# HP OpenView AssetCenter

Software version: 5.0

## Software assets

## Legal Notices

# Table of Contents

# Chapter 8. Monitoring license compliance of installations

# Chapter 9. Viewing reports and charts . . . . . . . 95

# Chapter 10. Practical cases . . . . . . . . . . . . . 97

# Chapter 11. Glossary . . . . . . . . . . . . . . . . 157

# List of Figures

# List of Tables

# 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 AssetCenter lets you do this.

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

This chapter explains how AssetCenter 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 presents the tasks that must be completed before using 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 AssetCenter with the demonstration database.

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

### Chapter Glossary

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

### Chapter References

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

# 1 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
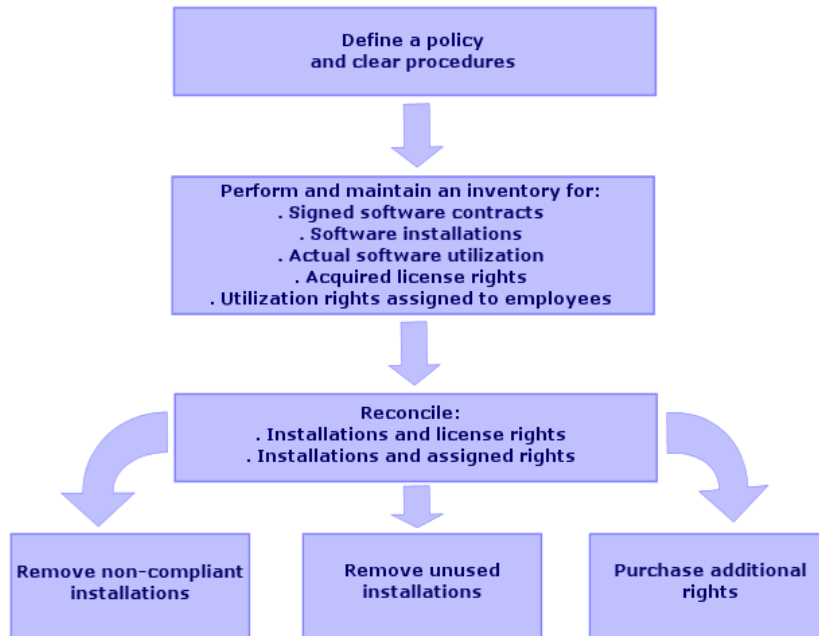


1  Define a software policy and clear procedures:
   - Reaffirm your drive to be compliant with legislation while continuing to meet the best usefulness/economy ratio for the organization
   - Centralize software procurement
   - Define a validation procedure for software purchase requests
   - Define 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 OpenView Enterprise Discovery 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 AssetCenter 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 AssetCenter database (licenses, contracts).

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

Using AssetCenter'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:

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

## How AssetCenter helps you manage software assets

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

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

- Portfolio

- Contracts
- Procurement

AssetCenter is also integrated with Enterprise Discovery, 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).

# 2  Licenses, entitlements, installations, utilizations and contracts

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

## Tables concerned by software management

In AssetCenter the following tables are concerned by software asset management:

**Table 2.1. Tables**

| Table | Use |
|---|---|
| Natures (amNature) | Create natures of:<br>■ Licenses<br>■ Installations/utilizations<br>■ Contracts |
| Models (amModel) | Create models of:<br>■ Licenses<br>■ Installations/utilizations<br>■ Contracts |

| Table | Use |
|---|---|
| Inventoried models (amInventModel) | Mapping between installations/utilizations models from automatic inventory tools and models in the AssetCenter database |
| Portfolio items (amPortfolio) | Create instances:<br>■ Licenses<br>■ Installations/utilizations |
| Assets (amAsset) | Each time a portfolio item corresponding to the following items is created, a corresponding record is created in the Assets table:<br>■ All licenses.<br>■ 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. |
| Software counters (amSoftLicCounter) | Counters enable you to make sure you are in compliance with the software provider and you own internal policies.<br><br>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 license management. |
| Actions (amAction) | This table contains wizards that automate certain tasks linked to software license management. |
| Contracts (amContract) | This table enables you to create:<br>■ Acquisition contracts (linked to licenses) or maintenance contracts (generally linked to installations and sometimes to licenses) when necessary.<br>■ Microsoft Select type master lease contracts.<br>■ 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
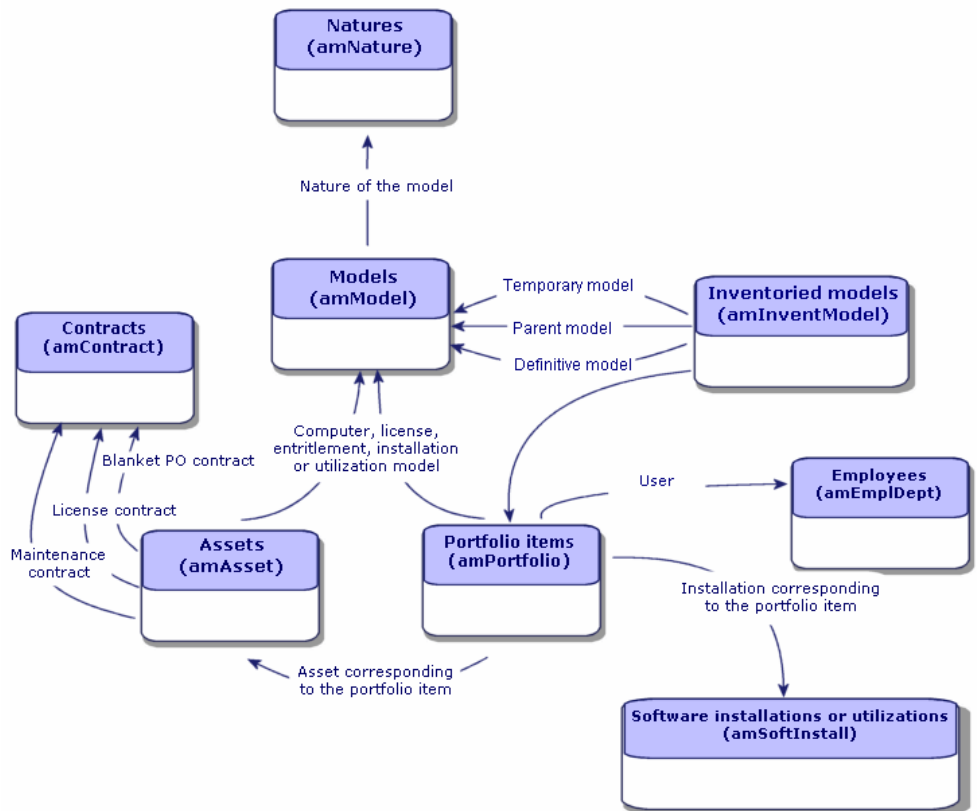
# Link between installations/utilizations and licenses

📝 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 AssetCenter 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 seem the most rigorous method, it is the most realistic since software is most often installed from a CD-ROM or a server, independently of its license.

  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.

# 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 (AssetCenter, SAP, for example).

  ▶ *Portfolio* guide, chapter *Portfolio items*, section *Assets*.

- Collective management for software of little value 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 33])
2 Create the software licenses(▸ Software license management [page 47])
3 Create the named entitlements (▸ Software entitlement management [page 53])
4 Create and/or import the software installations/utilizations (▸ Software installations and utilizations management [page 57])
5 Check compliance of installations/utilizations with respect to licenses (▸ Monitoring license compliance of installations [page 73])
6 Analyze the situation of your company (▸ Viewing reports and charts [page 95])

## 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 has the advantage of guiding you step-by-step in creating the records.

### 🎗 Important:

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

Once you are familiarized with the module, you can also use the links on the navigation bar to directly access records in a given table (for example, the **Portfolio management/ 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.

**Manage software** wizard (sysSamLauncher)

| Manage software page | Manage contracts page | Software licenses and installations page |
|---|---|---|
| Select the contract to work on | Create a new software contract (draft) | Create a software license |
| | Request validation for the contract | Prepare licenses and software installations |
| | Contract validation progress | Create a software license type (model) |
| | Create a completed contract | Create a software license model from an inventoried installation |
| | Modify an existing contract | Create an authorized standard request |
| | Create a new maintenance contract | Create a request from an authorized standard request |
| | Modify a maintenance contract | Modify a software license |
| | Add assets to an existing contract | Solve software compliancy issues |
| | Link invoice lines to the contract | Reconcile unknown installations |
| | | Add an ASP user |
| | | Remove an ASP user |
| | | Flag OEM installations |
| | | Remove/Retire hardware and software |
| | | Request new software licenses |

| Assign software and distribute packages/scripts to users page | Reconcile software licenses page | Create reports and charts page |
|---|---|---|
| Named entitlements | Create a software license management counter | General dashboard |
| Distribution of packages/scripts to computers | Modify a counter | Bottom 10 installed software items |
| Distribution of packages/scripts to locations | Solve software compliancy issues | Top 10 installed software items |
| Distribution of packages/scripts to users | Select counters to refresh | Usage audit per cost center |
| | | Unused software per cost center |

**Results of the software counters** window

| | | Entitlements |
|---|---|---|
| New | | Usage audit |
| Calculate | | Audit |
| License | | Potential software cost savings |
| Installation | | Total software cost |
| Solve | | Licensing status |

# 3   Preliminary tasks

This chapter presents the tasks that must be completed before using the *Software assets* module.

## Insert the appropriate license in the AssetCenter database

Make sure your AssetCenter license allows access to the following modules:

- Portfolio
- Contracts
- Software assets

## Windows client: Activate required modules

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

# Import the line-of-business 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 AssetCenter database*, section *Creating the database structure with AssetCenter Database Administrator*.

