Administration Quick Start

Novell®
ZENworks® 10 Asset Management SP3

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About This Guide

This *ZENworks 10 Asset Management Administration Quick Start* helps you quickly master the basics of administering your ZENworks 10 Management system. You should already have installed your ZENworks system. If not, see the *ZENworks 10 Asset Management Installation Guide*.

The information in this guide is organized as follows:

- Administration Quick List (page 9): Provides a check list of what you need to do to configure and monitor your ZENworks system, deploy the ZENworks Adaptive Agent to devices you want to manage, and then perform management tasks on the devices.
- Management Tools Quick View (page 13): Introduces ZENworks Control Center and the zman command line utility, the two primary ZENworks management tools.
- Zone Configuration (page 19): Provides instructions for configuring your ZENworks system to best support the management tasks you can perform.
- ZENworks Adaptive Agent Deployment (page 57): Provides instructions for installing the ZENworks Adaptive Agent to devices. The Adaptive Agent is required on any device you want to manage with ZENworks.
- Asset Management (page 39): Provides instructions for performing software and hardware inventory of devices, monitoring software usage, and monitoring software license compliance.
- Device Retirement (page 55): Provides instructions for retiring devices from your Management Zone.
- System Messages and Reports (page 67): Introduces the ways you can get information about the activity in your ZENworks system.

Audience

This guide is intended for anyone who will configure the ZENworks system, monitor the ZENworks system, or perform any ZENworks tasks related to managing devices or users.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to the Novell Documentation Feedback site (http://www.novell.com/documentation/feedback.html) and enter your comments there.

Additional Documentation

ZENworks 10 Asset Management is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the ZENworks 10 Asset Management documentation (http://www.novell.com/documentation/zam10).

Administration Quick List

1

You've installed your ZENworks Server (or maybe a couple of servers) and are eager to start using all of the time-saving functionality in Novell ZENworks 10 Asset Management SP3. The following sections are designed to quickly introduce you to the configuration, deployment, management, and status monitoring concepts and tasks that help you effectively manage the devices in your environment.

- Section 1.1, "Zone Configuration," on page 9
- Section 1.2, "ZENworks Adaptive Agent Deployment," on page 10
- Section 1.3, "Asset Management," on page 11
- Section 1.4, "System Messages and Reports," on page 11

1.1 Zone Configuration

Before you start compiling software and hardware inventories for devices, tracking software usage on devices, and monitoring license compliance, there are a few configuration tasks you need to complete to ensure that your Management Zone is configured to let you take full advantage of ZENworks management capabilities.

Table 1-1 *Zone Configuration Tasks*

Task	Details
Create folders and groups for organizing devices	Organize devices into folders and groups to ease the overhead involved in applying ZENworks configuration settings and performing tasks on similar devices. Rather than making assignments or performing tasks on individual devices, you can manage the folders and groups, with each device in a folder or group inheriting the assignment or task.
	For instructions, see Section 3.1, "Organizing Devices: Folders and Groups," on page 19.
Create registration keys or rules	The ZENworks Adaptive Agent must be installed on each device that you want to manage. When you deploy the ZENworks Adaptive Agent to a device, the device is registered in your Management Zone.
	You can use registration keys or rules to automatically assign devices to the appropriate folders and groups, ensuring that they immediately receive the correct configuration settings assignments.
	For instructions, see Section 3.2, "Registering Devices," on page 25.

Task	Details
Add user sources	You can connect to one or more LDAP directories to provide authoritative user sources in ZENworks. Adding a user source lets you associate ZENworks administrator accounts with LDAP user accounts, associate devices with the users who primarily use them, and run asset inventory and management reports that include users.
	For instructions, see Section 3.3, "Connecting to User Sources," on page 30.
Create additional administrator accounts	During installation, a default ZENworks administrator account (named Administrator) is created. The default Administrator account provides rights to the entire Management Zone.
	You can create additional administrator accounts that restrict access to the zone. For example, you could create an account that only provides the ability to run license compliance reports.
	For instructions, see Section 3.4, "Creating ZENworks Administrator Accounts," on page 32.
Modify zone configuration settings	Your zone settings are preset to provide the most common configuration. If necessary, you can change the settings.
	For instructions, see Section 3.5, "Modifying Configuration Settings," on page 35.

1.2 ZENworks Adaptive Agent Deployment

The ZENworks Adaptive Agent communicates with the ZENworks Server to perform management tasks on a device. You must deploy the Adaptive Agent to all devices you want to manage. Deploying the Adaptive Agent installs the agent files and registers the device in your Management Zone.

Table 1-2 *Deployment Tasks*

Task	Details
Discover devices	If you choose to use ZENworks Control Center to deploy the agent to devices, you must first add the devices to your Management Zone. You can do this by performing a network discovery.
	For instructions, see Section 6.1, "Discovering Network Devices," on page 57.
Import devices	You can also import devices into your Management Zone from a comma-separated values (CSV) file. Each device entry must include its IP address or DNS name.
	For instructions, see Section 6.2, "Importing Devices," on page 58.

Task	Details
Install the ZENworks Adaptive Agent	You can use a variety of methods to install the ZENworks Adaptive Agent to a device:
	◆ Use ZENworks Control Center to deploy the agent from a ZENworks Server to the device.
	◆ At the device, use a Web browser to download the agent from a ZENworks Server and install it.
	◆ Include the agent in an image and apply the image to the device.
	For instructions, see Section 6.3, "Installing the ZENworks Adaptive Agent," on page 59.

1.3 Asset Management

ZENworks provides a variety of tasks you can perform to manage your hardware and software assets.

Table 1-3 *Asset Management*

Task	Details
Scan devices to collect software and hardware inventory	Scan devices to collect software and hardware inventories for the devices. The inventory information can help you make decisions about software distribution and hardware upgrades.
	For instructions, see Section 4.1, "Collecting Software and Hardware Inventory," on page 39.
Monitor software usage	Generate reports to analyze how much and how often software products are being used.
	For instructions, see Section 4.2, "Monitoring Software Usage," on page 43.
Monitor software license compliance	See whether your installed software products are properly licensed, under licensed, or over licensed.
	For instructions, see Section 4.3, "Monitoring License Compliance," on page 44.
Allocate licenses	Allocate licenses within your organization to track ownership and distribution of the licenses. You can allocate licenses to devices or demographics (sites, departments, and cost centers).
	For instructions, see Section 4.4, "Allocating Licenses," on page 52.

1.4 System Messages and Reports

As you perform management tasks in your zone, information is recorded so that you can view the status of your zone and the activities taking place within it.

Table 1-4   *System Messages and Reports Tasks*

Task	Details
View system messages	The ZENworks system generates informational, warning, and error messages to help you monitor activities such as the distribution of software and application of policies.
	For instructions, see Section 7.1, "Viewing System Messages," on page 67.
Create a Watch List	If you have devices whose activity you want to closely monitor, you can add them to the Watch List.
	For instructions, see Section 7.2, "Creating a Watch List," on page 70.
Generate reports	Generate reports for devicesand much more.
	For instructions, see Section 7.3, "Generating Reports," on page 71.

Management Tools Quick View

2

Novell ZENworks 10 Asset Management provides both a Web-based console (ZENworks Control Center) and a command line utility (zman) that you can use to manage your ZENworks system. The following sections explain how to access and use the management tools:

2.1 ZENworks Control Center

ZENworks Control Center is installed on all ZENworks Servers in the Management Zone. You can perform all management tasks on any ZENworks Server.

2.1.1 Accessing ZENworks Control Center

1 Using a Web browser that meets the requirements listed in "Administration Browser Requirements" in the *ZENworks 10 Asset Management Installation Guide*, enter the following URL:

```
https://ZENworks_Server_Address:port
```

Replace *ZENworks_Server_Address* with the IP address or DNS name of the ZENworks Server. You only need to specify the *port* if you are not using one of the default ports (80 or 443). ZENworks Control Center requires an HTTPS connection; HTTP requests are redirected to HTTPS.

The login dialog box is displayed.

2 In the *Username* field, type `Administrator`.

3 In the *Password* field, type the Administrator password created during installation.

To prevent unauthorized users from gaining access to ZENworks Control Center, the administrator account is disabled after three unsuccessful login attempts, and a 60-second timeout is enforced before you can attempt another login. To change these default values, see "Changing the Default Login Disable Values" in the *ZENworks 10 Asset Management System Administration Reference*.

4 Click *Login* to display ZENworks Control Center.

For more detailed information on logging in as a different administrator, see "Accessing ZENworks Control Center" in the *ZENworks 10 Asset Management System Administration Reference*.

NOTE: If you use Novell iManager as the management tool for other Novell products, you can set up ZENworks Control Center to be available through iManager. For instructions, see "Accessing ZENworks Control Center through Novell iManager" in the *ZENworks 10 Asset Management System Administration Reference*.

2.1.2 Navigating ZENworks Control Center

The following Servers page represents a standard view in ZENworks Control Center.
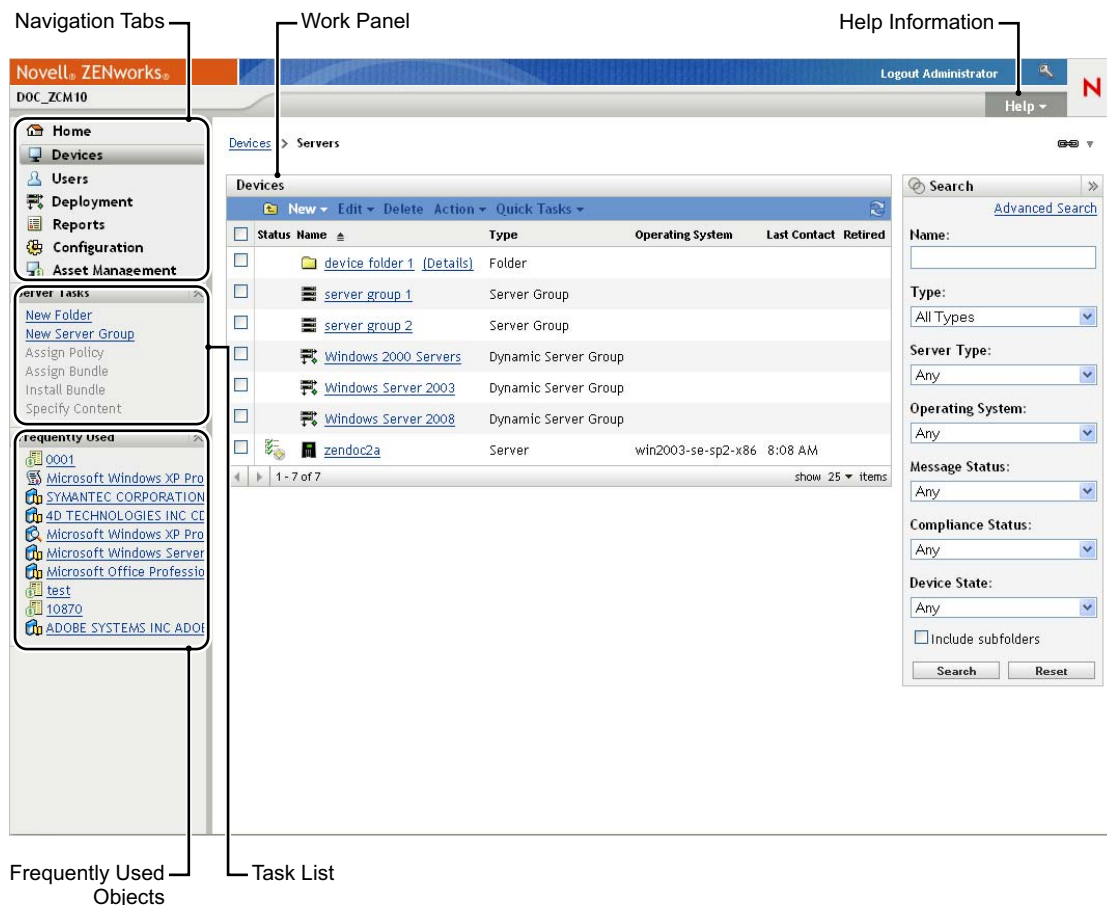
Navigation Tabs: The tabs in the left pane let you navigate among the functional areas of ZENworks. For example, the Servers page shown above lets you manage tasks associated with servers.

Task List: The task list in the left pane provides quick access to the most commonly performed tasks for the current page. The task list changes for each page.

Frequently Used Objects: The Frequently Used list in the left pane displays the 10 objects that you have accessed most often, from most used to least used. Clicking an object takes you directly to the details page for the object.

Work Panel: The work panels are where you monitor and manage your ZENworks system. The panels change depending on the current page. In the above example, there are two work panels: *Devices* and *Search*. The *Devices* panel lists the servers, folders, server groups, and dynamic server groups that have been created; you use this panel to manage servers. The *Search* panel lets you filter the Devices panel based on criteria such as a server's name, operating system, or status.

Help Information: The Help button links to Help topics that provide information about the current page. The Help button links change depending on the current page.

2.2 zman Command Line Utility

The zman utility provides a command line management interface that lets you perform the tasks available in ZENworks Control Center.

The primary purpose of the zman utility is to enable you to perform operations through a script. However, you can also perform operations manually at a command line.

- Section 2.2.1, "Location," on page 15
- Section 2.2.2, "Syntax," on page 15
- Section 2.2.3, "Help with Commands," on page 16

2.2.1 Location

The utility is installed on all ZENworks Servers in the following location:

```
%ZENWORKS_HOME%\bin
```

where `%ZENWORKS_HOME%` represents the ZENworks installation path. On Windows, the default path is `c:\novell\zenworks\bin`. On Linux, the default path is `/opt/novell/zenworks/bin`.

2.2.2 Syntax

The zman utility uses the following basic syntax:

```
zman category-action [options]
```

For example, to initiate an inventory scan of a device, you use the following command:

```
zman inventory-scan-now device/servers/server1
```

where `inventory-scan-now` is the category-action and `device/servers/server1` is an option that specifies the folder path of the device to be scanned.

2.2.3 Help with Commands

The best way to understand the commands is to use the online help or see "zman(1)" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

To use the online help:

1 On the ZENworks Server, enter `zman --help` at a command prompt.

This command displays the basic usage (syntax) and a list of the available command categories. You can also use the following to get help:

Command	Description
`zman --help	more`	Displays a complete list of commands by category.
`zman category --help	more`	Displays a complete list of commands within a category.
`zman command --help	more`	Displays help for a command

2.3 zac Command Line Utility

The zac utility provides a command line management interface that lets you perform tasks available in the ZENworks Adaptive Agent.

- Section 2.3.1, "Location," on page 16
- Section 2.3.2, "Syntax," on page 16
- Section 2.3.3, "Help with Commands," on page 17

2.3.1 Location

The utility is installed on all Windows managed devices in the following location:

`%ZENWORKS_HOME%\bin`

where `%ZENWORKS_HOME%` represents the ZENworks installation path. The default path is `c:\program files\novell\zenworks\bin` on a 32-bit Windows device and `c:\program files (x86)\novell\zenworks\bin` on a 64-bit Windows device.

2.3.2 Syntax

The zac utility uses the following basic syntax:

`zac command options`

For example, to initiate an inventory scan on a device, you use the following command:

`zac inv scannow`

where `inv` is the command and `scannow` is the command option.

