

Symantec™ Asset  
Management Suite 8.1  
powered by Altiris™  
technology User Guide



# Symantec™ Asset Management Suite 8.1 powered by Altiris™ technology User Guide

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# Technical Support

Symantec Technical Support maintains support centers globally. Technical Support's primary role is to respond to specific queries about product features and functionality. The Technical Support group also creates content for our online Knowledge Base. The Technical Support group works collaboratively with the other functional areas within Symantec to answer your questions in a timely fashion. For example, the Technical Support group works with Product Engineering and Symantec Security Response to provide alerting services and virus definition updates.

Symantec's support offerings include the following:

- A range of support options that give you the flexibility to select the right amount of service for any size organization
- Telephone and/or Web-based support that provides rapid response and up-to-the-minute information
- Upgrade assurance that delivers software upgrades
- Global support purchased on a regional business hours or 24 hours a day, 7 days a week basis
- Premium service offerings that include Account Management Services

For information about Symantec's support offerings, you can visit our website at the following URL:

[support.symantec.com](http://support.symantec.com)

All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policy.

## Contacting Technical Support

Customers with a current support agreement may access Technical Support information at the following URL:

[www.symantec.com/business/support/](http://www.symantec.com/business/support/)

Before contacting Technical Support, make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer on which the problem occurred, in case it is necessary to replicate the problem.

When you contact Technical Support, please have the following information available:

- Product release level
- Hardware information

- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
  - Error messages and log files
  - Troubleshooting that was performed before contacting Symantec
  - Recent software configuration changes and network changes

## Licensing and registration

If your Symantec product requires registration or a license key, access our technical support Web page at the following URL:

[www.symantec.com/business/support/](http://www.symantec.com/business/support/)

## Customer service

Customer service information is available at the following URL:

[www.symantec.com/business/support/](http://www.symantec.com/business/support/)

Customer Service is available to assist with non-technical questions, such as the following types of issues:

- Questions regarding product licensing or serialization
- Product registration updates, such as address or name changes
- General product information (features, language availability, local dealers)
- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
- Information about the Symantec Buying Programs
- Advice about Symantec's technical support options
- Nontechnical presales questions
- Issues that are related to CD-ROMs, DVDs, or manuals

## Support agreement resources

If you want to contact Symantec regarding an existing support agreement, please contact the support agreement administration team for your region as follows:

Asia-Pacific and Japan [customercare\\_apac@symantec.com](mailto:customercare_apac@symantec.com)

Europe, Middle-East, and Africa [semea@symantec.com](mailto:semea@symantec.com)

North America and Latin America [supportsolutions@symantec.com](mailto:supportsolutions@symantec.com)

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# Introducing Asset Management Suite

This chapter includes the following topics:

- [About Asset Management Suite](#)
- [Components of Asset Management Suite](#)
- [What you can do with Asset Management Suite](#)
- [Where to get more information](#)

## About Asset Management Suite

Asset Management Suite provides a management console, a database environment and a number of solutions that let you track assets and asset-related information. The suite includes Asset Management Solution and CMDB Solution. Asset Management Suite specializes in tracking IT-related assets, such as computers and software. You can also use it to track other types of assets, such as furniture and company cars.

In association with assets, you can record and track many types of documents and documented details. For example, you can track lease schedules, NDAs (non-disclosure agreements), SLAs (Service Level Agreements), and warranty information. Contracts and contract details can be associated with assets so that you can easily view the contractual information that is related to specific assets. You can also configure the software so that it notifies you of the upcoming actions that are specified in a contract.

See [“What you can do with Asset Management Suite”](#) on page 12.

You can use the Symantec Management Console to view the value of an asset or a group of assets. You can also view the department, cost center and user that is

assigned to an asset. You can keep track of software license details so that you avoid paying for the licenses that you do not need.

Additionally, Asset Management Suite aligns with IT Infrastructure Library (ITIL) standards. It also helps you comply with international IT standards such as COBIT and U.S. federal laws such as the Sarbanes-Oxley Act and HIPAA.

## Components of Asset Management Suite

Asset Management Suite is a collection of solutions and components that run on the Symantec Management Platform. Click the links to view individual release notes of the components.

**Table 1-1** Components of Asset Management Suite

Component	Description	Link to User Guide
Symantec Management Platform	<p>Symantec Management Platform provides a set of services that IT-related solutions can leverage. The platform services also provide a high degree of consistency between the solutions, so that users do not need to learn multiple product interfaces.</p> <p>Symantec Management Platform includes the following components:</p> <ul style="list-style-type: none"> <li>■ Configuration Management Database (CMDB)</li> <li>■ Notification Server</li> <li>■ Symantec Management Console</li> <li>■ Symantec Management Agent for Windows, and for UNIX, Linux, and Mac</li> <li>■ Network Discovery</li> <li>■ Software Management Framework</li> <li>■ Reports</li> </ul>	<a href="#">DOC9469</a>
Asset Management Solution	Asset Management Solution lets you set up and manage different asset management processes throughout the life cycle of your assets. You can manage the acquisition of your assets, on-going costs, contracts, and software license compliance.	<a href="#">DOC9302</a>
CMDB Solution	CMDB Solution lets you model configuration items, resources, and the relationships between them in a central database. It lets you facilitate the identification of all components and relationships, and instigate any required changes. The solution actively manages resources according to user-specified instructions in jobs, tasks, configuration policies, and custom CMDB rules.	<a href="#">DOC9590</a>

# What you can do with Asset Management Suite

Asset Management Suite helps you accurately value your assets, track ownership and maintain associations with related documents.

See [“About Asset Management Suite”](#) on page 10.

Asset Management Suite provides predefined templates and quick-start processes that help you do the following:

Manage configuration items.

Asset Management Suite helps you track assets and other resources. For each asset type that you want to track, you create a corresponding configuration item in the system. Templates are provided to help you create items for computers, printers, phones, furniture, and other assets.

After you create items for each asset, you can create configuration items for the details that you want to associate with the assets. You then specify the associations between the asset items and other items in your environment. For example, you can associate a computer with its purchase order, location and user. Reports and filters help you determine the status of the assets in your environment.

See [“Managing configuration items”](#) on page 30.

Manage your software license compliance.

Asset Management Suite helps you track software licenses and applications. You create configuration items for software licensing elements in your environment. You then associate these license-related items with other information in your system.

Asset Management Suite provides the templates that let you create software products, software licenses and software purchases. Reports and filters help you determine your software license compliance and requirements.

See [“Managing your software license compliance using the Software view”](#) on page 69.

See [“Managing your software license compliance on the Asset Management Solution pages”](#) on page 86.

Manage your procurement process.	<p>Procurement processes are the processes of obtaining new objects, assets, or devices for your company.</p> <p>Asset Management Suite provides the templates that help you create and manage procurement-related configuration items. You can track assets and resources from the initial procurement process to the eventual disposal. You can run reports and use filters to determine the procurement status of items in your environment.</p> <p>See <a href="#">“Performing the procurement”</a> on page 64.</p>
Manage contracts.	<p>Asset Management Suite helps you manage and track your contracts. The contract item specifies the details of the agreement and includes attached source documents.</p> <p>Asset Management Suite provides the templates that let you create contracts, lease schedules, NDAs (non-disclosure agreements) and warranties.</p> <p>See <a href="#">“Setting up the environment for managing contracts”</a> on page 49.</p>

## Where to get more information

Use the following documentation resources to learn about and use this product.

**Table 1-2** Documentation resources

Document	Description	Location
Release Notes	Information about new features and important issues.	<p>The <b>Supported Products A-Z</b> page, which is available at the following URL:</p> <p><a href="https://www.symantec.com/products/products-az">https://www.symantec.com/products/products-az</a></p> <p>Open your product's support page, and then under <b>Common Topics</b>, click <b>Release Notes</b>.</p>
User Guide	Information about how to use this product, including detailed technical information and instructions for performing common tasks.	<ul style="list-style-type: none"> <li>■ The Documentation Library, which is available in the Symantec Management Console on the <b>Help</b> menu.</li> <li>■ The <b>Supported Products A-Z</b> page, which is available at the following URL:  <a href="https://www.symantec.com/products/products-az">https://www.symantec.com/products/products-az</a></li> </ul> <p>Open your product's support page, and then under <b>Common Topics</b>, click <b>Documentation</b>.</p>

**Table 1-2** Documentation resources (*continued*)

Document	Description	Location
Help	<p>Information about how to use this product, including detailed technical information and instructions for performing common tasks.</p> <p>Help is available at the solution level and at the suite level.</p> <p>This information is available in HTML help format.</p>	<p>The Documentation Library, which is available in the Symantec Management Console on the <b>Help</b> menu.</p> <p>Context-sensitive help is available for most screens in the Symantec Management Console.</p> <p>You can open context-sensitive help in the following ways:</p> <ul style="list-style-type: none"> <li>■ Click the page and then press the F1 key.</li> <li>■ Use the Context command, which is available in the Symantec Management Console on the <b>Help</b> menu.</li> </ul>

In addition to the product documentation, you can use the following resources to learn about Symantec products.

**Table 1-3** Symantec product information resources

Resource	Description	Location
SymWISE Support Knowledgebase	Articles, incidents, and issues about Symantec products.	<a href="#">Knowledge Base</a>
Cloud Unified Help System	All available IT Management Suite and solution guides are accessible from this Symantec Unified Help System that is launched on cloud.	<a href="#">Unified Help System</a>

**Table 1-3** Symantec product information resources (*continued*)

Resource	Description	Location
Symantec Connect	An online resource that contains forums, articles, blogs, downloads, events, videos, groups, and ideas for users of Symantec products.	<p>The links to various groups on Connect are as follows:</p> <ul style="list-style-type: none"> <li>■ <a href="#">Deployment and Imaging</a></li> <li>■ <a href="#">Discovery and Inventory</a></li> <li>■ <a href="#">ITMS Administrator</a></li> <li>■ <a href="#">Mac Management</a></li> <li>■ <a href="#">Monitor Solution and Server Health</a></li> <li>■ <a href="#">Patch Management</a></li> <li>■ <a href="#">Reporting</a></li> <li>■ <a href="#">ServiceDesk and Workflow</a></li> <li>■ <a href="#">Software Management</a></li> <li>■ <a href="#">Server Management</a></li> <li>■ <a href="#">Workspace Virtualization and Streaming</a></li> </ul>

# Setting up Asset Management Suite

This chapter includes the following topics:

- [Required components of a fully functional Asset Management Suite environment](#)
- [About installing Asset Management Suite](#)
- [About licensing Asset Management Suite](#)
- [Checking license usage](#)

## Required components of a fully functional Asset Management Suite environment

Asset Management Suite lets you manage assets in your environment, set cost data and manage the services and the licenses that are associated with the assets.

See [“About Asset Management Suite”](#) on page 10.

To achieve a fully functional Asset Management Suite environment, the following components must be present in your network:

Active Directory server	You need a server that provides Active Directory services.
Mail server	Mail server is used to send out the notifications that are related to asset management processes.
SQL server	On the SQL server, you set up the Configuration Management Database (CMDB).

Notification Server	<p>On Notification Server, you install the following components of Asset Management Suite:</p> <ul style="list-style-type: none"><li>■ Asset Management Solution Asset Management Solution lets you set up and configure the asset management processes. See “<a href="#">What you can do with Asset Management Suite</a>” on page 12.</li><li>■ CMDB Solution CMDB Solution lets you manage your data in the Configuration Management Database (CMDB). For more information, see the topics about what you can do with CMDB Solution in the <i>CMDB Solution User Guide</i>.</li><li>■ Data Connector Data Connector lets you import and export resource data between numerous external data sources and the CMDB. For example, you can import organizational view and group memberships and resource filter membership information. You can also export reports.</li></ul>
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## About installing Asset Management Suite

Before you install Asset Management Suite, make sure that your server environment meets the requirements for Symantec Management Platform.

For more information, see the topics about installing Symantec Management Platform products in the *IT Management Suite Install and Upgrade Guide* at the following URL:

<http://www.symantec.com/docs/DOC9500>

## About licensing Asset Management Suite

Each solution in Asset Management Suite includes a trial license. You can register and obtain extended trial licenses at Symantec Web site, [www.symantec.com](http://www.symantec.com). You can also purchase full product licenses.

For more information, see the topics about applying licenses to a solution in the *IT Management Suite Planning for Implementation Guide* at the following URL:

<http://www.symantec.com/docs/DOC9470>

See “[About Asset Management Suite](#)” on page 10.

## Checking license usage

The **License Usage** page lets you monitor the number of Asset Management Solution licenses that you own and that are in use.

A license is consumed each time you log in to the Symantec Management Console and use Asset Management Solution functions. Asset Management Solution functions include software licensing, viewing or editing a contract, and viewing or editing a purchase order.

Asset Management Solution is licensed per concurrent connection. For example, if you simultaneously log in to the Symantec Management Console on two different computers and use Asset Management Solution functions on both computers, two licenses are consumed.

See [“About Asset Management Suite”](#) on page 10.

### To check license usage

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Service and Asset Management > Asset Management Solution**, and then click **License Usage**.

# Managing your organizational structure

This chapter includes the following topics:

- [Setting up your organizational structure](#)

## Setting up your organizational structure

Asset Management Suite lets you create and maintain associations among organizations, assets and resources. For example, you can associate a computer with a user, a department and a location. You can also associate a department with a specific cost center. After you specify these logical groups and associations, you can keep track of an asset. You can track where an asset is located, who has it, and which department or cost center has responsibility for it.

Before you can create the associations, you must add organizational configuration items into the Configuration Management Database (CMDB). The organizational configuration item types let you enter organizational data and define the structure of your organization. Organizational configuration item types are the essential building blocks upon which all of your other asset and contract data is based. Later, when you create entries for assets and other configuration items, you can then associate these items with the organizational information that already exists.

Organizational configuration item types support a hierarchy for organizing the resources. Organizing information in a hierarchy simplifies management and access to the data. You can view information at different levels of detail. For example, you can look at the reports for all computers in a building, on a site, in a geographical region, or at company level.

Before you enter any data, consider your organizational needs and the relationships that the resources have with each other. Symantec recommends that you plan and set up organizational configuration items at the beginning. However, you can update

and edit the organizational configuration items later. When you create an organizational configuration item, you can specify all data, including the association data. While you specify the association for a configuration item type, you can create an associated configuration type too. For example, you can specify a location for an asset from the already-created locations. Alternatively, you can create a new location from the same window, and then associate the newly-created location to the asset.

To create a configuration item, right-click a configuration item type, and then click the context menu option that lets you create a new configuration item.

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**Note:** Ideally, you would enter all data for a configuration item at once, and then move on to the next configuration item. However, when you create an organizational configuration item, it is often not possible. Organizational configuration items have associations with each other.

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After you enter your organizational data and associate it with assets, contracts and users, the system automatically creates organizational groups under the organizational views. Organizational groups offer a great benefit when you want to manage your assets by location or department. For example, you can apply policies and tasks separately to the different resource targets that you create from the organizational groups. You can also create and configure site-specific security roles to restrict each asset management team, so that they can only view and manage assets of their own sites.

See [“Managing security on an organizational group”](#) on page 27.

For more information, see the topics about organizational views and groups, and configuring resource security in the *IT Management Suite Administration Guide*.

**Table 3-1** Process for setting up your organizational structure

Step	Action	Description
Step 1	Create locations.	The location organizational type lets you add geographical or physical locations into the Configuration Management Database (CMDB). See <a href="#">“Creating a location”</a> on page 21.
Step 2	Create cost centers.	The cost center organizational type lets you add your company's cost centers into the CMDB. Note that if you enter cost center data but have not created a location, you cannot specify a location for a cost center. See <a href="#">“Creating a cost center”</a> on page 22.

**Table 3-1** Process for setting up your organizational structure (*continued*)

Step	Action	Description
Step 3	Create departments.	The department organizational type lets you add your company's departments into the CMDB.  If you enter department data but have not created a location and a cost center, you cannot create the associations for a department.  See <a href="#">"Creating a department"</a> on page 23.
Step 4	Create users.	The user configuration item type lets you enter data about people in your company into the CMDB.  See <a href="#">"Creating a user"</a> on page 24.
Step 5	(Optional) Update the organizational hierarchy manually.	When you set up your organizational structure in the Symantec Management Console, the organizational items do not appear in the <b>Organizational Views and Groups</b> list until the organizational hierarchy gets updated. By default, the automatic update runs every 30 seconds and updates the organizational hierarchy.  If you have disabled the automatic updating of organizational hierarchy, you must use the <b>Update Organizational Hierarchy</b> task to manually refresh the hierarchy.  See <a href="#">"Updating your organizational hierarchy manually"</a> on page 25.

## Creating a location

The **Location** organizational type lets you add geographical or physical locations into the Configuration Management Database (CMDB). If your company has multiple sites around the world, you can use the geographical locations, such as country, state and city, to create a location for each site. You can then associate the assets of each site with the locations that you define. Physical locations, such as building, floor and cubicle, let you create separate locations at a single site. You can then associate assets of each building, floor or cubicle to their corresponding locations.

You can associate each location with its manager and with a cost center. When you enter data for a location, you can also specify the hierarchy for it. For example, you can create a location for the United States, and then create sub-locations for the states, such as California, Utah, and Texas.

Note that on the **Location** page, all location items are displayed in the flat list. You can see the hierarchy of the locations on the **Organizational Views and Groups** page.

For more information, see the topics about organizational views and groups in the *IT Management Suite Administration Guide*.

This task is a step in the process for setting up your organizational structure.

See “[Setting up your organizational structure](#)” on page 19.

#### To create a location

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Manage Configuration Items**.
- 2 In the left pane, expand **Organizational Types**.
- 3 Right-click **Location** and click **Create Location**.
- 4 In the **Create configuration item** window, in the **Location** box, type the name of the location, and then fill in the location information.
- 5 (Optional) To create a hierarchy, in the **Location Hierarchy** section, specify the parent location for the item that you currently edit.

You can also first insert all locations, and then add a parent location to a group of locations at once. To add a parent location to a group of locations, do the following:

- Select the locations to which you want to add the parent location.
  - In the list of locations, right-click one a location, and then click **CMDB Functions > Assignment Functions > Assign Parent Location**.
  - In the **Select a Report** dialog box, select the parent location, and then click **OK**.
- 6 (Optional) If you enter the **Location To Subnet** parameter and then enable the **Update Network Resource Location** task, the task automatically assigns this location to the network devices that belong to the specified subnet.

However, you cannot assign a location to computers with multiple IP addresses in a subnet. Use the **Ignore** filter to add subnet IP address that the task can ignore. You can append the % character to IP address to filter the entire set of IP addresses.