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 AssetCenter Database Administrator.
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 AssetCenter installation folder (in general: C:\Program Files\HP OpenView\AssetCenter 5.00 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):

| Fields | Value |
| --- | --- |
| **Generate SQL script / Create database** page | |
| Database | Select the connection to the database into which you wish to import the line-of-business data. |
| Creation | Import line-of-business data. |
| Use advanced creation options | Do not select this option |
| **Creation parameters** page | |

| Fields | Value |
| --- | --- |
| Password | Enter the administrator's password. |
| | Note: |
| | The AssetCenter database administrator is the record in the **Departments and employees** (amEmplDept) table for which the **Name** (Name) field is set to *Admin*. |
| | The database connection login in stored in the **User name** (UserLogin) field. The administration name is *Admin*. |
| | The password is stored in the **Password** 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 AssetCenter

Refer to the *Installation and upgrade* guide.

# 4 License contract management

This section explains how to manage license contracts with AssetCenter.

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  In the **Manage software** page, select the **Create/Modify software contracts** option.

4  Click **Next**.

5  On the **Contract management** page, click **Create a new software contract (Draft)** or **Create a completed contract**.

> ✏ Note:
>
> The **Create a new software contract (Draft)** button is used to create a contract whose **Contract status** (seStatus) field is set to *In preparation*.
>
> The **Create a completed contract** button is used to create a contract whose **Contract status** (seStatus) field is set to *Validated*.
>
> This is the only difference between these two buttons.

6  This starts the *Create a software contract (Draft)* (sysSamCreateSoftContract) wizard.

Populate the wizard according to your needs.

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

The *Create a software contract (Draft)* 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) | ■ *Master lease*: If there is a master lease with the software vendor<br>■ *License*: For the license contract strictly speaking<br>■ *Insurance*: For support contracts, upgrades, software assurance, etc. |
| **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 |

| Field or link | Description |
| --- | --- |
| Tab list (**Licenses** (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.

### Note:

The selected contract remains associated with the wizard, even if you exit the wizard.

The current contract is associated with the AssetCenter 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 In the **Manage software** page, click on the **Select a contract to work on** 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 AssetCenter database.

## Automating contract validation

This section explains how contract validation is automated by AssetCenter 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**

| Events that trigger the workflow scheme | The workflow scheme starts if one of the following events occurs: <br> ■ Record added to the **Contracts** (amContract) table. <br> ■ 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** (amContract) | **Status** (Status) | SAM_WORKFLOW |
| | **Contracts** (amContract) | **Contract status** (seStatus) | *Awaiting approval* (13) or *Awaiting approval for renewal* (33) |
| Is AssetCenter Server required to trigger and run the workflow scheme? | No | | |
| Simplified description of the workflow scheme | 1 The workflow scheme creates a budgetary validation request assigned to a group that is selected by the workflow scheme. <br><br> 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. <br><br> 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. <br><br> 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. <br><br> 3 If the four validation requests are approved, the contract supervisor receives a message. <br><br> 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 contract validation request is created by the *Contract validation* workflow. The person also 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 that 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 contract validation request is created by the *Contract validation* workflow. The person also views these workflow activities. |
| **Composition** tab | |
| 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. |

🗝 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 *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 *Contract 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. |

## Customize the *Contract validation* workflow scheme

### Note:

This operation can only be done using the Windows client.

The *Contract validation* should only be considered as a sample.

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 n type>"``` <br> ```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 ation type> & "%'")``` <br> ```if RetVal=0 Then RetVal=amDbGetLong("SELEC T lGroupId FROM amEmplGroup WHERE BarCode ='sysSam_CNTR_<Validation type>'")``` <br><br> by replacing the *<Validation type>* variable with *FINA*. <br><br> <span style="color:orange">Tip:</span> <br><br> If you wish to customize how another validation group type is selected, you can use the same script, and replace *<Validation type>* with another value: <br> ▪ Billing approval: *BILL* <br> ▪ Legal approval: *LEGA* <br> ▪ 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>*, where *<Validation type>* 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 contract validation request is created by the *Contract validation* workflow. The person also views these workflow activities. |

| Field or link | Value |
|---|---|
| **Composition** tab | |
| 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. |
| **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 *Contract validation* workflow. The person also views these workflow activities. |
| **Composition** tab | |
| 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. |

### 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 associated to the current contract and select the **Create/Modify software contracts** option.
3 Click **Next**.

4  In the **Manage 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 36].)

## 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  In the **Manage software** wizard page, click the **Contract validation progress** button.

5  This displays a screen showing the progress of the *Contract validation* (sysSam_CNTR_APPR) workflow (▶ Overview [page 36]).

## 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 AssetCenter 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 AssetCenter 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
7  Take a look at the workflow task.
8  Click **Yes** to restart the validation circuit or **No** to quit 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 36].)

# 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. In the **Manage contracts** page, click the **Modify an existing contract** button.
5. This starts the *Create a software contract (Draft)* (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

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 contracts** option.
3. Click **Next**.
4. In the **Manage contracts** page, click the **Create a new maintenance contract** button.
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 In the **Manage contracts** page, click the **Modify a maintenance contract** button.

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 In the **Manage contracts** page, click the **Add assets to an existing 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

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 invoice lines. Then select the **Create/Modify software contracts** option.
3  Click **Next**.
4  In the **Manage software** wizard page, click the **Link invoice lines to the contract.** button.
5  This starts the *Add assets to an existing contract* (Ast2Cntr) 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).
2 Add a new record (**New** button).
3 Populate in particular the following fields and links:

| Field | Value |
|---|---|
| Also create (seOverflowTbl) | Nothing |
| Software license | Yes |

### 📝 Note:

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 48]

## 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 **Also create** (seOverflowTbl) field is set to *Nothing* and the **Software license** option is selected |

# 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 In 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 **Create a software 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 type (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 In 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 **Modify a software 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   In 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 **Request new software 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 type (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  In 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  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 the **Assign software and distribute packages/scripts to users** option.
3   Click **Next**.
4   On the **Assign software and distribute packages/scripts to users** page, click **Named entitlements**.

    This starts the *Assign software* (sysSamEntitleUserOrItem) wizard.
5   In the **Assign software licenses...** page, select the **Create a new 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 the **Assign software and distribute packages/scripts to users** option.
3. Click **Next**.
4. On the **Assign software and distribute packages/scripts to users** page, click **Named entitlements**.

   This starts the *Assign software* (sysSamEntitleUserOrItem) wizard.
5. On the **Assign software licenses...** page, select the **Modify an existing 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

## 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 Enterprise Discovery.

### Note:

You can, of course, use other inventory tools. You must make the required changes to the Connect-It scenarios and the AssetCenter Server 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 AssetCenter database.

## Configure your environment to import the results from a database obtained with Enterprise Discovery

1 Perform a software inventory using Enterprise Discovery. Use the version specified in the Connect-It Compatibility Matrix that ships with AssetCenter 5.0.
2 Install Connect-It in the version as provided with AssetCenter 5.0.
3 Start Connect-It.

4  Open the scenario `edac-swnorm.scn` (located in the
   `scenario\ed\ed<Enterprise Discovery version
   number>ac<AssetCenter version number>` sub-folder of the Connect-It
   installation folder) (**File/ Open** menu).

   For example: `C:\Program Files\Peregrine\Connect-It <Version
   number> <language>\scenario\ed\ed2ac50`.

5  Configure the *Peregrine 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 Connect-It.

8  Start AssetCenter Server.

9  Connect to the AssetCenter 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 Enterprise Discovery
      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 AssetCenter Server.


## Configure the *Model normalization* (sysSam_ModelNorm) group.

This group is used to assign workflow schemes from the *Model normalization:
'amInventModel' added* (sysIvtExtModelNew) (▶ Automatic mechanism triggered
when a new record is created in the Inventoried models (amInventModel) table
[page 61]).

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 *Model normalization: 'amInventModel' added* workflow scheme. |
| **Composition** tab | |
| Members (Members) | The members of the group view the workflow schemes created by the *Model normalization: 'amInventModel' added* workflow. |

## Importing the inventory database obtained by Enterprise Discovery

### Importing the inventory database

AssetCenter Server, when running in the background with the appropriate modules activated, automatically imports the information from the Enterprise Discovery 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 AssetCenter database

A portfolio item is created for every computer, computer component and software item identified on the computer.

Let's now take a closer look at software.

For every inventoried software item:

1 Connect-It searches in AssetCenter 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, Connect-It:
   ■ Creates the record.

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

### Note:

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, Connect-It updates the record.

### Note:

The line-of-business data from the *Software assets* module populates the **Inventoried models** (amInventModel) table with the models that correspond to the Enterprise Discovery version given in the Connect-It compatibility matrix that ships with AssetCenter 5.0.

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 (▶ Automatic mechanism triggered when an existing record of the Inventoried models table is linked to a software installation for the first time [page 62].)

2 Connect-It searches in the AssetCenter database if there already is a record in the **Portfolio items** (amPortfolio) 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, Connect-It:
- Creates the record
- Populates the **Models** (amModel) link with the unknown software installation model.

> ### 🖊 Note:
>
> 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, Connect-It updates the record.

3  Connect-It creates or updates the record in the **Software installations or
   utilizations** (amSoftInstall) table which is automatically associated with
   the portfolio item.

## Automatic mechanisms triggered by the import

### Automatic mechanism triggered when a new record is created in the **Inventoried models** (amInventModel) table

When Connect-It adds a record to the **Inventoried models** table, the *Model
normalization: 'amInventModel' added* (sysSam_ExtModelNew) workflow
scheme is automatically launched.

