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ZENworks Control Center Reference

ZENworks® 11 Support Pack 2

October 2013

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About This Guide

This *ZENworks 11 ZENworks Control Center Reference* explains how to access, navigate, customize, and use ZENworks Control Center, the administrative console used to manage your ZENworks system. The guide includes the following sections:

Audience

This guide is intended for ZENworks administrators.

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.

Additional Documentation

ZENworks 11 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 11 documentation Web site (http://www.novell.com/documentation/zenworks11).

Contents

1 Accessing ZENworks Control Center

You use ZENworks Control Center to configure system settings and perform management tasks in your Management Zone.

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

- Section 1.1, "Accessing ZENworks Control Center," on page 9
- Section 1.2, "Restricting Access to ZENworks Control Center," on page 10
- Section 1.3, "Accessing ZENworks Control Center through Novell iManager," on page 11

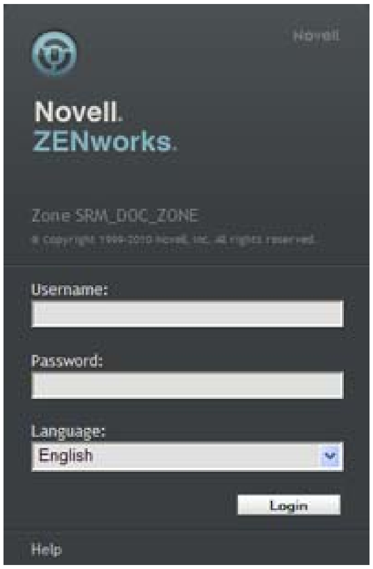
1.1 Accessing ZENworks Control Center

1 Using a Web browser that meets the requirements listed in "Administration Browser Requirements" in the *ZENworks 11 Server 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` (the default) or an administrator name that you previously created in ZENworks Control Center.

To log in to ZENworks Control Center as an administrator who has been created based on users in a user source who has the same name as a previously created ZENworks administrator, specify the username as *name@usersource*.

For example, if the administrator has the name testadmin and belongs to the user source named myserver, specify the username as testadmin@myserver.

3. In the *Password* field, do one of the following:
   - If you are logging in through the default Administrator account, specify the Administrator password that you created during installation.
   - Specify the password for the administrator name that you created in ZENworks Control Center.

   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 Section 3.1, "Changing the Default Login Disable Values," on page 15.
4. Click *Login* to display ZENworks Control Center.

To log in again as a different administrator, click the *Logout* option in the upper right corner of the ZENworks Control Center window, then when the login dialog box is displayed, log in as a different administrator.

Performing concurrent operations in multiple sessions of ZENworks Control Center might result in an exception

If ZENworks Control Center is opened in multiple browsers and you choose to perform an operation on an object in one browser when the same object is being modified or accessed in the other browser, an exception might occur.

For example, an error might occur if you update an object in one session of ZENworks Control Center when the same object has been deleted in another session of ZENworks Control Center.

1.2 Restricting Access to ZENworks Control Center

To restrict access to ZENworks Control Center from a subnet or an IP address range, perform the following steps:

1. Stop the ZENserver and ZENloader services.
2. In the %zenworks_home%/share/tomcat/webapps/zenworks directory, create a folder named META-INF.
3. Create a file named context.xml and add it to the META-INF folder. The context.xml file should include the following content, with the IP address series to which you want to provide or deny access:

```
<?xml version='1.0' encoding='utf-8'?>
<Context>
<Valve className="org.apache.catalina.valves.RemoteAddrValve" allow="<IP
Address Series 1>.*, <IP Address Series 2>.*,.......<IP Address Series n>.*"/>
<Valve className="org.apache.catalina.valves.RemoteAddrValve" deny="<IP
Address Series 1>.*, <IP Address Series 2>.*,........<IP Address Series n>.*"/>
</Context>
```

4 Based on whether you want to provide or deny access, make the relevant edits to the `context.xml` file:

- To allow only a certain series of IP addresses, configure the following line to include the relevant IP address series. For example:

  ```
  <Valve className="org.apache.catalina.valves.RemoteAddrValve"
  allow="164.99.96.*, 164.99.125.*"/>
  ```

- To deny a certain series of IP addresses, configure the following line to include the relevant IP address series. For example:

  ```
  <Valve className="org.apache.catalina.valves.RemoteAddrValve"
  deny="164.99.138.*,164.99.95.*"/>
  ```

  If the allow attribute is configured, all other IP address ranges are denied by default and vice versa.

5 Delete the `%zenworks_home%/share/tomcat/work` folder.

6 Start the ZENserver and ZENloader services.

If you want to make changes to the IP address range (`allow` or `deny` attribute value), repeat Step 1, delete the `%zenworks_home%/share/tomcat/conf/Catalina/localhost/zenworks.xml` file, update the IP changes in the `context.xml` file, and then repeat Step 6.

NOTE: Remember to backup the `META-INF` folder before you perform a system update. This enables you to re-create this folder if it is deleted after a system update.

1.3 Accessing ZENworks Control Center through Novell iManager

ZENworks 11 includes a Novell plug-in module (`.npm`) that you can use to access ZENworks Control Center from Novell iManager, which is a management console used by many Novell products.

The ZENworks Control Center plug-in supports iManager 2.7 only. It does not support iManager 2.6 or 2.5; it will install to these versions but does not work.

To install the ZENworks Control Center plug-in for iManager:

1 On the server where iManager is located (or on a device that has access to the iManager server), open a Web browser to the ZENworks download page:

https://*server*/zenworks-setup

where *server* is the DNS name or IP address of a ZENworks Server.

2 In the left navigation pane, click *Administrative Tools*.

3 Click *zcc.npm* and save the file to a location on the iManager server.

4 Follow the instructions in the *Novell iManager 2.7 Administration Guide* (http://www.novell.com/documentation/imanager27/) to install and configure the plug-in module.

5 Log into iManager.

6 Click the ZENworks icon at the top of the page.

7 Enter the ZENworks Control Center URL:

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

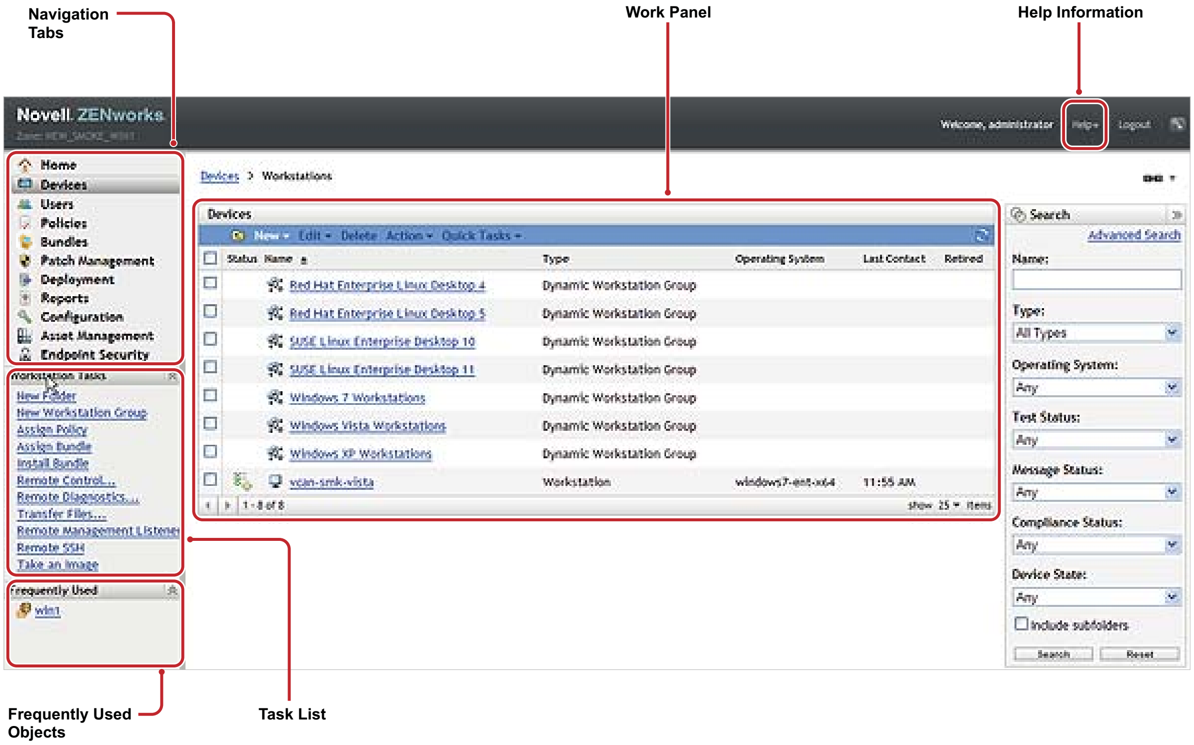
Replace *ZENworks_Server_Address* with the IP address or DNS name of the ZENworks Server. You only need to specify the *port* if the ZENworks server is not using the default port (80 or 443).