2.3.3 Help with Commands

The best way to understand the commands is to use the online help or see "zac(1)" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

To use the online help:

1 On the managed device, enter one of the following commands at a command prompt.

Command	Description
zac --help	Displays a complete list of commands.
zac *command* --help	Displays detailed help for a command.

Zone Configuration

<div align="right">

3

</div>

Novell ZENworks 10 Asset Management is designed to let you efficiently manage the software and hardware assets of a large number of devices with as little effort as possible. The first step in easing this management burden is to ensure that you've configured your Management Zone so that you can take full advantage of the ZENworks capabilities.

The following sections introduce the basic concepts you need to set up a Management Zone that best supports the ongoing management tasks you perform. Each section explains a management concept and provides general steps to perform the tasks associated with the concept.

3.1 Organizing Devices: Folders and Groups

Using ZENworks Control Center, you can manage devices by performing tasks directly on individual device objects. However, this approach is not very efficient unless you have only a few devices to manage. To optimize management of a large number of devices, ZENworks lets you organize devices into folders and groups; you can then perform tasks on a folder or group to manage its devices.

You can create folders and groups at any time. However, the best practice is to create folders and groups before you register devices in your zone. This allows you to use registration keys and rules to automatically add devices to the appropriate folders and groups when they register (see "Registering Devices" on page 25).

3.1.1 Folders

Folders are a great tool to help you organize devices in order to simplify management of those devices. You can apply configuration settings and perform tasks on any folder. When you do so, the folder's devices inherit those settings and tasks.

For best results, you should place devices with similar configuration setting requirements in the same folder.

For example, assume that you have workstations at three different sites. You want to apply different configuration settings to the workstations at the three sites, so you create three folders (/Workstations/Site1, /Workstations/Site2, and /Workstations/Site3) and place the appropriate workstations in each folder. You decide that most of the configuration settings apply to all workstations, so you configure those settings at the Management Zone. However, you want to perform a weekly collection of software and hardware inventory at Site1 and Site2 and a monthly

inventory collection at Site3. You configure a weekly inventory collection at the Management Zone and then override the setting on the Site3 folder to apply a monthly schedule. Site1 and Site2 collect inventory weekly, and Site3 collects inventory monthly.

Creating a Folder

1 In ZENworks Control Center, click the *Devices* tab.

2 Click the *Workstations* folder.
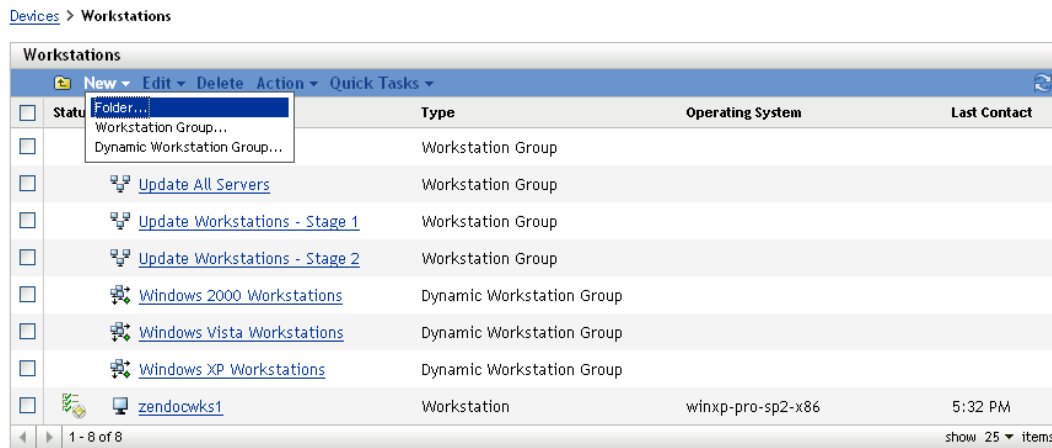
3 Click *New > Folder* to display the New Folder dialog box.

New Folder

Name: *

Folder: *

/Devices/Workstations

Description:

Fields marked with an asterisk are required.

OK   Cancel

4 In the *Name* field, type a name for the new folder.

When you name an object in the ZENworks Control Center (folders, groups, and so forth), ensure that the name adheres to the following conventions:

- The name must be unique in the folder.

- Depending on the database software being used for the ZENworks database, uppercase and lowercase letters might not create uniqueness for the same name. The embedded database included with ZENworks Asset Management is case insensitive, so Folder 1 and FOLDER 1 are the same name and cannot be used in the same folder. If you use an external database that is case-sensitive, Folder 1 and FOLDER 1 are unique.

- If you use spaces, you must enclose the name in quotes when entering it on the command line. For example, you must enclose Folder 1 in quotes ("Folder 1") when entering it in the zman utility.

- The following characters are invalid and cannot be used: / \ * ? : " ' < > | ` % ~

5 Click *OK* to create the folder.

You can also use the `workstation-folder-create` and `server-folder-create` commands in the zman utility to create device folders. For more information, see "Workstation Commands" and "Server Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

3.1.2 Groups

As you can with folders, you can also perform tasks on device groups. When you do so, the group's devices inherit those tasks. Unlike with folders, you cannot apply configuration settings to groups.

Groups provide an additional layer of flexibility for tasks. In some cases, you might not want to perform the same task on all devices in a folder. Or, you might want to perform tasks on one or more devices in different folders. To do so, you can add the devices to a group (regardless of which folders contain the devices) and then perform the tasks on the group.

ZENworks provides both groups and dynamic groups. From the perspective of performing tasks, groups and dynamic groups function exactly the same. The only difference between the two types of groups is the way that devices are added to the group. With a group, you must manually add devices. With a dynamic group, you define criteria that a device must meet to be a member of the group, and then devices that meet the criteria are automatically added.

ZENworks include several predefined dynamic server groups (Windows 2000 Servers and Windows 2003 Servers) and dynamic workstation groups (Windows XP Workstation, Windows 2000 Workstation, and Windows Vista Workstations). Any devices that have these operating systems are automatically added to the appropriate dynamic group.

Creating a Group

1 In ZENworks Control Center, click the *Devices* tab.

2 If you want to create a group for servers, click the *Servers* folder.

or

If you want to create a group for workstations, click the *Workstations* folder.
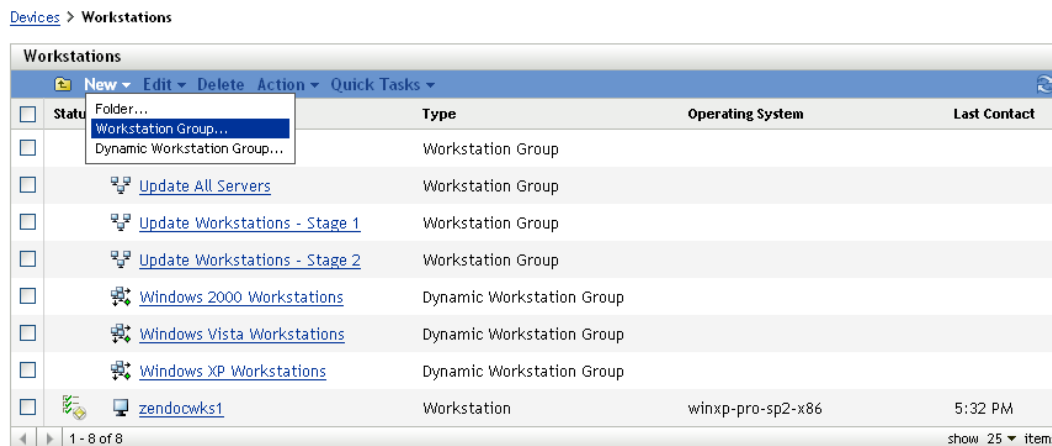
3 Click *New > Server Group* (or *New > Workstation Group* for workstations) to launch the Create New Group Wizard.

Devices > Workstations > **Create New Group**

Create New Group

🔧 **Step 1: Basic Information**

Group Name: *

[   ]

Folder: *

[/Devices/Workstations   ] 🔍

Description:

[   ]

Fields marked with an asterisk are required.

[<< Back]　[**Next >>**]　[Cancel]
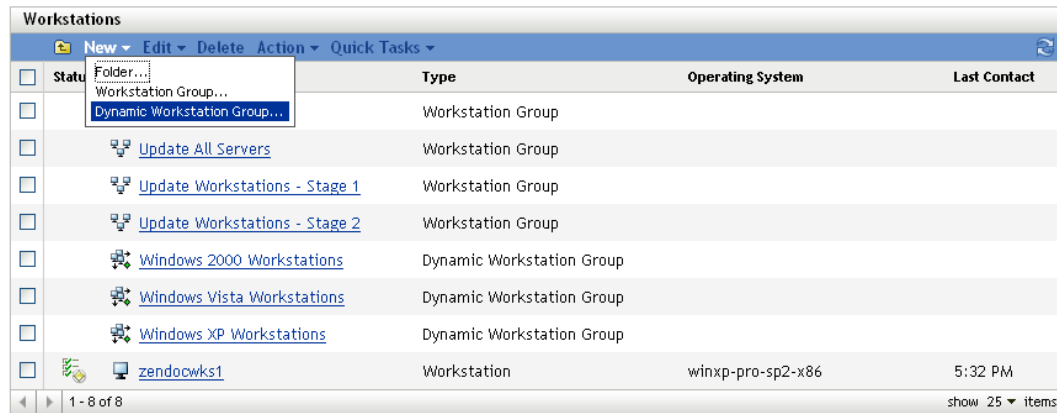
4 On the Basic Information page, type a name for the new group in the *Group Name* field, then click *Next*.

The group name must follow the naming conventions.

5 On the Summary page, click *Finish* to create the group without adding members.

or

Click *Next* if you want to add members to the group, then continue with Step 6.

6 On the Add Group Members page, click *Add* to add devices to the group, then click *Next* when finished adding devices.

7 On the Summary page, click *Finish* to create the group.

You can also use the `workstation-group-create` and `server-group-create` commands in the zman utility to create device groups. For more information, see "Workstation Commands" and "Server Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

Creating a Dynamic Group

1 In ZENworks Control Center, click the *Devices* tab.

2 If you want to create a group for servers, click the *Servers* folder.

or

If you want to create a group for workstations, click the *Workstations* folder.
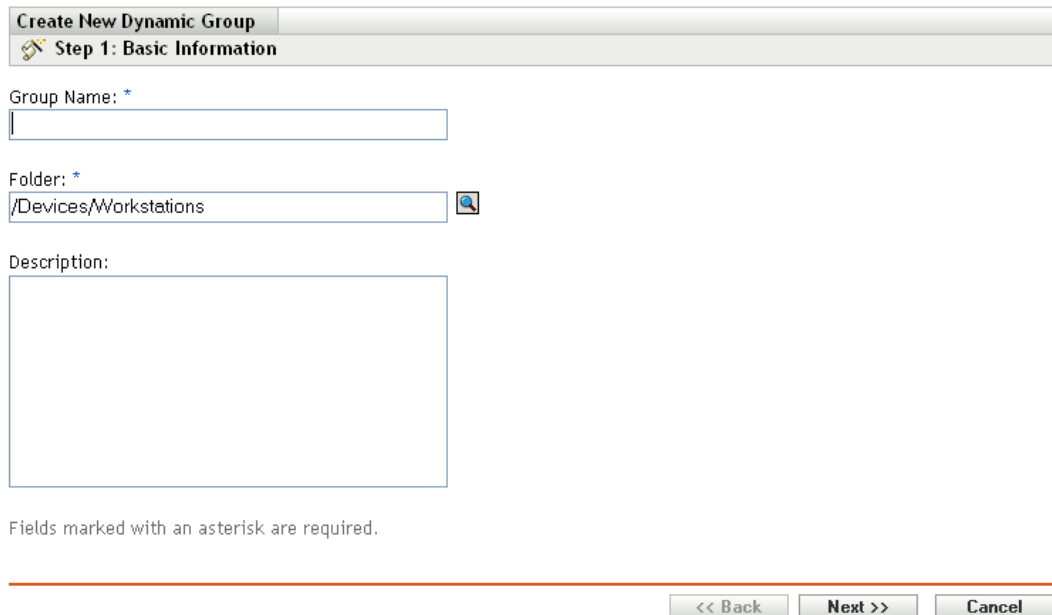
	Status		Type	Operating System	Last Contact
		Folder...			
		Workstation Group...			
		Dynamic Workstation Group...	Workstation Group		
		Update All Servers	Workstation Group		
		Update Workstations - Stage 1	Workstation Group		
		Update Workstations - Stage 2	Workstation Group		
		Windows 2000 Workstations	Dynamic Workstation Group		
		Windows Vista Workstations	Dynamic Workstation Group		
		Windows XP Workstations	Dynamic Workstation Group		
		zendocwks1	Workstation	winxp-pro-sp2-x86	5:32 PM

1 - 8 of 8   show   25 ▾ items

3 Click *New > Dynamic Server Group* (or *New > Dynamic Workstation Group* for workstations) to launch the Create New Group Wizard.

Create New Dynamic Group

Step 1: Basic Information

Group Name: *

Folder: *

/Devices/Workstations

Description:

Fields marked with an asterisk are required.

<< Back   Next >>   Cancel

4 On the Basic Information page, type a name for the new group in the *Group Name* field, then click *Next*.

The group name must follow the naming conventions.

5 On the Define Filter for Group Members page, define the criteria that a device must meet to become a member of the group, then click *Next*.

Click the *Help* button for details about creating the criteria.

6 On the Summary page, click *Finish* to create the group.

3.2 Registering Devices

When you deploy the ZENworks Adaptive Agent to a device, the device is registered in your Management Zone and becomes a managed device. As part of the registration, you can specify the device's ZENworks name and the folder and groups to which you want the device added.

By default, a device's hostname is used as its ZENworks name, it is added to the `/Servers` or `/Workstations` folder, and it is not given membership in any groups. You can manually move devices to other folders and add them to groups, but this can be a burdensome task if you have a large number of devices or if you are consistently adding new devices. The best way to manage a large number of devices is to have them automatically added to the correct folders and groups during registration.

To add devices to folders and groups during registration, you can use registration keys, registration rules, or both. Both registration keys and registration rules let you assign folder and group memberships to a device. However, there are differences between keys and rules that you should be aware of before choosing whether you want to use one or both methods for registration.

3.2.1 Registration Keys

A registration key is an alphanumeric string that you manually define or randomly generate. During deployment of the ZENworks Adaptive Agent on a device, the registration key must be provided. When the device connects to a ZENworks Server for the first time, the device is added to the folder and groups defined within the key.

You can create one or more registration keys to ensure that devices are placed in the desired folders and groups. For example, you might want to ensure that all of the Sales department's workstations are added to the `/Workstations/Sales` folder but are divided into three different groups (SalesTeam1, SalesTeam2, SalesTeam3) depending on their team assignments. You could create three different registration keys and configure each one to add the Sales workstations to the `/Workstations/Sales` folder and the appropriate team group. As long as each workstation uses the correct registration key, it is added to the appropriate folder and group.