This workflow creates a task assigned to the *Normalize models*
(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 AssetCenter 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 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.

   AssetCenter launches the *Reconcile external software license models*
   (sysSamReconcExtModelWiz) wizard.
5  Populate the **Definitive model** link.
6  Click **OK**.

   AssetCenter associates the record 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.

### Automatic mechanism triggered when an existing record of the **Inventoried models** table is linked to a software installation for the first time

The *Model normalization: 'amPortfolio' modified* (sysSamExtModelSync) workflow is automatically launched in the following cases:

- When 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 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.

This workflow scheme triggers the *Propagate reconciliation of external model* (SYS_RES_MOD_ACT01) action.

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 AssetCenter 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 **Computers** (amComputer) table, **Last software scan** (dtSoftScan) field. |
| Execution conditions of the workflow scheme | No conditions |
| Is AssetCenter Server 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.

An software installation or utilization 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.

### 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 **Also create** field (seOverflowTbl) is set to *Software installations or utilizations* (amSoftInstall). |
| **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. |

## Manually creating a software installation/utilization

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 **Also create** field (seOverflowTbl) is set to *Software installations or utilizations* (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 **No of points** field (lUseCount). |
| | When you use software installation counters (▶ Practical case 1d: Take into account effective software usage [page 134]), you can specify if the installation count should also count the number of points related to each installation/utilization. |
| **Last use** (dtLastUse) | The **Utilization** tab in the software installation/utilization detail gives information on how the software is used. |
| | Among the fields in this tab, the **Last use** field (dtLastUse) may be used by software counters (▶ Practical case 1b: Limit the scope of the counter to a given department [page 129]): At the level of the counter, you specify whether the installation/utilization count takes the last use date into account. |

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.

In the list of portfolio items (**Portfolio management/ Portfolio items** link on the navigation bar), a **Software inst.** tab is present for records that correspond to a software installation/utilization. This tab reproduces the detail of the record from the software installations table that corresponds to this item.

The detail of each software-installation record regroups the information entered in the **Software inst.** tab of the model upon which the installation is based.

# Sending an automatic message when a 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**

| | |
|---|---|
| Events that trigger the workflow | Creation of a new installation/utilization |
| Execution conditions of the workflow scheme | PortfolioItem.Model.seAuthorization = 2 |
| Is AssetCenter Server required to trigger and run the workflow scheme? | No |
| Simplified description of the workflow scheme | A message is sent to the person designated by the *Mail to administrator concerning unauthorized installation* (BstSamUnauthinstallation_found) action. |
| | By default, this person corresponds to the record in the **Departments and employees** (amEmplDept) table for which the **Name** (Name) field is set to *Admin*. |
| | The message is sent to the address given in the **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 | |

| Field or link | Value |
| --- | --- |
| Authorization (seAuthorization) | Non authorized |

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

1 Display the actions (**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 |
| --- |
| **Messaging** tab |
| To (MsgTo) |
| Subject (Subject) |
| Message (memMsgText) |

## 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).
3 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.
3 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    In 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.

---

### Warning:

In order for OEM installations to be excluded from installation counts, you must modify the query associated with the **Scope of the installations or utilizations to be counted** (SoftInstQuery) 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.seType <> 2)
```

---

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  In 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 wizard is associated to the ASP contract 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 wizard is associated to the ASP contract 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  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

AssetCenter 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.)

### 💡 Tip:

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
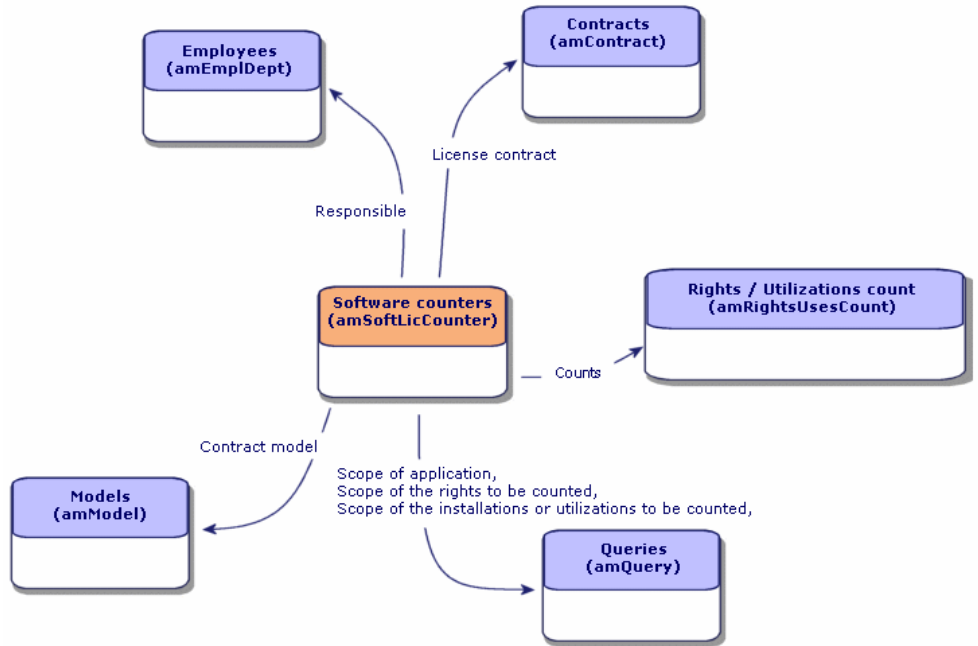
# Figure 8.2. Tables involved in named entitlements

Employees (amEmplDept)

Contracts (amContract)

Authorized contracts

Authorized employees

Assets (amAsset)

Authorized assets

Requests (amRequest)

Standard requests

Named entitlements (amEntitlement)

Portfolio items (amPortfolio)

Authorized portfolio items

Authorized models

Authorized locations

Models (amModel)

Locations (amLocation)
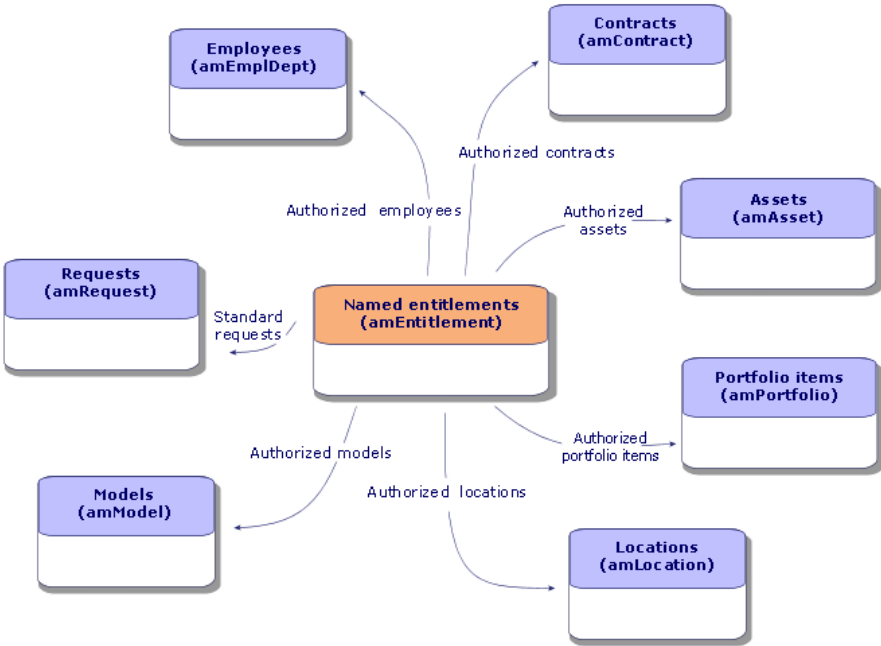
# Figure 8.3. Link between counters, entitlements and portfolio items
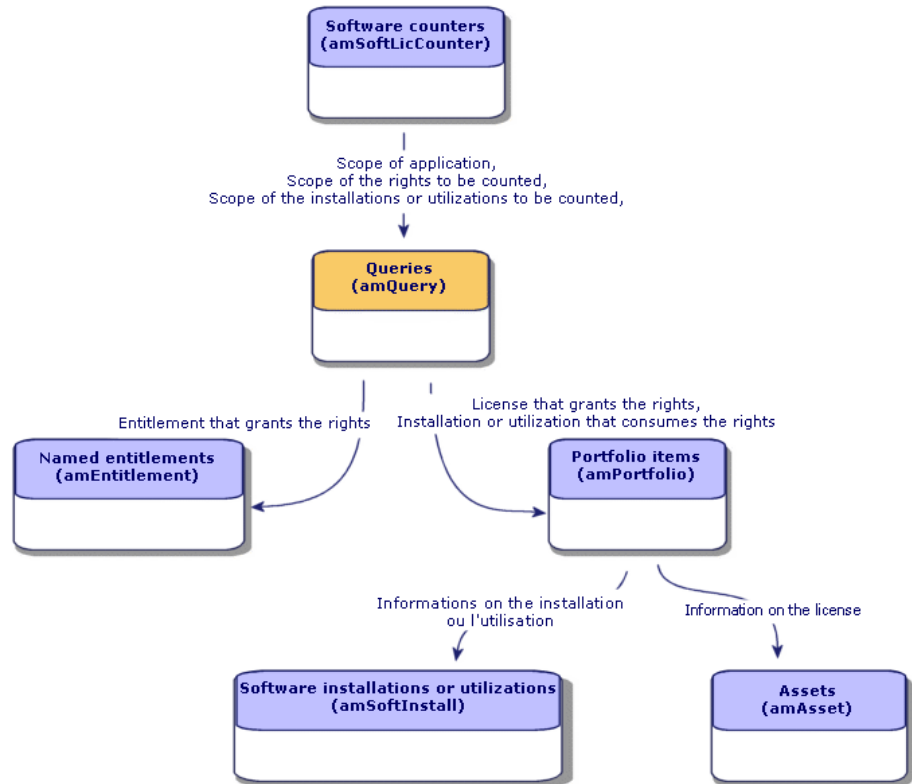


You will notice that there is no direct link between the counters and the objects that are counted. Queries are used to establish this link.

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.

### Warning:

The first page of the *Create a software license management counter...* wizard (*Select how software installations/utilizations are to be counted* page) lets you choose a value from a list.

Depending on the selected value:

- The wizard filters the counters on the next page (*Select a counter template* page) depending on the value of the counter's **Code** (Code) field.
- The wizard filters the license models listed on the *Select software licenses based on software application type* page depending on the value of the license model's **License type** (seSoftLicType) field.

The following is the correspondence between the values to select in the wizard and the values of the counter's **Code** field:

| If you select the following with the wizard... | The wizard keeps the counter models whose **Code** field starts with... |
|---|---|
| Not defined | BST_SAM |
| Per installation or utilization | BST_SAM_PIU |
| Per named workstation | BST_SAM_PNW |
| Per named user | BST_SAM_UACC |
| Per number of concurrent accesses | BST_SAM_PCA |
| By LPAR | BST_SAM_PLP |
| By CPU speed | BST_SAM_PCP |
| Per workstation (work and home) | BST_SAM_PWH |
| Per site | BST_SAM_PSS |
| OEM | BST_SAM_POE |
| Per CPU | BST_SAM_PRO |

### Tip:

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 into your existing database [page 30]).

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 In the **Manage software** page, select the **Reconcile software licenses** option.

3 Click **Next**.

4 In the **Manage contracts** page, click the **Create software reconciliation counters** button.

5 This starts the *Create a software license management counter...* wizard.

Populate the wizard according to your needs.

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

## Method 2: Create a simple counter using the *Create a simple counter* wizard (sysSamSimpleSoftCounterCreate)

This section explains how to create a counter that compares licenses and installations linked to a given model.

Licenses and installations are grouped by employees and departments.

To create a simple counter:

1 Starts the *Create a simple counter...* wizard. (**Portfolio management/ IT/ Licenses/ Create a simple counter...** link on the navigation bar).

2 Populate the wizard according to your needs.

3 Validate your parameters (**Finish** button).

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

---

 Important:

The wizard prompts you to select a license model and an installation model.

However, these models themselves will not be used as the references for counting licenses and installations: The value of the **Technical ref.** field (ModelRef) is used for this.

All models whose **Technical ref.** field have the same values are used.

You must therefore make sure that this field is populated at the level of the license model and the installation model that you select.

Example of a license selection query generated by the wizard:

```
Model.ModelRef = 'PC1 - PowerPoint - Installation'
```

with the **Portfolio items** table (amPortfolio) used as the context.

---

Counters created using the *Create a simple counter...* wizard are excluded from compliance management and cannot be modified using the wizards.

## Method 3: Creating a counter directly

To create a counter directly:

1 Display the counters (**Portfolio management/ 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*.

- 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*.

- **Use metering 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).

🖋 Note:

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.

7 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** (amSoftInstall) | **Counts for** (lUseCount) |
| **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**

| Table | Field |
|---|---|
| **Natures** (amNature) | **Also create** (seOverflowTbl) |
| | **Name** (Name) |
| **Software installations** (amSoftInstall) | **Authorization** (seAuthorization) |
| | **Installation type** (seType) |
| | **Local/Remote** (bLocal) |
| | **Is a software suite component** (bSuiteComponent) |
| **Models** (amModel) | **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** (seSoftLicType) |
| | **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) |
| **Contract entitlements** (amRelEntitlContract) | **Contract** (lCntrId) |
| | **Entitlement** (lEntitlId) |
| **Entitlements of the location** (amRelEntitlLoc) | **Location** (lLocaId) |
| | **Entitlement** (lEntitlId) |
| **Entitlements of the portfolio item** (amRelEntitlPortf) | **Portfolio item** (lPortfolioItemId) |
| | **Entitlement ID** (lEntitlId) |
| **Entitlements** (amRelModelEntitl) | **Model ID** (lModelId) |
| | **Entitlement ID** (lEntitlId) |
| **Employees and departments** (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 78].

### 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 **Reconcile software licenses** option.
     c Click **Next**.
     d On the **Manage contracts** 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

## Counters modified without an 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/ 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.

#### 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 **Reconcile software licenses** option.

  c Click **Next**.

  d On the **Manage contracts** 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**.

> ✐ Note:
>
> 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/ Software counters** link on the navigation bar).

2 Select the counter to update.

3 Click **Calculate**.

> ✐ Note:
>
> 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.

### 💡 Tip:

The records that have been generated by the same calculation have the same values in the **Results identifier** (lResultId) 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
- Uninstalling 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  In the **Manage software** page, select the **Reconcile software licenses** option.
    c  Click **Next**.
    d  In the **Manage contracts** page, click the **Fix irregularities** 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 uninstall the software.

3  Validate the parameters (**Finish** button).

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

## "Previous mode" software counters

### Warning:

This section only applies to the Windows client.

In version 4.3.0 of AssetCenter, the counters have been fully overhauled.

However, so that you can use the counters you have migrated from previous versions of AssetCenter 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 5.0, 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 into your existing database [page 30].

The following is a description of this workflow scheme:

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

| | |
|---|---|
| Events that trigger the workflow | Creation of a new counter |
| | Or modification of one of following fields in the **Software counters** (amSoftLicCounter) table: |
| | ■   No of rights (lLicUseRights) |
| | ■   No of install. (lSoftInstallCount) |
| | ■   Rights count (dLicUseRights) |
| | ■   Installations/Utilizations count (dSoftInstallCount) |
| Execution conditions of the workflow scheme | (lSoftInstallCount > lLicUseRights) OR (dSoftInstallCount > dLicUseRights) |
| Is AssetCenter Server required to trigger and run the workflow scheme? | No |

| | |
|---|---|
| Simplified description of the workflow scheme | A message is sent to the person designated by the action *Mail to administrator concerning licenses overrun* (BstSamLicenses_exceeded). |
| | By default, this person corresponds to the record in the **Departments and employees** (amEmplDept) table for which the **Name** (Name) field is set to *Admin*. |
| | The message is sent to the address specified in the **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 into your existing database [page 30].

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

| | |
|---|---|
| Triggering of the workflow scheme | According to the frequency defined by the calendar of the initial event in the workflow scheme |
| Is AssetCenter Server required to trigger and run the workflow scheme? | Yes |
| Simplified description of the workflow scheme | The workflow scheme executes the action *Calculate all software installations* (BstSam-ComputeAllLicAndInstall), which recalculates all counters. |

## Configuring AssetCenter Server

AssetCenter Server 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 AssetCenter Server performs this task:

1 Start AssetCenter Server.
2 Connect to the AssetCenter 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 AssetCenter Server as background task

AssetCenter Server 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) |

| Field |
| --- |
| 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 90]).

# 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

📝 Note:

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 identified by the paths */Portfolio management/IT/Licenses/* or */Portfolio management/IT/Reports/*.

# 10 Practical cases

## General information and prerequisites

### General information

The practical cases demonstrate how to manage software assets with AssetCenter.

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 AssetCenter 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 into your existing database [page 30].

# 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 (amSoftInstall) |

| 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 AssetCenter 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 intended to a blanket contract.

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

### Main stages of the practical case

## 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 |
| Login (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 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 - Headquarters |
| City (City) | PC4 - Paris |
| | Note: |
| | If the message *Would you like to add the value 'XXX' to itemized list 'YYY'?* is displayed, click **Yes**. |

3 Windows client: Close all windows.

### Creating a file represnting 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:\Temp\Contract.txt.

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. |

| Field | Value |
| --- | --- |
| 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 In the **Manage software** page, select the **Create/Modify software contracts** option.
3 Click **Next**.
4 On the **Manage contracts** page, click the **Create a completed contract** button.

   This triggers the *Create a software contract (Draft)* (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 |
| --- | --- |
| **Enter a software contract** page | |
| From scratch | Yes |
| **Contract type** page | |
| Select the type of contract to create | Microsoft |
| **Microsoft contract** page | |
| Contract number | PC4-MSNUM001 |
| **Who is the reseller for this software contract** page | |
| Name | PC4 - Microsoft |
| New supplier | No |
| **Define vendor details** page | |

| Field or link | Record |
|---|---|
| New contact | Yes |
| **Wizard** page | |
| Family name | PC4 - Kramer |
| Title | PC4 - Sales engineer |
| **Define reseller location** page | |
| New location | Yes |
| **Wizard** page | |
| Location name | PC4 - French Subsidiary |
| City | PC4 - Paris |
| **General contract information** page | |
| Internal contract reference (Ref) | PC4-001 |
| Object | PC4 - Microsoft license contract |
| Reseller reference | PC4-MSREF001 |
| Start | January 1st, 2005 |
| End | December 31, 2005 |
| Notice | 60 days |
| **Financial information** page | |
| Nature of payments | None |
| **Define internal contacts** page | |
| Supervisor | PC4 - Seagul |
| Notification address | /PC4 - Headquarters/ |
| **Key contractual terms and conditions** page | Do not enter anything |
| **Contract documentation and notes** page | Do not enter anything |
| **Summary** page | |
| Choose the step you wish to perform after creating the contract | None |

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 |

| Field or link | Value |
|---|---|
| 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 contract) 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 license from existing software application licenses** list: | Select the *PC4 - PowerPoint - License* record |
| **Populate license information** page | |
| Label (Asset tag) | PC4-001 |
| **Financial information** page | |
| Contracts | PC4-001 (PC4 - Microsoft license contract) |
| **Summary:** page | |

| Field or link | Record |
|---|---|
| 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*

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 In the **Manage contracts** page, click the **Modify an existing contract** button.

This triggers the *Create a software contract (Draft)* (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 |
| **Contract documentation and notes** page | |
| Unique name of the document | PC4 - Contract with ISP |
| Path of document to keep with the contract | C:\Temp\Contract.txt |
| Category of the above document | PC4 - Scanned contract |
| Status of the above document | Validated |
| Click **Add a document** | |
| **Summary** page | |
| Choose the step you wish to perform after creating the contract | None |

7 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 *License* is automatically assigned by the wizard without having to select it. |
| Purpose (Purpose) | PC4 - Microsoft license contract |
| **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 |

| Field or link | Value |
| --- | --- |
| Message | The contract [Ref] expires on [dEnd]. Notice period: [tsNotice] |

   3 Windows client: Close all windows.

### Associating an alarm with the end date

   1 Display the contracts (**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 AssetCenter Server