For more information, click the page and then press **F1**.

- 7 Click **OK**.

## Creating a cost center

The **Cost Center** organizational type lets you add your company's cost centers into the Configuration Management Database (CMDB). Cost centers are associated with the departments or other sections of the company that create costs. For example, an engineering department, IT department or services department can each include one or more cost centers. The managers of these cost centers are

responsible for approving all asset purchases and ensuring that the expenditures are kept within budgets.

You can associate a location and a manager with each cost center. You cannot specify a single cost center for multiple locations at once.

See [“Creating a location”](#) on page 21.

The **Cost Center** configuration item type lets you create a hierarchical structure of the cost centers in your company. Note that on the **Cost Center** page, all cost center items are displayed in the flat list. You can see the hierarchy of the cost centers on the **Organizational Views and Groups** page (**Manage > Organizational Views and Groups**).

For more information, see the topics about organizational views and groups in the *IT Management Suite Administration Guide*.

This task is a step in the process for setting up your organizational structure.

See [“Setting up your organizational structure”](#) on page 19.

#### To create a cost center

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Manage Configuration Items**.
- 2 In the left pane, expand **Organizational Types**.
- 3 Right-click **Cost Center** and click **Create Cost Center**.
- 4 In the **Create configuration item** window, give the cost center a name and specify the **Cost Center Code**.  
You use **Cost Center Code** value for accounting related data.
- 5 Fill in the cost center data.
- 6 (Optional) To create a child cost center, in the **Cost Center Hierarchy** section, select a parent cost center.
- 7 Click **OK**.

## Creating a department

The **Department** organizational type lets you add your company's departments into the Configuration Management Database (CMDB). You associate each department with a location, a cost center and a barcode that is used for physical audits. The **Department** configuration item type also lets you specify a manager for the department.

When you enter the data for a department, you can specify its hierarchical position within the company. You can see the hierarchy of the departments on the

**Organizational Views and Groups** page. On the **Department** page, all departments are displayed in the flat list.

For more information, see the topics about organizational views and groups in the *IT Management Suite Administration Guide*.

This task is a step in the process for setting up your organizational structure.

See [“Setting up your organizational structure”](#) on page 19.

#### To create a department

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Manage Configuration Items**.
- 2 In the left pane, expand **Organizational Types**.
- 3 Right-click **Department** and click **Create Department**.
- 4 In the **Create configuration item** window, give the department a name and fill in the department data.
- 5 (Optional) To create a child department, in **Department Hierarchy** section, select a parent department.
- 6 Click **OK**.

## Creating a user

The **User** configuration item type lets you enter data about people in your company into the Configuration Management Database (CMDB). The **User** configuration item type is associated with the company and the department configuration item types. You can also specify a manager for a user.

When you use Asset Management Suite for the first time, you do not have to insert user data manually. Symantec recommends that you use Microsoft Active Directory Import to enter all your company's existing users into the CMDB. If the user data that you import also contains department data, you can use it to automatically assign users to the departments. To accomplish this task, you must enter the department data before you import the user data.

You can add users manually in the Symantec Management Console when you need to add a few users at a time. For example, when you add information about new hires.

This task is a step in the process for setting up your organizational structure.

See [“Setting up your organizational structure”](#) on page 19.

**To create a user manually in the Symantec Management Console**

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Manage Configuration Items**.
- 2 In the left pane, expand **Organizational Types**.
- 3 Right-click **User** and click **Create User**.
- 4 In the **Create configuration item** window, fill in the user data.
- 5 Click **OK**.

## Updating your organizational hierarchy manually

When you add new locations, cost centers, or departments in the Symantec Management Console, the items do not appear in the **Organizational Views and Groups** list until the organizational hierarchy gets updated. By default, the automatic update runs every 30 seconds and updates the organizational hierarchy.

In large environments, Symantec recommends that you disable the automatic update task to improve the performance. You can disable it on the **Organizational Hierarchy Settings** page that you access from the **Settings** menu, at **All Settings > Service and Asset Management > CMDB Solution > Organizational Hierarchy Settings**.

If you have disabled the automatic updating of the organizational hierarchy, you can use the **Update Organizational Hierarchy** task to manually refresh the hierarchy on demand. You can run this task immediately or on a specified schedule. For example, you need to run the task after every import of your organizational data.

This task is an optional step in the process for setting up your organizational structure.

See [“Setting up your organizational structure”](#) on page 19.

**To update organizational hierarchy manually**

- 1 In the Symantec Management Console, on the **Manage** menu, click **Jobs and Tasks**.
- 2 In the left pane, expand **System Jobs and Tasks > Service and Asset Management > CMDB**, and then click **Update Organizational Hierarchy**.
- 3 On the **Update Organizational Hierarchy** page, add the organizational hierarchies that you want to update.

- 4 Click **Save changes**.
- 5 (Optional) Under **Task Status**, schedule the task.  
For more information, click the page and then press **F1**.

# Managing security in Asset Management Suite

This chapter includes the following topics:

- [Managing security on an organizational group](#)

## Managing security on an organizational group

Managing security on an organizational group involves two main steps. You assign an organizational group to a security role, and then you set the security permissions for the organizational group.

In most environments, you have different users who need various degrees of access to the Asset Management Suite features. Each type of user has different access needs. For example, a supervisor user needs the rights to verify and update resource entries, and a manager user needs to access the reports. To set up security roles for different types of users, you can modify the predefined asset management security roles, or you can create new security roles.

See [“Predefined asset management security roles”](#) on page 109.

In a large and a complex organization that has offices in several countries, additional security management might be necessary. For example, you might want to restrict each asset management team, so that they can only view and manage the assets for their own site. To accomplish this task, you need to create and configure site-specific security roles.

**Table 4-1** Process for managing security on an organizational group

Step	Action	Description
Step 1	(Optional) Create a custom security role.	When you want to manage security of an organizational group, the first step is to create the custom security roles. Custom security roles can help you better manage the assets that are dispersed over multiple sites or organizational units.  For more information, see the topics about creating and configuring a security role in the <i>IT Management Suite Administration Guide</i> .
Step 2	Assign an organizational group to a security role.	After you create a security role, you can assign an organizational group to it. Only users who are assigned to this security role can view and manage the assets of this organizational group.  See <a href="#">“Assigning an a security role to an organizational group”</a> on page 28.
Step 3	Configure security permissions for an organizational group.	To control what a security role can do with asset records of an organizational group, you must configure its security settings.  See <a href="#">“Configuring security permissions for an organizational group”</a> on page 29.

## Assigning an a security role to an organizational group

Assigning a security role to an organizational group lets you specify the users who can view and manage the assets in this organizational group. You can assign a predefined or a custom security role. If you want to assign the a custom security role to an organizational group, you must create the custom security role first.

For more information, see the topics about creating and configuring a security role in the *IT Management Suite Administration Guide*.

This task is a step in the process for managing security on an organizational group.

See [“Managing security on an organizational group”](#) on page 27.

### To assign a security role to an organizational group

- 1 In the Symantec Management Console, on the **Manage** menu, click **All Resources**.
- 2 In the left pane, expand any organizational view, right-click an organizational group to which you want to assign a security role, and then click **Manage Security > Assign Management Rights**.
- 3 In the **Assign Management Rights** dialog box, select the security role.
- 4 Click **OK**.

## Configuring security permissions for an organizational group

Security permissions let you control the actions that the users of a security role can perform with asset records in an organizational group.

This task is a step in the process for managing security of an organizational group.

See [“Managing security on an organizational group”](#) on page 27.

### To configure security permissions for an organizational group

- 1 In the Symantec Management Console, on the **Manage** menu, click **All Resources**.
- 2 In the left pane, expand any organizational view, right-click an organizational group for which you want to configure the security permissions, and then click **Security**.
- 3 On the **Security Role Manager** page, in the **Role** list, click the security role that you want to configure.
- 4 Configure the security permissions.
- 5 Click **Save changes**.

# Managing configuration items

This chapter includes the following topics:

- [Managing configuration items](#)
- [Creating a custom configuration item type](#)

## Managing configuration items

Asset Management Suite lets you manage and track the assets that you have in your environment. For each item that you want to manage, you enter information into the Configuration Management Database (CMDB) as a configuration item entry. Asset Management Suite provides you with the predefined configuration item types that let you manage different types of assets. Configuration item types are the templates that define the data that you can store about a specific configuration item in the CMDB. These configuration items can be assets, locations, invoices, schedules, users, contracts, and so on.

A configuration item type consists of the following components:

**Base configuration item type** The base configuration item type is the foundation on which a configuration item type is built. A configuration item type inherits the data classes of the base configuration item type.

**Data classes** Data classes are the building blocks of a configuration item type. Each data class defines the attributes that you can record about a configuration item.

**Configuration item association types** Configuration item association types create associations between configuration items and allow related data to be linked together.

**Table 5-1** Process for managing configuration items

Step	Action	Description
Step 1	Set up the environment for managing configuration items.	<p>Before you enter the asset data into the database, you set up your environment for managing configuration items. For example, you can create custom status values and custom configuration item types. To simplify and speed up the data entry, you can set the default data entry values and create custom edit views.</p> <p>See <a href="#">“Configuring default data entry values”</a> on page 32.</p> <p>See <a href="#">“Configuring ownership settings”</a> on page 33.</p> <p>See <a href="#">“Creating custom status values”</a> on page 34.</p> <p>See <a href="#">“Creating an edit view”</a> on page 34.</p> <p>See <a href="#">“Creating a custom configuration item type”</a> on page 41.</p>
Step 2	Create configuration items.	<p>You can create configuration items through manual entry, scanning of the asset during the receiving process or importing the assets. You can also gather inventory data about the computers in your network, and then have each computer automatically created as a configuration item.</p> <p>See <a href="#">“Creating a configuration item”</a> on page 35.</p> <p>After you create a configuration item, you can manage and track it through its whole lifecycle.</p>
Step 3	Perform configuration item maintenance tasks.	<p>You can run different asset maintenance tasks related to asset ownership, merging of duplicate computers or users, inventory synchronization and network resource location.</p> <p>See <a href="#">“Running configuration item maintenance tasks”</a> on page 36.</p>
Step 4	Track the total cost of an asset.	<p>When you add cost items to an asset, you can later use that information to determine the total cost of ownership and chargeback.</p> <p>See <a href="#">“Adding a cost item to an asset”</a> on page 39.</p> <p>See <a href="#">“About tracking the total cost of an asset”</a> on page 40.</p>

**Table 5-1** Process for managing configuration items (*continued*)

Step	Action	Description
Step 5	View and track the configuration item data.	<p>You can view and track the configuration item data through the lists, edit page, reports and <b>Resource Association Diagram</b>.</p> <p>You can access the configuration item reports on the <b>Reports</b> page, under <b>Reports &gt; Service and Asset Management &gt; Assets</b>.</p> <p>The <b>Resource Association Diagram</b> lets you view a configuration item and all its associated configuration items. In a large environment, this graphic makes it easier to track down an asset and its dependencies.</p> <p>See <a href="#">“Tracking the associations of a configuration item”</a> on page 41.</p>

## Configuring default data entry values

The default data entry values automatically populate the fields on the configuration item creation page and let you save data entry time. For example, if most of the contracts in your company are assigned to the same user, you can set that user as the default. Then you only need to change the default value when the contract is assigned to a different user.

---

**Note:** When you import data, the default values are not applicable.

---

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

### To configure default data entry default values

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Service and Asset Management > CMDB Solution**, and then click **Default Values**.

- 3 In the right pane, click the item for which you want to set the default values.  
 For more information, click the page and then press **F1**.
- 4 In the **Data Entry default values** dialog box, specify the default values, and then click **OK**.  
 For more information, click the page and then press **F1**.

## Configuring ownership settings

Multiple users, departments and cost centers can partly own the same configuration item. CMDB Solution lets you assign ownership percentage to a configuration item so that you can define the percentage that each of the multiple users, departments or cost centers owns. To allow a configuration item to have multiple owners you must configure ownership settings.

### Ownership Settings

The following table describes the options for ownership settings:

Option	Description
<b>Ownership Style</b>	Lets you choose whether an asset can have multiple owners. Once you set multiple ownership, you can no longer go back to a single association. If you set multiple ownership with warning, a warning appears when you assign ownership to an asset that already has an owner.
<b>Ownership Rule</b>	Lets you specify what type of owners (users or departments) have precedence in the event of a conflict of ownership.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

#### To configure ownership settings

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Service and Asset Management > CMDB Solution**, and then click **Ownership Settings**.
- 3 To allow a configuration item to have multiple owners, in the right pane, under **Ownership Style**, in the drop-down list, click one of the following options:
  - **Multiple**  
 Once you set multiple ownership, you can no longer go back to single association.
  - **Multiple With Warning**

Once you set multiple with warning ownership, you receive a notification when you assign ownership to a currently owned asset.

- 4 To specify what type of owners to keep in the event of a conflict of ownership, in the right pane, under **Ownership Rule**, in the drop-down list, click one of the following options:
  - **User Precedence**
  - **Department Precedence**
- 5 Click **Save changes**.

## Creating custom status values

For some resources, you may need to create a custom status value.

---

**Warning:** If you assign a custom status to an asset, it becomes inactive and does not appear in the reports. Instead of using custom statuses, Symantec recommends that you create a custom status as a Location and assign the asset to this location.

---

When a custom status is deleted, the resources that are configured with the particular custom status are reverted to the **Active** status.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

### To create custom status values

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Service and Asset Management > CMDB Solution**, and then click **CMDB Global Settings**.
- 3 In the right pane, in the **Custom Status** box, type the name of the custom status value, and then click **Add**.

For more information, click the page and then press **F1**.

## Creating an edit view

When you open the page to create or edit a configuration item, the default edit view opens. On the default edit view, you can specify information for all the data class attributes that apply to this configuration item type. On the default edit view, you can also create all associations that are possible for this configuration item type. If you do not need to insert some data or you prefer to insert the data in a different order, you can edit the default views. You can also create new views.

Customized edit views let you simplify and speed up the process of creating and editing configuration items by enabling you to control which fields and options are displayed.

---

**Note:** When you create a data class and edit a view to use in a virtual association, the column names must be **ParentResourceGuid** and **ChildResourceGuid** to avoid errors.

---

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

#### To create an edit view

- 1 Open the dialog box to create or edit a configuration item.  
See [“Creating a configuration item”](#) on page 35.
- 2 In the dialog box, in the **View** drop-down list, click **Manage Views...**
- 3 In the **Change Edit Views** dialog box, click **New**, insert the name of the view, and then click **OK**.
- 4 Select the **Data classes** and **Associations** that are displayed on the **Edit configuration item** page when you select the view.  
  
Symantec suggests that you select the **Data classes** and **Associations** based on your data entry roles.  
  
Check **Share this Edit Page View with other Asset users**, if you want to allow everyone to use this view.
- 5 Click **Save changes**.

## Creating a configuration item

Configuration items represent the resources and information that you want to track in your environment. Gathering and entering asset information is one of the first steps in asset management. You must create a configuration item for each asset that you want to track. To create a configuration item, you can use the predefined configuration item types that Asset Management Suite provides. You can also create and use custom configuration item types.

See [“Predefined configuration item types”](#) on page 110.

See [“Creating a custom configuration item type”](#) on page 41.

You can manually create configuration items or they can be automatically created. You must manually create configuration items for non-networked assets like office equipment, racks, and monitors. For networked devices, you can use inventory

management tools to automate the task of creating a configuration item. For example, you can gather inventory data about computers on your network, and then have each computer automatically created as a configuration item.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

#### To manually create a configuration item

- 1 In the Symantec Management Console, on the **Manage** menu, click **Assets**.
- 2 In the left pane, expand the desired folder.
- 3 To create a configuration item, right-click a configuration item type, and then click the context menu option that lets you create a new configuration item.
- 4 In the **Create configuration item** window, specify the details of the configuration item.
- 5 Do one of the following:
  - Click **Save and create new**, to save the data and create the next item.
  - Click **Apply**, to save the data and continue editing the same item.
  - Click **OK**, to save the data and close the window.

Note that in the configuration items list, you must click **Refresh** to display the changes.

#### To automatically create a configuration item for a network device

- 1 In the Symantec Management Console, on the **Actions** menu, click **Discover > Import Microsoft Active Directory**.
- 2 Specify the import settings and click **Save Changes**.

Each identified device is set up as a configuration item in the system.

- 3 (Optional) To view the configuration items, in the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Manage Configuration Items**, and then click the correct folder and configuration item type.

## Running configuration item maintenance tasks

CMDB Solution lets you model configuration items for any component in your environment and the relationships between them in a centralized database. It lets you identify all components and relationships and to instigate any required changes. The solution actively manages configuration items according to user-specified instructions in jobs, tasks, configuration policies, and custom CMDB rules.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

**To run configuration item maintenance tasks**

- 1 In the Symantec Management Console, on the **Manage** menu, click **Jobs and Tasks**.
- 2 In the left pane, under **Jobs and Tasks**, expand **System Jobs and Tasks > Service and Asset Management > CMDB**, and then click one of the following tasks:

**Assign Computer's Ownership to be the Primary User**

This task lets you synchronize the owner of a computer asset with the primary user who is reported through basic inventory. By default, the primary user of a computer is the person who has logged in the most during a particular month. This information is stored in a **Inv\_AeX\_AC\_Primary\_User** table.

The recommended schedule is to run the task daily during off peak hours.

**Clean Ownership**

This task resolves conflicts between the **Asset User Owners** resource association and the **Ownership Details** data class. Ownership conflicts can occur when several departments or users own the same resource. The **Asset User Owners** resource association associates an asset with a user resource or a department resource, and the **Ownership Details** data class keeps track of the ownership percentage. If the **Clean Ownership** task finds a conflict between the **Asset User Owners** resource association and the **Ownership Details** data class, the ownership resource association takes precedence, and the data class is updated.

The recommended schedule is to run the task every 12 hours.

**Duplicate Computer Merge**

This task automatically merges the computers that have identical **System Number**, **Serial Number**, or **Barcode** in the Configuration Management Database (CMDB).

When you use the **Duplicate Computer Merge** task to merge computers, the following restrictions apply:

- The **Duplicate Computer Merge** task only lets you merge two computers that have duplicate system numbers, serial numbers, or barcodes in CMDB.
- One of the duplicate computers to be merged must be a managed computer and the other must be an unmanaged computer. You cannot merge two unmanaged computers.

The recommended schedule is to run the task daily during off-peak hours.

**Duplicate User Merge**

This task merges the users that have duplicate **UserId** and **Domain** or **Given Name** and **Surname** information in the CMDB.