To create a registration key:

1 In ZENworks Control Center, click the *Configuration* tab, then click the *Registration* tab.
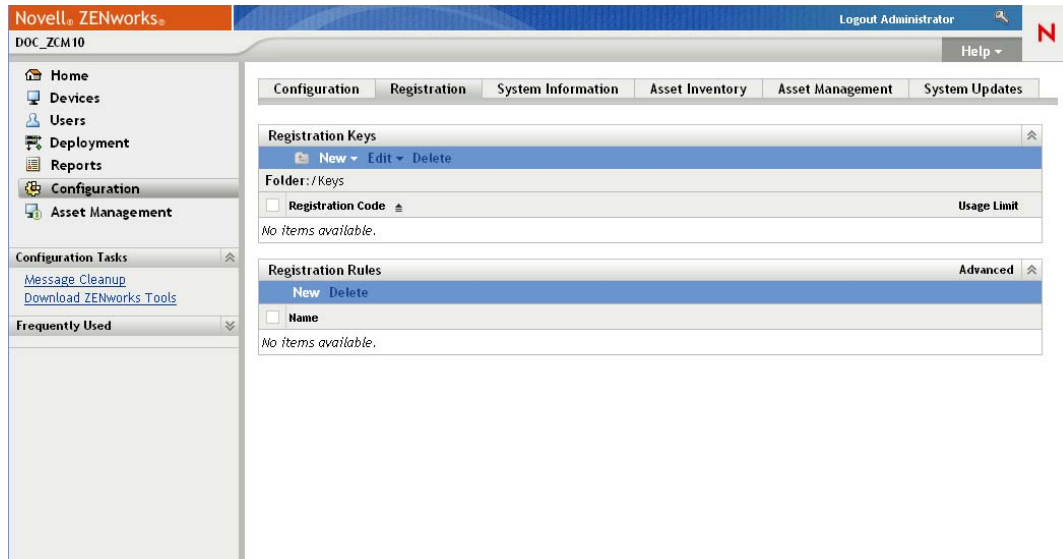
2 In the Registration Keys panel, click *New > Registration Key* to launch the Create New Registration Key Wizard.

3 Follow the prompts to create the key.

For information about what you need to supply at each step of the wizard, click the *Help* button.

You can also use the `registration-create-key` command in the zman utility to create a registration key. For more information, see "Registration Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

3.2.2 Registration Rules

If you don't want to enter a registration key during deployment, or if you want devices to be automatically added to different folders and groups based on predefined criteria (for example, operating system type, CPU, or IP address), you can use registration rules.

ZENworks includes a default registration rule for servers and another one for workstations. If a device registers without a key and you haven't created registration rules, the default registration rules are applied to determine the folder assignments. The two default rules cause all servers to be added to the /Servers folder and all workstations to the /Workstations folder.

The two default rules are designed to ensure that no server or workstation registration fails. Therefore, you cannot delete or modify these two default rules. You can, however, define additional rules that enable you to filter devices as they register and add them to different folders and groups. If, as recommended in Section 3.1, "Organizing Devices: Folders and Groups," on page 19, you've established folders for devices with similar configuration settings and groups for devices on which you need to perform similar tasks, then newly registered devices automatically receive the appropriate configuration settings and tasks.

To create a registration rule:

1 In ZENworks Control Center, click the *Configuration* tab, then click the *Registration* tab.
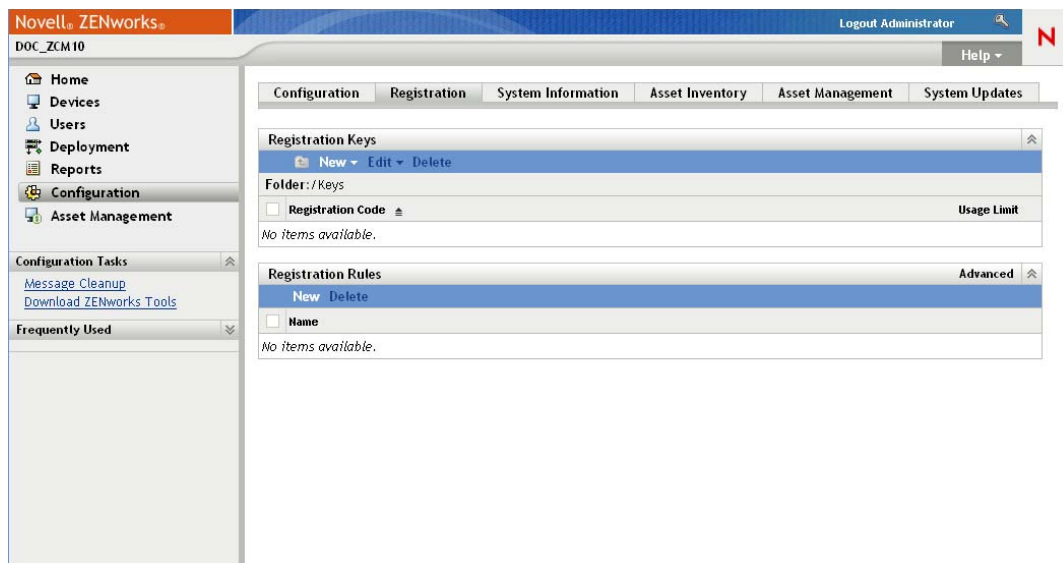
2 In the Registration Rules panel, click *New* to launch the Create New Registration Rule Wizard.

3 Follow the prompts to create the rule.

For information about what you need to supply at each step of the wizard, click the *Help* button.

You can also use the `ruleset-create` command in the zman utility to create a registration rule. For more information, see "Ruleset Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

3.2.3 Device Naming Template

The device naming template determines how devices are named when they register. By default, a device's hostname is used. You can change it to use any combination of the following machine variables: ${HostName}, ${GUID}, ${OS}, ${CPU}, ${DNS}, ${IPAddress}.

1 In ZENworks Control Center, click the *Configuration* tab.

2 In the Management Zone Settings panel, click *Device Management*.

3 Click *Registration* to display the Registration page.

Configuration > Registration

4 In the Device Naming Template panel, click 📋, then select the desired machine variable from the list.

You can use any combination of one or more variables. For example:

```
${HostName}${GUID}
```

5 Click *OK* to save the changes.

3.2.4 Where to Find More Information

For more information about registering devices, see the *ZENworks 10 Discovery, Deployment, and Retirement Reference*.

3.3 Connecting to User Sources

You can connect to one or more LDAP directories to provide authoritative user sources in ZENworks. Adding a user source lets you associate ZENworks administrator accounts with LDAP user accounts, associate devices with the users who primarily use them, and run asset inventory and management reports that include users.

Your LDAP directory is not affected; ZENworks requires only read access to the LDAP directory. For more detailed information about the specific read rights required when connecting to a user source, see the *ZENworks 10 Asset Management System Administration Reference*.

You can connect to Novell eDirectory and Microsoft Active Directory as user sources. The minimum requirements are Novell eDirectory 8.7.3 and Microsoft Active Directory on Windows 2000 SP4. The minimum LDAP requirement is version 3.

After you connect to an LDAP directory, you define the containers within the directory that you want exposed. For example, assume you have a Microsoft Active Directory domain tree named MyCompany. All users reside in two containers in the MyCompany tree: MyCompany/Users and MyCompany/Temp/Users. You could reference the MyCompany tree as the source and the MyCompany/Users and MyCompany/Temp/Users as separate user containers. This limits access within the directory to only those containers that include users.

In addition to the users that reside within the containers you add, ZENworks Control Center also displays any user groups located in the containers. This enables management of both individual user and groups of users

To connect to a user source:

1 In ZENworks Control Center, click the *Configuration* tab.

Configuration	Registration	System Information	Asset Inventory	Asset Management	System Updates

Management Zone Settings	⌄

Server Hierarchy	⌄

Administrators	⌄

Roles	⌄

User Sources	⌃
New Delete	⟳
☐ Status Name	
No items available.	

Licenses	⌄

Credential Vault	⌄
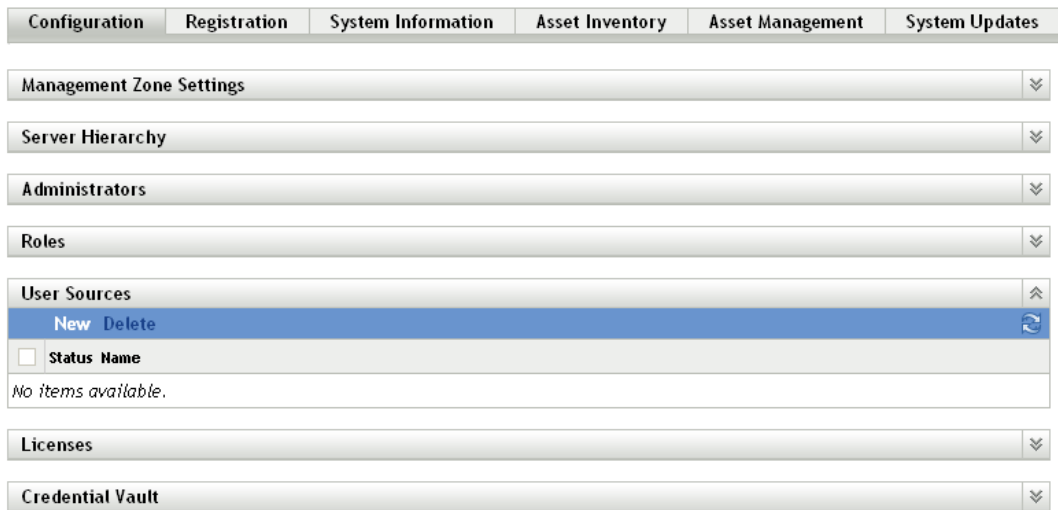
2 In the User Sources panel, click *New* to launch the Create New User Source Wizard.

3 Follow the prompts to create the user source.

For information about what you need to supply at each step of the wizard, click the *Help* button.

You can also use the `user-source-create` command in the zman utility to create a connection to a user source. For more information, see "User Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

3.4 Creating ZENworks Administrator Accounts

During installation, a default ZENworks administrator account (named Administrator) is created. This account, called a Super Administrator account, provides full administrative rights to the Management Zone.

Typically, you should create administrator accounts for each person who will perform administrative tasks. You can define these accounts as Super Administrator accounts, or you can define them as administrator accounts with restricted rights. For example, you could give a user an administrator account that only enables him or her to discover and register devices in the Management Zone. Or, the account might be limited to performing asset management tasks such as contract, license, and document management.

In some cases, you might have multiple administrator accounts that require the same administrative rights. Rather than assign rights to each account individually, you can create an administrator role, assign the administrative rights to the role, and then add the accounts to the role. For example, you might have a Help Desk role that provides administrative rights required by several of your administrators.

To create additional administrator accounts:

1 In ZENworks Control Center, click the *Configuration* tab.

Configuration	Registration	System Information	Asset Inventory	Asset Management	System Updates

Management Zone Settings	⌃
Content	⌄
Device Management	⌄
Discovery and Deployment	⌄
Event and Messaging	⌄
Infrastructure Management	⌄
Inventory	⌄
Reporting Services	⌄
Asset Management	⌄
Patch Management Services	⌄

Server Hierarchy	⌄

Administrators	⌃

New Edit ▾ Delete

	Name ⬆	Full Name	Username in User Source

No items available.

Roles	⌄

2 In the Administrators panel, click *New* to display the Add New Administrator dialog box.

Add new Administrator ? X

There are two ways to create an Administrator:

◉ Create a new Administrator providing name and password.

Administrator Name:

[   ] *

Full Name:

[   ]

Password:

[   ] *

Retype Password:

[   ] *

○ Based on user(s) in a user source
will use the same credential defined in Authoritative source.

Add Remove

☐	**Name**	**In Folder**
No items selected, click add to select items		

☐ Give this Administrator the same rights as I have.

Fields marked with an asterisk are required.

[**OK**]   [**Cancel**]

3 Fill in the fields.

The Add New Administrator dialog box lets you create a new administrator account by providing a name and password, or you can create a new administrator based on an existing user in the user source. Optionally, you can give the new administrator the same rights that the logged-in administrator has.

Create a New Administrator by Providing Name, Password: Select this option if you want to create a new administrator account by manually specifying the name and password.

Based on User(s) in a User Source: Select this option if you want to create a new administrator account based on user information from your user source. To do so, click *Add*, then browse for and select the user you want.

Give this Administrator the Same Rights as I Have: Select this option to assign the new administrator the same rights that you have as the currently logged-in administrator.

4 When you have finished filling in the fields, click *OK* to add the new administrator to the Administrators panel.

5 If you need to change the new administrator's rights or roles, click the administrator account to display the account details:

6 Using the Assigned Rights panel, modify the assigned rights.

For information about the options on the page, click the *Help* button, or see "Managing Administrator Rights" in the *ZENworks 10 Asset Management System Administration Reference*.

7 When you have finished modifying the rights, click *Apply* to save the changes.

For more information about creating ZENworks administrator accounts or administrator roles, see "Administrators" in the *ZENworks 10 Asset Management System Administration Reference*.

You can also use the `admin-create` command in the zman utility to create a ZENworks administrator account. For more information, see "Administrator Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

3.5 Modifying Configuration Settings

The Management Zone configuration settings enable you to control a wide range of functionality behavior for you zone. There are Device Management settings that let you control how often devices access a ZENworks Server for refreshed information, how often dynamic groups are refreshed, and

what levels of messages (informational, warning, or error) are logged by the ZENworks Adaptive Agent. There are Event and Messaging settings, Discovery and Deployment settings, and much more.

Management Zone settings that apply to devices are inherited by all devices in the zone. As discussed in Section 3.1, "Organizing Devices: Folders and Groups," on page 19, you can override zone settings by configuring them on device folders or on individual devices. This allows you to establish zone settings that apply to the largest number of devices and then, as necessary, override the settings on folders and devices.

By default, your zone settings are preconfigured with values that provide common functionality. You can, however, change the settings to best adapt them to the behavior you need in your environment.

- Section 3.5.1, "Modifying Configuration Settings at the Zone," on page 36
- Section 3.5.2, "Modifying Configuration Settings on a Folder," on page 37
- Section 3.5.3, "Modifying Configuration Settings on a Device," on page 38

3.5.1 Modifying Configuration Settings at the Zone

1 In ZENworks Control Center, click the *Configuration* tab.

2 In the Management Zone Settings panel, click the settings category (*Device Management*, *Discovery and Deployment*, *Event and Messaging*, and so forth) whose settings you want to modify.

Configuration	Registration	System Information	Asset Inventory	Asset Management	System Updates

Management Zone Settings	⊗
Device Management	⊗

Category	Description
Local Device Logging	Enable and configure local logging of warnings and errors encountered by managed devices.
Device Refresh Schedule	Configure the device refresh interval.
ZENworks Agent	ZENworks Agent Configuration.
Registration	Configure registration settings.
ZENworks Explorer Configuration	Configure the behavior of the ZENworks Explorer on managed devices.
System Variables	Configure system variables.
Primary User	Configure the setting for how the primary user is determined.
Primary Workstation	Configure the setting for how the primary workstation is determined.
Dynamic Group Refresh Schedule	Configure dynamic group refresh schedule.
Wake-on-LAN	Configure the Wake-on-LAN settings

Discovery and Deployment	⊗
Event and Messaging	⊗
Infrastructure Management	⊗
Inventory	⊗
Reporting Services	⊗
Asset Management	⊗

3 Click the setting to display its details page.

4 Modify the setting as desired.

For information about the setting, see "Management Zone Configuration Settings" in the *ZENworks 10 Asset Management System Administration Reference* or click the *Help* button in ZENworks Control Center.

5 When you have finished modifying the setting, click *OK* (or *Apply*) to save your changes.

If the configuration setting applies to devices, the setting is inherited by all devices in the zone unless the setting is overridden at a folder level or a device level.

