - SoftApp v2			
Select software installations based on software application type page				
Software installations (models) PC5 - SoftApp v2 installation				
Define non use criteria page				
Click Next.				
Select the way entitlements are defined page				
Check the Do not count entitlements box				
Enter the other parameters of the counter page				
Counter name PC5 - SoftApp v2 licenses and installations count				
Select the counter consolidation action to perform page				
Select Link the counter to another	counter			
Select counters to link page				
Counter for the next version	PC5 - SoftApp v3 licenses and installations count			
Can transfer rights	Check this box			
Create a software license management counter page				
	<u> </u>			

Field or link	Value
Select task to execute after wizard	Display the counter dashboard
executes	
Click Finish.	
Click <b>OK</b>	

This finishes the wizard and displays the *Software counters*. You can display the detail of the counter that you have just created to see the results of the counts and the links between the counters (**Consolidation** tab).

4 Create the counter that will be used to count PC5 - SoftApp v1 licenses and installations using the same procedure.

Start the *Create a software license management counter*... wizard and populate the fields as specified in the following table.:

Field or link	Value
Select how software installations/un	tilizations are to be counted page
License type	Per installation or utilization
Select a counter template page	
Counter templates	Installations, entitlements and actual utilization by cost center
	(per installations and utilizations)
Select software licenses based on sof	11 11 0
Software license models	PC5 - SoftApp v1
Select software installations based of	
Software installations (models)	PC5 - SoftApp v1 installation
Define non use criteria page	
Click <b>Next</b> .	
Select the way entitlements are defin	ned page
Check the Do not count entitlements	s box
Enter the other parameters of the co	
Counter name	PC5 - SoftApp v1 licenses and installations count
Select the counter consolidation acti	
Select Link the counter to another co	ounter
Select counters to link page	
Counter for the next version	PC5 - SoftApp v2 licenses and installations count
Can transfer rights	Check this box
Create a software license manageme	
Select task to execute after wizard	Display the counter dashboard
executes	
Click Finish.	
Click <b>OK</b>	

This finishes the wizard and displays the *Software counters*. You can display the detail of the counter that you have just created to see the results of the counts and the links between the counters (**Consolidation** tab).

#### Create the software upgrade counters

- 1 Display the Software upgrade counters (Portfolio management/ IT/ Licenses/ Software upgrade counters link on the navigation bar).
- 2 Create a new counter (**New** button).
- 3 Create the following record by populating the fields and links as shown in the following table:

Field or link	SQL Name	Value
Name	Name	PC5 - SoftApp v2 -> SoftApp v3 count
Group by	Context	Cost centers (amCostCenter)
Do not include in the compli-	bInternal	Yes (Check this box)
ance reports		
Rights count	bCountLic	Yes (Check this box)
Uncheck all other available che	eck boxes	
Rights tab		
Rights counter context	LicContext	Portfolio items (amPortfolio)
Scope of the rights to be coun-	LicQuery	<ul> <li>Name: License upgrade counts</li> </ul>
ted		■ <b>Query</b> tab: Model.Name = 'PC5 - SoftApp v2 -> SoftApp v3'
		Create a new query ( <b>New</b> button in the field's
		detail) with the following information:
Rights -> Group By link	LicGroupBy	CostCenter
License type	LicType	Per installation or utilization
Consolidation tab		
Upgrade from	UpgFrom	PC5 - SoftApp v2 licenses and installations count
Upgrade to	UpgTo	PC5 - SoftApp v3 licenses and installations count



If you have a software upgrade counter model, you can also use the *Create a software license management counter...* wizard (sysSamCreateSoftwareCounter) (**Portfolio management/IT/ Licenses/ Create a software license management counter...** link on the navigation bar) to create this counter, as in paragraph Create and link the software counters [page 153].

## Launch the wizard to calculate compliance

- 1 Display the Software counters (Portfolio management/ IT/ Licenses/ Software counters link on the navigation bar).
- 2 Display, for example, the detail of the Simple count of PC5 SoftApp v2 licenses and installations counter.

3 Click the **Calculate** button. This starts the *Recalculate rights and installations* (sysSamReCalcCounters) wizard for the selected counters and any related counters.

The results can be seen on the **General** and **Results** tabs.

- 4 Click the **Linked counters** button to launch the *View linked counters* (sysSamSoftLicLinkedCount) wizard:
  - The first screen summarizes the main information: Rights and installations/utilizations counts, and consolidated compliance.
     This lets you see that you are in compliance with your license rights and your actual installations/utilizations.
  - The second and more detailed screen helps you understand the different transfer and upgrade procedures that were carried out to improve consolidated compliance for the different software applications.

A table, similar to the following, displays the list of the software counters (the different steps taken to reach these results are detailed below)

Name	Rights count	Installa- tions/Util- izations count	Maximum consolidated rights count	Consolidated rights count	Compliance	Consolidated compliance
PC5 - SoftApp v3 licenses and install- ations count	5	10	5 license rights + 10 license rights ob- tained per upgrade process	5 license rights + 8 license rights obtained per upgrade process while maintaining the compliance of <i>PC5</i> - <i>SoftApp v2</i>	3 13 consolid- ated rights -10 installa- tions/utiliz- ations	3 license rights were trans- ferred to PC5 - SoftApp v2 then PC5 - SoftApp v1
PC5 - SoftApp v2 licenses and install- ations count	20	12	10 20 license rights - 10 license rights trans- ferred per upgrade process	12 20 license rights - 8 un- used license rights trans- ferred to PC5 - SoftApp v3 per upgrade pro- cess	0 12 consolid- ated rights -12 installa- tions/utiliz- ations	0

Name	Rights count	Installa- tions/Util- izations count	Maximum consolidated rights count	Consolidated rights count	Compliance	Consolidated compliance
PC5 -	5	8	5	5	-3	0
SoftApp v1 licenses and install- ations count					5 consolid- ated rights - 8 installa- tions/utiliz- ations	3 license rights were trans- ferred from PC5 - SoftApp v3 to PC5 - SoftApp v2 then to PC5 - SoftApp v1

And the following table (below) presents the list of software upgrade counters:

Name	Upgrade from	Upgrade to	Rights count	Number of transferred rights
PC5 - SoftApp v2 -> SoftApp v3 count	PC5 - SoftApp v2 li- censes and installa- tions count	PC5 - SoftApp v3 li- censes and installa- tions count	10	These 8 rights associated with 8 PC5 - SoftApp v2 license rights enabled 8 additional rights per upgrade to be provided for PC5 - SoftApp v3.

You will see in the last column of the first table (consolidated compliance) that you are in compliance with your installations and license rights. You will see in the second table that 8 of 10 upgrade rights have been transferred. 2 upgrade rights have not been used.

## Practical case 2: Microsoft Select contract

#### Presentation

This elaborate practical case demonstrates how to manage a Microsoft Select contract.

#### **Reminders about Microsoft Select 6.0 contracts**

- They are intended from medium to large-size companies.
- The are based around a target purchase volume over a period of three years. This target covers the total number of licenses that a company intends to purchase in any of the following product groups:
  - Application products
  - System products
  - Server products
- Within each of these groups, the company can organize its purchases to obtain the best rates.
  - As not all software has the same value, the Select program does not count licenses but uses a system of license points.
  - Additionally, it enables customers to copy software and use these copies automatically if the license points are available.
- There are four pricing levels, which are determined by purchase targets over three years, for each of the three product groups.
- You can opt for purchasing:
  - lacktriangle The license only (L).
    - The license, L, entitles you install the full version of a software product.
  - Software Assurance (SA).
    - The SA license entitles you to all updates (major, minor, service packs, patches, etc.) for the duration of the Select contract.
  - The license plus Software Assurance (L+SA).