The recommended schedule is to run the task daily during off-peak hours.

**Inventory Clean Up**

This task deletes inventory data from the Asset Management Suite inventory data classes and the Inventory Solution data classes for the resources that are no longer in use. After inventory data for a resource is deleted, financial and other non-inventory data is still available.

The recommended schedule is to run the task daily during off-peak hours.

**Inventory To Asset Synchronization**

This task synchronizes the following data contained in both the Asset Management Suite data classes and the inventory data classes:

- **Serial Number**
- **System Number**
- **Manufacturer**
- **Model**

If the task detects that the Asset Management Suite data classes already contain data for any of these items, it does not overwrite the data in the Asset Management Suite data classes with the inventory data.

The recommended schedule is to run the task daily during off-peak hours.

<b>Resource Merge Rule</b>	<p>To merge duplicate resources for resource types other than computers and users, you must create a merge rule with the <b>Resource Merge Rule</b> task.</p> <p>The recommended schedule is to run the task daily during off-peak hours.</p>
<b>Update Network Resource Location</b>	<p>This task uses asset subnet information gathered from the most recent inventory scan to automatically update the location data of an asset.</p> <p>The recommended schedule is to run the task daily during off-peak hours.</p> <p>The <b>Ignore</b> filter lets you ignore computers that have the same IP address from a subnet.</p>
<b>Update Organizational Hierarchy</b>	<p>This task updates the <b>Organizational Hierarchy</b> groups to match the associations in the database.</p> <p>See <a href="#">“Updating your organizational hierarchy manually”</a> on page 25.</p>

- 3 Set **Default Task Parameters**, if required.
  - 4 Click **Save changes**.
  - 5 In the **Task Status** section, click **New Schedule**.
  - 6 In the **New Schedule** dialog box, schedule the task, and then click **Schedule**.
- For more information, click the page and then press **F1**.

## Adding a cost item to an asset

A cost item is an expenditure that relates to or adds to the value of an asset. For example, you can add the cost of an extra disk drive to the value of a computer. The additional value is added as a cost item.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

### To add a cost item to an asset using the context menu

- 1 In the assets list, right-click an asset, and then click **Asset Functions > Add Cost Item**.
- 2 In the **Add Cost Item to Asset** dialog box, specify the settings, and then click **OK**.

### To add a cost item to an asset using the scheduled task

- 1 In the Symantec Management Console, on the **Manage** menu, click **Jobs and Tasks**.
- 2 In the left pane, right-click the folder where you want to save the task, and then click **New > Task**.
- 3 In the **Create New Task** dialog box, in the left pane, expand **Service and Asset Management > Asset Management**, and then click **Add Cost Items**.
- 4 In the right pane, click **Select a Resource**.
- 5 In the **Select a Resource** dialog box, select the items to which you want to add a cost item, click **>** to move the items to the **Selected items** list, and then click **OK**.
- 6 In the **Cost Items** section, click **Add** to select the cost type and add a cost item entry.
- 7 In dialog box that opens, enter cost item information, and then click **OK**.
- 8 Click **OK**.
- 9 On the **Add Cost Items** task page, under **Task Status**, click **New Schedule**.
- 10 In the **New Schedule** dialog box, configure the schedule for the task, and then click **Schedule**.

For more information, click the page and then press **F1**.

## About tracking the total cost of an asset

Asset Management Suite lets you track all the costs that occur during the lifecycle of an asset.

On average, 25% of an asset costs come from the initial purchase and 75% of the costs are the services and the indirect costs that arise later. Tracking the total cost lets you keep track of all the costs that incur against an asset, a user, or an organization.

To track the costs that are associated with an asset, you use the cost items. You can apply the cost items to an asset manually on the **Edit configuration item** page, or automatically through the procurement process or through imports.

Tracking the total cost may involve any or all of the following costs:

- Initial purchase cost
- Contract costs

Any contractual costs that are related to an asset are included in the total cost of an asset. For example, the software licenses that a computer uses.

- Costs of the additional fixed assets or consumable items  
For example, you buy a mouse for a computer or replace the toner for a printer. The receiving feature in procurement process lets you automatically apply a fixed asset or a consumable item as a cost item to an existing resource.
- Maintenance, servicing, and technical support costs  
You can extend cost items by customizing a workflow to apply cost items to an asset if a certain event occurs. For example, you can apply a cost item when an incident ticket is resolved with a particular closure code.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

## Tracking the associations of a configuration item

The Resource Association Diagram displays a graphic that shows a configuration item and all its associated configuration items. The Resource Association Diagram lets you view relationships between assets, users, locations, departments, and cost centers. In a large environment, this graphic makes it easier to track down an asset and its dependencies. For example, when a technician works on an incident and needs to review all of the details about the asset.

This task is a step in the process for managing configuration items.

See [“Managing configuration items”](#) on page 30.

### To track associations of a configuration item

- 1 In the Symantec Management Console, on the **Manage** menu, click **Assets**.
- 2 In the left pane, click the desired configuration item type.
- 3 In the configuration items list, right-click the configuration item that you want to track, and then click **CMDB Functions > Resource Association Diagram**.
- 4 (Optional) Adjust the **Resource Association Diagram** view according to your requirements.

For more information, click the page and then press **F1**.

## Creating a custom configuration item type

Asset Management Suite provides predefined configuration item types (also known as resource types) for many types of assets.

See [“Predefined configuration item types”](#) on page 110.

If the predefined configuration item types do not meet all your requirements, you can define custom configuration item types. You can create the custom configuration item types in the following ways:

- Customize the predefined configuration item types.** You customize the predefined configuration item types if they do not fully meet your requirements. For example, for some assets you might have information that cannot be stored in the existing data classes of the predefined configuration item types. In this situation you can define and add custom data classes and custom configuration item association types to the predefined configuration item types.
- Create new configuration item types.** You can create new configuration item types if the predefined item types are insufficient to represent the items in your environment. Symantec recommends that when you create a new configuration item type, you specify a base configuration item type for it. The new configuration item type inherits the data classes, associations, and functionality from the base configuration item type. To extend the definition of the base configuration item type, you add custom data classes and custom resource association types to it.

**Table 5-2** Process for creating a custom configuration item type

Step	Action	Description
Step 1	Create a custom data class.	When the existing data classes of a configuration item type do not let you store all the information that you want, you create custom data classes.  See <a href="#">“Creating a custom data class”</a> on page 43.
Step 2	(Optional) Create a configuration item type.	You create new configuration item types only when the predefined configuration item types do not let you manage all the resources that you have in your environment.  See <a href="#">“Creating a configuration item type”</a> on page 44.
Step 3	Add a custom data class to a configuration item type.	After you create the custom data classes, you can add them to a predefined configuration item type or to a new configuration item type that you create.  See <a href="#">“Adding a custom data class to a configuration item type”</a> on page 45.
Step 4	Creating a custom configuration item association type.	For the data types that you want to link to other configuration item types, you create custom association types.  See <a href="#">“Creating a custom configuration item association type”</a> on page 46.

**Table 5-2** Process for creating a custom configuration item type (*continued*)

Step	Action	Description
Step 5	Creating a virtual association	When you create an editable data class that has the attribute type Resource Foreign Key and associate it with an asset, you can create a virtual association for the asset using the data class.  See <a href="#">“Creating a virtual association”</a> on page 47.

## Creating a custom data class

Data classes are the building blocks of a configuration item type. They represent the categories of data that you want to record about a configuration item. For example, the **Computer** configuration item type contains the **Cost Items** data class, the **Manufacturer** data class, the **Serial Number** data class and so on.

CMDB Solution includes many predefined data classes that let you define new configuration item types. However, if the predefined data classes are not sufficient to clearly identify the configuration item types in your environment, you can create custom data classes. When you create a data class, you can customize it by adding, editing, and deleting its attributes. Note that you cannot modify or delete the predefined data classes.

A data class can be visualized as a table in the Configuration Management Database (CMDB). Each data class has a set of attributes that define its properties.

A data class has the following components:

**Data class attribute** Data class attributes define the data that data classes store. Data class attributes appear as fields when you enter data. After you add a data class attribute to a data class, you can edit certain aspects of the attribute. You can edit the description and control if it is hidden, but you cannot delete the description from the data class. You cannot add data class attributes to a predefined data class. For example, the **Manufacturer** data class contains the **Manufacturer Name** and **Model** data class attributes.

**Data class attribute parameter** Data class attribute parameters specify the characteristics of a data class attribute such as name, description, and maximum length of the attribute. For each data class attribute, you must specify values for each of the parameters. You can specify the type, number, and order of characters in a field. For example, the name to be entered into the **Manufacturer Name** data class attribute might have a parameter of fewer than 256 characters.

This task is a step in the process for creating a custom configuration item type.

See [“Creating a custom configuration item type”](#) on page 41.

#### To create a custom data class

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Notification Server > Resource and Data Class Settings > Data Classes > CMDB Data Classes**, right-click the folder where you want to create a custom data class, and then click **New > Editable Data Class**.
- 3 On the **New Editable Data Class** page, give the data class a name and add the attributes.

The name of the database table that is linked to the data class is created from the name of this data class. It begins with the prefix **Inv\_** followed by the data class name. The spaces in the data class name are replaced with the underscore character. Note that the table name persists even if you later change the name of the data class.

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**Warning:** Symantec recommends that you omit special characters from the custom data class names because they may cause errors.

---

For more information, click the page and then press **F1**.

- 4 Click **Save changes**.

After you create the data class, you can associate it with any configuration item type. To add the data class to a configuration item type, go to **Settings > Notification Server > Resource and Data Class Settings > Resource Types**, click the configuration item type where you want to add the data class, and then in the right pane, click **Add data classes**.

## Creating a configuration item type

Asset Management Suite provides predefined configuration item types for many types of assets. However, sometimes the predefined configuration item types are not sufficient and you might need to create your own configuration item types. For example, if you want to manage your tablet computers separately from other computers, you can create a new configuration item type for tablet computers.

This task is a step in the process for creating a custom configuration item type.

See [“Creating a custom configuration item type”](#) on page 41.

### To create a configuration item type

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Notification Server > Resource and Data Class Settings > Resource Types**, right-click the folder where you want to create a custom configuration item type, and then click **New > Resource Type**.
- 3 On the **New Resource Type** page, give the configuration item a name and specify its settings.

If you specify the **Base Resource Type**, the created configuration item type inherits all data classes, associations, and functionality of the selected base configuration item type. Base configuration item types let you take advantage of built-in features such as asset aggregation, reporting, and accounting data. Any configuration item type can serve as a base configuration item type. No special configuration is required to allow a configuration item type to be a base configuration item type.

- 4 Click **Save changes**.
- 5 (Optional) To make it easier to access the custom configuration item type, create a link to this configuration item type in the **CI Management** portal.

To create the link, do the following:

- In the Symantec Management Console, on the **CI Management** page, in the left pane, right-click the folder where you want to place the link, and then click **New > Resource Type Link**.
- In the **Select a Resource Type** dialog box, click the custom configuration item type, and then click **OK**.

## Adding a custom data class to a configuration item type

After you create a custom data class, you can add it to a predefined configuration item type or to a new configuration item type that you create.

This task is a step in the process for creating a custom configuration item type.

See [“Creating a custom configuration item type”](#) on page 41.

### To add a custom data class to a configuration item type

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Notification Server > Resource and Data Class Settings > Resource Types**, and then click the item to which you want to add a custom data class.

- 3 On the configuration item type page, under **Data Classes**, click **Add data classes**.
- 4 In the **Items Selector** dialog box, check the data class that you want to add, and then click **OK**.

Note that once you add data into the custom data class, you cannot remove this data class from the configuration item type anymore. You can only edit the **Edit configuration item** page view so that it does not display the fields of the custom data class.

- 5 Click **Save changes**.

## Creating a custom configuration item association type

A configuration item association type (also known as a resource association type) lets you link resources for more convenient access to associated data. You can then easily track the data about related configuration items. A configuration item association type is a template for creating a child to parent relationship between configuration items. This association links child configuration items to a parent configuration item. You can associate a computer monitor with a computer, a cell phone with a user, and several pieces of equipment with a lease. For example, the **Power to Network Resource** association type represents a group of network resources that are directly connected to the power rather than covered by a backup power system (UPS).

When you create a configuration item association type, a new field appears in the child configuration item type. The field contains the list of configuration items that the parent configuration item type defines. You can associate any of them with the child configuration item type. For example, you can create a configuration item association type that links the **Monitor** configuration item type to the **Computer** configuration item type. The **Monitor** configuration item type includes the field with the list of computers that you can associate with the monitor.

If the predefined associations of a configuration item type do not meet all your requirements, you can create custom configuration item associations. For example, you might want to associate a contract to each of your vendors as part of the contract management. In Asset Management Suite, the default associations of a Contract configuration item type do not let you create such an association. In this case you can create a custom configuration item association type.

This task is a step in the process for creating a custom configuration item type.

See [“Creating a custom configuration item type”](#) on page 41.

### To create a custom configuration item association type

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Notification Server > Resource and Data Class Settings > Resource Associations > CMDB Association Types**, right-click the folder where you want to create a custom association type, and then click **New > Editable Association Type**.
- 3 On the **New Editable Association Type** page, give the association a name and specify its details.

For more information, click the page and then press **F1**.

To create an association between a contract and a vendor, configure the details as follows:

- Type **Contract's Vendor**, as the name of the new editable association type.
- In the **Reverse Display name** box, type **Vendor's Contracts**.
- For the **From Type** configuration item type, select **Contract**.
- For the **To Type** configuration item type, select **Company**.
- In the **Minimum Cardinality** box, type **0**.
- In the **Maximum Cardinality** box, type **1**.  
 Note that when you create a new association, you can only specify the minimum cardinality and maximum cardinality from parent to child. The cardinality from child to parent is always from 0 to many, and you cannot change it.
- Under **Enable Editing From**, check **Contract**, and in the drop-down list, click **Resource Association Picker for Asset**.

- 4 Click **Save changes**.

## Creating a virtual association

When you create an editable data class that has the attribute type Resource Foreign Key and associate it with an asset, you can create a virtual association for the asset using the data class. The virtual association is displayed as a dotted line connection in the Resource Association Diagram.

**To create a virtual association**

- 1 Open the CMDB SQL database and create and run the following SQL query:

```
create view vViewName AS  
  
select _ResourceGuid as ParentResourceGuid, DC AS  
ChildResourceGuid  
  
from DB_Table
```

Where *vViewName* is the view name that you will use when you create virtual association, *DC* is the attribute of type Resource Foreign Key, and *DB\_Table* is the table in the database that represents the data class you created.

---

**Note:** Ensure that the column names are `ParentResourceGuid` and `ChildResourceGuid` to avoid errors.

---

- 2 From the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 3 In the left pane, expand **Notification Server > Resource and Data Class Settings > Virtual Associations**, right-click **Asset Virtual Associations**, and then click **New > Virtual Association**.
- 4 Enter the view name that you used in the SQL query and click Save. For example, from the SQL query mentioned in Step 1, the view name is *vViewName*.
- 5 The GUIDs **ParentResourceGuid** and **ChildResourceGuid** are displayed in the table.
- 6 To see the virtual association of the asset, open the Resource Association Diagram where the virtual association is displayed as a dotted line.

To know more about Research Association Diagram, refer to See [“Tracking the associations of a configuration item”](#) on page 41.

# Managing contracts

This chapter includes the following topics:

- [Setting up the environment for managing contracts](#)
- [Managing contracts](#)

## Setting up the environment for managing contracts

Before you can create contracts using Asset Management Suite, you must set up the prerequisite configuration item types for the contracts. The **Quick Start - Contracts** Web part displays the steps that must be completed in the shown order, when you first begin managing contracts with Asset Management Suite.

See [“Managing contracts”](#) on page 52.

**Table 6-1** Process for setting up the environment for managing contracts

Step	Action	Description
Step 1	Configure accounting periods.	An accounting period represents a yearly range of dates that correspond to a set of financial records or reports.  See <a href="#">“Configuring accounting periods”</a> on page 50.
Step 2	Create cost types.	A cost type specifies a type of expense and lets you logically group the expenses. Cost type attributes affect depreciation values, group allocation and other reporting areas. Asset Management Suite includes predefined cost types, but you can add custom cost types too.  See <a href="#">“Creating a cost type”</a> on page 51.
Step 3	Create currencies.	The currency configuration item type lets you specify different currencies and their rates compared to the base currency.  See <a href="#">“Creating a currency”</a> on page 51.

**Table 6-1** Process for setting up the environment for managing contracts  
*(continued)*

Step	Action	Description
Step 4	Configure base currency.	After you specify the base currency, you can use the currency values and rates with the currency convertor.  See <a href="#">“Configuring base currency settings”</a> on page 52.

## Configuring accounting periods

An accounting period represents a yearly range of dates that corresponds to a set of financial records or reports. For example, an accounting period for a tax year can start on June 1, and it can be divided quarterly into three-month ranges.

In Asset Management Solution, the following accounting periods are provided by default:

- My Book
- My Tax
- My Custom

The accounting period settings that you define appear in **Purpose** and **Period** in several reports. For example, these settings appear in the **Depreciation By Assigned Cost Center** report. In these reports, in the **Purpose** drop-down list, you can you select an accounting period. You can then select a range of dates from the **Period** drop-down list.

This task is a step in the process for setting up the environment for managing contracts.

See [“Setting up the environment for managing contracts”](#) on page 49.

### To configure accounting periods

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Service and Asset Management > Asset Management Solution**, and then click **Accounting Periods**.
- 3 In the right pane, configure the accounting period.
- 4 Click **Save changes**.

## Creating a cost type

A cost type lets you specify a type of expense and logically group expenses. Cost type attributes affect depreciation values, group allocation, and other reporting areas. The default cost types of Asset Management Suite are contract, external support, install, internal support, and purchase. You can also add custom cost types.

This task is a step in the process for setting up the environment for managing contracts.

See [“Setting up the environment for managing contracts”](#) on page 49.

### To create a cost type

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Contracts**.
- 2 In the **Contract Management** portal, in the **Quick Start - Contracts** Web part, click **Cost Type**.
- 3 In the **Create configuration item** window, enter the name of the cost type and specify whether the cost is internal.

An internal cost refers to expenses within an organization. For example, an internal cost is a cost for an employee to perform a task or the cost of a utility that keeps systems running.

- 4 Click **OK**.

## Creating a currency

If your company uses multiple currencies in its asset transactions, you can create these currencies in your system. Currency values and rates can be used with the currency convertor.

This task is a step in the process for setting up the environment for managing contracts.