3.5.2 Modifying Configuration Settings on a Folder

1 In ZENworks Control Center, click the *Devices* tab.

2 In the Devices panel (on the *Managed* tab), browse for the folder whose settings you want to modify.

3 When you've found the folder, click *Details* next to the folder name to display the folder's details.

4 Click the *Settings* tab.

5 In the Settings panel, click the settings category (*Device Management*, *Infrastructure Management*, and so forth) whose settings you want to modify.

Devices > Workstations

Workstations

| Summary | Settings |

Settings

Device Management

Category	Description	Inherited From
Local Device Logging	Enable and configure local logging of warnings and errors encountered by managed devices.	(System)
Device Refresh Schedule	Configure the device refresh interval.	(System)
ZENworks Agent	ZENworks Agent Configuration.	(System)
Registration	Configure registration settings.	(System)
ZENworks Explorer Configuration	Configure the behavior of the ZENworks Explorer on managed devices.	(System)
System Variables	Configure system variables.	---
Primary User	Configure the setting for how the primary user is determined.	---
Device Dynamic Rename	Enables automatic renaming of devices.	(System)

Infrastructure Management

Inventory

Asset Management

6 Click the setting to display its details page.

7 Modify the setting as desired.

For information about the setting, see "Management Zone Configuration Settings" in the *ZENworks 10 Asset Management System Administration Reference* or click the *Help* button in ZENworks Control Center.

8 When you have finished modifying the setting, click *OK* (or *Apply*) to save your changes.

The configuration setting is inherited by all devices in the folder, including any devices contained in subfolders, unless the setting is overridden on a subfolder or individual device.

3.5.3 Modifying Configuration Settings on a Device

1 In ZENworks Control Center, click the *Devices* tab.

2 In the Devices panel (on the *Managed* tab), browse for the device whose settings you want to modify.

3 When you've found the device, click the device name to display the its details.

4 Click the *Settings* tab.

5 In the Settings panel, click the settings category (, *Device Management*, *Infrastructure Management*, and so forth) whose settings you want to modify.

Devices > Workstations > zendocwks1			

zendocwks1

Summary	Inventory	Relationships	**Settings**

Settings

Device Management			≫
Category	**Description**	**Inherited From**	
Local Device Logging	Enable and configure local logging of warnings and errors encountered by managed devices.	(System)	
Device Refresh Schedule	Configure the device refresh interval.	(System)	
ZENworks Agent	ZENworks Agent Configuration.	(System)	
ZENworks Explorer Configuration	Configure the behavior of the ZENworks Explorer on managed devices.	(System)	
System Variables	Configure system variables.	---	
Primary User	Configure the setting for how the primary user is determined.	---	
Infrastructure Management			≫
Inventory			≫
Asset Management			≫

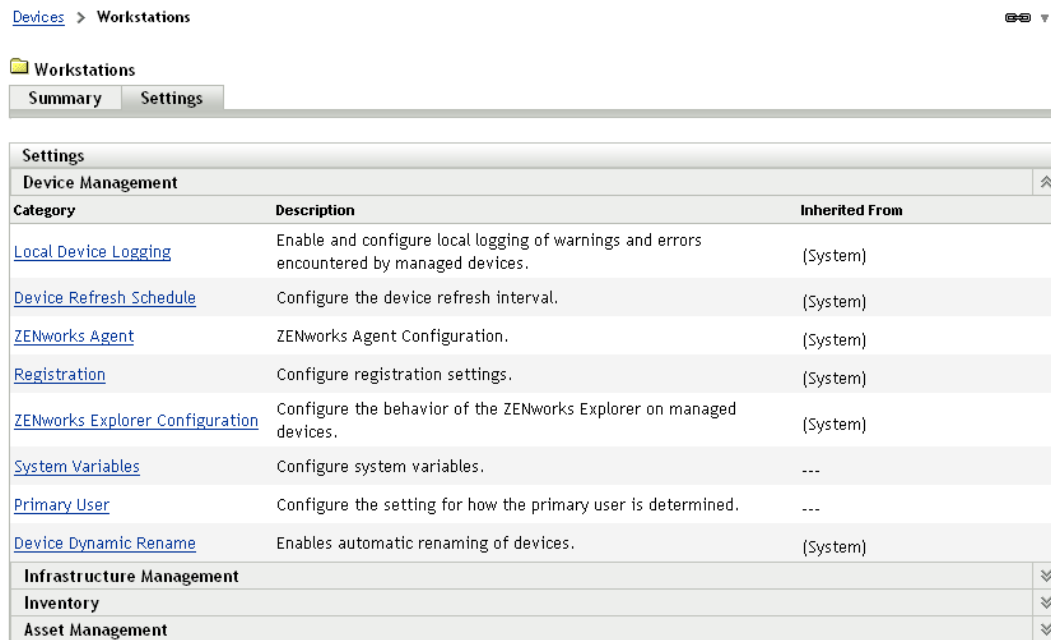**6** Click the setting to display its details page.

7 Modify the setting as desired.

For information about the setting, see "Management Zone Configuration Settings" in the *ZENworks 10 Asset Management System Administration Reference* or click the *Help* button in ZENworks Control Center.

8 When you have finished modifying the setting, click *OK* (or *Apply*) to save your changes.

Asset Management

4

After you've configured your Management Zone and deployed the ZENworks Adaptive Agent (or Inventory-Only Module) to devices, you're ready to start managing the software and hardware assets on those devices.

The following sections provide explanations and instructions for collecting software and hardware inventory from devices, monitoring software usage on devices, and monitoring software license compliance.

4.1 Collecting Software and Hardware Inventory

When you inventory a device, ZENworks Asset Management collects both software and hardware information from the device. Using ZENworks Control Center, you can view the inventory for an individual device, or you can generate reports for multiple devices based on specific criteria.

You can use the software inventory for a variety of purposes, including tracking usage of specific applications and ensuring that you have sufficient licenses for all copies of the application being used. For example, assume that your company owns 50 licenses of a word processing software. You do a software inventory and find that it is installed on 60 devices, which means that you are out of compliance with your license agreement. However, after viewing the usage reports for the software for the past 6 months, you see that it is actually being used on only 45 devices. To become compliant with the license agreement, you uninstall the software from the 15 devices that are not using it.

You can use the hardware inventory for a variety of purposes as well, including ensuring that your hardware meets the requirements for running specific software. For example, assume that your Accounting department wants to roll out a new version of their accounting software. The new software has increased processor, memory, and disk space requirements. Using the hardware inventory collected from your devices, you can create two reports, one that lists all devices that meet the requirements and one that lists the devices that don't meet the requirements. Based on the reports, you distribute the software to the compliant devices and create an upgrade plan for the noncompliant devices.

By default, devices are automatically scanned at 1:00 a.m. the first day of each month. You can modify the schedule, as well as many other *Inventory* configuration settings, on the *Configuration* tab in ZENworks Control Center.

The following sections provide instructions for initiating a device scan and using the collected inventory:

4.1.1 Initiating a Device Scan

You can initiate a scan of a device at any time.

1 In ZENworks Control Center, click the *Devices* tab.

2 Navigate the `Servers` or `Workstations` folder until you locate the device you want to scan.

3 Click the device to display its details.

4 In the task list located in the left navigation pane, click *Server Inventory Scan* or *Workstation Inventory Scan* to initiate the scan.

The QuickTask Status dialog box displays the status of the task. When the task is complete, you can click the *Inventory* tab to view the results of the scan.

To scan multiple devices at one time, you can open the folder in which the devices are located, select the check boxes next to the devices, then click *Quick Tasks* > *Inventory Scan*.

You can also use the `inventory-scan-now` command in the zman utility to scan a device. For more information, see "Inventory Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

4.1.2 Viewing a Device Inventory

1 In ZENworks Control Center, click the *Devices* tab.

2 Navigate the `Servers` or `Workstations` folder until you locate the device whose inventory you want to view.

3 Click the device to display its details.

4 Click the *Inventory* tab.

The Inventory page provides a summary of the hardware inventory. To see detailed inventory information, click *Detailed Hardware/Software Inventory*.

4.1.3 Generating an Inventory Report

ZENworks Asset Management includes several standard reports. In addition, you can create custom reports to provide different views of the inventory information.

1 In ZENworks Control Center, click the *Reports* tab.
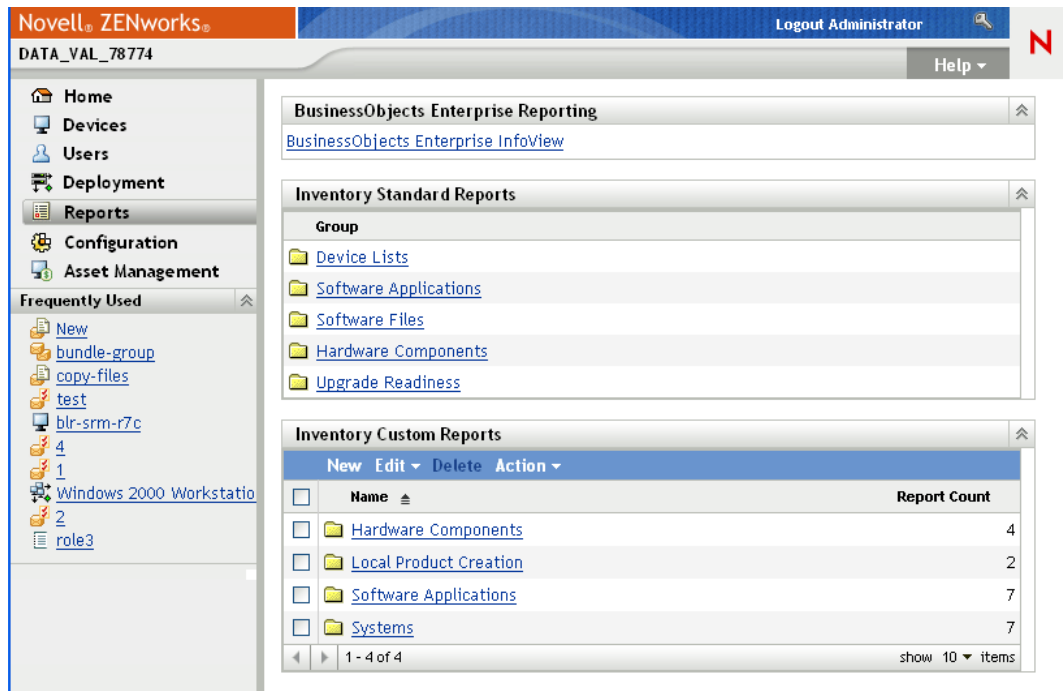
2 In the Inventory Standard Reports panel, click *Software Applications*.

3 Click the *Operating System* report to generate the report.

Using the options at the bottom of the report, you can save the generated report as a Microsoft Excel spreadsheet, CSV (comma-separated values) file, PDF file, or PDF Graph file.

4.1.4 Where to Find More Information

For more information about inventory, see the *ZENworks 10 Asset Inventory Reference*.

4.2 Monitoring Software Usage

After you've inventoried devices, you can run reports to view how much the devices' applications are used. ZENworks Asset Management includes standard reports for application usage by product, user, and device. You can also customize reports to provide more detailed or focused information. For example, Asset Management includes a predefined custom report that shows application that have not been used in the last 90 days.

To run a report that shows how much a specific application is used:

1 In ZENworks Control Center, click the *Asset Management* tab, then click the *Software Usage* tab.
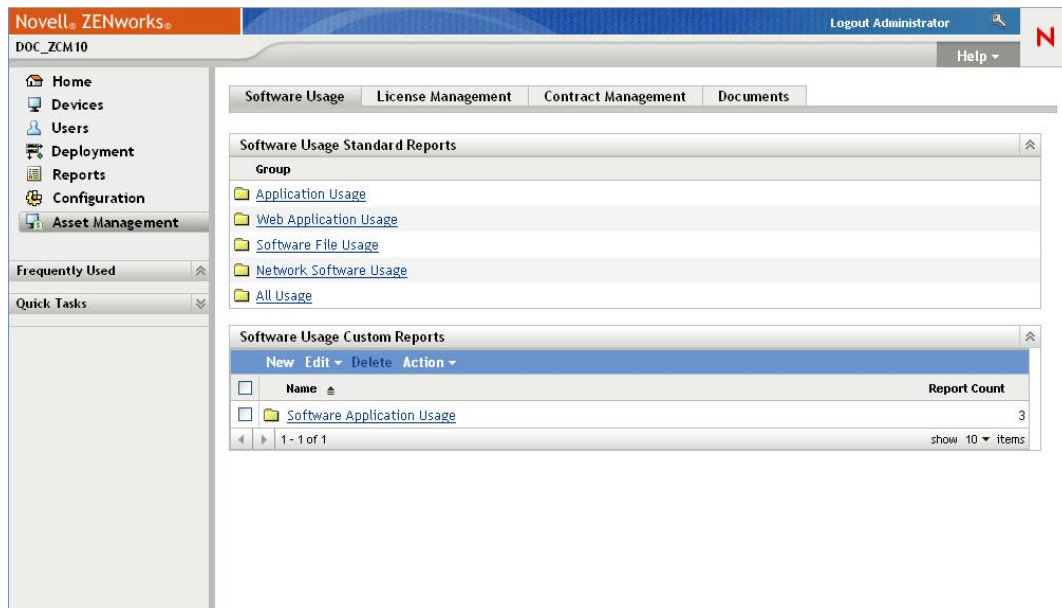
2 In the Software Usage Standard Reports panel, click *Application Usage* to display the list of application usage reports.

3 In the Reports panel, click *Local Application Usage by Product*.

```
Local Application Usage by Product                           Run Date: 3/16/09
Products from  10  Software Manufacturer(s) Installed on  2  Device(s)

Manufacturer                              Installations
Cinematronics                                         1
Macromedia                                            1
Microsoft                                            45
Novell                                               13
Sun                                                   6
Sun Microsystems                                     32
Sybase                                                1
Symantec                                              1
VMware                                                2
Yahoo!                                                1
```

Excel CSV PDF Graph

The report shows all the products, grouped by software manufacturer, that are installed on the devices.

4 Find a manufacturer whose products you want to see, then click the number in the Installations column to display the installed products.

The resulting report shows the current number of installations for each product, how many of the installations have been used, when it was last used, and other usage information.

5 If you want to change the time period for the report, or change the list of products displayed (all products, used products, or unused products), click *Change Time Period/Filters* at the bottom of the report.

There are many other standard and predefined custom reports that you can use. For additional information about application usage reports, see "Reports" in the *ZENworks 10 Asset Management Reference*.

4.3 Monitoring License Compliance

ZENworks Asset Management enables you to monitor your organization's compliance with software license agreements by comparing purchased software licenses with actual software installations discovered during inventory scans.

Asset Management license compliance is a powerful and flexible tool. As a result, there are multiple approaches and methods you can use when setting up license compliance. The following sections provide basic instructions with minimal explanation in order to help you quickly set up a single product for license compliance monitoring. After you finish this basic scenario, see "License Compliance" in the *ZENworks 10 Asset Management Reference* for more detailed information and instructions.

- Section 4.3.1, "License Compliance Components," on page 45
- Section 4.3.2, "Discovering Installed Products," on page 46
- Section 4.3.3, "Creating a Catalog Product and Purchase Record," on page 46
- Section 4.3.4, "Creating a Licensed Product," on page 48

4.3.1 License Compliance Components

Before you begin implementing compliance monitoring, you need to understand the components involved and how they work together, as explained in the following illustration and subsequent text.