8 Click the ZENworks icon to launch ZENworks Control Center.

2 Navigating ZENworks Control Center

The following Workstations page represents a standard view in ZENworks Control Center:

Figure 2-1 *ZENworks Control Center*



Status	Name	Type	Operating System	Last Contact	Retired
	Red Hat Enterprise Linux Desktop 4	Dynamic Workstation Group			
	Red Hat Enterprise Linux Desktop 5	Dynamic Workstation Group			
	SUSE Linux Enterprise Desktop 10	Dynamic Workstation Group			
	SUSE Linux Enterprise Desktop 11	Dynamic Workstation Group			
	Windows 7 Workstations	Dynamic Workstation Group			
	Windows Vista Workstations	Dynamic Workstation Group			
	Windows XP Workstations	Dynamic Workstation Group			
	vcan-smk-vista	Workstation	windows7-ent-x64	11:55 AM	

1 - 8 of 8 show 25 items

Name:

Type: All Types

Operating System: Any

Test Status: Any

Message Status: Any

Compliance Status: Any

Device State: Any

□ Include subfolders

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. For example, the task list on the Bundles page displays bundle-related tasks and the task list on the Devices page displays device-related tasks.

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 the servers. The Search panel lets you filter the Devices panel based on criteria such as a device'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.

3 Customizing ZENworks Control Center

You can change ZENworks Control Center settings to customize behavior such as the failed login timeout and the automatic logout timeout:

- Section 3.1, “Changing the Default Login Disable Values,” on page 15
- Section 3.2, “Changing the Timeout Value for ZENworks Control Center,” on page 16
- Section 3.3, “Using the Config.xml File to Modify ZENworks Control Center Settings,” on page 17

3.1 Changing the Default Login Disable Values

By default, an administrator’s account is disabled for 60 seconds after he or she unsuccessfully attempts to log in three times. You can change the number of login tries and the timeout length by editing a configuration file. The changes are only applied to the instance of ZENworks Control Center being run from the server where you open and modify the configuration file. To make the change applicable to all ZENworks Primary Servers, you must make the same change in each server’s copy of this file.

IMPORTANT: Login attempts per administrator account are maintained in the ZENworks database, and there is only one ZENworks database per Management Zone. Therefore, if a particular administrator unsuccessfully attempts to log in to one Primary Server, that administrator is locked out of all Primary Servers in the zone. The lockout period is determined by the configuration on the server where the login attempts failed.

To modify the login tries and timeout values:

1. In a text editor, open the following file:

   Windows: `*installation_location*\novell\zenworks\conf\datamodel\zdm.xml`

   Linux: `/etc/opt/novell/zenworks/datamodel/zdm.xml`

2. Add the following lines to the file:

   ```
   <entry key="allowedLoginAttempts">5</entry>
   ```

   ```
   <entry key="lockedOutTime">300</entry>
   ```

   The 5 in this example represents the number of retries before disabling login, and 300 represents the number of seconds (the default is 60 seconds, or 1 minute).

   Keep in mind that the longer the delay before allowing a re-login after the configured number of failures (such as 5), the longer your authorized administrators must wait to access ZENworks Control Center.

   IMPORTANT: If you enter 0 as the login attempts value, the lockout functionality is disabled, allowing unlimited attempts at logging in.

3 Save the file, then restart the zenloader and zenserver services on the Primary Server to make the changes effective.

   For instructions on restarting the services, see "Restarting the ZENworks Services" in the *ZENworks 11 Primary Server and Satellite Reference*.

3.2 Changing the Timeout Value for ZENworks Control Center

By default, ZENworks Control Center has a 30-minute timeout value, so if you leave ZENworks Control Center idle on your computer for more than 30 minutes, you are prompted to log in again to continue.

The purpose of the timeout is to clear memory resources. The larger the timeout value, the longer ZENworks Control Center retains the memory resources, which might have a negative impact on the long-term performance of the device from which you have launched ZENworks Control Center, including the ZENworks Server if you have it running locally on it.

To increase or decrease the timeout value, modify either or both `config.xml` and `custom-config.xml` files on the ZENworks Server. The change applies only to that server's ZENworks Control Center. Therefore, any devices that launch ZENworks Control Center from that server experience the same timeout value.

You can make the ZENworks Control Center timeout value different on each ZENworks Server in the Management Zone.

To change the ZENworks Control Center timeout value on a ZENworks Server:

1 Open the `custom-config.xml` file in a text editor.

   NOTE: The `custom-config.xml` file allows you to maintain customizations of ZENworks Control Center because information contained in this file overrides any corresponding information in the `config.xml` file. Therefore, changes made in this file are not lost when the `config.xml` file is overwritten during software updates or upgrades.

   The `custom-config.xml` file is located in the same directory as the `config.xml` file:

   - **Windows:** `\Novell\ZENworks\share\tomcat\webapps\zenworks\WEB-INF\custom-config.xml`
   - **Linux:** `/opt/novell/zenworks/share/tomcat/webapps/zenworks/WEB-INF/custom-config.xml`

2 Locate the `<setting id="timeout">` entry.

3 Set the timeout value to the same number as you entered in the `config.xml` file.

4 Remove the comments surrounding the `<setting id=”timeout”>` entry (<!-- and -->).

5 Save the `custom-config.xml` file.

6 Restart the ZENworks Server service.

   For instructions, see "Restarting the ZENworks Services" in the *ZENworks 11 Primary Server and Satellite Reference*..

3.3 Using the Config.xml File to Modify ZENworks Control Center Settings

In addition to enabling you to configure the timeout value for the ZENworks Control Center (see Section 3.2, "Changing the Timeout Value for ZENworks Control Center," on page 16), the `config.xml` file lets you control several additional configuration settings. However, with the exception of the timeout value, you should not need to modify the `config.xml` settings.

1 On the ZENworks Server, open the `config.xml` file in a text editor.

   - **Windows server path:** `\Novell\ZENworks\share\tomcat\webapps\ zenworks\WEB-INF\config.xml`
   - **Linux server path:** `opt/novell/zenworks/share/tomcat/webapps/zenworks/WEB-INF/config.xml`

2 Modify the desired setting. All settings begin with `<setting id=`.

   timeout: Specify the timeout value in minutes. The larger the timeout value, the longer ZENworks Control Center retains the memory resources, which might have a negative impact on the long-term performance of the device where you have launched ZENworks Control Center. If you change this value, you must also change the timeout entry in the `custom-config.xml` file. See Section 3.2, "Changing the Timeout Value for ZENworks Control Center," on page 16).

   debug.enabled: Change the value to *false* if you do not want any messages written to the ZENworks Control Center log files. The default value, *true*, causes messages to be written to the log files.

   debug.tags: These settings control debug information. You should not change them unless instructed by Novell Support.

   debug.log.viewstate: This setting controls debug information. You should not change it unless instructed by Novell Support.

   hideGettingStarted: Suppresses the Getting Started page. This setting is not functional at this time. To manually suppress the page, open the ZENworks Control Center, display the Getting Started page, then select *Do not show me this again*.

   noQuickTaskAutoRefresh: This setting disables automatic refreshing of the QuickTask status dialog box. It is used to discover issues with QuickTask status updates. You should not change this setting unless instructed by Novell Support.

3 Save the `config.xml` file.

4 Restart the ZENworks Server service. See "Restarting the ZENworks Services" in the *ZENworks 11 Primary Server and Satellite Reference* for instructions.

4 Bookmarking ZENworks Control Center Locations

The Bookmark feature allows you to use your Web browser to manage direct access to the various locations in ZENworks Control Center, instead of performing the usual navigation clicks. You can also use this feature to bookmark hard-to-find locations.

You can create bookmarks for your Web browser to locations within the following sections of ZENworks Control Center:

- *Managed* tab on the *Devices* tab
- *Policies* tab
- *Bundles* tab
- *Management Zone Settings* on the *Configuration* tab

The locations you can bookmark include such items as lists, details of objects, and configuration settings.