See [“Setting up the environment for managing contracts”](#) on page 49.

### To create a currency

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Contracts**.
- 2 In the **Contract Management** portal, in the **Quick Start - Contracts** Web part, click **Currency**.

- 3 In the **Create configuration item** window, enter the name, the standard three-letter code and the rate of the currency.

Symantec recommends that you set the base currency rate to 1.00. You then set other currencies to their respective exchange rates as they compare to the base currency.

- 4 Click **OK**.

## Configuring base currency settings

Before you can perform currency conversions and other finance-related operations, you must establish a base currency.

This task is a step in the process for setting up the environment for managing contracts.

See [“Setting up the environment for managing contracts”](#) on page 49.

### To configure a base currency

- 1 In the Symantec Management Console, on the **Settings** menu, click **All Settings**.
- 2 In the left pane, expand **Service and Asset Management > Asset Management Solution**, and then click **Base Currency**.
- 3 In the right pane, add the currencies that you want to use in the system, and then select the currency that you want to use as the base currency.

---

**Warning:** You cannot change the base currency after it has been saved.

---

- 4 Click **Save changes**.

## Managing contracts

Contract configuration items in Asset Management Suite let you insert and track the contract-related data in your environment. For example, you can enter details about lease schedules, warranties and the agreements that you have signed with your vendors or other business partners. After you create contract configuration items, you can associate them with other items in your system. For example, you can create a contract item that specifies the contract details, and then associate it with a new computer purchase. This association lets you track the document-related information for the new computer.

Before you can create and manage your contracts, you must set up your environment.

See [“Setting up the environment for managing contracts”](#) on page 49.

**Table 6-2** Process for managing contracts

Step	Action	Description
Step 1	Create contracts.	To track leases and contracts, you must create corresponding configuration items in the Configuration Management Database (CMDB). See <a href="#">“Creating a contract”</a> on page 53.
Step 2	Configure contract expiration notification policies.	A contract expiration notification policy is an automation policy that sends an email notification before a contract is due to expire. A reminder appears before the expiration date. See <a href="#">“Configuring a contract expiration notification policy”</a> on page 55.
Step 3	View contract reports.	You can access the contract management reports in the Symantec Management Console, on the <b>Reports</b> page, under <b>Reports &gt; Service and Asset Management &gt; Contract Management</b> .

## Creating a contract

To track leases and contracts, you enter the necessary data into the Configuration Management Database (CMDB). If your contract data is stored in paper form, you need to enter the data manually in the Symantec Management Console. If you have your contract data available in electronic format, you can import it into the CMDB. Symantec recommends that you use the predefined contract configuration item types to enter your contract data.

The predefined contract configuration item types in Asset Management Suite let you manage your contracts as follows:

- Contract** A contract configuration item type lets you enter data for any type of contract. For example, you can enter the contracts that you have signed with your vendors.
- Lease Schedule** A lease schedule lets you track lease payments, associated resources and the duration of leases. You can set notification policies to remind you that a lease is due to expire.

<b>Master Lease</b>	<p>After you create multiple lease schedules, you can combine accounting details into a master lease for total cost of ownership reports, generic schedule and overall summary information. A master lease lets you quickly view summary details for all leased equipment from one supplier. For example, you can view payments, schedules and serial numbers for covered hardware.</p> <p>For example, your organization leases several computers and printers from the same vendor. You can then create a master lease and link all the lease schedules that are associated with these leased assets.</p>
<b>NDA</b>	<p>A non-disclosure agreement (NDA) lets you protect the sensitive information about your organization that you share with your business partners or contractors. An NDA configuration item type lets you insert the NDAs that are signed for your company or the NDAs that your company signs for the other companies.</p>
<b>Service Level Agreement</b>	<p>A Service Level Agreement ( SLA) specifies the services that a vendor or a service provider furnishes under a particular contract.</p>
<b>Warranty</b>	<p>Warranties consist of hardware details, schedule and financial information. The warranty contract type lets you track the information that relates to the warranty. For example, you can track payments, expiration date and associated serial numbers.</p>

This task is a step in the process for managing contracts.

See [“Managing contracts”](#) on page 52.

#### To create a contract

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Contracts**.
- 2 In the left pane, under **Contract Management**, expand **Contract Types**.
- 3 Right-click a contract type, and then click the context menu option that lets you create a new contract.

4 In the **Create configuration item** window, specify the details of the contract.

<b>End Date</b>	To use the contract expiration notification feature, you must enter the end date of the contract.
<b>Covered Hardware</b>	For a <b>Lease Schedule</b> and a <b>Warranty</b> , you can specify the hardware that this contract covers.
<b>Associated Documents</b>	Note that, in Asset Management Suite, you can only specify the UNC path of the contract file. You cannot upload the document.

5 Click **OK**.

## Configuring a contract expiration notification policy

A contract expiration notification policy is an automation policy that sends an email notification 30, 60, or 90 days before a contract or a software license is due to expire.

By default, the automation policies send the notifications to the system administrator. However, if you assign owners to the contracts, you might want the contract owner to be notified instead.

---

**Warning:** After you configure the automation policy to send a notification to a contract owner, you must make sure that all the contracts have an assigned owner. If a contract does not have an assigned owner, the contract expiration notification is not sent. To avoid this situation, you can make the system administrator the default owner for all new contracts.

See [“Configuring default data entry values”](#) on page 32.

---

This task is a step in the process for managing contracts.

See [“Managing contracts”](#) on page 52.

### To configure a contract expiration notification policy

- 1 In the Symantec Management Console, on the **Manage** menu, click **Automation Policies**.
- 2 In the automation policies list, click one of the following:
  - **Contracts expiring in the next 30 days**
  - **Contracts expiring in the next 60 days**
  - **Contracts expiring in the next 90 days**

- 3 Specify the schedule and other settings of the automation policy.
- 4 Under **Actions**, click **Edit input parameter**.
- 5 In the **Edit Job/Task Input Parameters** dialog box, in the **To** box, type the email address of the recipient, and then click **OK**.
- 6 Click **Save changes**.
- 7 (Optional) Click **Test Automation Policy**.  
 If the automation policy works correctly, it sends an email to the email address that you specified.
- 8 On the toolbar, click **Turn on**.

**To configure a contract expiration notification policy to send an email notification to the contract owner**

- 1 In the Symantec Management Console, on the **Manage** menu, click **Automation Policies**.
- 2 In the automation policies list, click one of the following:
  - **Contracts expiring in the next 30 days**
  - **Contracts expiring in the next 60 days**
  - **Contracts expiring in the next 90 days**
- 3 On the contract expiration notification policy page, under **Details**, click **Edit query**.
- 4 In the **Data Source** dialog box, on the **Query** tab, in the left pane, click **vContract**, and then, in the right pane, under **Actions**, click **Create Joins**.
- 5 In the **Joins** dialog box, do the following:
  - In the first drop-down list, leave the type **LeftOuter**.
  - In the second drop-down list, click **vUser**.
  - In the bottom left drop-down list, click **[vContract].[\_AssignedUserGuid]**.
  - In the bottom right drop-down list, click **Guid**.
  - Click **OK**.
- 6 In the **Data Source** dialog box, on the **Fields** tab, click **Add**.
- 7 In the **Add Fields & DataClass Attributes** dialog box, in the drop-down list, click **[vUser].[Email]**, and then click **OK**.
- 8 In the **Data Source** dialog box, click **OK**.

- 9 On the contract expiration notification policy page, under **Actions**, click **Edit input parameter**.
- 10 In the **Edit Job/Task Input Parameters** dialog box, in the **To** drop-down list, click **Email**, and then click **OK**.
- 11 Click **Save changes**.
- 12 On the toolbar, click **Turn on**.

# Managing your procurement process

This chapter includes the following topics:

- [Setting up the procurement environment](#)
- [Performing the procurement](#)

## Setting up the procurement environment

Procurement describes the process of obtaining new objects, assets or devices for your company. Asset Management Suite helps you manage your procurement process and provides the templates that help you create and manage procurement-related configuration items. Creating and using these configuration items lets you track assets and resources for their entire lifecycle. You can also run reports and use filters to determine the status of items in your procurement process.

The **Quick Start - Procurement** Web part displays the steps that must be completed in the shown order when you first begin working in the Procurement portal. First, you must set up the stockrooms, supplier companies and catalogs, and then you enter the catalog items. After you prepare the procurement environment, you can create purchase requests and purchase orders.

See [“Performing the procurement”](#) on page 64.

**Table 7-1** Process for setting up the procurement environment

Step	Action	Description
Step 1	Create a stockroom.	Creating a stockroom is the first step of preparing the procurement environment. A stockroom lets you keep track of the catalog items.  See <a href="#">“Creating a stockroom”</a> on page 59.

**Table 7-1** Process for setting up the procurement environment (*continued*)

Step	Action	Description
Step 2	Create supplier companies.	Before you can create procurement catalogs, you must create company configuration items for suppliers from whom you purchase assets and consumables.  See <a href="#">“Creating a company”</a> on page 60.
Step 3	Create procurement catalogs.	Procurement catalogs store the information that you need to request assets.  See <a href="#">“Creating a procurement catalog”</a> on page 61.
Step 4	Add items to the procurement catalogs.	After you create a procurement catalog, you must populate it with the consumables, assets or software that users can request.  See <a href="#">“Adding items to the procurement catalog”</a> on page 62.
Step 5	(Optional) Create bundles.	Bundles let you group frequently ordered catalog items together.  See <a href="#">“Creating a bundle”</a> on page 63.
Step 6	(Optional) Keep track of the consumable items in stock.	The <b>Replenish Stockroom Quantities</b> automation policy helps you keep track of the quantities of the consumable items in the stockroom. This policy also performs a reorder, if necessary.  See <a href="#">“Replenishing stockroom quantities”</a> on page 63.

## Creating a stockroom

Stockrooms are part of the procurement feature in Asset Management Suite. A stockroom holds the assets and the consumables that are ready for distribution into the environment. It also lets you store spare equipment until it is needed.

When you define a stockroom, you must assign it to a location and associate a user as the stockroom manager. Before you create a stockroom, make sure that you have the location and the manager of the stockroom defined in the Configuration Management Database (CMDB).

At this time, a stockroom can only contain consumable configuration items. However, you may also want to assign fixed assets to a stockroom. The best practice is to create a location for each stockroom using the same name as the stockroom. When you place a fixed asset in a stockroom, you then change its status to **In Stock** and update its **Location** to reflect the stockroom. To see all fixed assets that are placed in the stockroom, filter the **Assets by Type, Status, Department, Cost Center and Location** report by **Asset Status** and **Location** parameters.

This task is a step in the process for setting up the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

### To create a stockroom

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, right-click **Stockroom**, and then click **Create Stockroom**.
- 3 In the **Create configuration item** window, do the following:
  - Give the stockroom a name, assign it to a location and then define the stockroom manager.  
For the system to work properly, ensure that the stockroom manager has a valid email address.
  - Under **Consumables in Stock**, add the consumable catalog items that you want to keep in this stockroom. Note that the **Consumables in Stock** items must first exist in the procurement catalog and be defined as consumable catalog items.  
The consumable catalog items are generally less important assets that are not tracked as individual resources. You only monitor the quantity of these items in stock and order new items when the quantity becomes too low. To make it easier to keep track of the consumable items and their quantities in stock, you can set up notifications and automation for reordering.  
See [“Replenishing stockroom quantities”](#) on page 63.
  - If you plan to use the reorder feature, specify the **Stock Order Details** data.

- 4 Click **OK**.

See [“Creating a location”](#) on page 21.

See [“Creating a user”](#) on page 24.

## Creating a company

The Company configuration item type lets you specify data for the internal or the external companies in the Configuration Management Database (CMDB).

For internal companies, the Company configuration item lets you create the top level of your company's organizational hierarchy, if you have subsidiaries. If a single company consists of multiple smaller companies, the Company configuration item type lets you record data about these companies. If you have structured your configuration item management system as a single company, this configuration item type might not be needed for internal company data.

For external companies, you can use the Company configuration item type to insert data of the companies from whom you purchase assets. In the procurement feature of Asset Management Suite, these companies are called suppliers.

Additionally, the Company configuration item type gets populated by the Software Management Framework. The Software Discovery scan collects data about the installed software and creates the software resources with the minimum metadata: the company (vendor) name, software name and version.

Note that the Company configuration item type does not let you create a hierarchical structure of companies.

This task is a step in the process for setting up the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

#### To create a company

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, expand **Organizational Types**, right-click **Company**, and then click **Create Company**.
- 3 In the **Create configuration item** window, specify the details of the company.
- 4 Click **OK**.

## Creating a procurement catalog

The procurement catalog contains the information that you need to request consumables, assets or software. The procurement catalog is directly associated with the supplier company.

See [“Creating a company”](#) on page 60.

This task is a step in the process for setting up the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

#### To create a procurement catalog

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, expand **Catalogs**, right-click **Catalog**, and then click **Create Catalog**.
- 3 In the **Create configuration item** window, give the catalog a name and specify the supplier for the catalog.  
  
Symantec recommends that you give the catalog the same name as the supplier company that is associated with it.
- 4 Click **OK**.

## Adding items to the procurement catalog

After you create the procurement catalog, you can populate it with the following types of items:

<b>Consumable catalog item</b>	You do not track consumable catalog items once you give them out. You only track how much it costs to buy these items. For example, consumable catalog items are cables and toners. The cost of a consumable catalog item is charged directly from a cost center or department. The owner of a consumable catalog item can be a cost center or a department.
<b>Fixed asset catalog item</b>	Fixed assets are usually purchased for a particular user. The owner of a fixed asset catalog item can be a user or a department. For example, fixed asset catalog items are computers, monitors, and desks.
<b>Software catalog item</b>	Software is purchased for a particular user or group of users. The owner of a Software Catalog item can be a user or a department.

Note that many suppliers provide an electronic form of their catalogs. You can use Data Connector Solution to import these catalogs into the Configuration Management Database (CMDB).

For more information, see the topics about managing CMDB data with Data Connector in the *IT Management Suite Administration Guide*.

After you add the items to the procurement catalog, users can start requesting purchases of these items.

This task is a step in the process for setting up the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

### To add items to the procurement catalog

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, expand **Catalogs**, right-click the catalog item type, and then click the context menu option that lets you create a catalog item.
- 3 In the **Create configuration item** window, give the catalog item a name and specify the catalog to which you want to add it.  
 For **Fixed asset catalog item**, you must also specify the **Resource Type**.
- 4 Click **OK**.

## Creating a bundle

Bundles let you group frequently ordered catalog items together. For example, you can create an equipment bundle for a new tester that contains two monitors, a desktop production computer, a keyboard, a mouse, a laptop, two test computers and a switch box. If you need to order such set of items frequently, you can create a bundle rather than have to select all the individual items each time you order. Note that you can add bundles only to a purchase request.

This task is a step in the process for setting up the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

### To create a bundle

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, expand **Catalogs**, right-click **Bundle**, and then click **Create Bundle**.
- 3 In the **Create configuration item** window, give the bundle a name and add the items that you want to be part of this bundle.

Note that you must have the items inserted into the procurement catalog first.

See [“Adding items to the procurement catalog”](#) on page 62.

- 4 Click **OK**.

## Replenishing stockroom quantities

You can use your stockrooms with the **Replenish Stockroom Quantities** automation policy. This policy automatically keeps track of the quantities of the consumable items in the stockroom and performs a reorder if necessary.

For each consumable item that is listed under **Stock Order Details** of the stockroom, the task checks the quantity in a stockroom with the same **Cost Center** or **Department**. If it is less than the **Order Level**, the policy creates a purchase order with a quantity of **Number to Order**. The policy also sends an email notification to the stockroom manager to report that the purchase order is created.

This task is a step in the process for setting up the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

### To replenish stockroom quantities

- 1 In the Symantec Management Console, on the **Manage** menu, click **Automation Policies**.
- 2 In the automation policies list, click **Replenish Stockroom Quantities**.

- 3 On the **Replenish Stockroom Quantities** page, specify the schedule of the policy and the actions that should be performed.
- 4 Click **Save changes**.
- 5 On the toolbar, click **Turn on**.

## Performing the procurement

The procurement process lets you obtain new objects, assets or devices for your company. Before you can start the procurement process, you must prepare the procurement environment.

See [“Setting up the procurement environment”](#) on page 58.

**Table 7-2** Process for performing the procurement

Step	Action	Description
Step 1	Create a purchase request.	The creation of a purchase request initiates the procurement process. You must manually create the purchase request in the Symantec Management Console. See <a href="#">“Creating a purchase request”</a> on page 65.
Step 2	Generate a purchase order.	Symantec recommends that you use the purchase requests to generate the purchase orders. However, you can also create a purchase order manually. See <a href="#">“Generating a purchase order”</a> on page 65. After you create a purchase order and send it to the supplier, the procurement process pauses until the items on the order arrive.
Step 3	Generate an invoice.	When a shipment arrives, you generate an invoice in the Symantec Management Console in preparation for receiving the items. Use the purchase order to generate the invoice. See <a href="#">“Generating an invoice”</a> on page 66.
Step 4	Receive items.	As the final step of the procurement process, you receive the items and place them in the stockroom or pass them to the owner. When you receive an item, you can specify how you want to handle it. You can create a new resource in the Configuration Management Database (CMDB) or you can update the existing item. See <a href="#">“Receiving an item”</a> on page 67.
Step 5	(Optional) View procurement reports.	You can access the procurement reports in the Symantec Management Console, on the <b>Reports</b> page, under <b>Reports &gt; Service and Asset Management &gt; Procurement</b> .

## Creating a purchase request

To order any assets or software items, you must create a purchase request.

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**Warning:** If you plan to create the purchase requests in the Symantec Management Console, restrict Procurement portal permissions so that only managers or users who have purchasing approval authority can create purchase requests. The reason for this restriction is that the purchase request form includes a global setting that lets you approve the request and move to the next stage in the procurement process.

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This task is a step in the process for performing the procurement.

See [“Performing the procurement”](#) on page 64.

To create a purchase request in the Symantec Management Console

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, right-click **Purchase Request**, and then click **Create Purchase Request**.
- 3 In the **Create configuration item** window, specify the stockroom, requestor and the catalog items that you want to purchase.

You must specify the quantity for each line item.

You can specify an owner for each line item separately. If you do not specify the owner, the system automatically sets the requestor as the owner of all line items.

For consumable catalog item types, the owner must be a Contact Center or Department.

- 4 Set the **Approval Status** to **Approved**, and then click **OK**.

## Generating a purchase order

A purchase order is a document that you send out to a supplier to order the items that your company requires. You can generate purchase orders from the purchase requests that you receive. You can also create purchase orders manually.