   1 Start AssetCenter Server (**Start/ Programs/ HP OpenView/ AssetCenter 5.0 <language>/ AssetCenter Server** 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 AssetCenter Server (**File/ Exit** menu).

### Reconnecting to the database as *PC4 - Seagul*

1 Enable the AssetCenter client.
2 Reconnect 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 |

AssetCenter 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 In the **Manage software** wizard page, click the **Link invoice lines to the contract.** 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...** page | |
| Supplier invoices | Select the invoice *PC4-001 PC4 - Microsoft* |
| **Link invoice lines to the contract...** page | |
| Invoice lines | Select the line *PC4-001 1 PC4 - PowerPoint license 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 In the **Manage software** page, select the **Create/Modify software contracts** option.

5 Click **Next**.

6 In the **Manage contracts** page, click the **Create a new maintenance contract** button.

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 contract linked to software contract PC4-001** page | |
| Number | PC4-MAINT001 |
| Object | Support and upgrades |
| Start | January 1, 2006 |
| End | November 30, 2006 |
| Linking assets to the maintenance contract | Yes |
| **Link the assets to the contract** page | |
| Date included | January 1, 2006 |
| Planned removal date | November 30, 2006 |
| List of assets | Select the *PC4-001* record (**Asset tag** field). |

| Field or link | Record |
|---|---|
| **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 *Maintenance* 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 current contract *PC4-001 (PC4 - Microsoft license contract)*. |
| Supervisor (Supervisor) | PC4 - Seagul |
| Number (ContractNo) | PC4-MAINT001 |
| Company (Company) | PC4 - Microsoft |
| Start (dStart) | January 1, 2006 |
| End (dEnd) | November 30, 2006 |
| 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 In the **Manage software** page, select the **Create/Modify software contracts** option.

4  Click **Next**.

5  In the **Manage contracts** page, click the **Modify a maintenance contract** button.

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, 2006 |

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 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

## Steps to carry out

### Creating the validators

1 Display the employees (**Organization/ Employees** link on the navigation bar).
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 - Azeman |
| Title (Title) | CFO |
| | **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:azeman |
| **Profile** tab | |
| Access type (seLoginClass) | Floating |
| Status of the user account (seLoginStatus) | Active |
| Login (UserLogin) | azeman |
| Password (LoginPassword) | Leave empty. |
| Administration rights (bAdminRight) | Yes |

| Field or link | Value |
| --- | --- |
| Name (Name) | Pc3 - Delmar |

| Field or link | Value |
|---|---|
| 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 |
| Login (UserLogin) | delmar |
| Password (LoginPassword) | Leave empty. |
| Administration rights (bAdminRight) | Yes |

| Field or link | Value |
|---|---|
| Name (Name) | Pc3 - Bertini |
| Title (Title) | Legal counsel |
| | **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:bertini |
| **Profile** tab | |
| Access type (seLoginClass) | Floating |
| Status of the user account (seLoginStatus) | Active |
| Login (UserLogin) | bertini |
| Password (LoginPassword) | Leave empty. |
| Administration rights (bAdminRight) | Yes |

| Field or link | Value |
|---|---|
| Name (Name) | Pc3 - Delaney |
| | **Note:** |
| | If the message *Would you like to add the value 'XXX' to itemized list 'YYY'?* is displayed, click **Yes**. |
| Title (Title) | Lawyer |

| Field or link | Value |
|---|---|
| **General** tab | |
| EMail (EMail) | AM:delaney |
| **Profile** tab | |
| Access type (seLoginClass) | Floating |
| Status of the user account (seLoginStatus) | Active |
| Login (UserLogin) | delaney |
| Password (LoginPassword) | Leave empty. |
| Administration rights (bAdminRight) | Yes |

| Field or link | Value |
|---|---|
| Name (Name) | Pc3 - Hawk |
| Title (Title) | CIO |

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:hawk |
| **Profile** tab | |
| Access type (seLoginClass) | Floating |
| Status of the user account (seLoginStatus) | Active |
| Login (UserLogin) | hawk |
| Password (LoginPassword) | Leave empty. |
| Administration rights (bAdminRight) | 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. |

| Field | Value |
|---|---|
| Use integrated NT security | No |

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

3  In the **Manage software** page, select the **Create/Modify software contracts** option.

4  Click **Next**.

5  In the **Manage contracts** page, click the **Create a new software contract (draft)** button.

This triggers the *Create a software contract (Draft)* (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 |
|---|---|
| **Create a software contract (Draft)** page | |
| From scratch | Yes |
| **Contract type** page | |
| Other | Yes |
| **Define contract addendum** page | |
| Do not redefine the external contacts | Yes |
| **General contract information** page | |
| Internal contract reference (Ref) | PC3-001 |
| **Financial information** page | |
| Payment amount | 10000 |
| **Define internal contacts** page | |
| Supervisor | PC3 - Hawk |
| **Key contractual terms and conditions** page | Do not enter anything |
| **Contract documentation and notes** page | Do not enter anything |
| **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 *Pc3 - 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 | |
| Contracts (Contracts) | Add *Pc3 - 001*. |

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

### Customize the *Contract validation* (sysSam_CNTR_APPR) workflow scheme

📝 Note:

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.

9  Display the detail of the **Assignee** link (click on the magnifier)

10  Modify the following fields and links:

| Field or link | Value |
|---|---|
| Context (ContextTable) | Contracts (amContract) |
| Type (seType) | Calculated group |
| Script (memScript) | `Const STRJURI="CNTRJURI"`<br>`RetVal=amDbGetLong("SELECT g.lGroupId FROM`<br>`amRelEmplGrpCntr r, amEmplGroup g WHERE r.`<br>`lGroupId=g.lGroupId AND r.lCntrId="& [lCnt`<br>`rId] & " AND g.BarCode LIKE '" & STRJURI &`<br>`"%'")`<br>`if RetVal=0 Then RetVal=amDbGetLong("SELEC`<br>`T lGroupId FROM amEmplGroup WHERE BarCode`<br>`='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 AssetCenter 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 AssetCenter displays the following message *You have unread messages. Do you want to read them now?*.

12 Display the unread messages (**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 AssetCenter 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).

### Note:

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

4 Select the *Contract validation: Budget* 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. |

| Field | Value |
|---|---|
| Use integrated NT security | No |

2  AssetCenter 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. |
| Use integrated NT security | No |

2  AssetCenter 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 In the **Manage software** page, select the **Create/Modify software contracts** option.

8 Click **Next**.

9 Click on the **Contract validation progress** 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 |
|---|---|
| Title (Title) | PC1 - Marketing |

| Field or link | Value |
|---|---|
| Title (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 | |

| Field or link | Value |
| --- | --- |
| 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 (seSoftLicType) | Per named workstation |

| Field or link | Value |
| --- | --- |
| Name (Name) | PC1 - PowerPoint - Installation |
| Nature (Nature) | PC1 - Installation |
| 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 |

| Field or link | Value |
|---|---|
| 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 In the **Manage software** page, select the **Create/Modify software licenses and installations** option.

5 Click **Next**.

6 In the **Licenses and software installations** page, click the **Create a software 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 from existing software application licenses | Select the *PC1 - PowerPoint - License* record |
| **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 | |

| Field or link | Record |
| --- | --- |
| Choose the step you wish to perform after creating the software license | None |

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 In the **Manage software** page, select the **Reconcile software licenses** option.

3 Click **Next**.

4 In the **Reconcile software licenses** page, click the **Create a software license management counter** button.

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

| Field or link | Record |
| --- | --- |
| **Select how software installations/utilizations are to be counted** page | Select the *Per named workstation* option |
| **Select a counter template** page | |
| Counter templates | Select the *Installations, entitlements and actual utilization by cost center (Type: per named workstation)* model |
| Use this counter for global software compliance management | No |
| Do not publish in the compliance report | Yes |
| **Select software licenses based on software application type** page | Select the *PC1 - PowerPoint - License* model. |
| **Select software installations based on software application type** page | Select the *PC1 - PowerPoint - Installation* model. |
| **Select cost centers covered by the entitlement** page | Select the *Pc1 - Marketing* cost center. |
| **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 entitlement** page | Select the *PC1 - Marketing* record |
| **Define the counter's scope of application** page | |
| Limit counter's scope of application | No |

| Field or link | Record |
|---|---|
| **Enter the other parameters of the counter** page | |
| Counter name | PC1 - PowerPoint - Simple count of licenses and installations |
| No contract | Yes |
| **Create a software license management counter...** page | Select the *Display/Adjust/Calculate counts* option |

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/ 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 129] 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 | |

| Field or link | Value |
|---|---|
| License type (seSoftLicType) | 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 **Reconcile software licenses** option.
3. Click **Next**.
4. In the **Reconcile software licenses** page, click the **Create a software license management counter** button.