Wherever the Link icon (🔗 ▾) is displayed, you can create a bookmark. The icon is located in the upper right of the page. If it is not displayed, a bookmark cannot be created for that location.

If you are logged in to ZENworks Control Center when you click a bookmark, the location is immediately displayed.

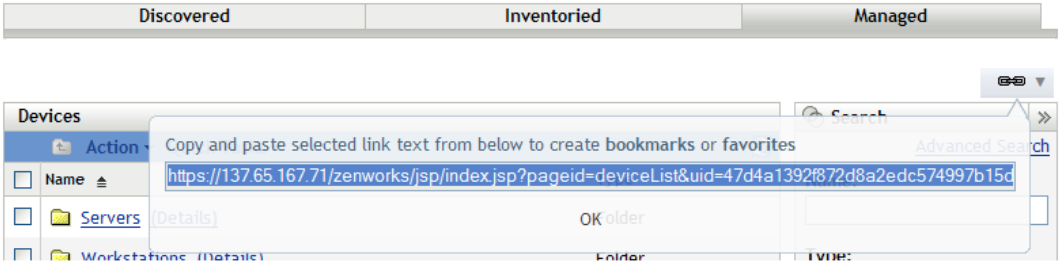
If you are not logged in to ZCC when you click a bookmark, the Login dialog box is displayed. After you enter valid credentials, the location is immediately displayed.

To create bookmarks:

1 In ZENworks Control Center, navigate to a location where you want to create a bookmark.

2 Click 🔗 ▾.

This opens the following dialog box, where the URL to the current location is already selected:



Copy and paste selected link text from below to create bookmarks or favorites

https://137.65.167.71/zenworks/jsp/index.jsp?pageid=deviceList&uid=47d4a1392f872d8a2edc574997b15d

3 Press Ctrl+C to copy the URL, then click *OK* to close the dialog box.

4 Paste the URL as a new bookmark in your Web browser.

5 Naming Objects in ZENworks Control Center

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

- The name must be unique in the folder.
- Depending on the database being used for the ZENworks database, uppercase and lowercase letters might not create uniqueness for the same name. The embedded database included with ZENworks 11 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 reg key 1 in quotes (“reg key 1”) when entering it in the zman utility.
- The following characters are invalid and cannot be used: / \ * ? : " ' < > | ` % ~
- Ensure that the name of a bundle, policy, bundle folder, bundle group, policy folder, or policy group does not contain the following:
    - @Sandbox
    - @Version

6 Managing Administrators and Administrator Groups

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, the account could only enable the user to assign bundles to devices, or could limit the user to performing asset management tasks such as contract, license, and document management.

IMPORTANT: In addition to the default Administrator account, you should make sure that you have at least one other Super Administrator account. This provides redundancy in case the password for the Administrator account is forgotten or lost. For information on how to create a Super Administrator account, see Section 6.2.1, "Assigning Super Administrator Rights," on page 26. If you need any further help, contact Novell Support (http://www.novell.com/support).

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.

You can use administrator group that lets you group administrators so that you can assign rights and roles to groups rather than assigning rights and roles to individual administrators

To create and modify administrator accounts and assign roles, you can use ZENworks Control Center (ZCC) or the zman command line utility. If you prefer the zman command line utility, see "Administrator Commands" in the *ZENworks 11 Command Line Utilities Reference*.

However, you can create and modify administrator group accounts and assign roles only through ZENworks Control Center (ZCC).

The following procedures explain how to create and modify administrators and administrator group accounts and assign roles through ZENworks Control Center (ZCC):

- Section 6.1, "Managing Administrator Accounts," on page 24
- Section 6.2, "Managing Administrator Rights," on page 26
- Section 6.3, "Managing Administrator Group Accounts," on page 28
- Section 6.4, "Managing Administrator Group Rights," on page 31
- Section 6.5, "Rights Descriptions," on page 32
- Section 6.6, "Managing Administrator Roles," on page 63

6.1 Managing Administrator Accounts

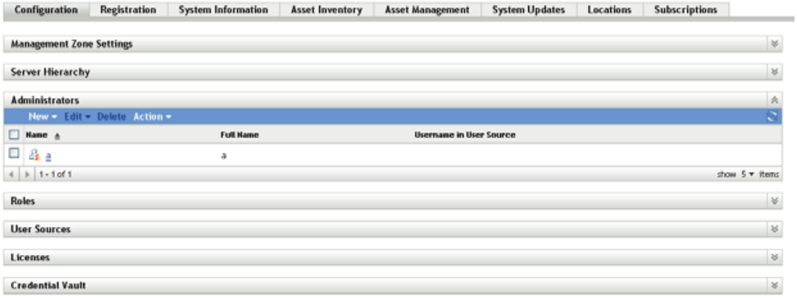
The following sections help you create and manage administrator accounts:

- Section 6.1.1, "Creating Administrators," on page 24
- Section 6.1.2, "Deleting Administrators," on page 25
- Section 6.1.3, "Renaming Administrators," on page 25
- Section 6.1.4, "Changing Administrator Passwords," on page 26

6.1.1 Creating Administrators

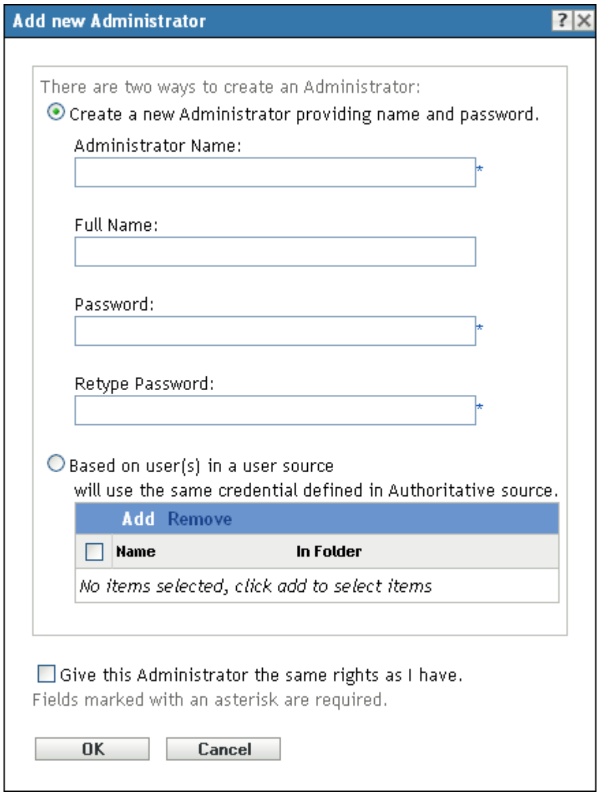
To create an administrator account:

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



□ Name	Full Name	Username in User Source
□ a	a	

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



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.

□ 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.

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.

When specifying a name for a new Administrator or User Source, you are not permitted to use characters such as / \ * ? : " ' < > | ` % ~. For more information on conventions to follow, see naming conventions.

3. Fill in the fields:

   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.

   Administrator login names with Unicode characters are case-sensitive. Make sure that you use the correct case for each character in the login name when it contains Unicode characters.

   The new administrator can change the password the first time he or she logs in by clicking the key icon located next to the *Logout* link in the upper right corner of ZENworks Control Center.

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

   The newly created administrator account is granted View rights to all objects in the Management Zone. To grant additional rights, or to limit the administrator's rights to specific folders only, you need to modify the rights.

   Give this Administrator the Same Rights as I Have: Select this option if you want 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.

You can also use the `admin-create` command in zman to create an administrator account. For more information, see "Administrator Commands" in the *ZENworks 11 Command Line Utilities Reference*.

6.1.2 Deleting Administrators

1. In ZENworks Control Center, click the *Configuration* tab.
2. In the Administrators panel, select the check box next to the administrator's name, then click *Delete*.

You can also use the `admin-delete` command in zman to delete an administrator account. For more information, see "Administrator Commands" in the *ZENworks 11 Command Line Utilities Reference*.

6.1.3 Renaming Administrators

You cannot rename an administrator who is created based on an existing user in the user source.

1. In ZENworks Control Center, click the *Configuration* tab.
2. In the Administrators panel, select the check box next to the administrator's name, click *Edit*, then click *Rename*.
3. Specify the new name, then click *OK*.

You can also use the `admin-rename` command in zman to rename an administrator account. For more information, see "Administrator Commands" in the *ZENworks 11 Command Line Utilities Reference*.

6.1.4 Changing Administrator Passwords

To change the password for any administrator account other than the default Administrator account:

1. In ZENworks Control Center, click the *Configuration* tab.
2. In the Administrators panel, select the check box next to the administrator, click *Edit*, then click *Set Password* to display the Change Administrator Password Dialog box.
3. Fill in the fields, then click *OK*.