## Basic information on the Microsoft Select contract in the practical case

- Start: January 1st, 2003
- End: December 31, 2006
- The main contract is a master contract between your company and Microsoft. The master lease is linked to a blanket PO contract which covers acquisition of new licenses in the *Applications* pool. This contract defines in particular the number of points in volume targeted over the 3 year period (1500 points).

This contract is also used as a reference for the acquisition of new licenses (which are acquired once and for all).

The blanket PO contract is linked to a maintenance contract that covers license assurance for the *Applications* pool.

- The company deploys applications within the contract: Excel and Project.
- Before the contract came into effect, the company owned 100 Excel licenses and 10 Project licenses.
  - The 100 Excel licenses will be covered by the Select Software Assurance.
  - The update of the 10 Project licenses is not covered by the Select contract.
- The company purchases 300 new Excel licenses including Select Software Assurance.

It also purchases 20 new Project licenses without Software Assurance.

#### Aspects we want to manage in the practical case

- Ascertain the acquired number of volume points and compare them to the contractual targets (commercial aspects of the contract).
  - Calculated fields are used to compare the targeted points with actual acquired points.
- Make sure the number of installations is in compliance with the number of authorized licenses.

A counter is used to compare installations with purchased licenses.

## Main stages of the practical case

- 1 Creating the natures and models.
- 2 Creating the contracts.
- 3 Creating the portfolio items.
- 4 Creating the catalog references.
- 5 Creating the requests and orders.
- 6 Creating the calculated fields.
- 7 Creating the counter.

## Steps to carry out

#### Create the natures

- 1 Display the natures (**Portfolio management/ Natures** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Name (Name)	PC2 - Computer
Create (seBasis)	Portfolio item
Also create (seOverflowTbl)	Computers (amComputer)
Management constraint (seMgtConstraint)	Unique asset tag
Has software installed (bHasSoftInstall)	Yes

Field or link	Value
Name (Name)	PC2 - License
Create (seBasis)	Portfolio item
Management constraint (seMgtConstraint)	Asset tag
License (bSoftLicense)	Yes

Field or link	Value
Name (Name)	PC2 - Installation
Create (seBasis)	Portfolio item
Also create (seOverflowTbl)	Software installations or utilizations (amSoftIn-
	stall)
Management constraint (seMgtConstraint)	Free

Field or link	Value
Name (Name)	PC2 - Blanket PO contract
Create (seBasis)	Contract
Contract type (seCntrType)	Blanket PO

#### Create the brands

- 1 Display the brands (**Portfolio management/ Brands** link on the navigation bar).
- 2 If it doesn't already exist, create the following record by populating the fields and links as shown in the following table:

Field or link	Value	
Name (Name)	Microsoft	

#### Create the units for features

- 1 Display the units (**Administration / System/ Units** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	Points
Dimension (Dimension)	Count
	Note:
	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .
Symbol (Symbol)	Pts
	Note:
	If the message Would you like to add the value 'XXX' to itemized list 'YYY'? is displayed, click <b>Yes</b> .
Conv. coeff. (fConv)	0

## Create the features for models and contracts

- 1 Display the features (**Administration / Features / Features** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Value
This feature to be associated with the license models
is used to define the number of points obtained each
time a license is purchased.
PC2SelectPointsL
Numeric
Points
Value
This feature to be associated with the license models
is used to define the number of Software Assurance
points obtained each time a license is purchased
during the third year of the contract (with less than
one year of Software Assurance left).
PC2SelectPointsSA1
Numeric

Field or link  Unit (Unit)	Value This feature to be associated with the license models is used to define the number of Software Assurance points obtained each time a license is purchased during the third year of the contract (with less than one year of Software Assurance left).  Points
Field or link	Value This feature to be associated with the license models is used to define the number of Software Assurance points obtained each time a license is purchased during the second year of the contract (with 1 to 2 years of Software Assurance left).
Label (TextLabel)	PC2SelectPointsSA2
Input tab	
Input type (seDataType)	Numeric
Unit (Unit)	Points
Field or link  Label (TextLabel)	Value This feature to be associated with the license models is used to define the number of Software Assurance points obtained each time a license is purchased during the first year of the contract (with 2 to 3 years of Software Assurance left).  PC2SelectPointsSA3
	PC2SelectPointsSA3
Input tab	N
Input type (seDataType) Unit (Unit)	Numeric Points
Unit (Unit)	Points
Field or link	Value This feature to be associated with the blanket PO contract for a given pool is used to define the points target.
Label (TextLabel)	PC2SelectPointsTarget
Input tab	
Input type (seDataType)	Numeric
Unit (Unit)	Points

## Add the parameters to the features

- 1~ Display the features (Administration / Features/ Features link on the navigation bar).
- 2 Select the feature PC2SelectPointsL.

- 3 Display the **Parameters** tab.
- 4 Add a parameter (+ button).
- 5 Populate the fields and links shown in the following table:

Field or link	Value
Table (TableName)	Models (amModel)

- 6 Proceed in the same way for the features *PC2SelectPointsSA1*, *PC2SelectPointsSA2* and *PC2SelectPointsSA3*.
- 7 Select the feature *PC2SelectPointsTarget*.
- 8 Display the **Parameters** tab.
- 9 Add a parameter (+ button).
- 10 Populate the fields and links shown in the following table:

Field or link	Value
Table (TableName)	Contracts (amContract)

#### Create the models

- 1 Display the models (**Portfolio management/ Models** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value	
Name (Name)	PC2 - Computer	
General tab		
Nature (Nature)	PC2 - Computer	
ry III IV I	W.I	
Field or link	Value	
Name (Name)	PC2 - Excel - License	
Brand (Brand)	Microsoft	
General tab		
Nature (Nature)	PC2 - License	
Features tab		
PC2SelectPointsL	1	
PC2SelectPointsSA1	1	
PC2SelectPointsSA2	1	

Field or link	Value
PC2SelectPointsSA3	2
-	
Field or link	Value
Name (Name)	PC2 - Project - License
Brand (Brand)	Microsoft
General tab	
Nature (Nature)	PC2 - License
Features tab	
PC2SelectPointsL	4
PC2SelectPointsSA1	2
PC2SelectPointsSA2	4
PC2SelectPointsSA3	6
F: 11   1: 1	W.I
Field or link	Value C.C.L. + D. I
Name (Name)	PC2 - Microsoft Select - Pool
Brand (Brand)	Microsoft
General tab	
Nature (Nature)	PC2 - Blanket PO contract
Field or link	Value
Name (Name)	PC2 - Excel - Installation
Brand (Brand)	Microsoft
	WHEFOSOIT
General tab	
Nature (Nature)	PC2 - Installation

## Create the contracts

- 1 Display the contracts (**Contracts/ Contracts** link on the navigation bar).
- $2\,\,$  Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
	Main contract.
Reference (Ref)	PC2MSML
Purpose (Purpose)	PC2 - Microsoft Select - Master lease
Type (seType)	Master lease
Contract status (seStatus)	Active
General tab	
Nature of payments (sePayType)	None
Start (dStart)	January 1, 2008

Field or link	Value
	Main contract.
End (dEnd)	December 31, 2008

Field or link	Value
	Blanket PO contact covering the acquisition of new
	licenses in the Applications pool.
Reference (Ref)	PC2MSA1
Purpose (Purpose)	PC2 - Microsoft Select - Applications - Acquisi-
	tions
Type (seType)	Blanket PO
Model (Model)	PC2 - Microsoft Select - Pool
General tab	
Attached to (Parent)	Select the PC2MSCC (PC2 - Microsoft Select -
	Master lease) contract from the list
Nature of payments (sePayType)	None
Start (dStart)	January 1, 2008
End (dEnd)	December 31, 2008
Features tab	
PC2SelectPointsTarget	1500