5. Populate the fields and links shown in the following table:

| Field or link | Record |
|---|---|
| **Select how software installations/utilizations are to be counted** page | Select the *Per installation or utilization* option. |
| **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 management | No |
| Do not publish in the compliance report | Yes |
| **Select software licenses based on software application type** page | Select the *PC1 - PowerPoint - License* model. |
| **Select software installations based on software application type** page | Select the *PC1 - PowerPoint - Installation* model. |
| **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 entitlement** page | Select the *PC1 - Marketing* record |
| **Define the counter's scope of application** page | |
| Limit counter's scope of application | Yes |
| **Define the counter's scope of application** page | |
| Employees and departments | Select the *Pc1 - Marketing* record |
| Select entire department | Yes |
| **Enter the other parameters of the counter** page | |
| Counter name | PC1b - PowerPoint installations in the Marketing department |
| No contract | Yes |

| Field or link | Record |
|---|---|
| **Create a software license management counter...** page | Select the *Display/Adjust/Calculate counts* option |

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 (seSoftLicType) | 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 |

| Field or link | Value |
| --- | --- |
| 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 **Create** 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 In the **Manage software** page, select the **Reconcile software licenses** option.

3 Click **Next**.

4 In the **Reconcile software licenses** page, click the **Create a software license management counter** button.

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

| Field or link | Record |
| --- | --- |
| **Select how software installations/utilizations are to be counted** page | Select the *Per named user* option. |
| **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 application type** page | Select the *PC1c - PowerPoint - License* model. |
| **Select software installations based on software application type** page | Select the *PC1c - PowerPoint - Installation* model. |

| Field or link | Record |
|---|---|
| **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 entitlement** page | Select the *PC1c - Named user rights for Power-Point* entitlement |
| **Define the counter's scope of application** page | |
| Limit counter's scope of application | No |
| **Enter the other parameters of the counter** page | |
| Counter name | PC1c - Named user rights for PowerPoint |
| No contract | Yes |
| **Create a software license management counter...** page | Select the *Display/Adjust/Calculate counts* option |

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

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 **Reconcile software licenses** option.
3  Click **Next**.
4  On the **Reconcile software licenses** 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 executing the wizard | Yes |

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, uninstall it.

# 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:
  - 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 (amSoftInstall) |
| 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 **Yes**. |
| Symbol (Symbol) | Pts |
| | Note: |
| | If the message *Would you like to add the value 'XXX' to itemized list 'YYY'?* is displayed, click **Yes**. |
| 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:

| Field or link | 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. |
| Label (TextLabel) | PC2SelectPointsL |

| Field or link | 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. |
| **Input** tab | |
| Input type (seDataType) | Numeric |
| Unit (Unit) | 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 third year of the contract (with less than one year of Software Assurance left). |
| Label (TextLabel) | PC2SelectPointsSA1 |
| **Input** tab | |
| Input type (seDataType) | Numeric |
| Unit (Unit) | 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 | 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). |
| Label (TextLabel) | PC2SelectPointsSA3 |
| **Input** tab | |
| Input type (seDataType) | Numeric |

| 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 first year of the contract (with 2 to 3 years of Software Assurance left). |
| 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 |

| 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 |
| 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 |

| Field or link | Value |
| --- | --- |
| Name (Name) | PC2 - Microsoft Select - Pool |
| Brand (Brand) | Microsoft |
| **General** tab | |

| Field or link | Value |
| --- | --- |
| Nature (Nature) | PC2 - Blanket PO contract |

| Field or link | Value |
| --- | --- |
| Name (Name) | PC2 - Excel - Installation |
| Brand (Brand) | Microsoft |
| **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, 2006 |
| End (dEnd) | December 31, 2006 |

| 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 - Acquisitions |
| 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, 2006 |
| End (dEnd) | December 31, 2006 |
| **Features** tab | |

| Field or link | Value |
|---|---|
| | Blanket PO contact covering the acquisition of new licenses in the *Applications* pool. |
| PC2SelectPointsTarget | 1500 |

| Field or link | Value |
|---|---|
| | Maintenance contract covering Software Assurance for the licenses in the *Applications* 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, 2006 |
| End (dEnd) | December 31, 2006 |

### 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 |

| Field or link | Value |
|---|---|
| | Excel licenses acquired before the start of the Select contract. |
| **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 *PC2 - Computer* record from the list |
| **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 (**Create** button) | |
| **Distributors** | Add a link to *Microsoft* |
| Default supplier (DefSuppCat) | Microsoft |

### Create the references

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:

| Field or link | Value |
| --- | --- |
| Purpose (Purpose) | PC2 - License + Excel Software Assurance |
| Number (PONumber) | PC2-01 |

| Field or link | Value |
| --- | --- |
| Purpose (Purpose) | PC2 - Project license |
| Number (PONumber) | PC2-02 |

| Field or link | Value |
| --- | --- |
| Purpose (Purpose) | PC2 - Excel Assurance |
| 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 |

| Field or link | Value |
| --- | --- |
| Reference (CatalogRef) | Select the *PC2 - Excel - License (Microsoft) - PC2 - Excel - License* record from the list |

> 💡 **Tip:**
> 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** (UsedReqLineCntr) field | Click |
| Drop-down list under the **Quantity** (fQty) field | Contract used |
| Field to the right of the drop-down list with the *Used contract* value | Select the *PC2MSA2 (PC2 - Microsoft Select - 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:

| Field or link | Value |
|---|---|
| Contract utilization (bCntrUtilization) | Yes |
| Quantity (fQty) | 1 |
| Icon to the right of the **Contract requested** (UsedReqLineCntr) field | Click |
| Drop-down list under the **Quantity** (fQty) field | Contract used |
| Field to the right of the drop-down list with the *Used contract* value | Select the *PC2MSA2 (PC2 - Microsoft Select - Applications - Assurance)* record from the list |
| Icon to the right of the **Port. item requested** (UsedReqLineAsset) field | Click |
| Drop-down list under the drop-down list with the *Used contract* value | Asset used |
| Field to the right of the drop-down list with the *Asset used* value | 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 | |
| Sent (dtSent) | March 31, 2006 |

   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, 2006 |

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 |

| Field or link | Value |
|---|---|
| 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:

| 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 >= #" & [dStart] & "# AND POrder.dtSent <= #" & [dEnd] & "#"*: 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).
- *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 |

| Field or link | Value |
| --- | --- |
| Script (Calculated-field script) | RetVal = AmDbGetDouble("SELECT SUM(Asset.fTotalQty * Asset.Model.fv_PC2SelectPointsSA1) 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_PC2SelectPointsSA2) FROM amAstCntrDesc 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_PC2SelectPointsSA3) FROM amAstCntrDesc WHERE lCntrId = " & [lCntrId] & " 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 **lCntrId** 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*#.

- *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 qty.* (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

### Note:

This operation can only be done using the Windows client.

You must use AssetCenter Database Administrator 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 queries 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) |

| Field or link | Value |
|---|---|
| | Identification of the cost center for which we will account for license rights and installations. |
| **Query** tab | |
| Query (memQueryText) | Title = 'PC2 - National Marketing' |

| Field or link | Value |
|---|---|
| | Identification of Excel licenses |
| Name (Name) | PC2 - Excel - Licenses |
| Table (TableName) | Portfolio items (amPortfolio) |
| **Query** tab | |
| Query (memQueryText) | Model.Name = 'PC2 - Excel - License' |

| 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/ 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 |
| Not used for compliance (bInternal) | Yes |
| 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) |
| Scope of the rights to be counted (LicQuery) | PC2 - Excel - Licenses |

| Field or link | Record |
|---|---|
| Rights -> Group By link (LicGroupBy) | CostCenter |
| | Note: |
| | AssetCenter 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 |
| Installations/Utilizations -> Group By link (InstGroupBy) | Parent.CostCenter |
| | Note: |
| | AssetCenter 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 |
| Installations/Utilizations calculation formula (InstCountSQL) | Countdistinct(lParentId) |

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.

 Note:

You can create a counter for Project in the same way.

# 11 Glossary

This section proposes a glossary of terms used in software asset management.

### Note:

The terms do not appear in alphabetical order.

## 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 AssetCenter 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 AssetCenter.

Doing this provides you with a simple and effective may 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.