Figure 4-1 *License Compliance Components*
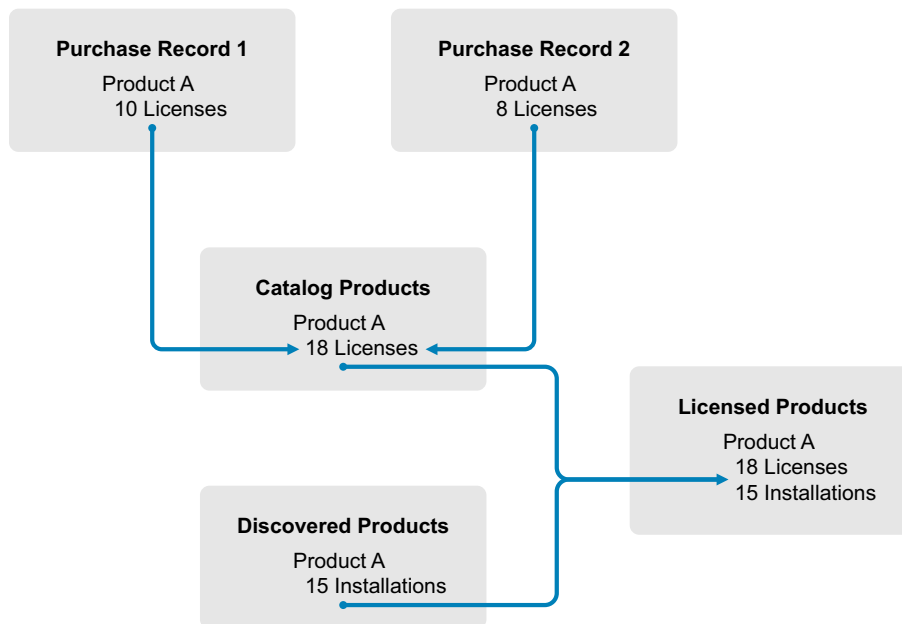
- You scan the devices in your Management Zone to collect the list of installed software products. These are called *discovered products*. In the above illustration, the inventory scan discovered that ProductA is installed on 15 devices.

- You create *catalog products* to represent the software products your organization has purchased. Typically, each catalog product corresponds to a specific manufacturer part number. In the above illustration, ProductA is the only catalog product. However, you might have catalog products for ProductA, ProductA Upgrade, and ProductB.

- You create *purchase records* to represent the purchase orders or invoices for software products. Each line item in the purchase record lists a catalog product along with the license purchase quantity. If a catalog product is listed in multiple purchase records, the catalog product's total licenses equal the purchase quantity for both purchase records. In the above illustration, one purchase record includes 10 licenses of ProductA and another purchase record includes 8 licenses. The total license count for ProductA is 18.

- You create *licensed products* and associate the corresponding discovered products and catalog products to them. This gives you a single licensed product that includes the number of licenses and installations for the product. The result is a quick view of whether or not the product usage complies with the license agreement. In the above illustration, ProductA has 18 licenses and is installed on 15 devices, so ProductA complies with your license agreement.

4.3.2 Discovering Installed Products

If you have not already scanned the devices in your Management Zone to collect information about installed products (referred to as *discovered products*), complete the steps in Section 4.1, "Collecting Software and Hardware Inventory," on page 39.

After you have discovered products, choose one whose compliance you want to monitor.

1 In ZENworks Control Center, click the *Asset Management* tab, then click the *License Management* tab.

2 In the License Management panel, click *Discovered Products* to display the Discovered Products list.

Discovered Products					
📁 Action ▾					
☐ Name ⬙	Excluded	Licensed Product	Installed Quantity	Active Usage Quantity	Standards Category
☐ 🔍 Microsoft Office Professional 2003 2003 (Windows)		Office Professional 2003	10	10	
☐ 🔍 Microsoft Windows Server 2003 5.2 (Windows)		Windows Server 2003	5	5	
☐ 🔍 Microsoft Windows XP Professional 5.1 (Windows)		Windows XP Professional	15	11	
☐ 🔍 Sun Java2 Runtime Environment 1.5 (Windows)			15	12	
☐ 🔍 Sybase SQL Anywhere Developer Edition 10.0 (Windows)			1	0	
☐ 🔍 Symantec Symantec AntiVirus Corporate Edition 8.1 (Windows)			30	25	
☐ 🔍 VMware VMware Tools - (Windows)			2	2	
☐ 🔍 Yahoo! Yahoo! Companion Toolbar - (Windows)			1	0	
◀ ▶ 1 - 8 of 8					show 25 ▾ items

3 Browse the list to choose the discovered product you want to use.

The product must have a least one installation listed in the *Installed Quantity* column. If possible, you should choose a product for which you have a purchase order or invoice readily available. This allows you to complete the scenario using real information. Otherwise, you can invent the purchase information as you go. Remember your product choice so that you can use it later.

4 Continue with the next section, "Creating a Catalog Product and Purchase Record" on page 46.

4.3.3 Creating a Catalog Product and Purchase Record

Discovered products provide the installation information for products. To provide information about product purchases, you create catalog products and purchase records.

A catalog product represents a software product. A purchase record populates the catalog product with the number of product licenses you've purchased.

The following steps explain how to create a catalog product and purchase record for the discovered product you chose in Section 4.3.2, "Discovering Installed Products," on page 46.

1 In ZENworks Control Center, click the *Asset Management* tab, then click the *License Management* tab.

2 Create the catalog product:

2a In the License Management panel, click *Catalog Products*.

2b Click *New > Catalog Product* to launch the Create New Catalog Product Wizard.

2c Fill in the following fields:

Manufacturer: Select the software manufacturer from the list. If the correct manufacturer is not listed, type the manufacturer name (for example, Novell, Symantec, or Microsoft).

Product: Type the name of the product. The product should represent the purchased software product package (SKU). For example, the purchased package might be Product A Single License or Product A 10-Pack. If you have an invoice record that includes the product for which you are creating the catalog product, use the product name from the invoice.

Licenses Per Package: Specify the number of licenses included in the product package.

Product Type - Notes: These fields are optional. You can use them to further identify the product.

Excluded: Do not select this check box.

2d Click *Next* to display the Summary page, the click *Finish* to add the product to the Catalog Products list.

2e Click *License Management* (in the breadcrumb path at the top of the page) to return to the License Management page.

3 Create the purchase record:

3a In the License Management panel, click *Purchase Records*.
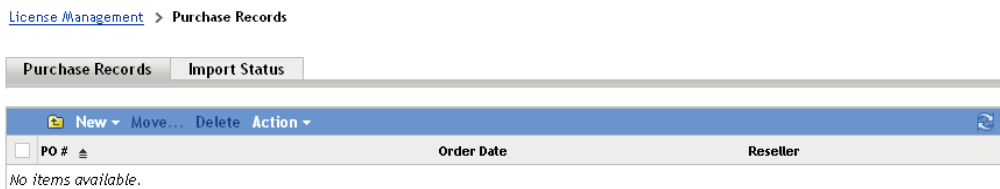
3b Click *New > Purchase Record* to launch the Create New Purchase Record Wizard.

3c Fill in the following fields:

PO Number: Specify the purchase order number or invoice number associated with the software product purchase. If you don't have PO or invoice for this product, use any number.

Order Date: Select the date the software was purchased.

Recipient - Reseller: These fields are optional. You can use them to further identify the purchase record.

3d Click Next to display the Summary page.

3e Select the *Define Additional Properties* box, then click *Finish* to create the purchase record and display its Purchase Details page.

3f Click *Add* to display the Add Purchase Detail dialog box, then fill in the following fields:

Product: Click 🔍 to browse for and select the catalog product you created in Step 2.

Quantity: Specify the quantity of product purchased. For example, if the catalog product you selected is ProductA 10-Pack and the purchase order was for 5 ProductA 10-Packs, specify 5.

Unit MSRP - Extended Price: These fields are required. Specify the manufacturer's suggested retail price (MSRP), the price you paid per unit, and the extended price. If you leave the *Extended Price* field blank, the wizard populates it by multiplying the *Purchase Quantity* and the *Unit Price*.

Invoice # - Comments: These fields are optional. You can use them to further identify the purchase.

3g Click *OK*.

4 Continue with the next section, Creating a Licensed Product.

Asset Management can also import purchase information from electronic files. During the process, the purchase record is created as well as any catalog products for software products included in the purchase record. For more information, see "License Compliance" in the *ZENworks 10 Asset Management Reference*.

4.3.4 Creating a Licensed Product

The final step in setting up compliance for the software product is to create a licensed product and associate the discovered product and catalog product with it. Doing so populates the license product with the installation and license information needed to determine its license compliance status.

The following steps explain how to use the Auto-Reconcile Wizard to create the licensed product and associate the discovered product and catalog product with it.

1 In ZENworks Control Center, click the *Asset Management* tab, then click the *License Management* tab.

2 In the License Management panel, click *Licensed Products*.

License Management > **Licensed Products**

Compliance Refresh Start: March 18, 2009 10:51:56 AM   **Finish**: March 18, 2009 10:51:58 AM
Started By: Administrator   0 Licensed Products

Licensed Products

📁 **New** ▾   **Move...**   **Delete**   **Action** ▾

☐	Name ≜ Status	Discovered Products	Catalog Products	License Quantity	Allocated Quantity

No items available.

3 In the Licensed Products panel, click *Action > Auto-Reconcile: Create Licensed Products* to launch the Auto-reconcile Wizard. Complete the wizard using information from the following table to fill in the fields.

Wizard Page	Details
Discovered Product Filter	The Auto-Reconcile Wizard creates licensed products from existing discovered products.To find your discovered product: 1. Click the *Products Specified Below* option. 2. In the *Select* list, select the manufacturer of your discovered product. 3. In the *Product* field, enter the name of your discovered product.
Select Licensed Products to Create	Based on the information you specified on the Discovered Product Filter page, this page should display your discovered product and the licensed that will be created for it. The wizard attempts to match catalog products to the discovered product by comparing the Manufacturer and Product fields. If the wizard was able to match the catalog product you created to your discovered product, the catalog product is listed as well. Select the catalog product to associate it with the licensed product. If the wizard is unable to match the catalog product to the discovered product, you will need to manually assign the catalog product after completing the wizard.
Destination Folder	Select the folder where you want to place the new licensed product. The field defaults to the current folder (the folder from which you launched the Auto-Reconcile Wizard). To specify another folder, click 🔍 to browse for and select the folder. The folder must already exist; you cannot use the selection dialog to create a new folder.
License Entitlements	Every licensed product must have at least one entitlement and license model. An entitlement typically represents a license agreement. In many cases, a licensed product might have only one entitlement. However, by allowing multiple entitlements, you can determine compliance for a licensed product that has several license agreements. For example, you might have a full license agreement and an upgrade license agreement for the same product. Rather than creating two separate licensed products for the same product, you create one licensed product with two different entitlements. The license model determines how the licenses are counted. Licenses can be counted per installation, user, or device. For this scenario, specify *Per-Installation* as the description and select *Per-Installation* as the license model. This causes each installation of the product to consume a license.
Auto-reconcile Create Summary	Review your data.

4 If you haven't done so already, click *Finish* to create the licensed product and add it to the Licensed Products list.

5 If the Auto-Reconcile Wizard was unable to associate your catalog product with the licensed product:

    5a Click the licensed product.

    5b Click the *License Entitlements* tab.

    5c In the Entitlements panel, click the entitlement.

    5d Click the *Proof of Ownership* tab.

    5e In the Catalog Products panel, click *Add*.

    5f Select the catalog product, then click *OK* to add it to the Catalog Products panel.

        The Catalog Products panel displays the catalog product's Purchase Quantity, which is the number of units of the catalog product that you've purchased (according to the purchase record). It also displays the License Quantity, which is the total number of licenses included in the purchased units.

6 Continue with the next section, , for information about monitoring compliance.

4.3.5 Viewing Compliance Data

There are two views you can use to see the compliance status of your licensed products. You can view the Licensed Products page to get a compliance status summary for all products, or you can generate the Software Compliance report to see more detailed information.

Viewing the Compliance Status Summary

1 In ZENworks Control Center, click the *Asset Management* tab, then click the *License Management* tab.

2 In the License Management panel, click *Licensed Products* to display the Licensed Products page.

License Management > **Licensed Products**

Compliance Refresh Start: March 18, 2009 1:10:51 PM   **Finish**: March 18, 2009 1:10:52 PM
Started By: (automatic single refresh)   1 Licensed Product

Licensed Products

📁 New ▾ Move… Delete Action ▾

☐	Name ▲	Status	Discovered Products	Catalog Products	License Quantity	Allocated Quantity
☐	🗐 Microsoft Office Professional 2003 2003	🔶	☑	☑	5	0
☐	🗐 Microsoft Windows Server 2003 5.2	🟢	☑	☑	1	0
☐	🗐 Microsoft Windows XP Professional 5.1	❌	☑	☑	1	0

◀ ▶ 1 - 3 of 3   show 25 ▾ items

The Licensed Products list displays all licensed products and their current compliance status:

* 🟢 The software product is properly licensed. The number of purchased licenses equals the number of installations.

- ◆ ⊙ The software product is over licensed. There are more purchased licenses than installations.
- ◆ ⊗ The software product is under licensed. There are fewer purchased licenses than installations.

Generating the Software Compliance Report

1 In ZENworks Control Center, click the *Asset Management* tab, then click the *License Management* tab.

2 In the License Management panel, click *License Management Reports*.

3 In the License Management Standard Reports panel, click *Software Compliance*.

4 In the Reports panel, click *Compliance Report*.

A report appears showing compliance data by license. You can filter the data by compliance status, manufacturer and value, or demographic criteria. Drill in to *License Quantity* to see compliance details for a particular licensed product. For information on other reports, see the *ZENworks 10 Asset Management Reference*.

4.3.6 Where to Find More Information

The scenario described in the previous sections shows only a small portion of the license compliance functionality available in ZENworks Asset Management. For more information, see "License Compliance" in the *ZENworks 10 Asset Management Reference*.

4.4 Allocating Licenses

ZENworks Asset Management lets you allocate licenses within your organization to track ownership and distribution of the licenses. You can allocate licenses to devices or demographics (sites, departments, and cost centers).

A *device allocation* is the assignment of a license to a specific device. The device can have the product installed or not installed. For example, you purchase 10 licenses of ProductA. You can allocate the licenses to the target devices before ProductA is even installed on the devices.

A *demographic allocation* is the assignment of one or more licenses to a site, department, or cost center. Any device that is assigned the demographic and has the product installed shows up as an installation associated with the allocation. For example, you purchase 15 licenses of ProductA and allocate them to DepartmentQ. There are 20 devices assigned to DepartmentQ. Of those 20 devices, 12 have ProductA installed. The result is that the DepartmentQ allocation shows 15 allocated licenses with 12 installations.

The following steps explain how to allocate licenses to devices. For information about allocating licenses to demographics, see "License Allocation" in the *ZENworks 10 Asset Management Reference*.