Field or link	Value
	Maintenance contract covering Software Assurance for the licenses in the <i>Applications</i> pool.
Reference (Ref)	PC2MSA2
Purpose (Purpose)	PC2 - Microsoft Select - Applications - Assurance
Type (seType)	Maintenance
Contract status (seStatus)	Active
General tab	
Attached to (Parent)	Select the PC2MSA1 (PC2 - Microsoft Select -
	Applications - Acquisitions) contract from the list
Nature of payments (sePayType)	Rents
Start (dStart)	January 1, 2008
End (dEnd)	December 31, 2008

#### Create a cost center

- 1 Display the cost centers (**Portfolio management/ Cost centers** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following table:

Field or link	Value
Label (Title)	PC2 - National Marketing

## Create the portfolio items

- 1 Display the portfolio items (**Portfolio management/ Portfolio items** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
	Excel licenses acquired before the start of the Select contract.
Model (Model)	PC2 - Excel - License
General tab	
Quantity (fQty)	100
Cost center (CostCenter)	PC2 - National Marketing
License tab	
Rights (lSoftLicUseRights)	1
Field or link	Value
	Project licenses acquired before the start of the Select contract.
Model (Model)	PC2 - Project - License
General tab	
Quantity (fQty)	10
Cost center (CostCenter)	PC2 - National Marketing
License tab	
Rights (lSoftLicUseRights)	1
Field or link	Value
Model (Model)	PC2 - Computer
General tab	
Cost center (CostCenter)	PC2 - National Marketing
Field or link	Value
	An Excel installation made before the start of the Select contract, and which will be covered by the Select Software Assurance.
Model (Model)	PC2 - Excel - Installation
General tab	
Quantity (fQty)	1
Component of (Parent)	Select the <i>PC2 - Computer</i> record from the list

Field or link	Value
	An Excel installation made before the start of the Select contract, and which will be covered by the Select Software Assurance.
Software inst. tab	
No of points (lUseCount)	1

#### Create the supplier

- 1 Display the companies (**Portfolio management/ Companies** link on the navigation bar).
- 2 If it doesn't already exist, create the following record by populating the fields and links as shown in the following table:

Field or link	Value
Name (Name)	Microsoft

#### Create the products

- 1 Create the products (**Catalog/ Products** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Description (Description)	PC2 - Excel - License
Brand (Brand)	Microsoft
General tab	
Model (Model)	PC2 - Excel - License

Field or link	Value
Description (Description)	PC2 - Project - License
Brand (Brand)	Microsoft
General tab	
Model (Model)	PC2 - Project - License

## Create the catalog

- 1 Display the catalogs (**Catalog/ Catalogs** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value	
Name (Name)	Microsoft	
Validate the creation of the record ( <b>Create</b> button)		
Distributors	Add a link to <i>Microsoft</i>	
Default supplier (DefSuppCat)	Microsoft	

#### Create the references

Purpose (Purpose)

- 1 Display the catalogs (**Catalog/ Catalog references** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
Catalog (Catalog)	Microsoft
Product (CatProduct)	PC2 - Excel - License
Price (sysCoreCatRefPrice)	200

Field or link	Value
Catalog (Catalog)	Microsoft
Product (CatProduct)	PC2 - Project - License
Price (sysCoreCatRefPrice)	800

## Create the license and assurance requests from the master lease

- 1 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- $2\,\,$  Create the following records, by populating the fields and links as shown in the following tables:

PC2 - Excel Assurance

Field or link	Value
Purpose (Purpose)	PC2 - License + Excel Software Assurance
Number (PONumber)	PC2-01
Field or link	Value
rieid or link	
Purpose (Purpose)	PC2 - Project license
Number (PONumber)	PC2-02
Field or link	Value

Field or link	Value
Number (PONumber)	PC2-03

## Create the request lines for the PC2-01 request

- 1 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- 2 Select request *PC2-01* (**Number** (PONumber) field).
- 3 Display the **Composition** tab.
- 4 Add the following request lines by populating the fields and links as shown in the following tables:

Field or link	Value
Contract utilization (bCntrUtilization)	No
Quantity (fQty)	300
Reference (CatalogRef)	Select the PC2 - Excel - License (Microsoft) - PC2
	- Excel - License record from the list



To be able to create the following line correctly in the Windows client, you must first have saved the inclusion of the first line of the request using the Modify button.

Field or link	Value
Contract utilization (bCntrUtilization)	Yes
Quantity (fQty)	1
Icon to the right of the Contract requested	Click
(UsedReqLineCntr) field	
Drop-down list under the <b>Quantity</b> (fQty) field	Contract used
Field to the right of the drop-down list with the	Select the PC2MSA2 (PC2 - Microsoft Select -
Used contract value	Applications - Assurance) record from the list
Port. item requested (UsedReqLineAsset)	300 PC2 - Excel - License

## Create the request lines for the PC2-02 request

- 1 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- 2 Select request *PC2-02* (**Number** (PONumber) field).
- 3 Display the **Composition** tab.
- 4 Add the following request line by populating the fields and links as shown in the following tables:

Field or link	Value
Quantity (fQty)	20
Reference (CatalogRef)	Select the PC2 - Project - License (Microsoft) -
	PC2 - Excel - License record from the list

#### Create the request lines for the PC2-03 request

- 1 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- 2 Select request *PC2-03* (**Number** (PONumber) field).
- 3 Display the Composition tab.
- 4 Add the following request line by populating the fields and links as shown in the following tables:

Value
Yes
1
Click
Contract used
Select the PC2MSA2 (PC2 - Microsoft Select -
Applications - Assurance) record from the list
Click
Asset used
Microsoft PC2 - Excel - License

## Creating, issuing and receiving the orders PC2-01 and PC2-02

- 1 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- 2 Select request *PC2-01* (**Number** (PONumber) field).
- 3 Click **Quote**, and then **Finish** and then **OK** to accept the proposed values.
- 4 In the detail of the purchase order generated from the request:
  - a Populate the fields and links shown in the following table:

Field or link	Value
Number (PONumber)	PC2-01
General tab	

Field or link	Value
Sent (dtSent)	March 31, 2008

- b Display the Composition tab.
- c Display the detail of the purchase order line.
- d In the detail of the order line, display the **Allocation** tab.
- e Populate the fields and links shown in the following table:

Field or link	Value
Cost center (CostCenter)	PC2 - National Marketing

- f In the detail of the order line, display the **Financing** tab.
- g Populate the fields and links shown in the following table:

Field or link	Value
On blanket PO (bUsesBlanketPO)	Yes
Blanket PO contract (BlanketPOCntr)	Select the PC2MSA1 (PC2 - Microsoft Select -
	Applications) record from the list

- h Save the modifications made to the order (**Modify** button).
- 5 Click **Issue**, and then **Finish**, and then **OK** to accept the proposed values.
- 6 Click **Receive**, and then **Finish**, and then **OK** to accept the proposed values.
- 7 Examine the details of this portfolio item that was created during the reception of the purchase order.
- 8 Windows client: Windows client: Close all windows.
- 9 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- 10 Select request *PC2-02* (**Number** (PONumber) field).
- 11 Click **Quote**, and then **Finish**. Accept the proposed values as they are. Click **OK**.
- 12 Populate the fields and links shown in the following table:

Field or link	Value
Number (PONumber)	PC2-02
General tab	
Sent (dtSent)	March 31, 2008

- 13 In the detail of the estimate generated from the request:
  - a Display the Composition tab.
  - b Display the detail of the purchase order line.