   Ensure that the password is at least six characters long.

To change the password for the currently logged-in administrator:

1. In ZENworks Control Center, click the 🔧 icon located next to the *Logout* option in the top right corner.

   The Change Administrator Password dialog box is displayed.
2. Fill in the fields, then click *OK*.

To change the password for the default Administrator account:

1. Log in using the Administrator account.
2. Click the 🔧 icon located next to the *Logout* option in the top right corner.

   The Change Administrator Password dialog box is displayed.
3. Fill in the fields, then click *OK*.

6.2 Managing Administrator Rights

The following sections help you manage existing administrator accounts and their assigned rights:

- Section 6.2.1, "Assigning Super Administrator Rights," on page 26
- Section 6.2.2, "Assigning Additional Rights," on page 27
- Section 6.2.3, "Modifying Assigned Rights," on page 27
- Section 6.2.4, "Removing Assigned Rights," on page 28

6.2.1 Assigning Super Administrator Rights

A Super Administrator has all rights to perform all actions in ZENworks Control Center. For more information about all of the rights that a Super Administrator has, see Section 6.5, "Rights Descriptions," on page 32. If you grant an administrator Super Administrator rights, any assigned rights that have been allowed, denied, or not set are overridden.

1. In ZENworks Control Center, click the *Configuration* tab.
2. In the Administrators panel, click the administrator's name.
3. Click the *Rights* tab.
4. In the General panel, select the *Super Administrator* check box.
5. Click *Apply*.

6.2.2 Assigning Additional Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator in the *Name* column of the Administrators panel.
3. Click the *Rights* tab.
4. In the Assigned Rights panel, click *Add*, then select the rights you want to assign.
5. Fill in the fields.

   For more information, see Section 6.5, "Rights Descriptions," on page 32.
6. Click *OK*.

You can also use the `admin-rights-set` command in zman to assign additional rights for an administrator account. For more information, see "Administrator Commands" in the *ZENworks 11 Command Line Utilities Reference*.

6.2.3 Modifying Assigned Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator in the *Name* column of the Administrators panel.
3. In the Assigned Rights panel, select the check box next to the assigned right.
4. Click *Edit*, then modify the settings.

   For more information, see Section 6.5, "Rights Descriptions," on page 32.
5. Click *OK*.

Modifying Inventory Report Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator in the *Name* column of the Administrators panel.
3. Click the *Rights* tab.
4. In the Administrator Tasks panel, click *Inventory Report Rights*.
5. Select the check box corresponding to the Folder Name for which you want to modify the rights.
6. Click *Edit*, then select the rights you want to assign.

   For more information, see Section 6.5.23, "Inventory Report Rights," on page 61.

Modifying Asset Management Report Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator in the *Name* column of the Administrators panel.
3. Click the *Rights* tab.
4. In the Administrator Tasks panel, click *Asset Management Report Rights*.
5. Select the check box corresponding to the Folder Name for which you want to modify the rights.
6. Click *Edit*, then select the rights you want to assign.

   For more information, see Section 6.5.24, "Asset Management Report Rights," on page 62.

6.2.4 Removing Assigned Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator in the *Name* column of the Administrators pane.
3. Select the check box next to the assigned right.
4. Click *Delete*.

You can also use the `admin-rights-delete` command in zman to delete assigned rights for an administrator account. For more information, see "Administrator Commands" in the *ZENworks 11 Command Line Utilities Reference*.

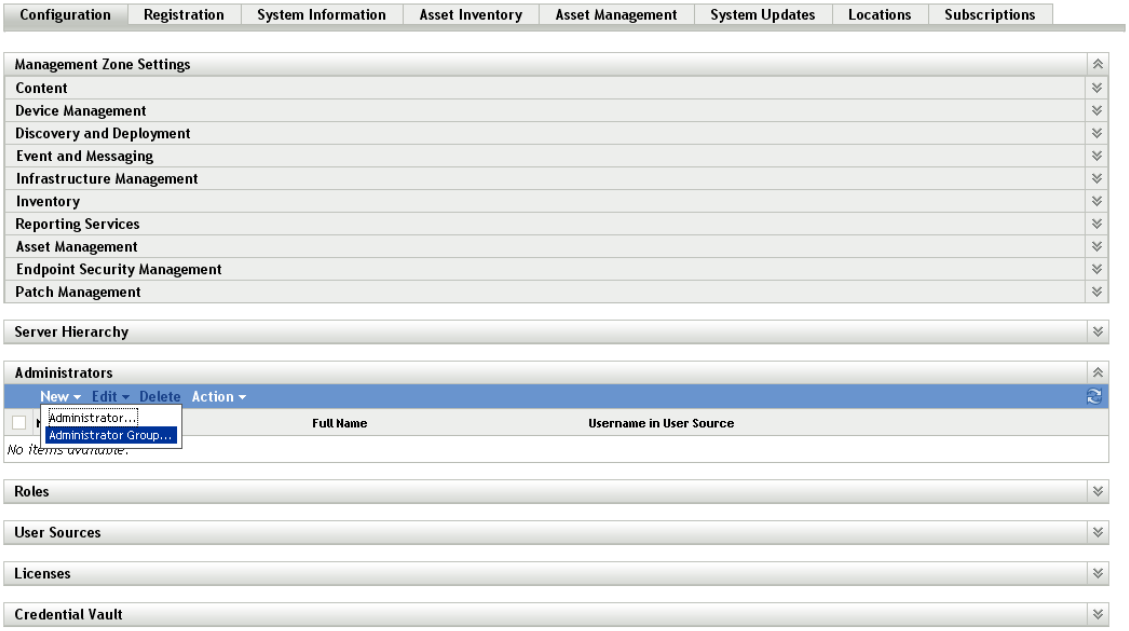
6.3 Managing Administrator Group Accounts

The following sections help you create and manage administrator group accounts:

- Section 6.3.1, "Creating Administrator Group Account," on page 28
- Section 6.3.2, "Creating Administrators," on page 30
- Section 6.3.3, "Deleting Administrator Groups," on page 30
- Section 6.3.4, "Renaming Administrator Groups," on page 31

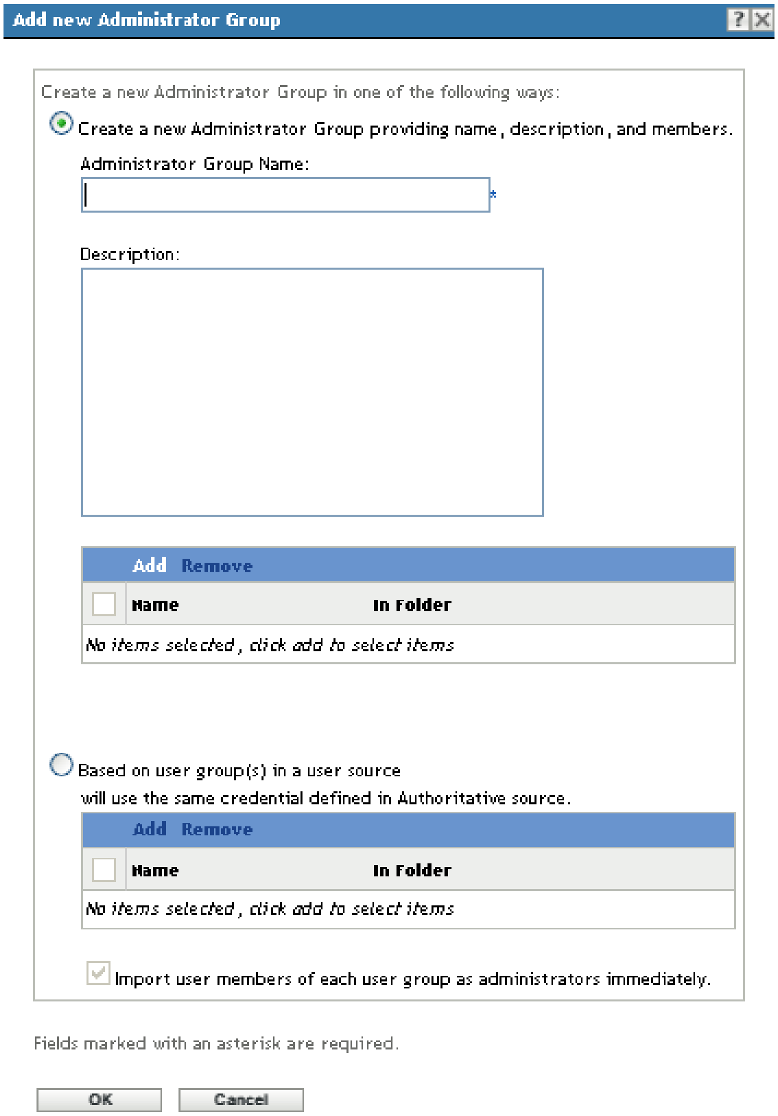
6.3.1 Creating Administrator Group Account

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



No items available.