1 In ZENworks Control Center, click the *Asset Management* tab.

2 On the License Management page, click *Licensed Products*.

License Management > **Licensed Products**

Compliance Refresh Start: March 18, 2009 1:10:51 PM   **Finish**: March 18, 2009 1:10:52 PM
Started By: (automatic single refresh)   1 Licensed Product

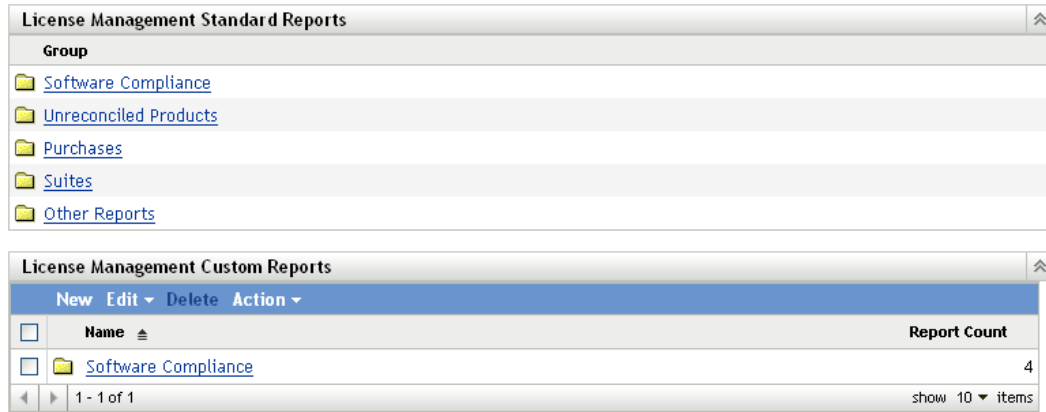| Licensed Products					
📁 New ▾ Move… Delete Action ▾					
☐ Name ⏶	Status	Discovered Products	Catalog Products	License Quantity	Allocated Quantity
☐ 🗐 Microsoft Office Professional 2003 2003	◈	☑	☑	5	0
☐ 🗐 Microsoft Windows Server 2003 5.2	●	☑	☑	1	0
☐ 🗐 Microsoft Windows XP Professional 5.1	ⓧ	☑	☑	1	0
◀ ▶ 1 - 3 of 3					show 25 ▾ items

3 In the Licensed Products list, click the licensed product for which you want to allocate licenses.

4 Click the *License Allocations* tab.

Adobe Adobe Acrobat 5

| General | License Entitlements | Compliance Status | License Allocations |

Demographic Allocations

Add Remove

	Site ▲	Device Count	Allocated Quantity	Installed Quantity	Variance
☐	Waltham	9	2	2	0
	Total:	9	2	2	

◄ ► 1 - 1 of 1   show 5 ▼ items

Device Allocations

Remove Add ▼

	Machine Name ▲	Login Name	IP Address	Site	Department	Cost Center	Installed Quantity	Duplicate Allocation
☐	ARHEATH02076	aheath	164.99.114.108	Bangalore	Engineering	1001	1	
☐	DAMAVILL03032	Damaville	192.168.2.134	Provo	North American Sales	1004	1	
☐	DDJOHNSO02096	ddjohnson	164.99.114.33	Bangalore	Engineering	1001	1	
☐	KJTOMBS03018	SLDUSCHEID	192.168.2.184	Waltham	Marketing Services Group	1007	1	☑
☐	MJLIBUDA02079	SYSTEM	164.99.114.19	Lebanon	Quality Assurance	1003	1	

◄ ► 1 - 5 of 5   show 5 ▼ items

Installations with no allocations: 1

5 (Optional) To see which devices have the product installed but do not have an allocated license, click the *Installations with no allocations* number in the Device Allocations panel.

6 Click *Add > Devices with Product Installed* if the device you want to allocate a license to has the product installed.

or

Click *Add > Any Devices* if the device you want to allocate a license to does not have the product installed.

The Search for Device dialog box is displayed.

7 In the *Device Type* field, select whether you want to search *Managed Devices*, *Inventoried Devices*, *Managed or Inventoried Devices*, *ZAM Migrated Devices*, or *All*.

If you are not sure of the device type, select *All*.

8 To limit the search, use the filters to create the search criteria.

If you don't create filters, all devices (or all devices with the product installed) are displayed, up to the maximum display number.

9 Specify the maximum number of devices you want the search to display.

10 Select the columns you want displayed in the resulting search dialog box. Control-click to select multiple fields.

11 Click *Search* to display a Select Device dialog box that lists the search results.

12 Select the devices you want to allocate licenses to, then click *OK*.

The following information is provided for the allocation:

◆ **Machine Name, Login Name, and IP Address:** Standard information about the device, including the login name of the user who was logged in at the time the device was inventoried.

- **Site, Department, Cost Center:** Demographic data about the device. If one or more of the fields is empty, the device's inventory data does not contain that information.

- **Installed Quantity:** The number of installations of the licensed product on the device. This should typically be 1.

- **Duplicate Allocation:** Includes a check mark if the device's installation is also included in a demographic allocation.

- **Installations with No Allocations:** Displays the number of installations that are not allocated a license either through a demographic allocation or a device allocation. Click the number to display the list of installations.

Device Retirement

<div style="text-align: right; font-size: 3em;">5</div>

If you retire a device, the device is removed from your ZENworks Management Zone. Retiring a device is different from deleting a device. When you retire a device, its GUID is retained (as opposed to when you delete a device, which also deletes its GUID). As a result, all inventory information is retained and is assessable but all assignments (folder, configuration settings, and so forth) are removed. If you unretire the device in the future, its assignments are restored. You can retire both managed and inventoried devices.

- Section 5.1, "Retiring a Managed Device," on page 55
- Section 5.2, "Retiring an Inventoried-Only Device," on page 55

5.1 Retiring a Managed Device

To retire or unretire a managed device:

1 In ZENworks Control Center, click the *Devices* tab.

2 Click the underlined link next to the *Servers* or *Workstations* folder to display the list of servers or workstations in your ZENworks system.

Devices				
□ New ▾ Edit ▾ Delete Action ▾ Quick Tasks ▾				↻
□ Status Name ≜	Type	Operating System	Last Contact	Retired
□ Windows 2000 Servers	Dynamic Server Group			
□ Windows Server 2003	Dynamic Server Group			
□ Windows Server 2008	Dynamic Server Group			
☑ zendoc1b	Server	win2003-se-sp2-x86	3:41 AM	
◂ ▸ 1 - 4 of 4			show 25 ▾ items	

3 Select the check box in front of the server or workstation (you can select multiple devices).

Before you can retire a ZENworks Primary Server, you must first demote it. For more information, see "Changing the Parent-Child Relationships of Primary Servers" in the *ZENworks 10 Asset Management System Administration Reference*.

4 Click *Action* > Retire Device.
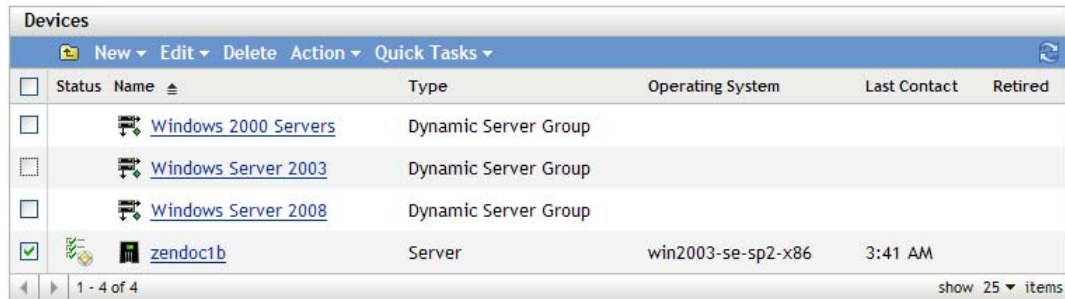
or

Click *Action* > *Unretire*.

The □ icon displays in the *Status* column in the *Servers* or *Workstations* list for retired devices. You can mouse over the time to see the full date and time.

5.2 Retiring an Inventoried-Only Device

To retire or unretire an inventoried-only device:

1 In ZENworks Control Center, click *Devices* > *Inventoried*.

2 Click the underlined link next to the *Servers* or *Workstations* folder to display the list of servers or workstations in your ZENworks system.

3 Select the check box in front of the server or workstation you want to retire or unretire (you can select multiple devices).

4 Click *Action > Retire Device*.

or

Click *Action > Unretire Device*.

The ▣ icon displays in the *Status* column in the *Servers* or *Workstations* list for retired devices. You can mouse over the time to see the full date and time.

ZENworks Adaptive Agent Deployment

<div style="text-align: right">6</div>

Novell ZENworks 10 Asset Management provides a variety of methods you can use to deploy the ZENworks Adaptive Agent to the devices you want to manage. This section covers two of the most common methods: a Web installation and a ZENworks Control Center deployment task. For information about the other methods, see the *ZENworks 10 Discovery, Deployment, and Retirement Reference*.

If you plan to use a deployment task to install the Adaptive Agent to devices, you must first either use network discovery or file import to add the target devices to your Management Zone. The first two sections listed below explain how to use network discovery and file import. The remaining section provides installation instructions for the ZENworks Adaptive Agent.

NOTE: If a device does not meet the requirements for installing the ZENworks Adaptive Agent (see "Managed Device Requirements" in the *ZENworks 10 Asset Management Installation Guide*), you might be able to install the Inventory Only Module on it to support inventorying of the device. For more information, see the *ZENworks 10 Discovery, Deployment, and Retirement Reference*.

6.1 Discovering Network Devices

If you want a ZENworks Server to automatically deploy the ZENworks Adaptive Agent to devices, you must first add the devices to your Management Zone. To do this, you have two options: 1) you can use the ZENworks discovery technology to search for devices on your network and display them in ZENworks Control Center or 2) you can import them from a comma-separated values (CSV) file.

This section explains how to use the discovery technology. If you want to know more about importing devices from a CSV file, see Section 6.2, "Importing Devices," on page 58.

There are two types of discoveries you can perform:

- **IP discovery:** Lets you specify an IP address range. By default, it uses seven discovery technologies (WMI, WinAPI, MAC Address, ZENworks, SNMP, SSH, and NMAP). Each discovery technology returns varying levels of information (OS version, DNS name, and so forth) about the discovered device.

- **LDAP discovery:** Lets you specify an LDAP directory context to search for all device-type objects (workstations, servers, and so forth). Device objects that are found are queried for well-known attributes (dnsHostName, OperatingSystem, wmNameDNS, wmNameOS, and so forth) to attempt to determine the OS version and DNS name of the device.

To perform either of the discoveries, you must create a discovery task. The discovery task lets you identify the source (IP address range or LDAP directory) that you want to search, specify the credentials required to retrieve information from discovered devices, schedule the date and time you

want to start the discovery, and select the ZENworks Server you want to perform the discovery. For more information on how to create the discovery tasks, see the *ZENworks 10 Discovery, Deployment, and Retirement Reference*.

6.2 Importing Devices

If you want a ZENworks Server to automatically deploy the ZENworks Adaptive Agent to devices, you must first identify the devices within your Management Zone. To do this, you have two options: 1) you can import them from a comma-separated values (CSV) file, or 2) you can use the ZENworks discovery technology to search for devices on your network and display them in ZENworks Control Center.

This section explains how to import devices from a CSV file. If you want to know more about using discovery technology, see Section 6.1, "Discovering Network Devices," on page 57.

When you import information from a CSV file, you map the CSV fields to ZENworks database fields. At a minimum, the CSV file must contain the DNS name or IP address for each device you want to import.

To import devices from a CSV file:

1 In ZENworks Control Center, click the *Deployment* tab.
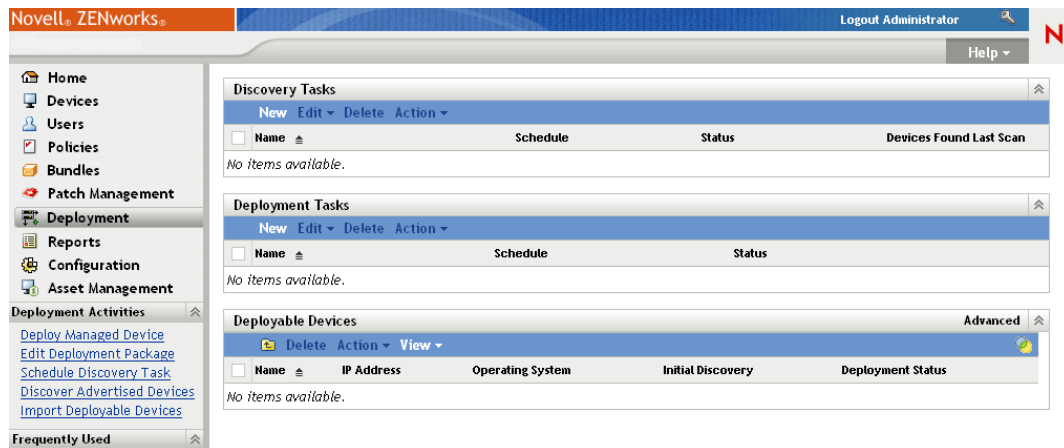
2 In the *Deployment Activities* list in the left navigation panel, click *Import Deployable Devices* to launch the Import Devices from CSV File Wizard.

3 Complete the wizard using information from the following table to fill in the fields.
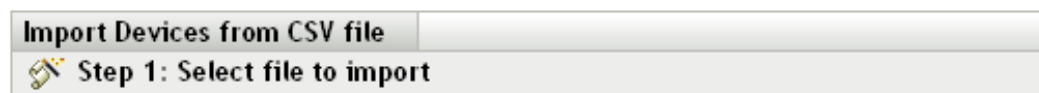
Wizard Page	Details
Select File to Import page	Browse for and select the CSV file that contains the devices you want to import. At a minimum, the CSV file must contain the DNS name or IP address for each device you want to import.
Configure Import	Map the columns in the CSV file to the device fields in the ZENworks database. At a minimum, you must map the CSV file's DNS name or IP address to the ZENworks database's DNS Name field or IP Address field.
	To create the information mappings:
	1. Click *Add* to display the Specify Import Columns dialog box.
	2. Fill in the following fields:
	Field: Select the device field you want to map to a column in the CSV file.
	Column: Specify the number of the column to map to the selected field.
	3. Click *OK* to create the information mapping and add it to the list.
	4. To verify that the field is mapped to the correct column, click *Show Sample*.
	5. Repeat the above steps to create and verify additional information mappings.

When you finish the wizard, the devices are added to the list in the Deployable Devices panel.

6.3 Installing the ZENworks Adaptive Agent

The following sections provide instructions for using the Web installation or a ZENworks Control Center deployment task to install the ZENworks Adaptive Agent on a device.

- Section 6.3.1, "Manual Installation," on page 59
- Section 6.3.2, "Deploying the Agent to a Linux Device," on page 60
- Section 6.3.3, "ZENworks Control Center Deployment Task," on page 62

NOTE: You can deploy the ZENworks 10 Adaptive Agent to devices that have the traditional ZENworks 7 Desktop Agent installed. If you plan to do so, see "ZENworks Adaptive Agent Deployment" in the *ZENworks 10 Discovery, Deployment, and Retirement Reference* for specific instructions.

6.3.1 Manual Installation

1 Make sure the device meets the necessary requirements (see "Managed Device Requirements" in the *ZENworks 10 Asset Management Installation Guide*).