- c In the detail of the order line, display the **Allocation** tab.
- d Populate the fields and links shown in the following table:

Field or link	Value
Cost center (CostCenter)	PC2 - National Marketing

- e In the detail of the order line, display the **Financing** tab.
- f Populate the fields and links shown in the following table:

Field or link	Value
On blanket PO (bUsesBlanketPO)	Yes
Blanket PO contract (BlanketPOCntr)	Select the PC2MSA1 (PC2 - Microsoft Select -
	Applications) record from the list

- g Save the modifications made to the order (**Modify** button).
- 14 For the estimate that was created from the purchase request, click **Issue**, and then **Finish**. Accept the proposed values as they are. Click **OK**.
- 15 In the details of the purchase order that was created from the purchase request, click **Receive**, and then **Finish**. Accept the proposed values as they are. Click **OK**.
- 16 Examine the details of this portfolio item that was created during the reception of the purchase order.
- 17 Windows client: Close all windows.

## Execute the request PC2-03

- 1 Display the requests (**Procurement/ Purchase requests** link on the navigation bar).
- 2 Select request *PC2-03* (**Number** (PONumber) field).
- 3 Set the **Req. status** field (seStatus) to Validated.
- 4 Click Modify.
- 5 Click **Execute**, and then **Finish**. Accept the proposed values as they are. Click **OK**.
- 6 Display the **Composition** tab.
- 7 Display the detail of the request line **Contract utilization**.
- 8 Click the magnifier to the right of the field set to *Microsoft PC2 Excel License*.
- 9 Display the Contracts tab.

You will notice that the asset is linked to the contract PC2MSA2 (PC2 - Microsoft Select - Applications - Assurance).

#### 10 Windows client: Close all windows.

#### Create the calculated fields for the points tracking

- 1 Display the calculated fields (Administration/ System/ Calculated fields link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:



We recommend coping the scripts from chm of the documentation to Asset Manager.

Field or link	Value
Label (TextLabel)	PC2 - Select - License Points
SQL name (SQLName)	PC2L
Table (TableName)	Contracts (amContract)
Field type (seType)	Basic script
Result type (seDataType)	Numeric
Calculated-field script (Script)	RetVal = AmDbGetDouble( "SELECT SUM(fQty
	* CatalogRef.CatProduct.Model.fv_PC2Select-
	PointsL) FROM amPOrdLine WHERE Blanket-
	POCntr = " & [lCntrId] & "AND POrder.dtSent
	>= #" & [dStart] & "# AND POrder.dtSent <= #"
	& [dEnd] & "#")

#### Description of the script:

- RetVal =: The script returns a value.
- *AmDbGetDouble(...)*: The value returned is a double-precision number (8 bytes).
- FROM amPOrdLine: The query searches the **Order lines** table.
- WHERE BlanketPOCntr = " & [lCntrId] & "AND POrder.dtSent >= #" &  $\lceil dStart \rceil$  & "# AND POrder.dtSent <= #" &  $\lceil dEnd \rceil$  & "#": The records in the Order lines table must by linked to the contract by the Blanket **PO** contract (BlanketPOCntr), the order to which the order line belongs must have been issued (link to the **POrder.dtSent** field) after the start of the contract (**dStart** field) and before its end (**dEnd** field).
- $\blacksquare$  SUM(fQty \* CatalogRef.CatProduct.Model.fv\_PC2SelectPointsL): The query sums (SUM(...)) the feature values fv PC2SelectPointsL associated with the product model of the catalog reference of the order line (CatalogRef.CatProduct.Model.fv PC2SelectPointsL link) for each order line selected by the *WHERE*(...) clause.

Field or link	Value
Label (TextLabel)	PC2 - Select - Assurance points
SQL name (SQLName)	PC2SA
Table (TableName)	Contracts (amContract)
Field type (seType)	Basic script
Result type (seDataType)	Numeric
Script (Calculated-field script)	RetVal = AmDbGetDouble("SELECT SUM(Asset.fTotalQty * Asset.Model.fv_CP2PointsSelectSA1) FROM amAstCntrDesc WHERE lCntrId = " & [lCntrId] & "AND dCntrIncluded >= #" & (Year([dStart]) + 2 ) & "-" & Month([dStart]) & "-" & Day([dStart]) & "# AND dCntrIncluded < #" & (Year([dStart]) + 3 ) & "-" & Month([dStart]) & "-" & Day([dStart]) & "+")
	$RetVal = RetVal + AmDbGetDouble("SELECT SUM(Asset.fTotalQty* Asset.Model.fv_CP2PointsSelectSA2) FROM amAstCntr-Desc WHERE lCntrId = " & [lCntrId] & " AND dCntrIncluded >= #" & ( Year([dStart]) + 1 ) & "-" & Month([dStart]) & "-" & Day([dStart]) & "# AND dCntrIncluded < #" & ( Year([dStart]) + 2 ) & "-" & Month([dStart]) & "-" & Day([dStart]) & "#") \\ \\$
	$RetVal = RetVal + AmDbGetDouble ("SELECT SUM(Asset.fTotalQty * Asset.Model.fv_CP2PointsSelectSA3) FROM amAstCntr-Desc WHERE   CntrId = " & [ CntrId] & " AND dCntrIncluded >= #" & ( Year([dStart]) + 0 ) & "-" & Month([dStart]) & "-" & Day([dStart]) & "# AND dCntrIncluded < #" & ( Year([dStart]) + 1 ) & "-" & Month([dStart]) & "-" & Day([dStart]) & "#") \\ \\$

Description of the first RetVal = of the script:

- RetVal =: The script returns a value.
   For better readability, the calculation is performed in three parts, thus we have: RetVal = RetVal + ...
- *AmDbGetDouble(...)*: The value returned is a double-precision number (8 bytes).
- FROM amAstCntrDesc: The query searches the Assets covered by contracts table.
- *lCntrId* = " & *[lCntrId]* & ": First condition of the *WHERE* clause.

  The assets covered by contracts must be linked to the current contract identified by the **lCntrld** field.
- dCntrIncluded >= #" & (Year([dStart]) + 2) & "-" & Month([dStart]) & "-" & Day([dStart]) & "#: Second condition of the WHERE clause.

The assets covered by contracts must have been included (**dCntrincluded** field) at least two years after the start of the contract.

The # character is used to delimit the reference date.

The reference date is reconstituted by concatenating the year, month and day of the start of the contract (**dStart** field).

We thus obtain a date with the format #YYYY-MM-DD#.

 $\blacksquare$  dCntrIncluded < #" & (Year([dStart]) + 3) & "-" & Month([dStart]) &"-" & Day([dStart]) & "#: Third condition of the WHERE clause.

The assets covered by contracts must have been included (dCntrincluded field) at least 3 years after the start of the contract.

■ SUM(Asset.fTotalQty \*Asset.Model.fv\_PC2SelectPointsSA3): The query sums the products of the *Total atv.* (fTotalQty) fields and the feature PC2SelectPointsSA3 of the assets covered by contracts selected by the WHERE clause.

In effect, it is this feature that gives the number of Software Assurance points to be counted when the license is acquired during the first year of the contract, when there remains 2 to 3 years of Software Assurance.

## Display the calculated fields and the feature of the contracts



This operation can only be done using the Windows client.

You must use Asset Manager Application Designer to customize windows and have them display calculated fields in a detail window or in a list in the Web client.