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



Create a new Administrator Group in one of the following ways:

● Create a new Administrator Group providing name, description, and members.

Administrator Group Name: *

Description:

□	Name	In Folder
No items selected, click add to select items		

○ Based on user group(s) in a user source

will use the same credential defined in Authoritative source.

□	Name	In Folder
No items selected, click add to select items		

☑ Import user members of each user group as administrators immediately.

Fields marked with an asterisk are required.

3 Fill in the fields.

The Add New Administrator Group dialog box lets you create a new administrator group account by providing a group name and adding members to the group, or you can create a new administrator group based on an existing user group in the user source. Each administrator group name must be unique.

Create a New Administrator Group by Providing a Name and Adding Members: Select this option if you want to create a new administrator group account by manually specifying the name and adding the members. To add members, click *Add*, then browse for and select the administrators you want.

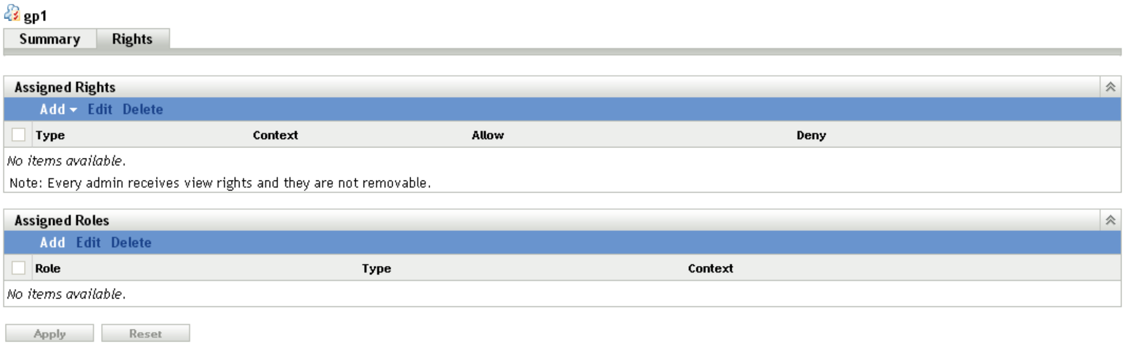
You can add any number of administrators to the group. You cannot add other administrator groups to the group.

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

Import user members of each user group as administrators immediately: Select this option to enable the user members of the selected user groups to be immediately added as administrators who can only view the ZENworks Control Center pages.

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

5 If you need to change the new administrator group's rights or roles, click the administrator group account and then the *Rights* tab to display the account details:



gp1

Summary | Rights

Assigned Rights

Add ▾ Edit Delete

□	Type	Context	Allow	Deny

No items available.

Note: Every admin receives view rights and they are not removable.

Assigned Roles

Add Edit Delete

□	Role	Type	Context

No items available.

Apply Reset

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 Group Rights" on page 31.

7 Using the Assigned Roles panel, modify the assigned roles.

For information about the options on the page, click the *Help* button, or see Section 6.6, "Managing Administrator Roles," on page 63.

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

6.3.2 Creating Administrators

You can create an administrator account for every user in the administrator group that is created based on an existing user group in the user source.

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

2 In the Administrators panel, select the check box next to the administrator group's name that is created based on an existing user group in the user source.

3 Click *Action* > *Create Administrators*.

4 Review the message, then click *OK*

6.3.3 Deleting Administrator Groups

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

2 In the Administrators panel, select the check box next to the administrator group's name, then click *Delete*.

6.3.4 Renaming Administrator Groups

You cannot rename an administrator group that is created based on an existing user groups in the user source.

1. In ZENworks Control Center, click the *Configuration* tab.
2. In the Administrators panel, select the check box next to the administrator group's name, click *Edit*, then click *Rename*.
3. Specify the new name, then click *OK*.

6.4 Managing Administrator Group Rights

The following sections help you manage existing administrator accounts and their assigned rights:

- Section 6.4.1, "Assigning Additional Rights," on page 31
- Section 6.4.2, "Modifying Assigned Rights," on page 31
- Section 6.4.3, "Removing Assigned Rights," on page 31

6.4.1 Assigning Additional Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator group in the *Name* column of the Administrators panel.
3. Click the *Rights* tab.
4. In the Assigned Rights panel, click *Add*, then select the rights you want to assign.
5. Fill in the fields.

   For more information, see Section 6.5, "Rights Descriptions," on page 32.
6. Click *OK*.

6.4.2 Modifying Assigned Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator group in the *Name* column of the Administrators panel.
3. In the Assigned Rights panel, select the check box next to the assigned right.
4. Click *Edit*, then modify the settings.

   For more information, see Section 6.5, "Rights Descriptions," on page 32.
5. Click *OK*.

6.4.3 Removing Assigned Rights

1. In ZENworks Control Center, click the *Configuration* tab.
2. Click the administrator group in the *Name* column of the Administrators pane.
3. Select the check box next to the assigned right.
4. Click *Delete*.

6.5 Rights Descriptions

When you create additional administrator accounts you can provide full access to your zone or you can create accounts with limited rights. For example, you could create an administrator account that enables the administrator to assign bundles to devices but doesn't allow the administrator to create bundles, or you could create an administrator account that allows access to all management tasks except those pertaining to Management Zone configuration (user sources, registration, configuration settings, and so forth). For information about creating additional administrators, see "Creating Administrators" on page 24.

For Administrator roles only, a third column of rights options is added to each rights assignment dialog box: *Unset*, which allows rights set elsewhere in ZENworks to be used for the role.

The most restrictive right set in ZENworks prevails. Therefore, if you select the *Deny* option, the right is denied for any administrator assigned to that role, even if the administrator is granted that right elsewhere in ZENworks.

If you select the *Allow* option and the right has not been denied elsewhere in ZENworks, the administrator has that right for the role.

If you select the *Unset* option, the administrator is not granted the right for the role unless it is granted elsewhere in ZENworks.

You can also add, modify, or remove the assigned rights for an existing administrator. For more information, see Section 6.2.2, "Assigning Additional Rights," on page 27, Section 6.2.3, "Modifying Assigned Rights," on page 27, or Section 6.2.4, "Removing Assigned Rights," on page 28.

The following sections contain additional information about the various rights that you can assign:

- Section 6.5.1, "Administrator Rights," on page 33
- Section 6.5.2, "Bundle Rights," on page 33
- Section 6.5.3, "Contract Management Rights," on page 35
- Section 6.5.4, "Credential Rights," on page 37
- Section 6.5.5, "Deployment Rights," on page 37
- Section 6.5.6, "Device Rights," on page 38
- Section 6.5.7, "Discovery Rights," on page 41
- Section 6.5.8, "Document Rights," on page 41
- Section 6.5.9, "Inventoried Device Rights," on page 42
- Section 6.5.10, "LDAP Import Rights," on page 43
- Section 6.5.11, "License Management Rights," on page 44
- Section 6.5.12, "Location Rights," on page 46
- Section 6.5.13, "Patch Management Rights - Device," on page 47
- Section 6.5.14, "Patch Management Rights - Zone," on page 48
- Section 6.5.15, "Policy Rights," on page 49
- Section 6.5.16, "Quick Task Rights," on page 52
- Section 6.5.17, "Remote Management Rights," on page 53
- Section 6.5.18, "Reporting Rights," on page 54
- Section 6.5.19, "Subscription Rights," on page 55
- Section 6.5.20, "User Rights," on page 56

- Section 6.5.21, “ZENworks User Group Rights,” on page 58
- Section 6.5.22, “Zone Rights,” on page 60
- Section 6.5.23, “Inventory Report Rights,” on page 61
- Section 6.5.24, “Asset Management Report Rights,” on page 62

6.5.1 Administrator Rights

The Administrator Rights dialog box lets you allow the selected administrator to grant rights to other administrators and to create or delete administrator accounts for your Management Zone.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Grant Rights	- Assign rights to an administrator or administrator group - Remove rights from an administrator or administrator group - Assign roles to an administrator or administrator group - Remove roles from an administrator or administrator group	To grant any object rights to other administrators, an administrator must have the *Grant Rights* and the rights for that object. For example, to grant bundle rights to other administrators, an administrator must have both the *Grant Rights* and the *Bundle Rights*.
Create/Delete	- Create an administrator - Rename an administrator - Set/reset an administrator’s password - Delete an administrator	
Create/Delete Groups	- Create an administrator group - Delete an administrator group	
Modify Groups	- Add administrators to a group - Remove administrators from a group	

6.5.2 Bundle Rights

The Bundle Rights dialog box lets you control the bundle operations that the selected administrator can perform.