A purchase request can contain a mix of catalog item types and items from different catalogs. For example, a purchase request can contain a Dell computer, Dell monitor, Hewlett-Packard keyboard and mouse, Cables Direct ethernet cable, and Microsoft Office software. When you generate a purchase order from the purchase request, the system automatically checks the supplier of each catalog item on the purchase request. For each different supplier company, the system creates a separate purchase order.

Note that before you can generate a purchase order, the **Approval Status** of the purchase request must be set to **Approved**.

This task is a step in the process for performing the procurement.

See [“Performing the procurement”](#) on page 64.

#### To generate a purchase order

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, click **Purchase Request**.
- 3 To generate a purchase order, do one of the following:
  - Open the purchase request for editing and in the **Edit configuration item** window, click **Generate**.
  - In the right pane, right-click the purchase request, and then click **Generate Purchase Order**.

When you use the **Generate** option in the **Edit configuration item** window to generate the purchase order, you can choose to have selected line items go across to the purchase order. If you use the right-click method, all of the line items are processed.

## Generating an invoice

When a shipment arrives, you generate an invoice in the Symantec Management Console. Use a purchase order to generate the invoice. The invoice contains catalog items from one supplier and is expected to be a copy of the invoice that you receive from the supplier company. To the invoice that you generate in the Symantec Management Console, you can attach the invoice that your supplier sends.

This task is a step in the process for performing the procurement.

See [“Performing the procurement”](#) on page 64.

#### To generate an invoice

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane, click **Purchase Order**.
- 3 To generate an invoice, do one of the following:
  - Open the purchase order for editing and, in the **Edit configuration item** window, click **Generate**.
  - In the right pane, right-click the purchase order, and then click **Generate Invoice**.

When you use the **Generate** option in the **Edit configuration item** window to generate the invoice, you can choose to have selected line items go across to the invoice. If you use the right-click method, all of the line items are processed.

## Receiving an item

As the final step of the procurement process, you receive the catalog items and place them in the stockroom or pass them to the owner. The system automatically creates a receiving slip to record the receiving action.

To accommodate different workflows, you can receive items from a purchase request, purchase order or invoice. Note that if you receive items from a purchase request, you must split up any bundles into their individual catalog items.

When you receive an item, you can specify whether you want to create a new resource for this item or update the existing catalog item. The receiving process handles each type of catalog item differently:

<b>Consumable catalog item</b>	When you receive a consumable catalog item, the system creates a new consumable catalog item or increases its quantity in the stockroom. You do not track consumable catalog items once you give them out.
<b>Fixed asset catalog item</b>	When you receive a fixed asset catalog item, the system creates a new resource in the Configuration Management Database (CMDB) or updates an existing asset. You can track the fixed asset catalog item for its entire lifecycle.
<b>Software catalog item</b>	When you receive a software catalog item, it becomes a software purchase configuration item in the CMDB.

This task is a step in the process for performing the procurement.

See [“Performing the procurement”](#) on page 64.

### To receive an item

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Procurement**.
- 2 In the left pane click **Invoice**.

---

**Note:** If **Invoice** has not been generated, you can receive items from **Purchase Order**. If **Purchase Order** has not been generated, you can receive items from **Purchase Request**.

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- 3 In the right pane, right-click the invoice, purchase order or purchase request, and then click **Receive Items**.

- 4 In the **Receive Items** dialog box, specify the stockroom where you want to place the items.

For more information, click the page and then press **F1**.

See [“Receive Items page”](#) on page 115.

- 5 Click **Receive**.

# Managing software licenses

This chapter includes the following topics:

- [Managing your software license compliance using the Software view](#)
- [Managing your software license compliance on the Asset Management Solution pages](#)

## Managing your software license compliance using the Software view

Asset Management Suite lets you optimize the usage of licensed software in your environment by comparing the number of the software product installations to the number of purchased licenses and the terms of the license contract that you configure. You can stay compliant with the purchased software licenses and at the same time improve software availability by optimizing usage of existing licenses. You can plan your future software purchases more accurately. You can also use this functionality during software audits.

To set up software license compliance, you must first collect data about the software that is installed on your client computers. After you discover the software, you add information about the purchased licenses to tie together the software product information and the number of purchased licenses.

If you have Asset Management Suite and Client Management Suite or IT Management Suite installed, you can manage your software licenses using the Software view from Symantec Management Console. If you have Asset Management Suite, you can use Asset Management Solution pages to manage your software licenses.

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**Note:** If you only install Asset Management Suite, the Software view is not installed. The Software view is only available when you install IT Management Suite or Client Management Suite.

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The Software view lets you manage software licenses in your environment with a few easy steps.

Note that the process of managing your software license compliance using the Software view from the Symantec Management Console provides more options than the Asset Management Solution pages. For example, you can manage license compliance with a few easy steps while considering software usage and create custom reports in a single click.

For more information, see the topics about the Software view in the *IT Management Suite Administration Guide*.

See [“Managing your software license compliance on the Asset Management Solution pages”](#) on page 86.

**Table 8-1**      Process for managing your software license compliance using the Software view

Step	Action	Description
Step 1	Gather software inventory.	Software inventory collects information about the applications that are installed on your client computers. To gather software inventory, you must have Inventory Solution installed on your Notification Server and the Inventory plug-in installed on your client computers.  See <a href="#">“Methods for gathering software inventory”</a> on page 71.  For more information, see the topics about gathering your software inventory in the <i>Inventory Solution User Guide</i> .
Step 2	Create a licensed software product.	To create a licensed software product, you identify the filter rules that define the software product and specify the software license data.  See <a href="#">“About creating a software product item using the Software view”</a> on page 73.
Step 3	Creating a software license	A software license item ties together the software purchase and the software product.  See <a href="#">“Software Product dialog box”</a> on page 74.
Step 4	(Optional) Edit the license rules.	Edit the license rules parameters. For example, license types, authorized filters, etc.  See <a href="#">“Edit License Rule dialog box”</a> on page 77.

**Table 8-1** Process for managing your software license compliance using the Software view *(continued)*

Step	Action	Description
Step 5	Viewing license information in ITMS Management Views	After you set up your environment, you can track the software license compliance.  See <a href="#">“Viewing license information in ITMS Management Views”</a> on page 78.
Step 6	(Optional) Create custom report for license compliance tracking	Based on the software license compliance information you can create a custom report with a few easy steps.  See <a href="#">“Filter/Target Results Report dialog box”</a> on page 84.

## Methods for gathering software inventory

You can gather inventory about the software applications that are installed in your environment. For example, you can gather information about the application version, build number, and manufacturer.

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**Note:** If a manufacturer does not provide the version of the software, a version is not populated for the relevant software component.

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When you perform a software inventory, you can use different methods to gather different types of data.

**Table 8-2**      Methods for gathering software inventory

Method	Description
<p>Basic software application file inventory</p>	<p>This software inventory method scans the file system on managed computers and reports software inventory based on the software application .EXE files that are found. For example, it reports file name, size, path, and so on.</p> <p>In addition to the file properties, the information about the key executables for the installed applications is collected as follows:</p> <ul style="list-style-type: none"> <li>■ For each user, the inventory agent scans the Start Menu folder for .lnk files and collects the information about where the links point to.</li> <li>■ For each user, the inventory agent scans the registry for the installed MSIs, and then each MSI is scanned for the included binaries that have a corresponding .lnk item in the MSI database.</li> </ul> <p>To gather basic software application file inventory on managed Windows and UNIX, Linux, and Mac computers, you create, configure, and turn on the inventory policy with the <b>File Properties - manufacturer, version, size, internal name, etc.</b> box checked.</p> <p>To gather basic standalone inventory on unmanaged Windows computers, you create, configure, and run the stand-alone inventory package with the <b>File Properties - manufacturer, version, size, internal name, etc.</b> box checked.</p> <p>Beside collecting file properties based on inventory rules, inventory agent collects information about key executables for installed applications: 1) For each user scan Start Menu folder for .lnk files and collect information about executables where link points to 2) For each user scan registry for installed MSIs and each found MSI scan for included binaries that have corresponding .lnk item in MSI database. Collect information about these executables.</p>
<p>Inventory of Windows <b>Add or Remove Programs</b> list and UNIX/Linux/Mac software packages</p>	<p>This software inventory method uses the <b>Software Discovery</b> task to collect the information about the installed software applications.</p> <p>On Windows computers, you can gather information about the applications that are in the <b>Add or Remove Programs</b> list of managed computers (MSI cache). Note that when Inventory Solution is installed, it turns off any schedules for the <b>Software Discovery</b> task. Instead, it uses the schedules of the Inventory policies that use it.</p> <p>On UNIX, Linux, and Mac computers, you can gather information about the software packages on managed computers.</p> <p>To use this method on managed Windows, UNIX, Linux, and Mac computers, you create, configure, and turn on the inventory policy with the <b>Software – Windows Add/Remove Programs and UNIX/Linux/Mac software packages</b> box checked. This box is checked by default.</p> <p>To use this method on unmanaged Windows computers, you create, configure, and run the stand-alone inventory package with the <b>Software – Windows Add/Remove Programs</b> box checked.</p>

**Table 8-2** Methods for gathering software inventory (*continued*)

Method	Description
Targeted software inventory on Windows computers	On managed Windows computers, this software inventory method lets you use rules to identify specific software applications.
Software inventory using the <code>filescan.rule</code> file on UNIX, Linux, and Mac computers	To use this method, you run the <b>Targeted Software Inventory</b> policy.  On managed UNIX, Linux, and Mac computers, this method lets you collect information about the installed software applications using the <code>filescan.rule</code> file. The software inventory agent compares a list of applications in the <code>filescan.rule</code> file with the actual file system data to determine which applications are installed.
Gathering software information and validating it using the Software Catalog Data Provider  (Windows only)	The Software Catalog Data Provider is a component of Inventory Solution that can be used to import software inventory data into the Software Catalog. The Software Catalog Data Provider is installed with Inventory Solution.  The Software Catalog Data Provider provides a list of known software applications and predefined software products that is imported in the Configuration Management Database (CMDB). When you perform software inventory, the gathered data about software applications can be compared to the list of known applications and predefined software products. If the application data matches, it helps ensure that your software inventory data is accurate and lets you manage installed software at the product level.

## About creating a software product item using the Software view

Software product items let you manage the details that are related to the software products and their different versions in your environment.

You can create a single software product item and associate it with several different versions of the same software. For example, you can associate both Norton Ghost 15.2 and Norton Ghost 15.3 SP2 with a software product item Norton Ghost 15. When these different versions are reported, they are consolidated for the software product named Norton Ghost 15.

When you create a software product item, you specify its name, description, company, and category. After you create a software product, you make associations between the software product, a software resource (also called a software component), and a software license. Creating these associations lets you identify how many copies of a given software product you have in your environment. You can compare the number of copies with the number of the software licenses that you own.

This task is a step in the process for managing your software license compliance using the Software view.

See [“Software Product dialog box”](#) on page 74.

## Software Product dialog box

To access the **Software Product** dialog box, do one of the following:

- On the **Software** view page, in the content pane, right-click a managed software product, click **Configure**, and then click one of the actions in the menu (**Component association**, **Usage tracking**, **Software delivery** or **Licenses**).
- On the **Software** view page, in the content pane, right-click a software component from the **Discovered Unreviewed Software** folder, and then, in the **Software Component Summary** flipbook, click **Create a software product** symbol.
- In the **Software Catalog** dialog box, right-click a software product in the **Managed software products** or a software component in the **Unmanaged software** folder. Click **Configure**, and then click an option in the right-click menu (**Component association**, **Usage tracking**, **Software delivery** or **Licenses**).

In the **Software Product** dialog box, you can review the information about a software product and configure the settings for this product.

You can do the following:

- Modify the product's filter criteria to identify the software to associate with this product.
- Meter and track the usage of the product.
- Choose the software packages to deliver.
- Track software usage or add and manage the purchased licenses.  
See "[Software Product Summary flipbook](#)" on page 79.

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**Note:** To change the icon for a software product, click the **Change...** symbol in the upper right corner of the dialog box. Note that only **PNG** and **JPG** image formats are supported.

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**Table 8-3**      Tabs on the **Software Product** dialog box

Tab	Description
<b>Identify inventory</b>	<p>Shows the non-hidden software components that are associated with the software product and match the search criteria.</p> <p>You can view and modify the filtering rules that define the product.</p> <p>Filtering rules are dynamic. Any software that comes into your environment that matches these rules is automatically associated with this product.</p> <p>The filtering criteria are as follows:</p> <ul style="list-style-type: none"> <li>■ <b>Software name</b></li> <li>■ <b>Company</b></li> <li>■ <b>Version</b></li> <li>■ <b>Installs</b></li> </ul> <p>This column shows the number of client computers on which the software is found. Because more than one software component can be installed on a client computer, the number that is shown in the <b>Installed</b> column may not correspond to the number of used licenses that is shown for the installed products in the <b>Software Product Summary</b> flipbook.</p> <p>When you change the software product name, for example, from Adobe Reader to Adobe, the data on the tab changes to display the information about all Adobe components.</p> <p>To activate the <b>Company</b> filter, you must first enter the value for the <b>Software name</b> filter.</p> <p>If you check the <b>Include components associated with other products</b> box, the software list will include the components that you can associate with the software product but that are currently associated with another software product. The components that are associated with another product are highlighted. When you click the highlighted component, you can change the software association or keep the current software association.</p> <p>Note that, if the query returns too many results, these results are never fully loaded and the process gets stuck. To make the search more specific and avoid this issue, use the <b>Search as you type</b> option.</p>

**Table 8-3**      Tabs on the **Software Product** dialog box (*continued*)

Tab	Description
<b>Meter / track usage</b>	<p>Shows the following data:</p> <ul style="list-style-type: none"> <li>■ All the software components that are associated with the software product.</li> <li>■ All manually imported software components that are associated with the software product.</li> <li>■ All manually created associations between the software product and the software components.</li> </ul> <p>You can meter and track the usage of a software product.</p> <p>You can only meter and track a software product if it has at least one program that is associated with it.</p> <p>If no program is associated with the software product, in the <b>Programs</b> list, click <b>Add Program</b>, and then, in the <b>Add Program</b> dialog box, choose the program that you want to associate with the software product.</p> <p>To enable software metering and tracking, check the <b>Turn on metering/usage tracking for this software product</b> box.</p> <p>If the product has not run on your computer for 90 days, the product is considered unused by default. You can change the default number of days at the bottom of the tab.</p>
<b>Delivery</b>	<p>You can select software packages to deliver.</p> <p>The <b>Delivery</b> tab displays available software packages. If only one package is associated with the product, the package is automatically selected as the package to be delivered. If only one command line is associated with the package, the command line is automatically selected as the command line for the package.</p> <p>If more than one package is associated with the software product, you can select the default package to be used when the product is delivered. If more than one command line is associated with the package, you can select the default command line to be used for the package.</p> <p>Note that if you select a different default package to associate with the product, it becomes the new default package. If you select a different default command line to associate with the package, it becomes the new default command line for the package.</p> <p>If no packages are displayed on the <b>Delivery</b> tab, click <b>Import</b> to define a package. You can also add a software package or a command line, edit, or delete a software package or a command line.</p>

**Table 8-3**      Tabs on the **Software Product** dialog box (*continued*)

Tab	Description
<b>Licenses</b>	<p>You can manage your software licenses.</p> <p>If you check the <b>Licensable product</b> box, you can license software products, add purchases to a license, create new licenses, and edit or delete software purchases and licenses. By default, this box is checked.</p> <p>The table shows you all the license contracts that are related to this software product. Expired contracts are marked in red, and the contracts that will be active in future are greyed out.</p> <p>When you click <b>Add license</b>, in a dialog box that opens, you can edit the product license information and add or delete purchases.</p> <p><b>Note:</b> To manage software licenses, you must have the Asset Management Suite installed.</p> <p>For more information, see the topics about installing Asset Management Suite in the <i>ITMS Management Suite Planning and Implementation Guide</i> and the topic about managing software licenses in the <i>Asset Management Suite User Guide</i>.</p>

## Edit License Rule dialog box

In this dialog box, you can choose the rule according to which license usage is calculated.

Additional options become available depending on the type of rule that you choose.

In the **Edit License Rule** dialog box, in the **Type** drop-down list, you can select the following types of license rules:

**Table 8-4**      Types of license rules

Type	Description
<b>Per Device</b>	<p>This rule lets you specify a list of devices on which the software product can be installed and used.</p> <p>The license usage for devices that do not belong to this filter is counted as unauthorized. If you do not select a filter, the license usage is counted as authorized for all devices and on Notification Server.</p>

**Table 8-4** Types of license rules (*continued*)

Type	Description
<b>Per User</b>	<p>This rule lets you specify a list of devices on which the software product can be installed, a list of users that can run this software product, and the limit for installations.</p> <p>The license usage for devices and users that are not in the filter is counted as unauthorized. If you do not select a filter, the license usage is counted as authorized for all devices and users on Notification Server.</p>
<b>Per Processor/Core</b>	<p>This rule type lets you specify a list of devices and the number of processors or cores that is used to calculate the license usage.</p> <p>The licenses are counted according to the use of physical processors or cores, and the <b>Point Value</b> coefficient.</p>

See [“Software Product Summary flipbook”](#) on page 79.

## Viewing license information in ITMS Management Views

In ITMS Management Views, you can see the information about your software products and licenses in the **Software Product Summary** flipbook.

See [“Software Product Summary flipbook”](#) on page 79.

### To view license information in ITMS Management Views

- 1 In the Symantec Management Console, on the **Manage** menu, click **Software**.
- 2 In the left pane, under **Software Filters**, click the filter that contains the managed software product (for example, **Installed Products** or **All Software**).

- 3 In the content pane, click any installed software product, and then, in the right pane, in the **Software Product Summary** flipbook, you can see the information about software usage or license usage and compliance.

For a licensed software product, the color-coded **License Utilization** pie chart shows you how many licenses there are, how they are utilized and if any of them are used without authorization.

See [“License Utilization pie chart”](#) on page 81.

For an unlicensed software products, the color-coded software **Software Usage** pie chart shows you how many software products are used, unused or untracked.

See [“Software Usage pie chart”](#) on page 82.

- 4 (Optional) To filter the **Computers with software installed** list according to a specific license software or license state, click a section in the pie chart.

You can save the computer list as an editable filter or a report.

See [“Computers with software installed list”](#) on page 83.

## Software Product Summary flipbook

In the **Software Product Summary** flipbook, on the **Software View** page, you can see detailed information about software and license usage on your client computers. You can use this data to create reports and filters and manage your licensed software.