- 1 Display the contracts (**Contracts/ Contracts** link on the navigation bar).
- 2 Right-click the list header.
- 3 Select **Utilities/ Configure list** from the shortcut menu.
- 4 Add the calculated fields PC2 Select Assurance Points (PC2SA) and PC2 - Select - License Points (PC2L).
- 5 Click **OK**.
- 6 Examine the values you have added for the PC2MSA1 and PC2MSA2 contracts.

## Create the gueries required for the Excel counter

- 1 Display the queries (**Administration/ Queries** link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Value
	Identification of the cost center for which we will account for license rights and installations.
Name (Name)	PC2 - Cost center 1
Table (TableName)	Cost centers (amCostCenter)
Query tab	
Query (memQueryText)	Title = 'PC2 - National Marketing'
Field or link	Value
Tiold of link	Identification of Excel licenses
Name (Name)	PC2 - Excel - Licenses
Name (Name) Table (TableName)	PC2 - Excel - Licenses Portfolio items (amPortfolio)

Field or link	Value
	Identification of Excel licenses
Name (Name)	PC2 - Excel - Installations
Table (TableName)	Portfolio items (amPortfolio)
Query tab	
Query (memQueryText)	Model.Name = 'PC2 - Excel - Installation'

## Create the Excel counter

- 1 Display the counters (Portfolio management/ IT/ Licenses/ Software counters link on the navigation bar).
- 2 Create the following records, by populating the fields and links as shown in the following tables:

Field or link	Record
Name (Name)	PC2 - Excel - License control
Use as model (bType)	No
Do not include in the compliance reports (bIntern-	Yes
al)	
Edit the counter using the wizards (bAutomated)	No
User-rights count (bCountLic)	Yes
Installations/Utilizations count (bCountInst)	Yes
Entitlements count (bCountEnt)	No
Group by (Context)	Cost centers (amCostCenter)
Scope of application (Definition)	PC2 - Cost center 1
License contract (Contract)	Select the PC2MSA1 (PC2 - Microsoft Select -
	Applications - Acquisitions) record from the list
Rights tab	
Rights counter context (LicContext)	Portfolio items (amPortfolio)

Field or link	Record
Scope of the rights to be counted (LicQuery)	PC2 - Excel - Licenses
Rights -> Group By link (LicGroupBy)	CostCenter
	Note:
	Asset Manager adds automatically a period (full stop) to the end of the string you type or paste.
	You must delete this period (full stop) in order to validate what you have entered.
Rights-calculation mode (seLicCountMode)	Count according to a calculation formula
Field for rights count (LicCountFormula)	SUM((fQty * Asset.lSoftLicUseRights))
Installations/Utilizations tab	
Installation/Utilization counter context (InstContext)	Portfolio items (amPortfolio)
Scope of the installations or utilizations to be counted (SoftInstQuery)	PC2 - Excel - Installations
$\overline{Installations/Utilizations} \mathbin{-{>}} \operatorname{Group} \operatorname{By} \operatorname{link} (\operatorname{Inst-}$	Parent.CostCenter
GroupBy)	Note:
	Asset Manager adds automatically a period (full stop) to the end of the string you type or paste.
	You must delete this period (full stop) in order to validate what you have entered.
Installations/Utilizations calculation mode (seInstallCountMode)	Count according to a calculation formula
$In stall at ions/Utilizations\ calculation\ formula \\ (In stCount SQL)$	Count distinct (IP ar ent Id)

- 3 Click the **Calculate** button.
- 4 Display the **General** tab: The counts are summarized here.
- 5 Display the **Results** tab: The counts are detailed here.



You can create a counter for Project in the same way.

# IV Appendixes

# 11 Glossary

Please read the glossary in the next chapter:

▶ Main concepts [page 23].

## 12 References

## Navigation bar, menus and tabs

The following navigation bar links and menus of the Windows client are directly linked to the *Software assets* module:

Table 12.1. Navigation bar links, menus and tabs in the Software assets module - list

Menu and naviga- tion bar link	Table that the menu accesses (la- bel and SQL name)	Dedicated tabs, fields or links	Comments	Section of the guide to consult
File Activate modules	Does not apply.	Does not apply.	Enables you to activate or deac- tivate the Soft- ware assets mod- ule if your license file authorizes it.	Refer to the Tailoring guide, part 1 Customizing client computers, chapter Customizing a client workstation, section Activating the modules

Menu and naviga- tion bar link	Table that the menu accesses (la- bel and SQL name)	Dedicated tabs, Comments fields or links	Section of the guide to consult
Portfolio/ Port- folio items menu Portfolio man- agement/ Port- folio items link	Portfolio items (amPortfolio)	<ul> <li>Software inst. tab</li> <li>Utilization tab</li> <li>License tab</li> </ul>	<ul> <li>Method 2: Using the menus</li> <li>[page 55]</li> <li>Method 2: Using the menus</li> <li>[page 56]</li> </ul>
Portfolio/ Assets and batches menu Portfolio management/ Assets link	Assets (amAsset)	♦ License tab	
Portfolio/ Soft- ware installa- tions and utiliz- ations menu Portfolio man- agement/ IT/ Software install- ations link	Software installa- tions or utiliza- tions (amSoftIn- stall)	♦ All	Software installa- tions and utiliza- tions manage- ment [page 63]
Portfolio/ Natures menu Portfolio man- agement/ Natures link	Natures (am- Nature)	<ul> <li>Also create field (Over- flowTbl)</li> <li>Has soft- ware in- stalled field (bHasSoftIn- stall)</li> <li>License field (bSoftLi- cense)</li> </ul>	<ul> <li>Manually creating a software installation/utilization [page 71]</li> <li>Create a software license nature [page 53]</li> </ul>

Menu and naviga- tion bar link	Table that the menu accesses (la- bel and SQL name)	Dedicated tabs, fields or links	Comments	Section of the guide to consult
Portfolio/ Models menu Portfolio management/ Models link	Models (amModel)	<ul> <li>Software inst. tab</li> <li>License tab</li> </ul>		<ul> <li>Manually creating a software installation/utilization [page 71]</li> <li>Method 2: Using the menus [page 54]</li> </ul>
Portfolio/ Named entitlements menu Organization/ Named entitlements link	Named entitlements (amEntitlement)	♦ All		Software entitlement management [page 59]
Software/ Soft- ware asset management menu Portfolio man- agement/ IT/ Licenses/ Man- age software link	Does not apply.	Does not apply.	Triggers the Manage Software wizard.	How to create records [page 29]
Software/ Dashboard menu Portfolio man- agement/ IT/ Licenses/ Soft- ware dash- board link	Does not apply.	Does not apply.	Displays a reports dashboard.	Method: Using the links on the navigation bar [page 107]

Menu and naviga- tion bar link	Table that the menu accesses (la- bel and SQL name)	Dedicated tabs, fields or links	Comments	Section of the guide to consult
Software/ Definitive Soft- ware library menu Portfolio man- agement/ IT/ Licenses/ Defin- itive Software Library link	Models (amModel)	<ul> <li>Software inst. tab</li> </ul>	Displays the list of records in the <b>Models</b> table (amModel) linked to a nature whose <b>Also create</b> field (OverflowTbl) is set to Software installations or utilizations (amSoftInstall).	
Portfolio man- agement/ IT/ Licenses/ In- ventoried soft- ware keys link	Inventoried models (amInvent-Model)	♦ All	·	Result of the import in the Asset Manager database [page 66]
Software/ Results of the software counters menu.  Portfolio management/ IT/	Software counters (amSoftLic-Counter)	♦ All	Displays the list of all counters that are not mod- els, and also dis- plays the results of the selected counter.	Updating the results of a software counter [page 92]
Licenses/ Results of the software counters			Can also be used to recalculate the counts, modify counters using wizards, and solve irregularities between license rights and installations/utilizations.	
Software/ Soft- ware counters menu Portfolio man- agement/ IT/ Licenses/ Soft- ware counters link	Software counters (amSoftLic-Counter)	All		Method 2: Creating a counter directly [page 86]