# 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 *Tail-oring* guide, part 1 *Customizing client computers*, chapter *Customiz-ing a client work-station*, section *Activating the modules* |

| Menu and navigation bar link | Table that the menu accesses (label and SQL name) | Dedicated tabs, fields or links | Comments | Section of the guide to consult |
|---|---|---|---|---|
| **Portfolio/ Portfolio items** menu<br><br>**Portfolio management/ Portfolio items** link | Portfolio items (amPortfolio) | ■ **Software inst.** tab<br>■ **Utilization** tab<br>■ **License** tab | | ■ Method 2: Using the menus [page 49]<br>■ Method 2: Using the menus [page 50] |
| **Portfolio/ Assets and batches** menu<br><br>**Portfolio management/ Assets** link | Assets (amAsset) | ◆ **License** tab | | |
| **Portfolio/ Software installations and utilizations** menu<br><br>**Portfolio management/ IT/ Software installations** link | Software installations or utilizations (amSoftInstall) | ◆ All | | Software installations and utilizations management [page 57] |
| **Portfolio/ Natures** menu<br><br>**Portfolio management/ Natures** link | Natures (amNature) | ■ **Also create** field (OverflowTbl)<br>■ **Has software installed** field (bHasSoftInstall)<br>■ **License** field (bSoftLicense) | | ■ Manually creating a software installation/utilization [page 64]<br>■ Create a software license nature [page 47] |

| Menu and navigation bar link | Table that the menu accesses (label and SQL name) | Dedicated tabs, fields or links | Comments | Section of the guide to consult |
|---|---|---|---|---|
| **Portfolio/ Models** menu<br><br>**Portfolio management/ Models** link | Models (amModel) | ■ **Software inst.** tab<br>■ **License** tab | | ■ Manually creating a software installation/utilization [page 64]<br>■ Method 2: Using the menus [page 48] |
| **Portfolio/ Named entitlements** menu<br><br>**Organization/ Named entitlements** link | Named entitlements (amEntitlement) | ◆ All | | Software entitlement management [page 53] |
| **Software/ Software asset management** menu<br><br>**Portfolio management/ IT/ Licenses/ Manage software** link | Does not apply. | Does not apply. | Triggers the *Manage Software* wizard. | How to create records [page 25] |
| **Software/ Dashboard** menu<br><br>**Portfolio management/ IT/ Licenses/ Software dashboard** link | Does not apply. | Does not apply. | Displays a reports dashboard. | Method: Using the links on the navigation bar [page 95] |

| Menu and navigation bar link | Table that the menu accesses (label and SQL name) | Dedicated tabs, fields or links | Comments | Section of the guide to consult |
|---|---|---|---|---|
| **Software/ Definitive Software library** menu <br><br> **Portfolio management/ IT/ Licenses/ Definitive Software Library** link | Models (amModel) | ◆ **Software inst.** tab | Displays the list of records in the **Models** table (amModel) linked to a nature whose **Also create** field (OverflowTbl) is set to *Software installations or utilizations (amSoftInstall)*. | |
| **Portfolio management/ IT/ Licenses/ Inventoried software keys** link | Inventoried models (amInventModel) | ◆ All | | Result of the import in the AssetCenter database [page 59] |
| **Software/ Results of the software counters** menu. <br><br> **Portfolio management/ Results of the software counters** link | Software counters (amSoftLicCounter) | ◆ All | Displays the list of all counters that are not models, and also displays the results of the selected counter. <br><br> Can also be used to recalculate the counts, modify counters using wizards, and solve irregularities between license rights and installations/utilizations. | Updating the results of a software counter [page 86] |
| **Software/ Software counters** menu <br><br> **Portfolio management/ Software counters** link | Software counters (amSoftLicCounter) | ◆ All | | Method 3: Creating a counter directly [page 81] |

| Menu and navigation bar link | Table that the menu accesses (label and SQL name) | Dedicated tabs, fields or links | Comments | Section of the guide to consult |
|---|---|---|---|---|
| **Contracts/ Contracts** menu<br><br>**Contracts/ Contracts** link | Contracts (am-Contract) | ◆ **Licenses** tab | | Method 2: Using the menus [page 34] |
| **Contracts/ Master leases** menu<br><br>**Portfolio management/ IT/ Licenses/ Contracts** link | Contracts (am-Contract) | ◆ **Licenses** tab | | Method 2: Using the menus [page 34] |
| **Tools/ Actions/ Edit** menu<br><br>**Administration/ Actions** link | Actions (amAction) | ◆ All | | Refer to the *User interface* guide, chapter *Reference information*, section *Actions*. |
| **Tools/ Actions/ <Name of action>** menu<br><br>Multiple locations on the navigation bar depending on the action's functional domain. | Does not apply. | Does not apply. | Proposes the actions that are either non-contextual or whose contexts are active.<br><br>Enables you to trigger the selected action. | Actions and wizards [page 173] |
| **Tools/ Customize toolbar** menu | Does not apply. | Does not apply. | Enables you to add icons to or drop icons from the toolbar (*Portfolio* category). | Windows client toolbar icons [page 167] |
| **Tools/ Reporting/ Reports** menu<br><br>**Administration/ Reporting/ Reports** link | Reports (amReport) | ◆ All | | Reports and forms [page 180] |

| 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 |
|---|---|---|---|---|
| **Tools/ Report-ing/ Forms** menu<br><br>**Administra-tion/ Report-ing/ Internal forms** link | Forms (amForm) | ◆ All | | Reports and forms [page 180] |
| **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.<br><br>This task is re-served for the ad-ministrator. This is because these tables are not usually modified directly. | Refer to the *User interface* guide, chapter *Record lists*, chapter *Us-ing lists*. |
| **Administra-tion/ Itemized lists** menu<br><br>**Administra-tion/ System/ Itemized lists** menu | Itemized lists (amItemizedList) | ◆ All | | Itemized lists [page 171] |
| **Administra-tion/ Counters** menu<br><br>**Administra-tion/ System/ Counters** link | Counters (am-Counter) | ◆ All | | Counters [page 172] |
| **Administra-tion/ Calcu-lated fields** menu<br><br>**Administra-tion/ System/ Calculated fields** link | Calculated fields (amCalcField) | ◆ All | | Calculated fields [page 172] |

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 | ▪ Create a software license [page 48] ▪ Manually creating a software installa- tion/utilization [page 64] |

| 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 | ■ Create a software license model [page 48]<br>■ Creating software installation/utilization model [page 64] |
| Natures | amNature | Portfolio management/ Natures | ■ Create a software license nature [page 47]<br>■ Creating a software installation/utilization nature [page 63] |
| *Tables specific to software* | | | |
| Contracts | amContract | Contracts/ Contracts | License contract management [page 33] |
| Named entitlements | amEntitlement | Organization/ Named entitlements | Create a named entitlement for a license [page 53] |
| Software counters | amSoftLicCounter | Portfolio management/ Software counters<br><br>**Administration / List of screens** menu, **Software counters (previous format)** line | Monitoring license compliance of installations [page 73] |
| Rights / Utilizations count | amRightsUsesCount | **Administration / List of screens** menu, **Rights / Utilizations count** line | Periodical cleaning [page 88] |
| Software installations or utilizations | amSoftInstall | Portfolio management/ Software installations | Software installations and utilizations management [page 57] |
| Inventoried models | amInventModel | Portfolio management/ IT/ Licenses/ Inventoried software keys | Result of the import in the AssetCenter database [page 59] |
| Installations to create | amModelSoftInfo | **Administration / List of screens** menu, **Installations to create** line | |

# Relationships between tables

The *Software assets* module uses numerous tables in the AssetCenter 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: AssetCenter 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 (amLocation) | | | |
| Departments and employees (amEmplDept) | Locations (amLocation) | | |
| Contracts (amContract) | Employees and departments (amEmplDept) | | |

| Table (label and SQL name) | Tables to populate beforehand (label and SQL name) | Mandatory values | Automatically created records |
|---|---|---|---|
| Nature (am-Nature) | | **Create** (sebasis): *Portfolio item* | |
| | | **Also create** (seOverflowTbl): *(No table)* | |
| | | **Management constraint** (seMgtConstraint): *Unique asset tag* | |
| | | **License** (bSoftLicense): *Yes* | |
| | | **Create** (sebasis): *Portfolio item* | |
| | | **Also create** (seOverflowTbl): *Software installations or utilizations (amSoftInstall)* | |
| | | **Management constraint** (seMgtConstraint): *Free* | |
| Models (amModel) | Nature (amNature) | | |
| Portfolio items (amPortfolio) | Models (amModel) | | ■ Asset (amAsset)<br>■ Software installations or utilizations (amSoftInstall)<br>■ Rights / Utilizations count (amRightsUsesCount) |
| Named entitlements (amEntitlement) | Departments and employees (amEmplDept) | | |
| Queries (amQuery) | | | |

| Table (label and SQL name) | Tables to populate beforehand (label and SQL name) | Mandatory values | Automatically created records |
|---|---|---|---|
| Counters (amCounter) | <ul><li>Departments and employees (amEmplDept)</li><li>Models (amModel)</li><li>Queries (amQuery)</li><li>Portfolio items (amPortfolio)</li><li>Named entitlements (amEntitlement)</li></ul> | | Rights / Utilizations count (amRightsUsesCount) |

## 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 (amSoftLicCounter) | Nature (Type) | amSLCountNature |
| Software installations or utilizations (amSoftInstall) | Language (Language) | amLanguage |
| Software installations or utilizations (amSoftInstall) | Operating system (SoftOS) | amOS |
| Software installations or utilizations (amSoftInstall) | Status (Status) | amSoftInstStatus |
| Contracts (amContract) | Nature (Nature) | amCntrNature |
| Contracts (amContract) | 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 installations count | sysSamOfficeInst | Portfolio items (amPortfolio) | Programming |
| Productivity software license count | sysSamOfficeLic | Portfolio items (amPortfolio) | Programming |
| Utilization-points count | sysSamUses | Portfolio items (amPortfolio) | Programming |
| License-points count | sysSamLicences | Portfolio items (amPortfolio) | Programming |

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... | sysSamCreateSoftwareCounter | Wizard | | Method 1: Create a counter using the Create a software license management counter... (sysSamCreateSoftwareCounter) wizard [page 78] |