- “Contexts” on page 33
- “Privileges” on page 34

Contexts

Specify the Bundle folders (contexts) that you want the administrator’s Bundle rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder’s subfolders.

Privileges

The *Privileges* section lets you grant the selected administrator rights to create or modify bundles, groups, and folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify Groups	◆ Rename a bundle group ◆ Change a bundle group's description	
Create/Delete Groups	◆ Create a bundle group ◆ Delete a bundle group ◆ Move a bundle group	Setting the Create/Delete Groups right to Allow forces the Modify Groups right to Allow. This means that an administrator who creates a group also receives rights to modify it.
Modify Group Membership	◆ Add bundles to a group ◆ Remove bundles from a group ◆ Reorder bundles within a group	
Modify Folders	◆ Rename a bundle folder ◆ Change a bundle folder's description	
Create/Delete Folders	◆ Create a bundle folder ◆ Delete a bundle folder ◆ Move a bundle folder	Setting the Create/Delete Folders right to Allow forces the Modify Folders right to Allow. This means that an administrator who creates a folder also receives rights to modify it.
Author	◆ Create a bundle (Sandbox version) ◆ For Sandbox bundles: ◆ Edit settings on a bundle's Summary tab ◆ Edit settings on a bundle's Requirements tab ◆ Edit settings on a bundle's Actions tab ◆ Rename a bundle ◆ Move a bundle from one folder to another ◆ Copy system requirements from one bundle to another ◆ Delete a bundle ◆ Enable/disable a bundle ◆ Publish (copy) a bundle to a new bundle (Sandbox version)	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Publish	◆ Publish a bundle as a new version or a new bundle ◆ Edit settings on a bundle's Summary tab ◆ Edit settings on a bundle's Requirements tab ◆ Edit settings on a bundle's Actions tab ◆ Rename a bundle ◆ Move a bundle from one folder to another ◆ Copy system requirements from one bundle to another ◆ Delete a bundle ◆ Enable/disable a bundle ◆ Publish (copy) a bundle to a new bundle (Sandbox version)	Setting the Publish right to Allow forces the Author right to Allow. This means that an administrator who can publish bundles can also author bundles.
Modify Settings	◆ Edit settings on a bundle's Settings tab with the following exception: ◆ Cannot create or add system variables (System Variables setting) on bundles	This right applies to bundles and bundle folders. It does not apply to bundle groups because bundle groups do not have a Settings tab.
Assign Bundles	◆ Assign bundles to devices, device groups, and device folders ◆ Assign bundle groups to devices, device groups, and device folders ◆ Assign bundles to users, user groups, and user folders ◆ Assign bundle groups to users, user groups, and user folders ◆ Remove bundle assignments from the objects listed above ◆ Remove bundle group assignments from the objects listed above	To assign bundles to devices, groups, and folders, an administrator needs this right and the Device Rights – Assign Bundles right. In other words, the administrator needs Assign Bundle rights for the bundle and the device to which the bundle is being assigned. To assign bundles to users, groups, and folders, an administrator needs this right and the User Rights – Assign Bundles right. In other words, the administrator needs Assign Bundle rights for the bundle and the user to which the bundle is being assigned.

6.5.3 Contract Management Rights

The Contract Management Rights dialog box lets you control the operations that the selected administrator can perform to manage contracts.

- "Contexts" on page 36
- "Privileges" on page 36

Contexts

Specify the Contract Management folders (contexts) that you want the administrator's Contract Management rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The *Privileges* section lets you grant the selected administrator rights to contracts and folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Change contract details, with the following exceptions: ◆ Date Notification changes also require Create/Delete rights ◆ Change default Date Notification settings ◆ Add relationships (Workstation/Server Devices, Network Devices, Licence Entitlements, Users, Sites, Cost Centers, and Departments) to contracts ◆ Remove relationships from contracts	To add or remove a license entitlement relationship, an administrator must have this right and the License Management Rights – Modify right. In other words, an administrator needs Modify rights to both the contract and the license entitlement.
Create/Delete	◆ Create a new contract ◆ Copy a contract to create a new contract ◆ Move a contract to a different folder ◆ Delete a contract ◆ Create a Date Notification ◆ Change a Date Notification ◆ Move a Date Notification to a different folder ◆ Delete a Date Notification	
Modify Folders	◆ Change a folder's description	
Create/Delete Folders	◆ Create a folder ◆ Delete a folder ◆ Move a folder to another folder	To move a folder, an adminstrator must have this right and the Create/Delete right.

Access to Contract Management reports is controlled through Asset Management Report Rights. For details, see Section 6.5.24, "Asset Management Report Rights," on page 62.

6.5.4 Credential Rights

The Credential Rights dialog box lets you control the operations that the selected administrator can perform to manage credentials.

- "Contexts" on page 37
- "Privileges" on page 37

Contexts

Specify the Credential folders (contexts) that you want the administrator's Credential rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the selected administrator rights to create or modify credentials, groups, and folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Rename a credential ◆ Change a credential's login name ◆ Change a credential's password ◆ Change a credential's description	
Create/Delete	◆ Create a credential ◆ Move a credential to a different folder ◆ Delete a credential	
Modify Folders	◆ Rename a credential folder ◆ Change a folder's description	To rename a folder, an administrator must have this right and the Modify right.
Create/Delete Folders	◆ Create a credential folder ◆ Delete a credential folder ◆ Move a credential folder to another folder	To move a folder, an administrator must have this right and the Create/Delete right.

For more information about the tasks you can perform on credentials, see Chapter 10, "Using the Credential Vault," on page 105.

6.5.5 Deployment Rights

Deployment lets you discover network devices and deploy the ZENworks Adaptive Agent to them so that they become managed devices in your Management Zone. For more information, see "ZENworks Adaptive Agent Deployment" in the *ZENworks 11 Discovery, Deployment, and Retirement Reference*.

The Deployment Rights dialog box lets you control the selected administrator's ability to perform deployment operations.

The following right is available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Deployment	◆ Create a deployment task ◆ Launch a deployment task ◆ Abort a deployment task ◆ Rename a deployment task ◆ Modify all deployment task settings ◆ Delete a deployment task ◆ Edit a deployment package ◆ Import devices from a CSV file into the Deployable Devices list ◆ Delete devices from the Deployable Devices list	

6.5.6 Device Rights

The Device Rights dialog box lets you control the operations that the selected administrator can perform on devices.

- "Contexts" on page 38
- "Privileges" on page 39

Contexts

Specify the Device folders (contexts) that you want the administrator's Device rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The *Privileges* section lets you grant the selected administrator rights to work with devices, including device groups and folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Retire a device ◆ Rename a device ◆ Acknowledge device messages ◆ Change a device to a test device ◆ Change a test device to a non-test device ◆ Copy device settings (from the Settings tab) to other devices ◆ View and edit a device's detailed inventory (Detailed Software Hardware Inventory link on the Inventory tab)	To copy device settings, the administrator also needs the Modify Settings right.
Create/Delete	◆ Create managed devices by importing device information from a CSV file ◆ Create managed devices by manually adding device information ◆ Delete a device ◆ Move a device	
Modify Groups	◆ Rename a device group ◆ Change a device group's description	To change device group's description, an administrator needs this right and the Modify right.
Create/Delete Groups	◆ Create a device group ◆ Delete a device group ◆ Move a device group	Setting the Create/Delete Groups right to Allow forces the Modify Groups right to Allow. This means that an administrator who creates a group also receives rights to modify it.
Modify Group Membership	◆ Add devices to a device group ◆ Remove devices from a device group ◆ Change criteria for a dynamic device group	
Modify Folders	◆ Rename a device folder ◆ Change a device folder's description	
Create/Delete Folders	◆ Create a device folder ◆ Delete a device folder ◆ Move a device folder	Setting the Create/Delete Folders right to Allow forces the Modify Folders right to Allow. This means that an administrator who creates a folder also receives rights to modify it.