Menu and naviga- tion bar link	Table that the menu accesses (la- bel and SQL name)	Dedicated tabs, fields or links	Comments	Section of the guide to consult
Contracts/ Contracts menu Contracts/ Con-	Contracts (am- Contract)	<ul> <li>Licenses tab</li> </ul>		Method 2: Using the menus [page 40]
tracts link				
Contracts/ Master leases menu	Contracts (am- Contract)	♦ Licenses tab		Method 2: Using the menus [page 40]
Portfolio man- agement/ IT/ Licenses/ Con- tracts link				
Tools/ Actions/ Edit menu Administra-	Actions (amAction)	• All		Refer to the <i>User</i> interface guide, chapter <i>Reference</i>
tion/ Actions				information, section $Actions$ .
Tools/ Actions/ <name ac-="" of="" tion=""> menu Multiple loca- tions on the nav- igation bar de-</name>	Does not apply.	Does not apply.	Proposes the actions that are either non-contextual or whose contexts are active.	Actions and wiz- ards [page 194]
pending on the action's functional domain.			Enables you to trigger the selec- ted action.	
Tools/ Customize toolbar	Does not apply.	Does not apply.	Enables you to add icons to or drop icons from the toolbar ( <i>Portfolio</i> category).	Windows client toolbar icons [page 189]
Tools/ Reporting/ Reports menu Administration/ Reporting/ Reports	Reports (amReport)	♦ All		Reports [page 201]

Menu and naviga- tion bar link	Table that the menu accesses (la- bel and SQL name)	Dedicated tabs, fields or links	Comments	Section of the guide to consult
Administra- tion/List of screens menu	Does not apply.	Does not apply.	Enables you to access tables that are not accessible by the present menus.  This task is reserved for the administrator. This is because these tables are not usually modified directly.	Refer to the <i>User</i> interface guide, chapter <i>Record</i> lists, chapter <i>Us</i> ing lists.
Administra- tion/ Itemized lists menu Administra- tion/ System/ Itemized lists menu	Itemized lists (amItemizedList)	♦ All	V	Itemized lists [page 193]
Administra- tion/ Counters menu Administra- tion/ System/ Counters link	Counters (am- Counter)	♦ All		Counters [page 194]
Administra- tion/ Calcu- lated fields menu Administra- tion/ System/ Calculated fields link	Calculated fields (amCalcField)	♦ All		Calculated fields [page 194]

This table does not list the actions or reports included in the *Software assets* module and which can be found on the *Portfolio management/IT/Licenses* branch of the navigation bar.

#### Windows client toolbar icons

No toolbar icons of the Windows client are specific to the *Software assets* module. For more information on customizing the toolbar, consult the *Tailoring* guide, part 1 *Customizing client computers*, chapter *Customizing a client workstation*, section *Customizing the toolbar*.

## Windows client interface options

There are no Windows client interface options specifically dedicated to the *Software assets* module.

For more information on configuring the interface options, consult the *Tailoring* guide, part 1 *Customizing client computers*, chapter *Customizing a client workstation*, section *General options*.

#### **Tables**

The Software assets module uses numerous tables.

The following tables are linked directly to the *Software assets* module:

Table 12.2. Tables in the Software assets module - list

Table label	SQL name of the table	Links on the navigation bar used to access the table	Section of the guide to consult
Generic tables			
Portfolio items	amPortfolio	Portfolio management/ Portfolio items	<ul> <li>Create a software license [page 55]</li> <li>Manually creating a software installation/utilization [page 71]</li> </ul>

Table label	SQL name of the table	Links on the navigation bar used to access the table	Section of the guide to consult
Models	amModel	Portfolio management/ Models	<ul> <li>Create a software license model [page 54]</li> <li>Creating software installation/utilization model [page 71]</li> </ul>
Natures	amNature	Portfolio management/ Natures	<ul> <li>Create a software license nature [page 53]</li> <li>Creating a software installation/utilization nature [page 70]</li> </ul>
Tables specific to softw			
Contracts	amContract	Contracts/ Contracts	License contract management [page 39]
Named entitlements	amEntitlement	Organization/ Named entitlements	Create a named enti- tlement for a license [page 59]
Software counters	${ m amSoftLicCounter}$	Portfolio management/ IT/ Licenses/ Software counters  Administration / List of screens menu, Software counters (previous format)	Monitoring license compliance of installations [page 81]
Rights / Utilizations count	amRightsUsesCount	Administration / List of screens menu, Rights / Utilizations count line	Periodical cleaning [page 94]
Software installations or utilizations	amSoftInstall	Portfolio management/ IT/ Software installa- tions	Software installations and utilizations management [page 63]
Inventoried models	amInventModel	Portfolio management/ IT/ Licenses/ Inventor- ied software keys	Result of the import in the Asset Manager database [page 66]
Installations to create	amModelSoftInfo	Administration / List of screens menu, In- stallations to create line	

## Relationships between tables

The Software assets module uses numerous tables in the Asset Manager database. There are multitudes of links between these tables. Because of these links, you will find it useful to populate these tables in a certain, defined order.

The order that we propose below is not mandatory: Asset Manager enables you to create missing records in linked tables whenever it is necessary.

Here is a table that optimizes the order of how you should create your records. It indicates which dependant tables you need to populate.

The practical cases used in this guide follow these recommendations.

Table 12.3. Interdependence of tables - table

Table (label and SQL name)	Tables to populate beforehand (label and SQL name)	Mandatory values	Automatically created records
Locations (am-			
Location)			
Departments and	Locations (amLocation)		
employees			
(amEmplDept)			
Contracts (am-	Employees and departments		
Contract)	(amEmplDept)		

Table (label and SQL name)	Tables to populate beforehand (label and SQL name)	Mandatory values	Automatically created records
Nature (am- Nature)		<b>Create</b> (sebasis): Portfolio item	
		Also create (seOverflowTbl): (No table)	
		Management constraint (seMgtCon- straint): Unique asset tag	
		License (bSoftLicense): Yes  Create (sebasis):	_
		Portfolio item  Also create (seOverflowTbl): Software installations or utilizations (amSoftInstall)	
		Management constraint (seMgtCon-	
Models (amModel)	Nature (amNature)	straint): Free	
Portfolio items (amPortfolio)	Models (amModel)		<ul> <li>Asset (amAsset)</li> <li>Software installations or utilizations (amSoftInstall)</li> <li>Rights / Utilizations count (amRightsUsesCount)</li> </ul>
Named entitle- ments (amEntitle- ment)	Departments and employees (amEmplDept)		Se ses seume)
Queries (am- Query)			

Table (label and	the state of the s	Mandatory values	
SQL name)	and SQL name)		ated records
Counters (am-	<ul> <li>Departments and employees</li> </ul>		Rights / Utiliza-
Counter)	(amEmplDept)		tions count (am-
	■ Models (amModel)		Right-
	■ Queries (amQuery)		sUsesCount)
	<ul> <li>Portfolio items (amPortfolio)</li> </ul>		
	<ul><li>Named entitlements (amEntitlement)</li></ul>		

## Itemized lists

You can select the value of certain fields using an open or closed itemized list.

To access the Itemized lists table (amItemizedList), use the Administration/Itemized lists menu.