The flipbook is available for all software products.

The **Software Product summary** contains the following sections:

**Table 8-5** Software Product Summary flipbook sections

Section	Description
Overall status of the software product.	<p>The product status can be as follows:</p> <ul style="list-style-type: none"> <li>■ <b>Compliant</b></li> <li>■ <b>Needs Attention</b> This status indicates that there are problems with current license utilization. This status is typically displayed when there are underutilized licenses.</li> <li>■ <b>Action Required</b> This status indicates that there are serious problems with current license utilization that require immediate actions. This status is typically displayed when there are overutilized licenses.</li> </ul> <p>For more information and a suggestion of further actions, click the product status.</p>
General information about the software product.	<p>Shows the following information about a software product:</p> <ul style="list-style-type: none"> <li>■ General information about the product (name, company, version).</li> <li>■ State (<b>Managed</b> or <b>Unmanaged</b>). To make the product managed or unmanaged, in the content pane, right-click the product, and then, in the drop-down menu, click the option that you need.</li> <li>■ Usage tracking (<b>On</b> or <b>Off</b>)</li> <li>■ License type The type of rule according to which license usage is calculated (per device, per user or per processor/core). You select the rule when you create or edit a software license. If the software is unlicensed, there is a link to the <b>Licenses</b> tab on the <b>Software Product</b> page. From this tab, you can add licenses to your software product. See <a href="#">“Creating a software license”</a> on page 89.</li> <li>■ The number of active licenses. (For a licensed product)</li> <li>■ Average license price. (For a licensed product)</li> </ul>
(For a licensed product) <b>License Utilization</b> pie chart	<p>A color-coded chart that describes software and license usage.</p> <p>See <a href="#">“License Utilization pie chart”</a> on page 81.</p>

**Table 8-5** Software Product Summary flipbook sections (*continued*)

Section	Description
(For a non-licensed product) <b>Software Usage</b> pie chart	A color-coded chart that describes software usage. See <a href="#">“Software Usage pie chart”</a> on page 82.
<b>Computers with software installed</b>	You can filter the results in this dynamic list according to the particular state of software or license usage and save the results as an editable filter or report. See <a href="#">“Computers with software installed list”</a> on page 83.
<b>Policies installing this software</b>	From this list, you can open the policy page to view or configure the policy settings.

See [“Viewing license information in ITMS Management Views”](#) on page 78.

### License Utilization pie chart

The color-coded **License Utilization** pie chart is shown for a licensed software product on the **Software Product Summary** flipbook.

The pie chart consists of two circles:

- An outer circle that shows the license utilization summary.  
See [Table 8-6](#) on page 81.
- An inner circle that shows detailed information about license usage.  
You can click the sections of this circle to filter the **Computers with this software installed** list.  
See [Table 8-7](#) on page 82.

The chart shows the following information about the usage of software licenses:

**Table 8-6** Information under Summary

Status	Description
<b>Underutilized</b>	The number of licenses that are not consumed or licenses belonging to software that is installed but not used. Potential savings are shown based on the average license price.  Note that, if software usage tracking is turned on and the software is unused, the license is counted as <b>Underutilized</b> .
<b>Utilized</b>	The number of licenses that are used in a normal way.  Note that, software usage tracking is turned off, the license for installed software is always counted as <b>Utilized</b> .

**Table 8-6** Information under Summary (*continued*)

Status	Description
<b>Overutilized</b>	The number of licenses the usage of which exceeds the number of purchased licenses or that were installed without authorization.

**Table 8-7** Information under License Usage

Status	Description
<b>Available</b>	The number of available licenses that are not consumed.
<b>Unused</b>	The number of licenses belonging to unused software products that were discovered during software inventory.
<b>Used</b>	The number of licenses used by software products on inventoried client computers for which usage tracking and metering is turned on.
<b>Tracked manually</b>	The number of consumed licenses on the non-inventoried client computers. This number is entered by the administrator in the license editor.
<b>No tracking data</b>	The number of consumed licenses that were discovered by Inventory on the client computers on which the software usage is not tracked.
<b>Unauthorized</b>	The number of licenses for software found on client computers that do not belong to a defined computer or user filter.

See [“Software Product Summary flipbook”](#) on page 79.

## Software Usage pie chart

The color-coded **Software Usage** chart is shown for an unlicensed software product on the **Software Product Summary** flipbook.

The pie chart shows the following information:

**Table 8-8** Software Usage data

Status	Description
<b>Unused</b>	The number of client computers on which the software product was not reported by metering as used during last 90 days (default number).

**Table 8-8** Software Usage data (*continued*)

Status	Description
<b>Used</b>	The number of client computers on which the software product was reported by metering as used during last 90 days (default number).
<b>Untracked</b>	<p>The number of client computers on which the software product is reported as installed, but there is no metering information about the software usage.</p> <p>This happens, for example, if usage tracking for a software product is turned off, if the computers on which this software is installed are not targeted by the software usage tracking or metering policy, or if software tracking is not supported by the operating system on this client computer.</p> <p>For untracked software products, the <b>User</b> column in the <b>Computers with software installed</b> list shows the primary user of the client computer.</p>

See [“Software Product Summary flipbook”](#) on page 79.

## Computers with software installed list

In the **Computers with software installed** list on the **Software Product Summary** flipbook, you can do the following:

- Filter the data according to the state of license usage.  
 To filter the computer list, on the **License Utilization** pie chart, click a section in the inner circle or a license state under **License Usage**.  
 You can also click **Filter by Usage** on the toolbar, and then check or uncheck the boxes.  
 To restore the default filter settings, click **Default**. To enable all filtering options, click **Select all**.
- Create a computer filter.  
 You can save the computer list as a filter, and then edit this filter and use it for managing software.
- Create a report.  
 You can save the computer list as a dynamic editable report.

The list contains the following columns:

**Table 8-9** Columns in the computer list

Column	Description
<b>Computers</b>	<p>This column shows the name of the client computer on which the software product is installed.</p> <p>If license utilization count is based on users that use the software product (<b>Per User</b> license rule type), the same client computer may be shown multiple times, but each entry shows a different user.</p> <p>See <a href="#">“Edit License Rule dialog box”</a> on page 77.</p> <p>To see the computer properties in the <b>Computers</b> view, click the computer name.</p>
<b>User</b>	<p>If the software product is untracked and there is no information about software usage, this column shows the primary user of the client computer.</p> <p>If software usage metering for the product is turned on, this column shows the user of the client computer based on the data gathered by metering scan.</p>
<b>License Usage</b>	<p>This column is shown only for licensed software products.</p> <p>This column shows the information about license usage. Depending on the license rule type, the license usage is counted differently.</p>
<b>Software Usage</b>	<p>This column shows the information about the usage of the software products by a particular user on a particular client computer.</p>
<b>Last Used</b>	<p>This column shows the date when the software product was last used on the client computer.</p>
<b>Installed Date</b>	<p>This column shows the date when the software product was installed on the client computer.</p>

See [“Software Product Summary flipbook”](#) on page 79.

## Filter/Target Results Report dialog box

In the **Filter/Target Results Report** dialog box, you can configure a detailed report for a computer filter, target or a software filter.

To open the dialog box, right-click a computer filter, a target or a software filter, and then click **View Results Report**. Also, when you are viewing computer filter, software

filter or target details, at the top of the content pane, you can click the **View filter/target results report** symbol.

In the **Filter/Target Results Report** dialog box, you can see the following sections:

**Table 8-10** Sections in the Filter/Target Results Report dialog box

Section	Description
<b>Select columns for report</b>	<p>In this section, you can choose associations, data classes and columns or views for reporting.</p> <p>To save the report configuration for the selected filter or target, at the bottom of the dialog box, check <b>Save the selected columns for filter/target</b>. The configuration is saved separately for each user and each filter or target.</p>
<b>Report results view</b>	<p>In this section, you can see the results depending on the items that you chose in the left section. By default, this dialog box shows the data based on the filter or target that you opened it from. The columns shown by default are the selected filter or target criteria.</p> <p>The columns may return multiple results. If you use the <b>Search</b> box, all the returned results are scanned.</p> <p>You can select one or multiple items, and then copy and paste the report results to a text file.</p> <p>You can move and reorder the columns. The only exception is the column <b>Name</b>, which cannot be moved.</p>

You can export the report results as a CSV file. To do that, at the bottom of the **Filter/Target Results Report** dialog box, click **Export**. In the Dialog box that opens, type the name for the file, choose the location to save the file to, and then click **Save**.

If the report is created from a Query Builder filter, in the **Save as Report** dialog box, you can choose to save the report to the legacy ITMS reports tree. Then, you can navigate to the saved report, right-click the report, and then click **View as XML**. In the right pane, you can edit the query and save the changes.

To open the report at once, check the **Open report in new window after saving** box.

## Managing your software license compliance on the Asset Management Solution pages

The following information is useful if you have installed only Asset Management Suite.

Asset Management Suite lets you audit software license compliance by comparing the number of the software product installs to the amount of purchased licenses and the terms of the license contract.

Managing the software licenses in your environment lets you easily report software license compliance for software audits. It minimizes the risk that software installs exceed the amount of software licenses. Software license compliance reports let you plan your future software purchases more accurately.

To set up software license compliance, you must first collect data about the software that is installed on your client computers. After you discover the software, you insert information about the purchased licenses. Software license items let you tie together the software product information and the amount of purchased licenses.

If you have Asset Management Suite and Client Management Suite or IT Management Suite installed, you can manage your software licenses using the Software view in the Symantec Management Console. If you do not have Client Management Suite or IT Management Suite installed, you can use Asset Management Solution pages to manage your software licenses.

To track and manage software license compliance using the Asset Management Solution pages, you must insert the software-related configuration items and create the necessary associations.

**Table 8-11** Process for managing your software license compliance on the Asset Management Solution pages

Step	Action	Description
Step 1	Gather software inventory.	<p>Software inventory collects information about the applications that are installed on your client computers. To gather software inventory, you must have the Inventory Solution installed on your Notification Server and the Inventory plug-in installed on your client computers.</p> <p>For more information, see the topics about gathering your software inventory in the <i>Inventory Solution User Guide</i>.</p> <p>See <a href="#">“Methods for gathering software inventory”</a> on page 71.</p>

**Table 8-11** Process for managing your software license compliance on the Asset Management Solution pages (*continued*)

Step	Action	Description
Step 2	Create software product item.	A software product item contains information about the software. After you create the software product item, you associate it to the software resource and to the software license information. See <a href="#">“Creating a software product item”</a> on page 87.
Step 3	Create or configure software resource.	Before you can view the reports, you must configure the software resource. You must associate a software product item to the software resource. See <a href="#">“Associating a software product item to a software resource”</a> on page 88.
Step 4	Creating a software license	A software license item ties together the software purchase and the software product. See <a href="#">“Creating a software license”</a> on page 89.
Step 5	(Optional) Edit the license rules.	Edit the license rules parameters. For example, license types, authorized filters, etc. See <a href="#">“Editing the license rules”</a> on page 90.
Step 6	Track software license compliance.	After you set up your environment, you can track the software license compliance. See <a href="#">“Tracking the software license compliance”</a> on page 93. <b>Note:</b> This functionality will remain compatible with the old license engine for some time, but is no longer supported or developed, and could be removed in the future.
Step 7	(Optional) Upgrade or renew software license.	You can upgrade or renew the software license. See <a href="#">“Upgrading and renewing a software license”</a> on page 95.

## Creating a software product item

Software product items let you manage the details that are related to the software products and their different versions in your environment.

You can create a single software product item and associate it with several different versions of the same software. For example, you can associate both Norton Ghost 15.2 and Norton Ghost 15.3 SP2 with a software product item Norton Ghost 15. When these different versions are reported, they are consolidated for the software product named Norton Ghost 15.

When you create a software product item, you specify its name, description, company, and category. After you create a software product, you make associations between the software product, a software resource (also called a software component), and a software license. Creating these associations lets you identify how many copies of a given software product you have in your environment. You can compare the number of copies with the number of the software licenses that you own.

This task is a step in the process for managing your software license compliance.

See [“Managing your software license compliance on the Asset Management Solution pages”](#) on page 86.

**To create a software product item if have installed only Asset Management Suite**

- 1 In the Symantec Management Console, on the **Manage** menu, click **Software**.
- 2 In the left pane, under **Software Catalog**, click **Software Product**.
- 3 On the **Software Product** page, click **Add**.
- 4 In the **Add or Edit Product** dialog box, specify the details of the software product, and then click **OK**.

---

**Note:** This option is not available if you have Asset Management Suite and Client Management Suite or IT Management Suite installed. In this case, you must manage software license compliance through the Software view.

See [“Managing your software license compliance using the Software view”](#) on page 69.

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## Associating a software product item to a software resource

A software resource represents a common way to describe a specific instance of a software application so that all software-related actions can identify it accurately. For example, a software resource is Asset Management Solution 7.0.1341.0 English.

You create a software resource for the software that you want to manage. For example, you can create a software resource for the software that is installed on client computers in your network.

For more information, see the topics about software resources in the *IT Management Suite Administration Guide*.

To make the software license compliance work, you must associate a software product item to a software resource. A software product item can have one or multiple software resources linked to it.

This task is a step in the process for managing your software license compliance on the Asset Management Solution pages.

See [“Managing your software license compliance on the Asset Management Solution pages”](#) on page 86.

#### To manually associate a software product item to a software resource

- 1 Open the software resource for editing.
  - In the Symantec Management Console, on the **Manage** menu, click **Software**.
  - In the left pane, under **Software Catalog**, click **Installed Software** and open the software resource for editing.

For more information, see the topics about editing software resources in the *IT Management Suite Administration Guide*.

- 2 On the software resource page, on the **Properties** tab, in the **Software Product** drop-down list, click the software product that you want to link to the software resource.

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**Note:** This option is not available if you have Asset Management Suite and Client Management Suite or IT Management Suite installed. In this case, you must manage software license compliance through the Software view.

See [“Managing your software license compliance using the Software view”](#) on page 69.

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- 3 Click **OK**.

## Creating a software license

Use this dialog box to create a license contract. You can add information about the license contracts and the license purchases.

#### To open the Creating Software License dialog box:

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Software Licensing**.
- 2 In the left navigation pane, right-click **Software License**, and then click **Create Software License**.
- 3 Add the required software product in the **Select Software Product** dialog box.

**Managing your software license compliance on the Asset Management Solution pages**

- 4 In the **Create Software License** dialog box, enter the required information.

Option	Description
Name	By default this field displays the selected product name.
License Rule	Use this option to define the licensing rule. By default, <b>New Rule</b> is displayed with <b>Type: Per Device</b> . Click <b>New Rule (License rule name)</b> to modify the licensing rule.  <b>Note:</b> A single software product can have only one license rule at a time  For more information, See <a href="#">“Editing the license rules”</a> on page 90.
Start Date	Date when the licensing contract begins.
Expiry Date	Date when the licensing contract expires.  <b>Note:</b> Leave this field empty for software the products that have licenses without any expiration date.
Comment	Enter additional comments about the software license.
Purchases	Add the details about the license purchase order. After you enter the information about the licensing contract, one row gets added with default values.  You can add more purchase orders for a licensing contract. You can edit the field values by double-clicking the cell under a column.
Edit advanced settings after saving	Use this option to open the <b>Advanced View</b> dialog box after you click <b>Save</b> .  <b>Advanced View</b> dialog box lets you define additional parameters for licensing contract and purchase.

- 5 Click **Save** to create the software license resource.

To view software license information from the ITMS Management Views, See [“Viewing license information in ITMS Management Views”](#) on page 78.

## Editing the license rules

You can edit the license rule while creating the software license or by editing the existing software license resource. Every license rule provides a set of configurable parameters that help to calculate the license consumption.

The three main base types that can be applied to the license rules are:

- **Per Device**

Specify the devices for installing a software product. Use this option if your licenses are consumed as per the number of installations. In this case one installation consumes one license.

The configurable parameter for **Per Device** base type is the **Authorized Devices** filter. Use the **Click to select...** option to open the **Select tree item** dialog box for selecting an existing or customized filter.

---

**Note:** All installations on the devices that are not included in the defined filter are considered as **Unauthorized**. If a filter is not selected, then all the installations are considered as **Authorized**.

---

- **Per User**

Specify the devices for installing the software and the users that can use the installed software. Use this option if your license is consumed for every user installing the software on one or more than one device.

The configurable parameters for **Per User** base type are:

- **Authorized Devices**

Use the **Click to select...** option to open the **Select tree item** dialog box for selecting an existing or customized filter.

---

**Note:** If **Per User** license type is selected and the software is installed and used on a non-specified device, then the installation is considered as an **Unauthorized**.

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- **Authorized Users**

Use the **Click to select...** option to open the **Select tree item** dialog box for selecting an existing or customized filter.

---

**Note:** If **Per User** license type is selected and the software is installed and used on a non-specified user, then the installation is considered as an **Unauthorized**. If filters are not selected, then all the installations for all of the users are considered as **Authorized**.

---

- **Installations per user** (by default this value is 1)

Define the number of software installations per the user that count as one license (as per the license agreement).

For example, if you set the value as 10, then a specified user can install the software on up to 10 selected devices and the installations consume one license. If the installations exceed this value, then more than one license gets consumed. From 11 to 20 installations, 2 licenses are consumed and from 21 to 30 installations, 3 licenses are consumed.

---

**Note:** If the **Installations per user** option is not selected, then all the installations per user in consumes one single license. For example, if there is 1 software installation per user, 1 license is consumed, or if there are 15 installations per user, even then 1 license is consumed.

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- **Per Processor/Core**

Specify the license consumption calculated as per processor or per core. Use this option if your license consumption is calculated per processor or per core. The configurable parameters for Per Processor/Core base type are:

- **Calculation**

Select either Per Processor or Per Core as the base for making calculations for license consumption.

- **Affinity Adjustment table**

Define the device name, affinity, and point value for calculating the consumption of licenses.

The number of licenses consumed by a single device is the multiplication of the Affinity number of Processors/Cores and the point value.

---

**Note:** Non-specified devices are considered as **Unauthorized** and installation of the software on **Unauthorized** devices is termed as unauthorized usage.

---

For the calculation of licenses consumed by Unauthorized devices, point value is taken as the maximum of the entered point values and affinity is taken from the inventory information for each device.

Use the **Add Device** option to select and add devices.

As you make changes, the Entered By and Entered Date information is filled.

For more information, See [“Creating a software license”](#) on page 89.

**To edit an existing software license:**

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Software Licensing**.
- 2 In the right-side pane, right-click the existing software license and select **Edit**. The **Advanced View** dialog box opens.