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify Settings	◆ Edit settings on a device's Settings tab	This right applies to devices and device folders. It does not apply to device groups because device groups do not have a Settings tab.
Assign Bundles	◆ Assign bundles to devices, device groups, and device folders ◆ Assign bundle groups to devices, device groups, and device folders ◆ Remove bundle assignments from the objects listed above ◆ Remove bundle group assignments from the objects listed above	To assign bundles to devices, groups, and folders, an administrator needs this right and the Bundle Rights – Assign Bundles right. In other words, the administrator needs Assign Bundle rights for the bundle and the device to which the bundle is being assigned.
Assign Policies	◆ Assign policies to devices, device groups, and device folders ◆ Assign policy groups to devices, device groups, and device folders ◆ Remove policy assignments from the objects listed above ◆ Remove policy group assignments from the objects listed above	To assign policies to devices, groups, and folders, an administrator needs the following rights: ◆ Assign Policies (this right) ◆ Policy Rights - Assign Policies ◆ Policy Rights - Manage Configuration Policies or Policy Rights - Manage Security Policies In other words, an administrator needs Assign Policy rights for the policy and the device to which the policy is being assigned, and he needs the Manage Configuration Policies or Manage Security Policies right depending on whether the policy is a Configuration or Security policy.
Assign Locations	◆ Assign locations and network environments to devices and device folders ◆ Assign startup locations and network environments to devices and device folders	This right does not apply to device groups because device groups do not have a Locations tab.
View Detailed Inventory	◆ View a devices detailed inventory (Detailed Software/Hardware Inventory link on Inventory tab)	This right controls view-only access. If you want an administrator to be able to edit the detailed inventory, the administrator needs the Modify right.
Manage ERI	◆ Download a device's ERI file ◆ View an ERI file's password ◆ Delete an ERI file	

6.5.7 Discovery Rights

The Discovery Rights dialog box lets you control the selected administrator's ability to perform discovery operations.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Discovery	◆ Create a discovery task ◆ Launch a discovery task ◆ Abort a discovery task ◆ Rename a discovery task ◆ Modify all discovery task settings ◆ Delete a discovery task ◆ Discover advertised devices (devices that have the ZENworks preagent installed, such as OEM devices or unregistered devices)	
Edit Discovered Devices	◆ Edit the following properties for discovered devices: ◆ Discovered Type ◆ Network Type ◆ Operating System Vendor ◆ Operating System Category ◆ Operating System Platform ◆ Support/Service Pack	

6.5.8 Document Rights

The Document Rights dialog box lets you control the operations that the selected administrator can perform to manage documents.

- "Contexts" on page 41
- "Privileges" on page 42

Contexts

Specify the Document folders (contexts) that you want the administrator's Document rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The *Privileges* section lets you grant the selected administrator rights to create or modify documents and their folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Change a document's details: ◆ Document ID ◆ Path ◆ Source Location ◆ As-Of-Date ◆ Description ◆ Download and open a document ◆ Add and remove relationships with contracts ◆ Add and remove relationships with license entitlements ◆ Add and remove relations with purchase summary records	To add and remove relationships with contracts, an administrator must also have the Contract Management Rights – Modify right. In other words, an administrator needs Modify rights to both the document and the contract. To add and remove relationships with license entitlements and purchase summary records, an administrator must also have the License Management Rights – Modify right. In other words, an administrator needs Modify rights to both the document and the license entitlement or purchase summary record.
Create/Delete	◆ Upload a new document so that it is available from the ZENworks Server ◆ Link (hyperlink) to a new document ◆ Move a document to a different folder ◆ Delete a document	
Modify Folders	◆ Change a folder's description	
Create/Delete Folders	◆ Create a folder ◆ Delete a folder ◆ Move a folder to another folder	To move a folder, an administrator must have this right and the Create/ Delete right.

6.5.9 Inventoried Device Rights

The Inventoried Device Rights dialog box lets you control the operations that an administrator can perform on inventoried devices.

- "Contexts" on page 42
- "Privileges" on page 43

Contexts

Specify the Inventoried Device folders (contexts) that you want the administrator's Inventoried Device rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The *Privileges* section lets you grant the selected administrator rights to work with inventoried devices, including device folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Retire an inventoried device ◆ Rename an inventoried device ◆ Edit a device's detailed inventory (Detailed Software Hardware Inventory link on the Inventory tab)	
Create/Delete	◆ Create an inventoried device ◆ Delete an inventoried device ◆ Move an inventoried device	To create an inventoried device, an administrator also requires the Device Rights – Create/Delete right so that he has access to the Create Portable Client and Import Inventory tasks.
Modify Groups	◆ None	This right has no operational effect when assigned to an administrator.
Create/Delete Groups	◆ None	This right has no operational effect when assigned to an administrator.
Modify Group Membership	◆ None	This right has no operational effect when assigned to an administrator.
Modify Folders	◆ Rename a device folder ◆ Change a device folder's description	
Create/Delete Folders	◆ Create a device folder ◆ Delete a device folder ◆ Move a device folder	Setting the Create/Delete Folders right to Allow forces the Modify Folders right to Allow. This means that an administrator who creates a folder also receives rights to modify it.
View Detailed Inventory	◆ View a devices detailed inventory (Detailed Software/Hardware Inventory link on Inventory tab)	This right controls view-only access. If you want an administrator to be able to edit the detailed inventory, the administrator needs the Modify right.

6.5.10 LDAP Import Rights

The LDAP Import Rights dialog box lets you control the selected administrator's ability to import LDAP information.

The following right is available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
LDAP Import	◆ Create a an LDAP import task; the task imports data from an LDAP source and uses it to populate device inventory information in ZENworks Control Center ◆ Rename an LDAP import task ◆ Delete an LDAP import task ◆ Launch an LDAP import task ◆ Abort an LDAP import task ◆ View results of an LDAP import task ◆ Modify tasks settings	The LDAP Import feature is located in Configuration > Asset Inventory tab > LDAP Import Tasks

6.5.11 License Management Rights

The License Management Rights dialog box lets you control the operations that the selected administrator can perform to manage licenses.

- "Contexts" on page 44
- "Privileges" on page 45

Contexts

Specify the License Management folders (contexts) that you want the administrator's License Management rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the administrator rights to work with the software license components associated with the contexts (folders) you selected in the Contexts section

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ For purchase records: ◆ Change purchase record details ◆ Create, edit, and delete purchase details for existing purchase records ◆ For catalog products: ◆ Change catalog product details ◆ Add a catalog product to a licensed product ◆ Include or exclude a catalog product from being able to be added to a licensed product ◆ For licensed products: ◆ Change licensed product details ◆ Allocate licensed products to devices ◆ Remove licensed product allocations from devices ◆ Refresh compliance status ◆ Use auto-reconcile to add discovered products and catalog products to existing licensed products ◆ For discovered products: ◆ Include or exclude a discovered product from being able to be added to a licensed product ◆ Add a discovered product to a licensed product or to a software collection ◆ Assign a Standards category to a discovered product ◆ Refresh compliance status ◆ Change the usage period ◆ For software collections: ◆ Change a software collection’s details ◆ Add discovered products to a software collection ◆ Remove discovered products from a software collection	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Create/Delete	◆ For purchase records: ◆ Create a new purchase record ◆ Import purchase records from a file ◆ Move a purchase record from one folder to another ◆ Move a purchase record from one folder to another ◆ For catalog products: ◆ Create a new catalog product ◆ Move a catalog product from one folder to another ◆ Delete a catalog product ◆ For licensed products: ◆ Create a new licensed product ◆ Auto-reconcile to create new licensed products from discovered products ◆ Merge two or more licensed products into one ◆ Move a licensed product from one folder to another ◆ Delete a licensed product ◆ For software collections: ◆ Create a new software collection ◆ Move a software collection from one folder to another ◆ Delete a software collection	
Modify Folders	◆ Change a folder's description	
Create/Delete Folders	◆ Create a folder ◆ Delete a folder ◆ Move a folder to another folder	To move a folder, an adminstrator must have this right and the Create/ Delete right.

Access to License Management reports is controlled through Asset Management Report Rights. For details, see Section 6.5.24, "Asset Management Report Rights," on page 62.