The following table details the itemized lists specific to the  $Software\ assets$  module.

Table 12.4. Itemized lists - list

Table (label and SQL name)	Field populated using an itemized list (label and SQL name)	Itemized list identifier
Software counters (amSoftLic-	Nature (Type)	amSLCountNature
Counter)		
Software installa- tions or utiliza- tions (amSoftIn- stall)	Language (Language)	amLanguage
Software installa- tions or utiliza- tions (amSoftIn- stall)	Operating system (SoftOS)	amOS
Software installa- tions or utiliza- tions (amSoftIn- stall)	Status (Status)	amSoftInstStatus
Contracts (am- Contract)	Nature (Nature)	amCntrNature
Contracts (am- Contract)	Status (Status)	amCntrStatus

For more information about itemized lists, consult the *Advanced use* guide, chapter *Itemized lists*.

#### Calculated fields

The Software assets module uses numerous calculated fields.

The following table details the calculated fields specific to the *Software assets* module.

Table 12.5. Calculated fields - list

Label of the calculated field	SQL name of the calculated field	Label and SQL name of the field that uses the calculated field	Utilization
Productivity software installa-	sysSamOf-	Portfolio items (amPortfolio)	Programming
tions count	ficeInst		
Productivity software license	sysSamOf-	Portfolio items (amPortfolio)	Programming
count	ficeLic		
Utilization-points count	sysSamUses	Portfolio items (amPortfolio)	Programming
License-points count	sysSamLi-	Portfolio items (amPortfolio)	Programming
	cences		

For more information about calculated fields, consult the *Advanced use* guide, *Calculated fields* chapter.

For more information about writing scripts, consult the *Advanced use* guide, chapter *Scripts*.

For more information on using APIs, refer to the Programmer's reference guide.

#### Counters

The Software assets module does not use counters.

To access the **Counters** table (amCounter), select the **Administration/ System/ Counters** link on the navigation bar.

#### Actions and wizards

The *Software assets* module uses actions to automate common tasks.

To access the Actions table (amAction), select the Administration/ Actions link on the navigation bar.

You can filter the actions linked to the Portfolio and Software assets modules by using a simple filter on one of the following fields:

- Domain (**Domain**)
- Nature (Nature)

The following actions are directly linked to the *Software assets* module:

Table 12.6. Actions and wizards - list

Name of action	SQL name of the action	Type of action	Context of the action (SQL name of the table)	Section of the guide to consult
Create a software license management counter	sysSamCreateSoft- wareCounter	Wizard		Method 1: Create a counter using the Create a software li- cense management counter (sysSamCre- ateSoftwareCounter) wizard [page 86]
Calculate all soft- ware in- stalla- tions	BstSamCom- puteAllLicAndInstall	Script		Main features of the Periodic verification of licenses workflow scheme [page 104]
Software dash- board	BstSamDashBoard	Dash- board		Customizing the dashboard [page 107]
Mail to adminis- trator concern- ing li- censes overrun	BstSamLicenses_exceeded	Mes- saging	${ m amSoftLicCounter}$	Sending an automatic message in case of li- cense overrun [page 102]
Missing software assign- ment	BstSamMissingSoft- ware	Script	amComputer	Flagging software missing from the last computer inventory [page 69]
Mail to adminis- trator concern- ing unau- thorized installa- tion	BstSamUnauthinstall- ation_found	Mes- saging	amSoftInstall	Sending an automatic message when an un- authorized installa- tion occurs [page 75]

Name of action	SQL name of the action	Type of action	Context of the action (SQL name of the table)	Section of the guide to consult
Add an ASP user	sysSamAd- dAspUsers2Cntr	Wizard		Adding a user to the current ASP contract [page 79]
Create a software license type (model)	sysSamCreateLicModel	Wizard		Create a software license [page 55]
Create a software license model from installations	sysSamCreateLicMod- FromInst	Wizard		Create a software license [page 55]
Create a new soft- ware li- cense	sysSamCreateLicpfi	Wizard		<ul> <li>Method 1: Using the Manage software wizard (sys-SamLauncher) [page 55]</li> <li>This starts the Create a new software license (sys-SamCreateLicpfi) wizard. [page 55]</li> </ul>
Create a request on named entitlement	sysSamCreateReqFromEntitledTempl	Wizard		Method 1: Using the Manage software wiz- ard (sysSamLauncher) [page 56]
Create a software contract (Draft)	sysSamCreateSoftContract	Wizard		<ul> <li>Creating a license contract [page 39]</li> <li>Modifying a license contract [page 49]</li> </ul>
Delete an ASP user	sysSam- DelAspUsersFrom- Cntr	Wizard		Removing a user from the current ASP con- tract [page 80]
Flag OEM in- stalla- tions	sysSamFlagOEMInst	Wizard		Flagging installations as OEM installations [page 78]
Select your cur- rent soft- ware con- tract	sysSamGetEnv	Wizard		Selecting the current contract in the Man- age software wizard (sysSamLauncher) [page 40]

Name of action	SQL name of the action	Type of action	Context of the action (SQL name of the table)	Section of the guide to consult
Solve soft- ware com- pliancy is- sues	sysSamIdentifyIllegal- Install	Wizard		Processing irregularities between installations/utilizations and licenses [page 94]
Manage soft- ware	sysSamLauncher	Wizard		How to create records [page 29]
Prepare licenses and soft- ware in- stalla- tions	sysSamLicenseProcess	Wizard		<ul> <li>Create a software license [page 55]</li> <li>Method 1: Using the Manage software wizard (sys-SamLauncher) [page 56]</li> </ul>
Link invoice lines to the contract	sysSamLinkIn- voices2Cntr	Wizard		Link invoice lines to the current contract [page 52]
Recalcu- late rights and in- stalla- tions	sysSamReCalcCounters	Wizard		Processing irregularities between installations/utilizations and licenses [page 94]
Reconcile external software license models	sysIvtReconcExtMod- elWiz	Wizard	amInventModel	If a new record is created in the Inventoried models (amInvent-Model) table or if an existing record in the Inventoried models table is linked for the first time to a software installation [page 68]
Request contract valida- tion	sysSamReqCon- tractApproval	Wizard		Requesting validation for the current con- tract [page 47]
Propagate reconcili- ation of external model	SYS_RES_MOD_ACT01	Script	amInventModel	Automatic mechanisms triggered by the import [page 68]

Name of action	SQL name of the action	Type of action	Context of the action (SQL name of the table)	Section of the guide to consult
Modify the list of installa- tion mod- els to take into ac- count	sysSamAd- dInst2Counter	Wizard	${ m amSoftLicCounter}$	Modifying software counters [page 91]
Modify the list of license models to take into account	sysSamAd- dLic2Counter	Wizard	${ m amSoftLicCounter}$	Modifying software counters [page 91]
Define or redefine the counter's scope of applica- tion	sysSa- mAddScope2Counter	Wizard	${ m amSoftLicCounter}$	Modifying software counters [page 91]
Request software licenses	sys Sam Create Lic Req	Wizard		Request new software licenses [page 56]
Assign soft- ware	sysSamEntitleUserOr- Item	Wizard		Create a named enti- tlement for a license [page 59]
Modify a software license	sysSamModifyLicpfi	Wizard		Modify a software license [page 56]
Reconcile unknown installa- tions with known software installa- tions	sysSamNormalizeModels	Wizard		Reconcile unknown installations [page 77]

For more information about actions, refer to the  $Advanced\ use$  guide, chapter Actions.

For more information about writing scripts, consult the  $Advanced\ use$  guide, chapter Scripts.