2 On the target device, open a Web browser to the following address:

https://*server*/zenworks-setup

where *server* is the DNS name or IP address of a ZENworks Server.
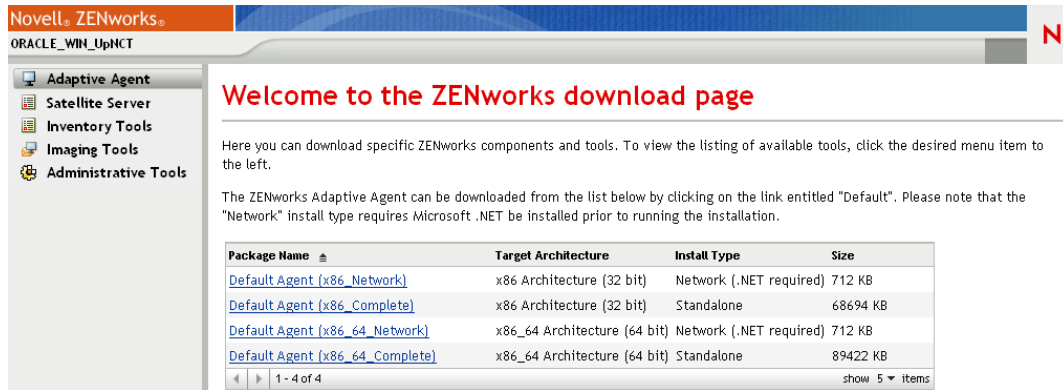
The Web browser displays a list of deployment packages for the Adaptive Agent. For each architecture (32-bit and 64-bit), there are two types of packages:

Network: The network package downloads and installs only the preagent to the target device; the preagent then downloads and installs the ZENworks Adaptive Agent from the ZENworks Server.

Standalone: The standalone package downloads the preagent and Adaptive Agent to the target device; the preagent then installs the Adaptive Agent from the local device. The standalone package is useful when you need to install the ZENworks Adaptive Agent to a device that is currently disconnected from the network. You can save the package to removable media (CD, USB flash drive, and so forth) and have the standalone device run the package from the media. The Adaptive Agent is installed to the device, but no registration or management occurs until the device connects to the network.

3 Click the name of the deployment package you want to use; save the package to the device's local drive or run it from the ZENworks Server.

4 If you downloaded the package, launch the package on the device.

For information about options you can use with the package when launching it from a command line, see "Manually Deploying the Agent" in the *ZENworks 10 Discovery, Deployment, and Retirement Reference*.

5 Upon completion of the installation, a message is displayed asking whether to reboot. Select one of the following options:

  ◆ Do nothing and auto-reboot occurs after 5 minutes.

  ◆ Click *Cancel*. You will need to reboot later.

  ◆ Click *OK* to reboot immediately.

When the device reboots, it is registered in the Management Zone and the ZENworks icon is placed in the notification area (system tray).

In ZENworks Control Center, the device appears under the `\Servers` folder structure or `\Workstations` folder structure on the Devices page.

6.3.2 Deploying the Agent to a Linux Device

In order to use a Linux device as a ZENworks Satellite, you need to install the Linux Adaptive Agent package on the device and configure it as a Satellite. For more information on how to configure the device as a Satellite, see "Satellites" in the *ZENworks 10 Asset Management System Administration Reference*.

To deploy the Linux Adaptive Agent package to a Linux device:

1 Make sure the device meets the necessary requirements (see "Satellite Requirements" in the *ZENworks 10 Asset Management Installation Guide*).

2 On the target device, open a Web browser to the following address:

https://*server*/zenworks-setup

where *server* is the DNS name or IP address of a ZENworks Server.
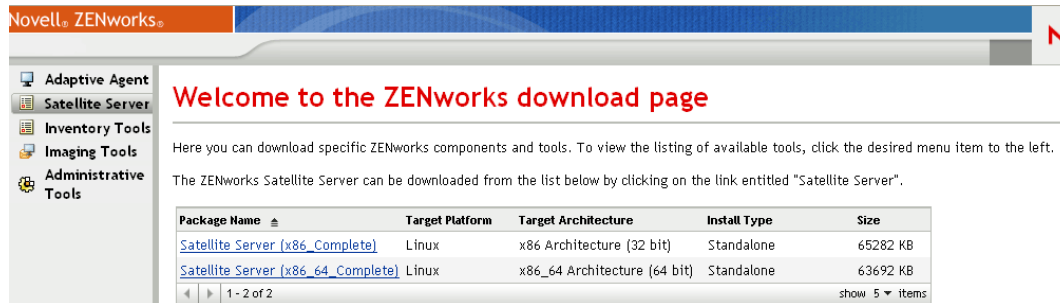
There is one standalone package for each architecture (32-bit and 64-bit).

3 Click the *Satellite Server* tab.

4 Click the name of the deployment package you want to use, save the package to the device's local drive, then give executable permissions to the file by running the command `chmod 755` *filename*.

For information on the options you can use with the package, see "Package Options" on page 61.

5 In the terminal window, go to the directory where you have downloaded the package, then launch the package on the device by running the command `./`*filename*, where *filename* is the name of the package you downloaded in Step 4.

In ZENworks Control Center, the device appears under the `\Servers` folder structure or `\Workstation` folder structure on the Devices page.

After the installation is complete and if the device is connected to the network, the ZENworks Management Daemon in the agent registers itself with the Management Zone.

You can run the commands locally on the device by using the zac command line utility. If the agent was installed on the Linux device by using an xsession or ssh session, you need to run zac by entering the command `/opt/novell/zenworks/bin/zac`. However, after logging in again, you can run zac directly from the command line without typing the full path.

Package Options

You can use the options listed below when launching a deployment package from the command line. The syntax is:

`package name` *option1 option2 ...*

For example:

`SatelliteServer.bin -k regkey1`

-d *target_path***:** Extracts the files to the specified target path. The default target path is
`c:\opt\novell\zenworks\stage`.

-h: Displays help information.

-k: The registration key used to register the device in the management zone.

-l: Lists the contents of the package only. Does not extract the package and run the installation.

-n: Extracts the package but does not run the installation.

-v: Turns on verbose screen logging.

In addition to the options listed above, there are two additional BUILDTIME options (-f *file* and -o
output_file) that are used when building packages. These options should only be used under the
direction of Novell Support.
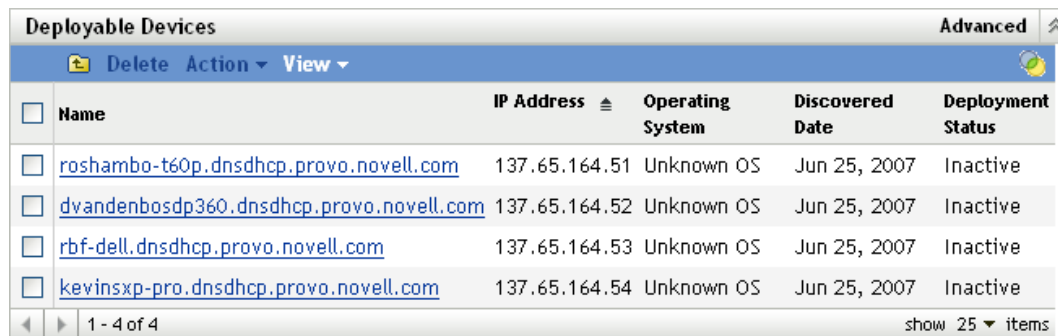
6.3.3 ZENworks Control Center Deployment Task

To install the Adaptive Agent by using a deployment task, the target device must be displayed in
ZENworks Control Center. This means you must have already completed Section 6.1, "Discovering
Network Devices," on page 57 or Section 6.2, "Importing Devices," on page 58.

To create a deployment task:

1 In ZENworks Control Center, click the *Deployment* tab.

The Deployable Device panel lists all the devices (imported or discovered) to which you can
deploy the Adaptive Agent.

Deployable Devices				Advanced ☆
🗁 Delete Action ▾ View ▾				🔄
☐ **Name**	**IP Address** ≜	**Operating System**	**Discovered Date**	**Deployment Status**
☐ roshambo-t60p.dnsdhcp.provo.novell.com	137.65.164.51	Unknown OS	Jun 25, 2007	Inactive
☐ dvandenbosdp360.dnsdhcp.provo.novell.com	137.65.164.52	Unknown OS	Jun 25, 2007	Inactive
☐ rbf-dell.dnsdhcp.provo.novell.com	137.65.164.53	Unknown OS	Jun 25, 2007	Inactive
☐ kevinsxp-pro.dnsdhcp.provo.novell.com	137.65.164.54	Unknown OS	Jun 25, 2007	Inactive
◄ ▶ 1 - 4 of 4				show 25 ▾ items

2 In the Deployment Tasks panel, click *New* to launch the Deploy Device Wizard.

Deployment > **Deploy Device Wizard**

Deploy Device Wizard
✎ **Step 1: Enter Deployment Task Name**

Name: *

Description:

* Fields marked with an asterisk are required.

[<< Back] [**Next >>**] [Cancel]

3 Complete the wizard using information from the following table to fill in the fields.

Wizard Page	Details
Enter Deployment Task page	Specify a name for the task. The name cannot include any of the following characters: / \ * ? : " ' < >	` % ~
Select Devices page	1. Click *Add* to display the Discovered Device Browser dialog box. The default view displays all discovered devices in your Management Zone. 2. Click ➡ to select a device. 3. When you have finished selecting devices, click *OK* to return the Select Devices page. The devices you selected are displayed in the list.
Enter Credentials page > *Save Credentials to DataStore* field	The Enter Credentials page lets you provide the usernames and passwords required to deploy the Adaptive Agent to the devices included in the task. Unless you save the credentials, they are stored only in memory. Saved credentials are encrypted in the database for increased security. Credentials that are not saved are cleared from memory when the ZENworks Server is restarted. If you are creating a scheduled deployment task, you might want to save the credentials to ensure that they are still available when the deployment is performed.

Wizard Page	Details
Enter Credentials page > *Credentials* field	To add a credential: 1. Click *Add* to display the Enter Credential Information dialog box. In the *Username* field, specify the appropriate username. To deploy the Adaptive Agent, the ZENworks Server must be able to map a drive to the device's administrative share (ADMIN$). This requires the following credentials: ◆ **If the device is a member of a domain:** You can use a domain or local Administrator group credential. If you use the local credential, you must specify the username as `workstation_name\username` to distinguish it from domain credentials. ◆ **If the device is not a member of a domain:** You must use a local Administrator group credential. 2. Enter the user password in the *Password* and *Reenter Password* fields. 3. Click *OK* to save the credential. Depending on your environment, one credential might not provide access to all of the devices where you want to deploy the Adaptive Agent. In this case, you need to add as many credentials as necessary to cover the devices included in the task. The ZENworks Server uses the first credential that works.
Select Schedule page	The Select Schedule page lets you choose whether you want the task to run as soon as it is created (the *Now* option) or if you want to schedule the task to run at a future date and time. If you select *Scheduled*, choose one of the following schedules: **No Schedule:** Indicates that no schedule has been set. The task does not run until a schedule is set or it is manually launched. This is useful if you want to create the task and come back to it later to establish the schedule or run it manually. **Date Specific:** Specifies one or more dates on which to run the task. **Recurring:** Identifies specific days each week, month, or a fixed interval on which to run the task. For more information about the schedules, click the *Help* button.
Select Primary Server page > *Primary Server* field	Select the ZENworks Server that you want to perform the deployment task.
Select Windows Proxy page > *Override Zone Windows Proxy Settings* field	Select this option if you want to override the Windows Proxy settings configured at the Management Zone and modify the settings of a task. A Windows Proxy is primarily used for Linux Primary Servers that cannot perform deployment tasks on Windows managed devices. However, you can also use a Windows Proxy for Windows Servers, if you want to deploy devices in a different subnet than the Primary Server. In order to protect information, such as a discovery credential, that is passed between the ZENworks Server and the Windows Proxy, the connection between the ZENworks Server and the Windows Proxy is secured through SSL.

Wizard Page	Details
Select Windows Proxy page > *Use > Windows Proxy for Windows Primary Server* field	Select this option if you want to use a Windows Proxy instead of the Windows Primary Server to perform the deployment tasks. For deployment, you need to add File and Printer Sharing as an exception in the Windows Firewall configuration settings. By default, the scope of the exception applies only to a local subnet. If the target device is in a different subnet than the Primary Server from which the deployment is run, you also need to add the IP address of the Primary Server as an exception. However, if you use a Windows Proxy in the same subnet as a target device, you do not need to change the scope of the Windows Firewall exception. **Windows Proxy:** Select the managed Windows device (server or workstation) on which you want to perform deployment tasks on behalf of Linux Primary Servers or Windows Servers. **Windows Proxy Timeout:** Specify the number of seconds you want the ZENworks Server to wait for a response from the Windows Proxy. Any responses received after the specified timeout period are discarded.
General Options page > *Deployment Package* field	Depending upon the processor architecture of the managed device, select the deployment package to be used for installing ZENworks Adaptive Agent on the device. If you are not sure about the device's processor architecture, choose the package with target architecture as All, which applies to 32-bit and 64-bit platforms. If the selected package has been deleted from the Primary Server, then the default deployment package is deployed.
General Options page > *Specify Agent Installation Folder* field	Specify the directory on the managed device where you want to install ZENworks Adaptive Agent. By default, the agent is installed to the directory specified in the *%ZENWORKS_HOME%* system environmental variable or to the `%ProgramFiles%\novell\zenworks` directory if the variable is not set on the managed device. Ensure that the installation path does not contain spaces. --- **NOTE:** If the directory you specify cannot be created, then the agent is installed in the default location.

Wizard Page	Details

General Options page > *Reboot Option*	After installation of the ZENworks Adaptive Agent, a device must reboot to make the Adaptive Agent functional. Do the following:
	
	1. Select the desired reboot option.
	
	    ◆ **Immediate:** To reboot immediately after installation of the Adaptive Agent, select *Immediate* to force the device
	
	    ◆ **Manual:** To allow the user to manually reboot the device at his or her convenience, select *Manual*.
	
	    ◆ **Scheduled:** To reboot the device at a specified time, select *Scheduled*. Fill in the schedule's fields.
	
	        ◆ **Start Date:** Click 🖼 to display a calender you can use to select a date for the event.
	
	        ◆ **Start Time:** Specify the time at which the event must start.
	
	        ◆ **Use Coordinated Universal Time (UTC):** The Start Time is converted to Universal Coordinated Time (UTC). Select this option to indicate that the Start Time you entered is already in Coordinated Universal Time and should not be converted. For example, suppose you are in the Eastern time zone. If you enter 10:00 a.m. and select this option, the Start Time is scheduled for 10:00 UTC. If you dont select this option, the Start Time is scheduled for 14:00 UTC because Eastern time is UTC - 4 hours.
	
	2. (Optional) Select the *Do Not Prompt for Reboot* option if you do not want the reboot prompt message to be displayed.

Add Registration Key page	(Optional) Select a registration key to use during the registration portion of the deployment process. A registration key provides information about the folders and groups to which a device is assigned during registration. Selecting a registration key is optional; if you dont select one, registration rules are used to determine the folder and group assignments. To deploy to servers or workstations, choose a server registration key or a workstation registration key respectively. For more information about registration keys and rules, see Section 3.2, "Registering Devices," on page 25.
Pre/Post Deployment page	(Optional) Specify commands that you want run before and after the Adaptive Agent is installed on a device. For example, you can execute operating system commands, run scripts, and launch executables. The commands are passed to the preagent as part of the deployment task package. The preagent executes the commands in the system space, so you must specify commands that do not require user interaction. For more information about pre-deployment and post-deployment commands, click the *Help* button.