| Create a simple counter | sysSamSimpleSoftCounterCreate | Wizard | | Method 2: Create a simple counter using the Create a simple counter wizard (sysSamSimpleSoftCounterCreate) [page 80] |
| Calculate all software installations | BstSamComputeAllLicAndInstall | Script | | Main features of the Periodic verification of licenses workflow scheme [page 91] |
| Software dashboard | BstSamDashBoard | Dashboard | | Customizing the dashboard [page 95] |

| 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 |
|---|---|---|---|---|
| Mail to administrator concerning licenses overrun | BstSamLicenses_exceeded | Messaging | amSoftLicCounter | Sending an automatic message in case of license overrun [page 90] |
| Missing software assignment | BstSamMissingSoftware | Script | amComputer | Flagging software missing from the last computer inventory [page 62] |
| Mail to administrator concerning unauthorized installation | BstSamUnauthinstallation_found | Messaging | amSoftInstall | Sending an automatic message when a unauthorized installation occurs [page 66] |
| Add an ASP user | sysSamAddAspUsers2Cntr | Wizard | | Adding a user to the current ASP contract [page 70] |
| Create a software license type (model)... | sysSamCreateLicModel | Wizard | | Create a software license [page 48] |
| Create a software license model from installations... | sysSamCreateLicModFromInst | Wizard | | Create a software license [page 48] |
| Create a new software license... | sysSamCreateLicpfi | Wizard | | ■ Method 1: Using the Manage software wizard (sysSamLauncher) [page 48] ■ This starts the Create a new software license (sysSamCreateLicpfi) wizard. [page 48] |

| 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 request on named entitlement... | sysSamCreateReqFromEntitledTempl | Wizard | | Method 1: Using the Manage software wizard (sysSamLauncher) [page 50] |
| Create a software contract (Draft)... | sysSamCreateSoftContract | Wizard | | ■ Creating a license contract [page 33]<br>■ Modifying a license contract [page 43] |
| Delete an ASP user... | sysSamDelAspUsersFromCntr | Wizard | | Removing a user from the current ASP contract [page 70] |
| Flag OEM installations... | sysSamFlagOEMInst | Wizard | | Flagging installations as OEM installations [page 69] |
| Select your current software contract... | sysSamGetEnv | Wizard | | Selecting the current contract in the Manage software wizard (sysSamLauncher) [page 35] |
| Solve software compliancy issues... | sysSamIdentifyIllegalInstall | Wizard | | Processing irregularities between installations/utilizations and licenses [page 88] |
| Manage software... | sysSamLauncher | Wizard | | How to create records [page 25] |
| Prepare licenses and software installations... | sysSamLicenseProcess | Wizard | | ■ Create a software license [page 48]<br>■ Method 1: Using the Manage software wizard (sysSamLauncher) [page 50] |
| Link invoice lines to the contract... | sysSamLinkInvoices2Cntr | Wizard | | Link invoice lines to the current contract [page 46] |

| 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 |
|---|---|---|---|---|
| Recalculate rights and installations | sysSamReCalcCounters | Wizard | | Processing irregularities between installations/utilizations and licenses [page 88] |
| Reconcile external software license models... | sysIvtReconcExtModelWiz | Wizard | amInventModel | Automatic mechanism triggered when a new record is created in the Inventoried models (amInventModel) table [page 61] |
| Request contract validation... | sysSamReqContractApproval | Wizard | | Requesting validation for the current contract [page 41] |
| Propagate reconciliation of external model | SYS_RES_MOD_ACT01 | Script | amInventModel | Automatic mechanisms triggered by the import [page 61] |
| Modify the list of installation models to take into account... | sysSamAddInst2Counter | Wizard | amSoftLicCounter | Modifying software counters [page 85] |
| Modify the list of license models to take into account... | sysSamAddLic2Counter | Wizard | amSoftLicCounter | Modifying software counters [page 85] |
| Define or redefine the counter's scope of application... | sysSamAddScope2Counter | Wizard | amSoftLicCounter | Modifying software counters [page 85] |
| Request software licenses... | sysSamCreateLicReq | Wizard | | Request new software licenses [page 50] |
| Assign software... | sysSamEntitleUserOrItem | Wizard | | Create a named entitlement for a license [page 53] |

| 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 a software license... | sysSamModifyLicpfi | Wizard | | Modify a software license [page 49] |
| Reconcile unknown installations with known software installations... | sysSamNormalizeModels | Wizard | | Reconcile unknown installations [page 68] |

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 licenses available | BST_SAM01 | amSoftLicCounter | Sending an automatic message in case of license overrun [page 90] |
| Periodic verification of licenses | BST_SAM02 | amSoftLicCounter | Automate periodical calculation of the software counters [page 91] |

| 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 |
|---|---|---|---|
| Installation not authorized | BST_SAM03 | amSoftInstall | Sending an automatic message when a unauthorized installation occurs [page 66] |
| Detection of software missing from last scan | BST_SAM20 | amComputer | Flagging software missing from the last computer inventory [page 62] |
| Contract validation | sysSam_CNTR_APPR | amContract | Overview [page 36] |
| Normalize models: 'amInventModel' resolved | sysIvtExtModelEnd | amInventModel | Automatic mechanism triggered when a new record is created in the Inventoried models (amInventModel) table [page 61] |
| Normalize models: 'amInventModel' added | sysIvtExtModelNew | amInventModel | Automatic mechanism triggered when a new record is created in the Inventoried models (amInventModel) table [page 61] |
| Normalize models: 'amPortfolio' modified | sysIvtExtModelSync | amPortfolio | Automatic mechanism triggered when an existing record of the Inventoried models table is linked to a software installation for the first time [page 62] |

For further information on workflow, refer to the *Advanced use* guide, *Workflow* chapter.

You can create new workflow schemes or customize existing workflow schemes.

# AssetCenter Server modules

Certain AssetCenter Server modules are specific to the *Software assets* module.

To access the AssetCenter Server modules:

1  Launch AssetCenter Server.
2  Connect to your AssetCenter database.
3  Select the **Tools/ Configure modules** menu.

**Table 12.8. AssetCenter Server 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 AssetCenter Server modules, consult the *Administration* guide, chapter *AssetCenter Server*, section *Configuring the modules monitored by AssetCenter Server*.

## *System data* and *Line-of-business data*

AssetCenter 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 AssetCenter 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 AssetCenter.

### *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 AssetCenter 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 AssetCenter demonstration database.

The *line-of-business data* is included in your working database if you select this option with AssetCenter Database Administrator.

▶ Import the line-of-business into your existing database [page 30].

## Reports and forms

AssetCenter is provided with forms and reports. Certain of these forms and 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 AssetCenter Database Administrator.

### 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*.

### Importing and identifying forms specific to the *Software assets* module

To find out how to import forms, refer to the *Advanced use* guide, chapter *Forms*, section *Installing preconfigured forms into your working database*.

To identify the forms specific to the *Software assets* module, refer to the *Advanced use* guide, chapter *Forms*, section *Identifying forms specific to a given module*.

## Background processes

For more information on the automatic background processes executed by AssetCenter, consult the *Database structure* guide. For each table discussed in this guide, you will find a *Background processes* section.

▶ Tables [page 167].

## API

Certain AssetCenter 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 client computers*, chapter *Using views*.

## Other documentation

This guide only provides information directly related to the *Software assets* module.

To obtain associated information not covered in this guide, we recommend that you read the following documents:

**Table 12.9. Other documentation - list**

| Document | Contents | Format | Location in the AssetCenter installation folder |
|---|---|---|---|
| Installation and upgrade | ◆ Installation of AssetCenter | Printed | \doc\pdf\*InstallationAndUpgrade*.pdf |
| | | Online | \doc\chm\install.chm |
| Core tables | ◆ Management of locations and employees | Printed | \doc\pdf\CommonTables*.pdf |
| | | Online | \doc\chm\commontables.chm |
| User Interface | ◆ General interface of the application | Printed | \doc\pdf\*UserInterface*.pdf |
| | | Online | \doc\chm\userinterface.chm |
| Portfolio | ◆ Management of natures, models, portfolio items and assets | Printed | \doc\pdf\*Portfolio*.pdf |
| | | Online | \doc\chm\portfolio.chm |

| Document | Contents | Format | Location in the AssetCenter installation folder |
|---|---|---|---|
| Administration | ■ Use of wizards<br>■ Customization of fields<br>■ Use of calculated fields | Printed | `\doc\pdf\*Administration*.pdf` |
| | | Online | `\doc\chm\administration.chm` |
| Advanced use | ■ Itemized-list management<br>■ Creation of scripts | Printed | `\doc\pdf\*AdvancedUse*.pdf` |
| | | Online | `\doc\chm\advanceduse.chm` |
| Context-sensitive help for fields and links | ◆ Use of database fields and links | Online | To access contextual help on a field or link:<br>1 Select a field or link.<br>2 Perform one of the following actions:<br>  ■ Right-click and select **Help on this field** from the shortcut menu.<br>  ■ Press *Shift* and *F1* simultaneously on the keyboard.<br>  ■ Select the **Help/Help on this field** menu. |
| Programmer's reference | ◆ Use of APIs | Printed | `\doc\pdf\*ProgrammersReference*.pdf` |
| | | Online | `\doc\progref.chm` |
| Database structure | ■ List of the database's tables, fields, links and indexes<br>■ Automatic agents triggered by AssetCenter. | Text file | ■ `doc\infos\database.txt`<br>■ `\infos\tables.txt` |
| | | Online | `\doc\chm\dbstructure.chm` |
| General online help | ◆ The functioning of the entire application | Online | To access the online help, do one of the following:<br>1 Press *F1* on the keyboard.<br>2 Select the **Help/ Index** menu. |

# Index