- 3 Click the **License Rule** option to open the **Edit License Rule** dialog box.
- 4 In the **Edit License Rule** dialog box, enter the required information.

Option	Description
Name	Enter the name for the license rule.
Type	Defines the base type for the license rule.
Type: <b>Per Device</b>	Specify the devices for installing a software product. Use this option if your licenses are consumed as per the number of installations. In this case one installation consumes one license.
Type: <b>Per User</b>	Specify the devices for installing the software and the users that can use the installed software. Use this option if your license is consumed for every user installing the software on one or more than one device.
Type: <b>Per Processor/Core</b>	Specify the license consumption calculated as per processor or per core. Use this option if your license consumption is calculated per processor or per core.

- 5 Click **OK** to continue creating the software license resource.
- 6 To apply the license rule changes, click **Yes**.

---

**Warning:** If the software product has more than one license contract, then the changes are applied to all the licenses of the current product.

---

You can also edit a software license from the ITMS Management Views.

See [“Edit License Rule dialog box”](#) on page 77.

To view software license information from the ITMS Management Views, See [“Viewing license information in ITMS Management Views”](#) on page 78.

## Tracking the software license compliance

After you insert all necessary data and create the associations, you can track the software license compliance in your environment.

---

**Note:** Software products are linked to one or more software resources. The purpose and benefit of a software product is not fully realized until Asset Management Suite is installed. Installation of Asset Management Suite is a pre-requisite for creating a licensed software product.

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You can use the **Software** view or Resource Manager to check the software license compliance of a single software. In the **Licensing Reports** Web Part, on the **Software Product Licensing Compliance** tab, you can view the software license compliance report for all your software.

To see the most accurate data in Resource Manager and in the **Software Licensing** portal, the **Software Product Licensing Recalculation Operation Task** must run. By default, this task is scheduled to run during off-peak hours. You can access the task on the **Jobs / Tasks** page, under **Jobs and Tasks > System Jobs and Tasks > Service and Asset Management > Contract Management**.

This task is a step in the process for managing your software license compliance using the Software view.

See [“Managing your software license compliance using the Software view”](#) on page 69.

See [“Managing your software license compliance on the Asset Management Solution pages”](#) on page 86.

You can also track the software license compliance by location using the **Software Product Licensing Compliance By Location** report. To view the report, ensure that the installation location is associated with the software purchase and the computers. Ensure that you run the **Software Product Licensing Recalculation Operation Task** before generating the report to get the updated data.

#### To track your software license compliance in the Software view

- 1 In the Symantec Management Console, on the **Manage** menu, click **Software**.
- 2 In the navigation pane, under **Licensed Software**, click **Licensed**, and then select a software product in the list pane.
- 3 In the software details pane, you can view the information about software usage and software licenses.

For more information, click the page and then press **F1**.

Note that the software license compliance graphic does not include non-inventoried, borrowed, or upgraded licenses. It only shows the count of purchased licenses as compared to the count of software product installs detected in the environment.

**To track your software license compliance in Resource Manager**

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Software Licensing**.
- 2 In the left pane, click **Software Product**.
- 3 In the **Software Product** list, right-click the software product, and then click **Resource Manager**.
- 4 In Resource Manager, on the **Summaries** menu, click **Software Product Licensing Summary**.

**To track your software license compliance in the Software Licensing portal**

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Software Licensing**.
- 2 In the right pane, in the **Licensing Reports** Web Part, click the **Software Product Licensing Compliance** tab.

**To track your software license compliance by location in the Software Licensing portal**

- 1 In the Symantec Management Console, on the **Reports** menu, click **All reports**.
- 2 In the **Reports** pane on the left, click **Service and Asset Management > Contract Management > Software Licensing > Software Product Licensing Compliance By Location** to view the software license compliance by location report.

Alternatively, on the **Home** menu, click **Service and Asset Management > Software Licensing**. In the left pane, click **Service and Asset Management Reports > Contract Management > Software Licensing > Software Product Licensing Compliance By Location**.

Alternatively, on the **Home** menu, click **Service and Asset Management > Manage Configuration Items**. In the left pane, click **Service and Asset Management Reports > Contract Management > Software Licensing > Software Product Licensing Compliance By Location**.

## Upgrading and renewing a software license

You can upgrade or renew a software license. Note that after you upgrade or renew the software license once, the context menu options **Upgrade Software License** and **Renew Software License** do not appear.

You can renew a software license when the following conditions are met:

- For the software license, in the **Advanced View** dialog box, under **Contract Details**, the **Renewable** option is checked.

**Managing your software license compliance on the Asset Management Solution pages**

- The software license is not expired.
- The software license is associated with a software purchase that has quantity data specified.

This task is a step in the process for managing your software license compliance on the Asset Management Solution pages.

See [“Managing your software license compliance on the Asset Management Solution pages”](#) on page 86.

**To upgrade a software license**

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Software Licensing**.
- 2 In the left pane, click **Software License**.
- 3 In the right pane, right-click a software license, and then click **Contract Functions > Upgrade Software License**.
- 4 In the **Upgrade an existing software license** dialog box, to specify the settings of the new software license, do the following:
  - For the **Covered Software Product** option, select a software product that is different from the original software product.
  - Select one or more software purchases so that the quantity matches the total number of original software licenses that you upgrade. Partial upgrade is not supported.
  - Enter information in other data classes as required.
- 5 Click **OK**.

**To renew a software license**

- 1 In the Symantec Management Console, on the **Home** menu, click **Service and Asset Management > Software Licensing**.
- 2 In the left pane, click **Software License**.
- 3 In the right pane, right-click a software license, and then click **Contract Functions > Renew Software License**.
- 4 In the **Renew an existing software license** dialog box, specify the settings of the software license renewal.

Note that the quantity of the selected software purchases must match the quantity of the licenses that you want to renew. Partial renewal is not supported.
- 5 Click **OK**.

# Viewing the Asset Management Suite reports

This chapter includes the following topics:

- [Viewing the Asset Management Suite reports](#)

## Viewing the Asset Management Suite reports

The following table provides information about the different types of Asset Management Suite reports that you can execute and view:

**Table 9-1** Reports in Asset Management Suite

Report	Description	Navigation from the Symantec Management Console
Asset_Type Parameter Query	This is a parameterized query report for asset types that is used by the <b>Depreciation By Assigned Cost Center Detail</b> and <b>Depreciation By Assigned Cost Center</b> reports.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Asset Management</b> > <b>Accounting</b> > <b>Depreciation Reports</b> > <b>Datasources</b>
Cost Center Filter Parameter Query	This is a parameterized query report for cost center filter that is used by the <b>Depreciation By Assigned Cost Center Detail</b> and <b>Depreciation By Assigned Cost Center</b> reports.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Asset Management</b> > <b>Accounting</b> > <b>Depreciation Reports</b> > <b>Datasources</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Location Filter Parameter Query	This is a parameterized query report for location filter that is used by the <b>Depreciation By Assigned Cost Center Detail</b> and <b>Depreciation By Assigned Cost Center</b> reports.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Asset Management &gt; Accounting &gt; Depreciation Reports &gt; Datasources</b>
Range Parameter Query	This is a parameterized query report for range filter that is used by the <b>Depreciation By Assigned Cost Center Detail</b> and <b>Depreciation By Assigned Cost Center</b> reports.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Asset Management &gt; Accounting &gt; Depreciation Reports &gt; Datasources</b>
Select Period Parameter Query	This is a parameterized query report for period filter that is used by the <b>Depreciation By Assigned Cost Center Detail</b> and <b>Depreciation By Assigned Cost Center</b> reports.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Asset Management &gt; Accounting &gt; Depreciation Reports &gt; Datasources</b>
Select Purpose Type Parameter Query	This is a parameterized query report for purpose type filter that is used by the <b>Depreciation By Assigned Cost Center Detail</b> and <b>Depreciation By Assigned Cost Center</b> reports.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Asset Management &gt; Accounting &gt; Depreciation Reports &gt; Datasources</b>
Depreciation By Assigned Cost Center	This report lists the depreciation amounts for assets and software licenses based on cost centers.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Asset Management &gt; Accounting &gt; Depreciation</b>
Depreciation By Assigned Cost Center Detail	This report lists the depreciation amounts for assets and software licenses based on cost centers.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Asset Management &gt; Accounting &gt; Depreciation Reports</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Assets by Owner's Department	This report returns a list of assets, which can be filtered by the asset owner's department. This may include assets owned by the specified department, rather than a user.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Assets</b>
Assets by Type, Status, Department, Cost Center and Location	This report returns a list of assets, which can be filtered by asset by type, status, department, cost center, or location parameters.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Assets</b>
Count of Assets	This is a summary report of asset types.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Assets</b>
General Asset Report	This report returns a list of all configurable assets. Results can be limited by selecting a specific resource type.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Assets</b>
Owned Assets	This report provides a list of assets owned by the given user.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Assets</b>
Master Lease Covered Assets	This report lists assets that are covered by a master lease agreement.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Master Lease</b>
Contracts Expiring in N Days	This report returns a list of contracts expiring within the specified date range. The results can be limited by contract type.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management</b>
Contracts Expiring in N Days-Simple	This report returns a list of contracts expiring within the specified date range. The results can be limited by contract type.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management</b>
Count of Contracts by Type	This report returns a list of contract types, with a count of managed contracts for each type.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Network Resources Available For Data Center	This report displays network resources. If the filter is set to "True", all network resources will be displayed except for network printers, and computer resources of a computer type (workstation, server, or test) with the <b>Display Server Fields</b> check box cleared.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Data Center</b>
Merge assets with duplicate Barcodes	This report lists all the assets that share the same barcodes and allows such duplicates to be merged by clicking on it and selecting merge assets from the context menu.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Merge</b>
Merge assets with duplicate Serial Numbers	This report lists all assets that share the same serial numbers and allows such duplicates to be merged by clicking on it and selecting merge assets from the context menu.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Merge</b>
Merge assets with duplicate System Numbers	This report lists all assets that share the same system numbers and allows such duplicates to be merged by clicking on it and selecting merge assets from the context menu.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Merge</b>
List of Cost Centers by Location	This report returns a list of cost centers, which can be limited by selecting a specific location.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Organizational Types &gt; Cost Center</b>
Departments by Location and Cost Center	This report shows a list of departments, which can be filtered by a specific location or cost center.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Organizational Types &gt; Department</b>
List of Locations by Cost Center	This report returns a list of locations, which can be limited by selecting a specific cost center.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Organizational Types &gt; Location</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Asset Type Parameter Query	This is a parameterized query report that displays the asset types. The report is used in various reports like <b>All Asset, Count of Asset, General Asset Reports</b> , and so on.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Parameters</b>
Assets By Organizational Types, Status Query	This is a parameterized query report that displays assets by organizational types.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Parameters</b>
AssetStatus Parameter Query	This is a parameterized query report that displays the asset status. The report is used in various reports like <b>All Asset, Count of Asset, General Asset Reports</b> , and so on.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Parameters</b>
All Accounting Codes	This report displays all accounting codes existing in the system.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports &gt; Asset Management</b>
All Bundles	This report lists all bundle items.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports &gt; Asset Management</b>
All Catalog Items	This report lists all catalog items.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports &gt; Asset Management</b>
All Catalogs	This report lists all catalogs.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports &gt; Asset Management</b>
All Consumable Catalog Items	This report lists all consumable catalog items.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports &gt; Asset Management</b>
All Cost Types	This report returns all cost types available.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports &gt; Asset Management</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
All Currencies	This report lists all currencies.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Depreciation Schedules	This report lists all the depreciation schedules. Depreciation schedules are used as part of the cost model feature to define the yearly depreciation rate.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Fixed Asset Catalog Items	This report lists all fixed asset catalog items.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Invoices	This report lists all invoices.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Purchase Orders	This report lists all purchase orders.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Purchase Requests	This report lists all purchase requests.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Receiving Slips	This report lists all receiving slips.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Software Catalog Items	This report lists all software catalog items.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Software Licenses	This report displays all software licenses which satisfy the given search conditions.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Software Purchases	This report lists all software purchases.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>
All Stockrooms	This report lists all stockrooms.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Picker Reports</b> > <b>Asset Management</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Active Contracts by User	This report list all contracts marked as active listed by assigned owner	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Assets	This report returns a list of assets, filtered by asset type, status and common organizational types.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Assets-Simple	This report returns a list of assets, filtered by asset type, status and common organizational types.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Computer Types	This report returns a list of all computer types.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Computers	This report returns a list of all computer resources.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Contracts	This report lists information of contracts which satisfy the given search criteria.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Cost Centers	This report lists all cost centers.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Departments	This report lists all departments.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Locations	This report lists all locations.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Office Equipment	This report returns a list of all office equipment resources.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Phones	This report returns a list of all phone resources. The results can be limited by selecting a specific phone type.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Powers	This report returns a list of all power resources.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Racks	This reports returns a list of all rack resources.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
All UPS	This report returns a list of all UPS resources.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
All Users	This report returns a list of all user resources. The results can be limited by selecting a specific location, department, or company.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Picker Reports</b>
Incomplete Receiving Items	This report lists all procurement items that have line items that have not been transitioned to the next step and therefore are considered incomplete. This does not include receiving slips as by definition they are always complete.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Procurement</b>
Critical Error Report	This report displays critical errors.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Workflow</b>
Workflow Project Assemblies	This report displays workflow projects and their associated assemblies.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Workflow</b>
Authorized Installs By Computer Filter For Software Product	This report lists authorized installs for the given software product, limited by filters in Computer authorization group.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Authorized Installs By Owner Filter For Software Product	This report lists authorized installs for the given software product, limited by filters in owner authorization group.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Authorized Installs By Primary User Filter For Software Product	This report lists authorized installs for the given software product, limited by filters in primary user authorization group.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Borrowed Licenses for Software Product	This report displays the software licenses where a quantity of licenses have been borrowed from another software license. This is usually done to cover down-grade rights where a newer version license is used for an older version.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Computers with Inventoried and Non Inventoried Installs	This report lists all computers that have inventoried installs for a particular software product, where the computer's owner also has non-inventoried installs assigned in the 'Non Inventoried Installs' Data Class for the same software license. The data used by this report is taken from stored data which is calculated on a schedule.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Donated Licenses For Software Product	This report displays the software licenses where a quantity of licenses have been donated to another software license. This is usually done to cover down-grade rights where a newer version license is used for an older version.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Inventoried Installs For Software Product	This report displays a list of software products with number of installs detected.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
List of legacy 6.5 Software Licenses to be migrated	This report displays all 6.5 legacy software licenses to migrate to the latest Asset Management Solution. Right-click a license to initiate the migration wizard.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Master License Agreement Summary Report	This report provides summary information of Software Licenses covered by this Master License Agreement.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Non-Inventoried Installs For Software Product	This report provides a list of software products with number of installs that were entered manually. This commonly for systems that have not been inventoried.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Purchased Licenses For Software Product	This report lists all the purchased software licenses which are currently active for the given software product.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Software License Sharing	This report displays software licenses where a quantity of licenses have been borrowed or donated from another software license. This is usually done to cover down-grade rights where a newer version license is used for an older version.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Software License's Authorized Clients	This report displays software products using the authorized users feature with authorized users inventory counts.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Software License's Non-Inventoried Installs	This report displays the given software license's non-inventoried installs information.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Software License's Purchased Quantity	This report displays purchase information for a given software license.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Software Product Licensing Compliance	This report shows the compliance for the given Software Product, the <b>Name</b> field filters the <b>Software Product</b> list by name. The data used by this report is taken from stored data which is calculated on a schedule. To adjust the frequency of this calculation, modify the settings given in the <b>Software License evaluation</b> page under settings.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Contract Management</b> > <b>Software Licensing</b>
Software Product Licensing Compliance By Location	This report shows the compliance for the given Software Product by location. The <b>Name</b> field filters the <b>Software Product</b> list by name. The data used by this report is taken from stored data which is calculated on a schedule. To adjust the frequency of this calculation, modify the settings given in the <b>Software License evaluation</b> page under settings.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Contract Management</b> > <b>Software Licensing</b>
Software Product Usage Details	This report provides details on how many times a given software product has been run on each client. <b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Contract Management</b> > <b>Software Licensing</b>	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Contract Management</b> > <b>Software Licensing</b>
Software Product Usage Details Query	This is a parameterized query report that displays information about how many number of times a given software product has been run on each client.	<b>Reports</b> menu > <b>All Reports</b> > <b>Service and Asset Management</b> > <b>Contract Management</b> > <b>Software Licensing</b>

**Table 9-1** Reports in Asset Management Suite (*continued*)

Report	Description	Navigation from the Symantec Management Console
Software Products by Computer, Owner	This report shows all the software license contracts that are assigned to a computer and the owner of the computer. The report is most useful to look at an individual computer. The information is current as of the last software license evaluation run.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Unauthorized Installs For Software Product	This report displays products using the authorized users feature with unauthorized users inventory counts.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>
Virtual License Agreement Summary Report	This report displays summary information of software licenses covered by the virtual license agreement.	<b>Reports menu &gt; All Reports &gt; Service and Asset Management &gt; Contract Management &gt; Software Licensing</b>

# Reference topics

This appendix includes the following topics:

- [Predefined asset management security roles](#)
- [Predefined configuration item types](#)
- [About configuration item associations](#)
- [About data input masks](#)
- [Receive Items page](#)
- [Software purchase item attributes](#)
- [Software license item attributes](#)

## Predefined asset management security roles

When you install Asset Management Suite, the system automatically adds the predefined asset management security roles to the Symantec Management Console. The predefined security roles get automatically assigned the privileges and the permissions that their respective jobs and tasks require.

See [“Managing security on an organizational group”](#) on page 27.

**Table A-1** Predefined asset management security roles

Security role	Description
<b>Asset Managers</b>	This security role has privileges for managing the basic configuration item types. The security role also has privileges for the managing functions that are related to special contract types, software licensing, and procurement.
<b>Barcode User</b>	This security role is a restricted data entry user role.

**Table A-1** Predefined asset management security roles (*continued*)

Security role	Description
<b>CMDB Managers</b>	This security role has privileges for managing basic configuration item types, such as hardware and the base contract configuration item type.

## Predefined configuration item types

Predefined configuration item types (also known as predefined resource types) are the templates that define what data is created and stored about a specific configuration item.

Asset Management Suite provides predefined configuration item types for many types of assets. You can add custom fields to the predefined configuration item types. You can also create new configuration item types, if required. However, Symantec recommends that you use predefined configuration item types, because different features and reports are available for the predefined configuration item types.