You can also use the `deployment-task-create` command in the zman utility to create a deployment task. For more information, see "Deployment Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

System Messages and Reports 7

Novell ZENworks 10 Asset Management lets you monitor the activity within your Management Zone through system messages and reports.

7.1 Viewing System Messages

The ZENworks system generates normal (informational), warning, and error messages to help you monitor activities such as the distribution of software and application of policies.

Each ZENworks Server and ZENworks Adaptive Agent creates a log of the activities associated with it. These messages are displayed in ZENworks Control Center in a variety of areas:

- **System Message Log:** The system message log, located on the System Information page (*Configuration* tab), displays messages from all ZENworks Servers and Adaptive Agents within the zone.
- **Device Message Log:** A device message log, located on the Summary page for a server or workstation, displays messages generated by the ZENworks Server or the Adaptive Agent. For example, the message log for Workstation1 includes all messages generated by the Adaptive Agent on Workstation1.

7.1.1 Viewing a Summary of Messages

You can view a summary that shows the number of messages generated for the in your zone.

1 In ZENworks Control Center, click the *Home* tab.
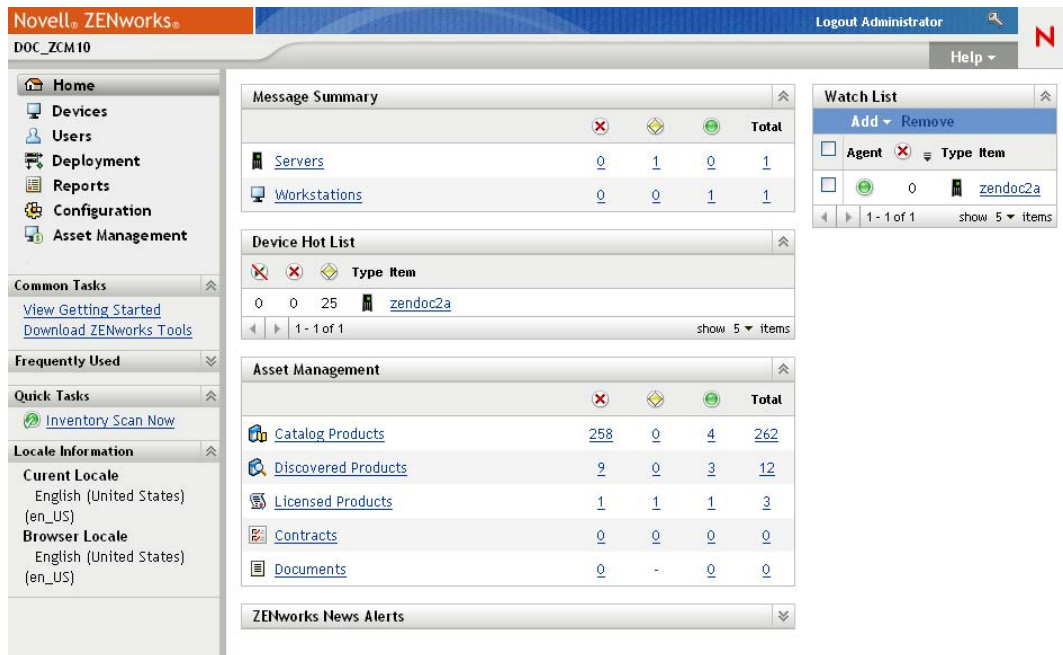
The Message Summary panel displays the status of all in your Management Zone. For example, if two servers have unacknowledged critical messages (messages that you or another administrator have not yet acknowledged as having seen), the ✖ column displays the number 2. You can do the following with the summary:

◆ Click an object type to display its root folder. For example, click *Servers* to display the Servers root folder (`/Servers`).

◆ For any object type, click the number in one of its status columns (✖ ◆ ●) to display a listing of all the objects that currently have that status. For example, to see the list of servers that have a normal status, click the number in the ● column.

◆ For any object type, click the number in the *Total* column to display all of the objects that have critical, warning, or normal messages. For example, click the *Total* count for *Servers* to display a list of all servers that have any type of messages.

7.1.2 Acknowledging Messages

A message remains in a message log until you acknowledge it. You can acknowledge individual messages or acknowledge all messages in the message log at one time.

1 In ZENworks Control Center, click the *Devices* tab.

2 Navigate the `Servers` folder until you locate a ZENworks Server.

3 Click the server to display its details.

DOC_ZCM10

Logout Administrator

Help ▾

Home
Devices
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Asset Management

Server Tasks
Assign Policy
Assign Bundle
Wake up Device
Refresh Server
Server Inventory Scan
Server Inventory Wizard
Add to Server Group
Acknowledge All Messages
Reboot/Shutdown Server
Launch Application on Server
Run Script on Server

Frequently Used

Quick Tasks
Inventory Scan Now

Devices > Servers > zendoc2a

zendoc2a

| Summary | Inventory | Relationships | Settings | Statistics |

General

Alias:	zendoc2a
Host Name:	zendoc2a
IP Address:	137.65.167.172
Last Full Refresh:	6:08 AM
Last Contact:	10:08 AM
ZENworks Configuration Management Version:	10.2.0.0
ZENworks Asset Management Version:	10.2.0.18376
ZENworks Patch Management Version:	
ZENworks Agent Version:	10.2.0.18196
ZENworks Agent Status:	
Operating System:	Microsoft Windows Server 2003 5.2 2 3790
Number of errors not acknowledged:	0
Number of warnings not acknowledged:	25
Primary User:	No user sources configured
Owner: (Edit)	
Serial Number (Edit)	d3027b03dde2b8a90f332951f9426876
GUID:	d3027b03dde2b8a90f332951f9426876
Department: (Edit)	
Site: (Edit)	
Location: (Edit)	

Logged In Users — Advanced

Name	In Folder
No items available.	

Assigned System Updates

Name	Status
ZCM10.2-20090303-97780	Update Completed
ZCM10.2-20090314-99051	Update Completed

Message Log — Advanced

Status	Message	Date
◇	Many Upload Failures count=8 - uploading: E:\Novell\ZENworks\/work/collection	Mar 5
◇	Many Upload Failures count=7 - uploading: E:\Novell\ZENworks\/work/collection	Mar 5
◇	Many Upload Failures count=6 - uploading: E:\Novell\ZENworks\/work/collection	Mar 5
◇	Many Upload Failures count=8 - uploading: E:\Novell\ZENworks\/work/collection	Mar 5
◇	Many Upload Failures count=7 - uploading: E:\Novell\ZENworks\/work/collection	Mar 5

◀ ▶ 1 - 5 of 25   show 5 ▾ items

4 On the *Summary* tab, locate the Message Log panel.

The Message Log panel lists all messages (informational, warning, and error) generated by the ZENworks Server. The following table explains the various ways you can acknowledge and delete messages.

Task	Steps	Additional Details
Acknowledge a message	1. Click the message to display the Message Detail Information dialog box. 2. Click *Acknowledge*.	If you decide that you dont want to acknowledge the message, click *Finished* to dismiss the dialog box. This causes the message to remain in the *Message Log* list.
Acknowledge all messages	1. In the *Tasks* list located in the left navigation pane, click *Acknowledge All Messages*.	
View all acknowledged or unacknowledged messages	1. Click the *Advanced* button to display the Edit Message Log page.	In addition to viewing all acknowledged and unacknowledged messages, you can also view only those messages with a specific status or date, view more details about messages, and acknowledge messages. Click the *Help* button on the Edit Message Log page for specific information about performing tasks on that page.
Delete a message	1. Click the message to display the Message Detail Log dialog box. 2. Click *Delete*.	Deleting a message completely removes the message from your ZENworks system.

You can also use the `messages-acknowledge` command in the zman utility to acknowledge messages associated with devices. For more information, see "Message Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

7.1.3 Where to Find More Information

For more information about system messages, see "Message Logging" in the *ZENworks 10 Asset Management System Administration Reference*.

7.2 Creating a Watch List

If you haveservers or workstations whose status you want to closely monitor, you can add them to the Watch List. The Watch List provides the following information:

- **Agent:** For servers and workstations, displays whether the device's ZENworks Adaptive Agent is currently connected ( ) or disconnected ( ).

- : Displays whether or not the object has any critical messages.

- **Type:** Displays an icon representing the object's type. For example, a device might have a icon to show that it is a server. You can mouse over the icon to see a description.

- **Name:** Displays the object's name. You can click the name to go to the object's message log.

To add a device to the Watch List:

1 In ZENworks Control Center, click the *Home* tab.
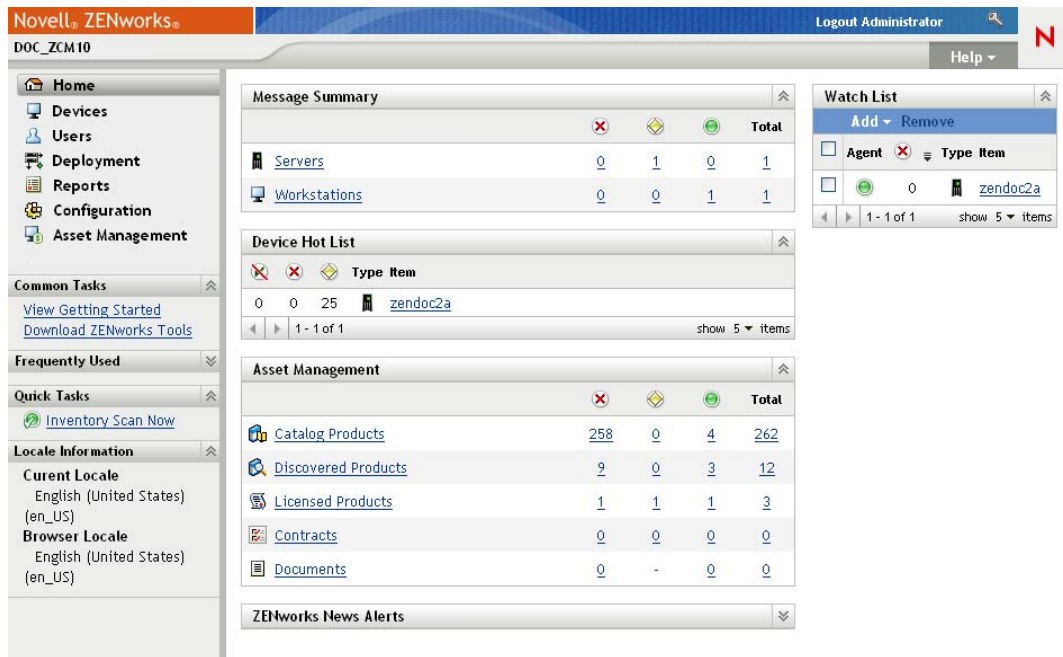
2 In the Watch List panel, click *Add* > *Device*.

3 In the selection dialog box, select the desired object, then click *OK* to add it to the Watch List.

For example, if you are adding servers, browse for and select a server.
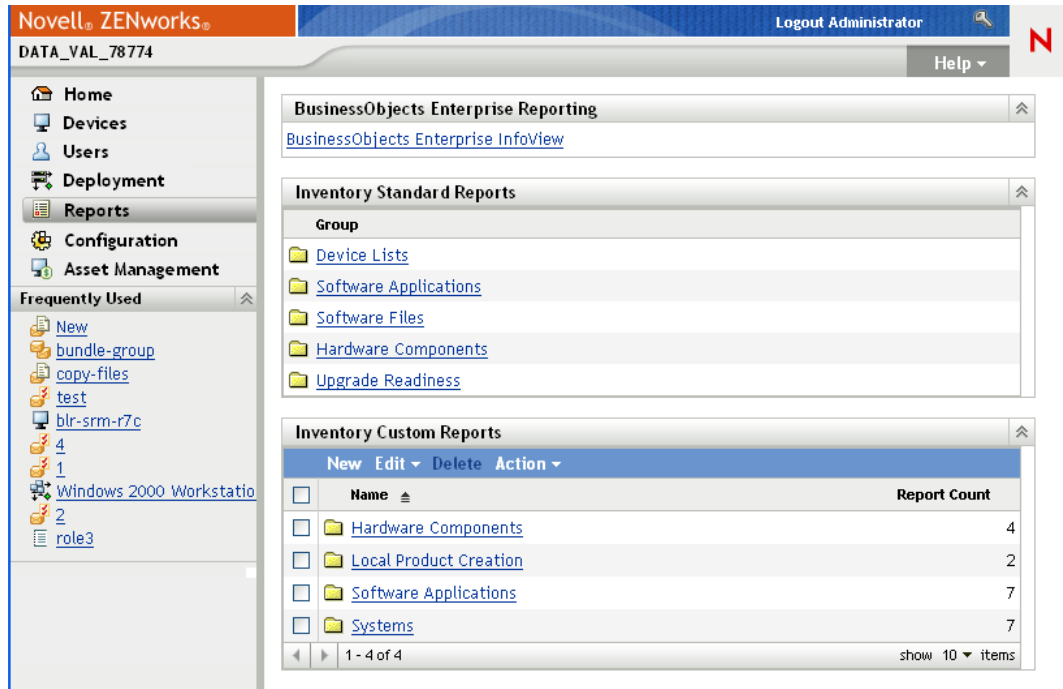
Objects remain in the Watch List until you remove them.

7.3 Generating Reports

ZENworks Asset Management uses ZENworks Reporting Server to generate reports for your Management Zone. You can use predefined reports or custom reports.

To access the reports:

1 In ZENworks Control Center, click the *Reports* tab.

2 In the ZENworks Reporting Server panel, click *ZENworks Reporting Server InfoView* to launch the ZENworks Reporting Server InfoView. The ZENworks Reporting Server InfoView page is displayed with initial view as *Document List*.

The following table explains the various tasks you can perform in the ZENworks Reporting Server InfoView.

Task	Steps
Generate a predefined report	1. Navigate the `Predefined Reports` folder until you locate the report definition on which you want to generate a report. 2. Click *Actions > Schedule*, or right-click the report, then select *Schedule*.
Generate a custom report	1. In the InfoView toolbar, click *New > Web Intelligence Document*. The *Universe* pane is displayed. 2. Click the Universe that you want to view. For example, to view the ZENworks Universe, click *ZENworks*. 3. In the *Data* tab, navigate to the universe object for which you want to create a report, and drag the object to the right pane. 4. Click *Run Query*. 5. Save the report in the `Custom Reports` folder.
View the earlier instances of a report	1. Navigate the `Predefined Reports` or the `Custom Reports` folder until you locate the report whose earlier instances you want to view. 2. Click *Actions > History,* or right-click the report, and select *History*.

Task	Steps
View the latest instance of a report	1. Navigate the `Predefined Reports` or the `Custom Reports` folder until you locate the report whose latest instances you want to view. 2. Click *Actions > View Latest Instance*, or right-click the report, and select *View Latest Instance*.
View the properties of a report	1. Navigate the `Predefined Reports` or the `Custom Reports` folder until you locate the report whose properties you want to view. 2. Click *Actions > Properties*, or right-click the report and select *Properties*.

You can also use the `report-generate-now` command, as well as other report commands, in the zman utility to manage reports. For more information, see "Report Commands" in the *ZENworks 10 Asset Management Command Line Utilities Reference*.

For more information about reporting, see the *ZENworks 10 Asset Management System Reporting Reference*.