For more information on using APIs, refer to the *Programmer's reference* guide. You can create new actions or customize some of the existing ones.

#### Workflow

The Software assets module uses workflow schemes to handle certain procedures.

To access the **Workflow schemes** (amWfScheme) table, click the **Administration/ Workflows/ Workflow schemes** link on the navigation bar.

The following workflow schemes are directly linked to the  $Software\ assets$  module:

Table 12.7. Workflow - list

Name of the workflow scheme	Reference of the workflow scheme	Context of the workflow scheme (SQL name of the table)	Section of the guide to consult
No more li- censes	BST_SAM01	amSoftLicCounter	Sending an automatic message in case of license
available			overrun [page 102]
Periodic	BST_SAM02	amSoftLicCounter	Automate periodical calcu-
verification			lation of the software
of licenses	DOM: 011500	2 47	counters [page 104]
Installation	BST_SAM03	amSoftInstall	Sending an automatic
not author-			message when an unau-
ized			thorized installation oc-
D. t t	DOM CAMOO	C t	curs [page 75]
	BST_SAM20	amComputer	Flagging software miss-
software			ing from the last com-
missing			puter inventory [page 69]
from last			
scan	C CNIED ADDD	<u> </u>	0 : [ 41]
Contract validation	sysSam_CNTR_APPR	amContract	Overview [page 41]
Normalize	sysIvtExtModelEnd	$\operatorname{amInventModel}$	If a new record is created
models:			in the Inventoried models
'amInvent-			(amInventModel) table or
Model' re-			if an existing record in
solved			the Inventoried models
			table is linked for the first
			time to a software install-
			ation [page 68]

Name of the workflow scheme	Reference of the workflow scheme	Context of the workflow scheme (SQL name of the table)	Section of the guide to consult
Normalize models: 'amInvent- Model' ad- ded	sysIvtExtModelNew	amInventModel	If a new record is created in the Inventoried models (amInventModel) table or if an existing record in the Inventoried models table is linked for the first time to a software install- ation [page 68]

For further information on workflow, refer to the *Advanced use* guide, *Workflow* chapter.

You can create new workflow schemes or customize existing workflow schemes.

### Asset Manager Automated Process Manager modules

Certain Asset Manager Automated Process Manager modules are specific to the *Software assets* module.

To access the Asset Manager Automated Process Manager modules:

- 1 Launch Asset Manager Automated Process Manager.
- 2 Connect to your Asset Manager database.
- 3 Select the Tools/ Configure modules menu.

Table 12.8. Asset Manager Automated Process Manager module - list

Name of the module	Description
WkGrIddAcoupSYS_SAM	Execute workflow rules for execution group 'SYS_SAM'
EdAc	Update the database using Enterprise Discovery inventory results.

For more information about the Asset Manager Automated Process Manager modules, consult the *Administration* guide, chapter *Asset Manager Automated Process Manager*, section *Configuring the modules monitored by Asset Manager Automated Process Manager*.

## System data and Line-of-business data

Asset Manager is provided with a standard set of data.

These data sets are part of one of the following groups:

- System data: Data required by the Asset Manager application in order to function properly.
- *Line-of-business data*: Data that can be inserted into your production database at your discretion.
  - This data is divided into functional areas.
- Sample data: Data that you can use to familiarize yourself with Asset Manager.

#### System data specific to the Software assets module

For the Software assets module, the system data package contains data for the following tables:

- Actions (amAction)
- Scripts (amScriptLibrary)
- Application options (amOption)

The system data is incorporated by default in the Asset Manager database.

#### Line-of-business data specific to the Software assets module

For the Software assets module, the line-of-business data package contains data for a number of tables. Here are some examples:

- Employee groups (amEmplGroup)
- Software counters (amSoftLicCounter)
- Actions (amAction)
- Workflow schemes (amWfScheme)
- Itemized list values (amItemListVal)
- Inventoried models (amInventModel)
- Reports (amReport)
- Dashboard item (amDashboardItem)

Line-of-business data is automatically included in the Asset Manager demonstration database.

The line-of-business data is included in your working database if you select this option with Asset Manager Application Designer.

▶ Import the line-of-business data into your existing database [page 36].

#### Reports

Asset Manager ships with many out-of-the box reports. Certain of these reports are specific to the *Software assets* module.

In order for these reports and forms to be available in your database, you must import them using Asset Manager Application Designer.

#### Importing and identifying reports specific to the Software assets module

To find out how to import reports, refer to the *Advanced use* guide, chapter *Crystal Reports*, section *Installing and using the reporting tool*, sub-section *Installing preconfigured Crystal Reports in your database*.

To identify the reports specific to the *Software assets* module, refer to the *Advanced use* guide, chapter *Crystal Reports*, section *Identifying Crystal reports* specific to a given module.

## Background processes

For more information on the automatic background processes executed by Asset Manager, consult the *Database structure* guide. For each table discussed in this guide, you will find a *Background processes* section.

▶ Tables [page 189].

#### API

Certain Asset Manager APIs are used in the Software assets module.

To obtain the list and description of the *Software assets* module's APIs, consult the *Programmer's reference*.

#### **Views**

There are no default views for the Software assets module.

For more information on using views, refer to the *Tailoring* guide, part 1 *Customizing Windows clients*, chapter *Using views*.

#### Other documentation

This guide only provides information directly related to the *Software assets* module.

Table 12.9. Other documentation - list

Document	Contents	Format	Location in the Asset Manager installation folder
Installation and upgrade	<ul> <li>Installation of Asset Manager</li> </ul>	Printed	\doc\pdf\*InstallationAndUp- grade*.pdf
		Online	\doc\chm\install.chm
Core tables	<ul><li>Management of</li></ul>	Printed	\doc\pdf\CommonTables*.pdf
	locations and em- ployees	Online	\doc\chm\commontables.chm
User Interface	♦ General interface	Printed	\doc\pdf\*UserInter-
	of the application		face*.pdf
		Online	\doc\chm\userinterface.chm
Portfolio	<ul> <li>Management of</li> </ul>	Printed	\doc\pdf\*Portfolio*.pdf
	natures, models, portfolio items and assets	Online	\doc\chm\portfolio.chm
Administration	■ Use of wizards	Printed	\doc\pdf\*Administra-
	<ul> <li>Customization of</li> </ul>		tion*.pdf
	fields	Online	\doc\chm\administration.chm
	<ul> <li>Use of calculated fields</li> </ul>		
Advanced use	■ Itemized-list man-	Printed	\doc\pdf\*AdvancedUse*.pdf
	agement	Online	\doc\chm\advanceduse.chm
	<ul> <li>Creation of scripts</li> </ul>		
Context-sensitive help for fields and links	♦ Use of database fields and links	Online	To access contextual help on a field or link:
			1 Select a field or link.
			2 Perform one of the following actions:
			<ul> <li>Right-click and select Help on this field from the shortcut menu.</li> </ul>
			Press Shift and F1 simultaneously on the keyboard.
			<ul> <li>Select the Help/Help on this field menu.</li> </ul>
			mile mem meman
Programmer's reference	♦ Use of APIs	Printed	\doc\pdf\*ProgrammersReference*.pdf

Document	Contents	Format	Location in the Asset Manager installation folder
Database structure List of the database's tables,	Text file	<pre>doc\infos\database.txt     \infos\tables.txt</pre>	
	fields, links and indexes	Online	\doc\chm\dbstructure.chm
	<ul> <li>Automatic agents triggered by As- set Manager.</li> </ul>		
General online help	The functioning of the entire application	Online	To access the online help, do one of the following:  1 Press F1 on the keyboard.  2 Select the <b>Help/Index</b> menu.

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