**Table A-2** Predefined configuration item types of Asset Management Solution

Category	Predefined configuration item types
<b>Contract Management</b>	<b>Lease Schedule, Master Lease, NDA, Warranty</b> See " <a href="#">Managing contracts</a> " on page 52.

**Table A-2** Predefined configuration item types of Asset Management Solution  
*(continued)*

Category	Predefined configuration item types
<b>Financial Types</b>	<ul style="list-style-type: none"> <li> <p>■ <b>Accounting Code</b>                      An accounting code contains an ID number and a description that corresponds with a budgetary division, such as a department or division. You can associate the accounting code with the cost items to help you allocate expenses to resources, such as computers and purchase orders.</p> </li> <li> <p>■ <b>Cost Type</b>                      You use a cost type item to specify a type of expense. For example, you can designate cost types as an external purchase, external support, internal support, or contract. Cost type items let you logically group expenses. Cost type attributes affect depreciation values, group allocation, and other reporting areas.</p> </li> <li> <p>■ <b>Currency</b>                      By default, Asset Management Suite defines no currency types or currency rates. It provides a single, non-defined base currency for all monetary entries. Symantec recommends that you define your base currency so that you can use the currency convertor. Symantec recommends that you set the rate of the base currency to 1.00. You then set other currencies to their respective exchange rates as they compare to the base currency.</p> </li> <li> <p>■ <b>Depreciation Schedule</b>                      The depreciation schedule lets you specify the rates and the dates that are associated with depreciating assets and other resource items. You create the depreciation schedule items that correspond to your depreciation expense strategies. When you create a depreciation schedule item, you enter attributes, such as description, depreciation type, and rate. You can use these items and attributes to generate the reports that are associated with the assets and depreciation.</p> </li> <li> <p>■ <b>Cost Item</b>                      A cost item is an expense that relates to or adds value to a resource. See <a href="#">“Adding a cost item to an asset”</a> on page 39.</p> </li> </ul>
<b>Procurement</b>	<b>Invoice, Purchase Order, Purchase Request, Receiving Slip, Stockroom.</b>
<b>Catalogs</b>	<b>Bundle, Catalog, Consumable Catalog Item, Fixed Asset Catalog Item, Software Catalog Item.</b>
<b>Software Licensing</b>	<b>Software Product, Master License Agreement, Software License, Software Purchase, Virtual License Agreement.</b>

**Table A-3**      Predefined configuration item types of CMDB Solution

Category	Predefined configuration item types
<b>Contract Management</b>	<p><b>Contract, SLA</b></p> <p>See <a href="#">"Managing contracts"</a> on page 52.</p>
<b>Communication Equipment</b>	<b>Cell Phone, Desk Phone.</b>
<b>Computers and Peripherals</b>	<b>Computer, Monitor, Network Printer, Peripheral, Scanner, Virtual Machine.</b>
<b>Datacenter Types</b>	<ul style="list-style-type: none"> <li>■ <b>Computer Type</b> Includes the predefined <b>Server, Test,</b> and <b>Workstation</b> types to let you specify what type of function or role a computer has. You determine the computer type when you edit or create a new computer configuration item.</li> <li>■ <b>Power</b> The power sources that the network uses and that are intended to be associated with UPS configuration items.</li> <li>■ <b>Rack</b> Network resource racks. You can specify which network resources are included in each rack.</li> <li>■ <b>Services</b> The functions that support one or more business areas. For example, the <b>Service</b> configuration item type lets you manage the information about your email service. Email service consists of several components such as Active Directory, Exchange Server, and Web Mail. Each of these components might be located on a separate server. When you set up the email service in the Symantec Management Console, you first create the systems that support this service. After you create the systems, you create the <b>Service</b> and in the <b>Create configuration item</b> window, under <b>Supporting Systems</b>, you add all related systems. When you then receive an incident that is related to the email service, you can use the Resource Association Diagram to track down the problem. The Resource Association Diagram lets you quickly view all the components that are connected to this particular service. See <a href="#">"Tracking the associations of a configuration item"</a> on page 41.</li> <li>■ <b>Systems</b> The components that support services. For example, an Exchange Server.</li> <li>■ <b>UPS</b> Uninterrupted power supply resources. Includes the details on voltage, input and output frequencies, currents, and so on.</li> </ul>
<b>Generic Asset Types</b>	<b>Asset, Network Resource.</b>

**Table A-3** Predefined configuration item types of CMDB Solution (*continued*)

Category	Predefined configuration item types
<b>Other Assets</b>	<b>Furniture and Fixtures, Office Equipment, Site, Subnet.</b>
<b>Organizational Types</b>	<b>Company, Cost Center, Department, Location, User.</b>

## About configuration item associations

Understanding the relationships between various configuration item types, especially the crucial organizational configuration item types, helps you to identify the dependencies within the Configuration Management Database (CMDB). You can view relationships between configuration items in the Resource Association Diagram that you access in the Resource Manager, in the left pane.

See [“Tracking the associations of a configuration item”](#) on page 41.

Not all configuration item types can have direct associations with each other but most of them have indirect associations with each other. Associations are useful for reporting purposes. For example, a computer asset is associated with a user and the user is associated with a department. Although the asset may not be directly associated with the department, the asset is reported as one of the department’s assets.

The following table shows direct configuration item type associations. The configuration item type column presents the child (from) configuration item type, and the direct association column presents the parent (to) configuration item types.

**Table A-4** Direct associations of configuration item types

Configuration item type	Direct association
<b>Asset</b>	<b>Cost Center, Location, User, Department, and Asset.</b>
<b>Cost Center</b>	<b>Location and Manager (User).</b>
<b>Department</b>	<b>Cost Center, Location, and Manager (User).</b>
<b>Location</b>	<b>Cost Center and Manager (User).</b>
<b>User</b>	<b>Company, Department, Location, and Manager (User).</b>

The following table shows indirect configuration item type associations, including the path for creating the association. The configuration item type column presents

the child (from) configuration item type, and the indirect association column presents the parent (to) configuration item types.

**Table A-5** Indirect associations of configuration item types

Configuration item type	Indirect association
<b>Asset</b>	<b>User &gt; Company</b> <b>User &gt; Department</b> <b>User &gt; User</b>
<b>Department</b>	<b>Cost Center &gt; User</b>
<b>Location</b>	<b>Cost Center &gt; User</b>
<b>Manager</b>	Existing <b>Users</b> can be specified as <b>Managers</b> .
<b>User</b>	<b>Department &gt; Cost Center</b> <b>Department &gt; Location</b>

## About data input masks

Data input masks are the filters that selectively include or exclude certain values. When you define a data class, you can assign the masks that indicate what sort of value the data class attributes should hold. Values that do not conform to the mask cannot be entered.

See [“Creating a custom data class”](#) on page 43.

**Table A-6** Data input mask characters

Character	Meaning
A	Any letter. Entry required.
a	Any letter. Entry optional.
9	Any digit or space. Entry optional; “+” and “-” not allowed.
0	Any digit (0 to 9). Entry required; “+” and “-” not allowed.
*	Any letter, digit, space, “+”, or “-”. Entry optional; spaces are removed when data is saved.
#	Any letter, digit, “+”, or “-”. Entry required.

**Table A-6** Data input mask characters (*continued*)

Character	Meaning
\	Treat the masking character following the “\” as a regular character with no special masking properties.

## Receive Items page

The **Receive Items** page lets you receive different catalog item types and specify how you want to receive them. For example, you can place the consumable catalog items in a stockroom or add them as cost items to an asset. You can add new fixed asset catalog items to your database or update the data of the existing assets. You can add a new software purchase configuration item or update the data of the existing software purchase.

When you receive items, a receiving slip is automatically created as a record.

See [“Receiving an item”](#) on page 67.

**Table A-7** Options on the **Receive Items** page

Option	Description
<b>Receiving Item</b>	Lets you specify the <b>Line Items</b> that you want to receive.
<b>Receive To Stockroom</b>	Lets you specify the stockroom where you want to place the items that you receive.

Table A-7 Options on the **Receive Items** page (*continued*)

Option	Description
<b>The items should be received as</b>	<p>Lets you specify how you want to receive the items:</p> <ul style="list-style-type: none"> <li>■ <b>Create a new Resource</b> Lets you create a new resource for a fixed asset catalog item or for a software catalog item. For example, when you create a new monitor configuration item, all relevant information from the fixed asset catalog item is copied to the new resource. Additionally, you can specify <b>System Number</b>, <b>Serial Number</b> and <b>Barcode</b>.</li> <li>■ <b>Update an existing Resource/Add the Consumable to a Stockroom</b> Lets you update an existing resource or add consumable catalog items to a stockroom. If you update an existing resource, specify the individual resource that you want to update in the <b>Existing Resource/Stockroom</b> field, in the <b>Received Item Line Items</b> table. If you add consumable items to a stockroom, specify the stockroom in the <b>Existing Resource/Stockroom</b> field, in the <b>Received Item Line Items</b> table.</li> <li>■ <b>Add as a Cost Item to an existing Resource</b> For example, you can add a new hard drive as a cost item to a computer. In this case, you need to specify this computer in the <b>Existing Resource/Stockroom</b> field, in the <b>Received Item Line Items</b> table.</li> </ul>
<b>Parameters</b>	<p>Lets you select the data classes for which you want to add or edit the data.</p> <p>The default values are as follows:</p> <ul style="list-style-type: none"> <li>■ The <b>Received Asset's Status</b> is <b>In Stock</b>.</li> <li>■ The <b>Received Asset's Location</b> of the asset is the location of the stockroom to which the item is received.</li> <li>■ The <b>Manufacturer</b>, and <b>Model</b> information is taken from the catalog item data.</li> </ul>

**Table A-7** Options on the **Receive Items** page (*continued*)

Option	Description
<b>Received Item Line Items</b>	

Table A-7 Options on the **Receive Items** page (*continued*)

Option	Description
	<p>Lets you specify additional data for each <b>Line Item</b> and select the items that you want to receive.</p> <p>For a consumable catalog item you can specify <b>Display Name</b>, <b>Quantity</b> and <b>Owner</b>. If the system detects in the stockroom the same consumable item of the same <b>Owner</b>, the quantity of the item is increased. The <b>Owner</b> of the consumable catalog item can be a cost center or a department.</p> <p>When you receive a consumable catalog item as a cost item to an existing resource, you must specify the <b>Existing Resource</b> to which you want to add the item. A cost item is added to the cost center or the department for which the consumable item has been ordered.</p> <p>When you receive fixed asset catalog items, one line per item is created in the <b>Received Item Line Items</b> table. For example, when you purchase three new laptops, the <b>Received Item Line Items</b> table displays three separate lines, all with quantity of 1.</p> <p>The receiving process handles the data of a fixed asset catalog item as follows:</p> <ul style="list-style-type: none"> <li>■ The <b>Catalog Item</b> field defines the asset type.</li> <li>■ The <b>Display Name</b> field defines the name of the configuration item.</li> <li>■ The <b>Owner</b> field defines the <b>Asset Owners</b>.</li> <li>■ The <b>Description</b> of the receiving item is added to the <b>Comment</b> field of the new asset.</li> <li>■ The <b>Asset's associated catalog item</b> association is set.</li> <li>■ You can specify <b>System Number</b>, <b>Serial Number</b> and <b>Barcode</b> values. Symantec recommends that you insert the <b>Serial Number</b> of a computer when receiving it. When inventory runs and finds an item with this serial number, it creates an association between the inventory record and the asset record.</li> <li>■ If you update an asset that is already created in the database, specify the <b>Existing Resource/Stockroom</b> that you want to update. The details, such as <b>Barcode</b>, <b>Manufacturer</b>, <b>Status</b> or <b>Location</b>, are only added when the existing asset does not have them specified.</li> </ul> <p>When you receive a new software catalog item, a new software purchase configuration item is created.</p> <p>The receiving process handles the data of each software catalog item as follows:</p> <ul style="list-style-type: none"> <li>■ The <b>Display Name</b> field defines the name of the software purchase.</li> <li>■ The <b>Owner</b> field defines the <b>Software Purchase Owners</b>.</li> <li>■ The <b>Description</b> of the receiving software catalog item is added to the <b>Comment</b> field of the software purchase.</li> <li>■ The <b>Software Purchases' Associated Catalog Item</b> association is set.</li> </ul>

Table A-7 Options on the **Receive Items** page (*continued*)

Option	Description
	<ul style="list-style-type: none"> <li>■ The <b>Quantity</b> of the software catalog item is written to the <b>Quantity</b> field of the software purchase.</li> <li>■ The <b>System Number</b>, <b>Serial Number</b> and <b>Barcode</b> fields are ignored.</li> <li>■ If you update a software purchase configuration item that is already created in the database, specify the <b>Existing Resource/Stockroom</b> that you want to update.</li> </ul>
<b>Receive all</b>	Lets you receive and generate receiving slips for all <b>Line Items</b> .
<b>Receive selected</b>	Lets you receive and generate receiving slips for selected <b>Line Items</b> .

## Software purchase item attributes

When you create a software purchase item, you specify its attributes and associations with other configuration items in your system.

The attributes that are listed in the table are displayed when in the **View** drop-down list, you select the **Software Purchase (global)** view.

Table A-8 Software purchase item attributes

Attribute	Description
<b>Software Purchase</b>	Lets you insert the name of the software purchase item.  Symantec recommends typing a name that uses a combination of the software name, software version, purchase date, and number of licenses. For example, you can type the following as a software purchase name: <b>Norton Ghost 15.0 5May2011 (10 Licenses)</b> .
<b>Software Purchase Details</b>	Lets you specify the details that are related to purchasing the software. You can specify the purchase date, description, and number of licenses.
<b>Cost Items</b>	Lets you enter the costs that are associated with purchasing the software licenses.
<b>Software Purchase Owners</b>	Lets you associate and allocate the cost to departments and users.
<b>Software Purchase Cost Center Ownership</b>	Lets you associate and allocate the purchase cost to one or more cost centers.
<b>Installed Location</b>	Lets you associate a location.
<b>Software Purchases' Associated Catalog Item</b>	Lets you associate the software purchase with an item from the procurement Software Catalog.

Table A-8 Software purchase item attributes (*continued*)

Attribute	Description
<b>Book Depreciation</b>	Lets you specify the book depreciation schedule to be used.
<b>Custom Depreciation</b>	Lets you specify the custom depreciation schedule to be used.
<b>Tax Depreciation</b>	Lets you specify the tax depreciation schedule to be used.
<b>Internal Reference</b>	Lets you specify reference information, such as account number, internal reference ID, internal contact, archive number, and cross reference.

## Software license item attributes

When you create a software license item, you specify its attributes and associate it with other configuration items in your system.

Note that the attributes that are listed in the table are displayed when in the **View** drop-down list, you select the **Software Licenses (global)** view.

Table A-9 Software license item attributes

Attribute	Description
<b>Software License</b>	Lets you specify a name for the software license item.
<b>Covered Software Product</b>	Lets you specify which software product is associated with the software license contract.  To ensure the data integrity, you can add only one software product item to a software license item.
<b>Standard Contract Information</b>	Lets you enter standard contract information.
<b>Software License Details</b>	Lets you record the software license details. You can specify maintenance renewal cost, support renewal cost, and license type.
<b>Software Purchases</b>	Lets you specify the software purchases that are associated with the software license item. You can associate one or more software purchases to the software license item. Note that you can associate multiple software purchases to the software license item only when you use manual process of managing your software license compliance.  To ensure the data integrity, you can add each software purchase item only to one software license item.

Table A-9 Software license item attributes (*continued*)

Attribute	Description
<b>Authorized Clients</b>	<p>Lets you specify the users, computers, and owners that are authorized to run the software. You can use the <b>Add</b> option to add an authorized client. Note that you can specify authorized client information only when you use the manual process of managing your software license compliance.</p> <p>You can specify the following options:</p> <ul style="list-style-type: none"> <li>■ <b>Clients</b> – lets you select a filter that contains the computers, users, or owners that are authorized to run the software. The results of the selected filter must consist of only one configuration item type. The results cannot combine computer and user configuration item types.</li> <li>■ <b>Authorization Group</b> – lets you specify the configuration item type resulting from the filter, either Computer, Owner, or Primary User.</li> </ul> <p>To specify additional filters, you can add more rows to the grid. Each row is treated as an OR condition. The client is authorized for the software license if any condition in any row is met.</p>
<b>Non Inventoried Installs</b>	<p>Lets you enter the details to track the number of software installations on the computers that are not inventoried or discovered.</p>
<b>Software License Sharing</b>	<p>Lets you specify the details about sharing the software licenses.</p> <p>If the software license item borrows licenses from other software license items, select the appropriate software license and specify the number of borrowed licenses.</p>
<b>Contract's Assigned User</b>	<p>Lets you specify the user that is assigned to the software license contract.</p>
<b>Contract's Location</b>	<p>Lets you specify the location of the software license contract.</p>
<b>Contract Details</b>	<p>Lets you enter any details that correspond to the software license contract. You can select a filter to specify to which user or computer the software license contract applies.</p>
<b>Comment</b>	<p>Lets you enter comments about the software license.</p>

Table A-9 Software license item attributes (*continued*)

Attribute	Description
<b>Associated Documents</b>	<p>Lets you specify the documents that are associated with the software license contract. You can use the <b>Add</b> option to add an associated document.</p> <p>You can specify the following options:</p> <ul style="list-style-type: none"><li>■ <b>File</b> - lets you enter the path to the document. The path must be specified as a UNC path. The following file path is not supported: <code>C:\document.txt</code> To specify a file on the local computer, you can set up its location as a network share as follows: <code>\\Computer\share\document.txt</code></li><li>■ <b>Description</b> - lets you enter a description of the document.</li></ul>
<b>Internal Reference</b>	<p>Lets you enter the internal reference information. For example, you can enter the account number, internal contact, and archive number.</p>
<b>Former Software License (if renewed or upgraded)</b>	<p>Lets you specify the former software license item that represents the previous software license contract.</p> <p>This option is available only when you upgrade or renew a software license.</p>
<b>New Software License (if renewed or upgraded)</b>	<p>Lets you specify the new software license item that represents the upgraded software license contract.</p> <p>This option is available only when you upgrade or renew a software license.</p>

# Glossary

<b>bundle</b>	A container that is used to group frequently ordered catalog items together.
<b>data input mask</b>	A filter that selectively includes or excludes certain values.
<b>procurement catalog</b>	A component of Asset Management that contains the information that is necessary for requesting consumables, assets, or software.
<b>user configuration item type</b>	A component of Asset Management that is used to enter the data about the company workers into the CMDB (Configuration Management Database).

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