6.5.12 Location Rights

The Location Rights dialog box lets you control the operations the selected administrator can perform on locations and network environments.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ For locations: ◆ Rename a location ◆ Reorder locations (move up/down) ◆ Add network environments to a location ◆ Remove network environments from a location ◆ Reorder network environments for a location (move up/down) ◆ Change a location's description ◆ Configure a location's closest servers (Servers page) ◆ Modify the location's settings (Settings page) ◆ Change the "Duration to Honor" setting for the startup location ◆ For network environments: ◆ Rename a network environment ◆ Change a network environment's description ◆ Modify a network environment's match criteria (network services) ◆ Configure a network environment's closest servers (Servers page) ◆ Modify a network environment's settings (Settings page)	
Create/Delete	◆ Create a location ◆ Delete a location ◆ Create a network environment ◆ Delete a network environment	

6.5.13 Patch Management Rights - Device

Patch Management rights are configurable at two levels: zone and device. The zone-level Patch Management rights (see Section 6.5.14, "Patch Management Rights - Zone," on page 48) control the operations that are available on the Patch Management page and on device objects, while the device-level Patch Management rights control only the operations available on device objects.

Contexts

Specify the Device folders (contexts) that you want the administrator's Patch Management rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the administrator rights to perform Patch Management operations associated with the contexts (folders) you selected in the Contexts section

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Patch Deploy	◆ Deploy a patch to a device ◆ Deploy a patch to a device group	An administrator must have this right and Bundle Rights for the patch bundle being deployed.
Assign a Baseline	◆ Assign a patch to a device group's mandatory baseline of patches	
Remove from Baseline	◆ Remove a patch from a device group's mandatory baseline of patches	
View Patch Details	◆ View information for a patch that is listed in a device's Patches list	
Recalculate Baseline	◆ Initiate an immediate check of all devices in a device group to evaluate baseline patch compliance and apply the required baseline patches if necessary	
Export Patch	◆ Export patch information to a CSV file for one or more patches selected from a device's Patches list	

6.5.14 Patch Management Rights - Zone

Patch Management rights are configurable at two levels: zone and device. The zone-level Patch Management rights control the operations that are available on the Patch Management page and on device objects, while the device-level Patch Management rights (see Section 6.5.13, "Patch Management Rights - Device," on page 47) control only the operations available on device objects.

The following zone-level Patch Management rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Patch Deploy	◆ Deploy a patch to a device ◆ Deploy a patch to a device group ◆ Deploy a patch to a device folder	An administrator must have this right and Bundle Rights for the patch bundle being deployed.
Patch Enable	◆ Enable a patch to be deployed	
Patch Disable	◆ Disable a patch so it can't be deployed	
Patch Update Cache	◆ Update a patch in the ZENworks Server cache by downloading the patch from the subscription service	
Assign a Baseline	◆ Assign a patch to a device group's mandatory baseline of patches	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Remove from Baseline	◆ Remove a patch from a device group's mandatory baseline of patches	
View Patch Details	◆ View information for a patch that is listed in a device's Patches list	
Export Patch	◆ Export patch information to a CSV file for one or more patches selected from a device's Patches list	
Scan Now	◆ Initiate a patch detection scan (DAU task) on devices	
Remove Patch	◆ Remove a patch from a device	
Recalculate Baseline	◆ Initiate an immediate check of all devices in a device group to evaluate baseline patch compliance and apply the required baseline patches if necessary	
Configure	◆ Configure the Patch Management zone settings (Configuration > Management Zone Settings > Patch Management)	

6.5.15 Policy Rights

The Policy Rights dialog box lets you control the operations that the selected administrator can perform on policies.

- "Contexts" on page 49
- "Privileges" on page 49

Contexts

Specify the Policy folders (contexts) that you want the administrator's Policy rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the selected administrator rights to work with policies, including policy groups and folders listed in the Contexts section

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify Groups	◆ Rename a policy group ◆ Change a policy group's description	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Create/Delete Groups	◆ Create a policy group ◆ Delete a policy group ◆ Move a policy group	Setting the Create/Delete Groups right to Allow forces the Modify Groups right to Allow. This means that an administrator who creates a group also receives rights to modify it.
Modify Group Membership	◆ Add policies to a group ◆ Remove policies from a group ◆ Reorder policies within a group	In addition to this right, an administrator must also have the Manage Configuration Policies right or the Management Security policies right. For example, to add a Configuration policy to a group, an administrator must have the following two rights: ◆ Modify Group Membership (this right) ◆ Manage Configuration Policies
Modify Folders	◆ Rename a policy folder ◆ Change a policy folder's description	
Create/Delete Folders	◆ Create a policy folder ◆ Delete a policy folder ◆ Move a policy folder	Setting the Create/Delete Folders right to Allow forces the Modify Folders right to Allow. This means that an administrator who creates a folder also receives rights to modify it.
Author	◆ Create a policy (Sandbox version) ◆ For Sandbox policies: ◆ Edit settings on a policy's Summary tab ◆ Edit settings on a policy's Requirements tab ◆ Edit settings on a poliy's Details tab ◆ Rename a policy ◆ Move a policy ◆ Copy system requirements from one policy to another ◆ Delete a policy ◆ Enable and disable a policy ◆ Publish (copy) a policy as a new policy (Sandbox version)	In addition to this right, an administrator must also have the Manage Configuration Policies right or the Management Security policies. For example, to create a Configuration policy, an administrator must have the following two rights: ◆ Author (this right) ◆ Manage Configuration Policies

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Publish	◆ Publish a policy as a new version ◆ Edit settings on a policy's Summary tab ◆ Edit settings on a policy's Requirements tab ◆ Edit settings on a poliy's Details tab ◆ Rename a policy ◆ Move a policy ◆ Copy system requirements from one policy to another ◆ Delete a policy ◆ Enable and disable a policy ◆ Publish (copy) a policy as a new policy (Sandbox version)	Setting the Publish right to Allow forces the Author right to Allow. This means that an administrator who has rights to publish policies also has rights to author policies. In addition to this right, an administrator must also have the Manage Configuration Policies right or the Management Security policies. For example, to publish a Security policy, an administrator must have the following two rights: ◆ Publish (this right) ◆ Manage Security Policies
Assign Policies	◆ Assign policies to devices, device groups, and device folders ◆ Assign policy groups to devices, device groups, and device folders ◆ Assign policies to users, user groups, and user folders ◆ Assign policy groups to users, user groups, and user folders ◆ Remove policy assignments from the objects listed above ◆ Remove policy group assignments from the objects listed above	In addition to this right, an administrator must also have the Manage Configuration Policies right or the Management Security policies right and the Device Rights - Assign Policies right or User Rights - Assign Policies right. For example, to assign a Security policy to a device, an administrator must have the following two rights: ◆ Assign Policies (this right) ◆ Manage Security Policies ◆ Device Rights - Assign Policies (for the target device)
Manage Configuration Policies	◆ Access to Windows and Linux Configuration policies	This right enables the Author, Publish, Modify Group Membership, and Assign Policies rights to apply to Windows and Linux Configuration policies. Configuration policies are provided by ZENworks Configuration Management and include the Windows Configuration policies (Browser Bookmarks policy, Dynamic Local User policy, Local File Rights policy, Printer policy, Remote Management policy, Roaming Profile policy, SNMP policy, Windows Group policy, and ZENworks Explorer Configuration policy) and the Linux Configuration policies (External Services policy and Puppet policy).

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Manage Security Policies	◆ Access to Windows Security policies (including the Full Disk Encryption policy)	This right enables the Author, Publish, Modify Group Membership, and Assign Policies rights to apply to Windows Security policies.

6.5.16 Quick Task Rights

Quick Tasks are tasks that appear in ZENworks Control Center task lists (for example, Server Tasks, Workstation Tasks, Bundles Tasks, and so forth). When you click a task, either a wizard launches to step you through the task or a dialog box appears in which you enter information to complete the task.

The Quick Tasks Rights dialog box lets you control the selected administrator's ability to perform specific quick tasks.

- "Contexts" on page 52
- "Privileges" on page 52

Contexts

Specify the Device folders (contexts) that you want the administrator's Quick Task rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The *Privileges* section lets you control the selected administrator's rights to perform quick tasks associated with the contexts (folders) you selected in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Shutdown/Reboot/ Wake Up Device	◆ Reboot Shutdown Devices quick task ◆ Intel AMT Power Management quick task ◆ Wake Up quick task	
Execute Processes	◆ Launch Application quick task ◆ Run Script quick task ◆ Launch Java Application quick task	
Refresh ZENworks Adaptive Agent	◆ Refresh Device quick task ◆ Refresh Policies quick task	
Install/Launch Bundles	◆ Install Bundle quick task ◆ Launch Bundle quick task ◆ Verify Bundle quick task ◆ Uninstall Bundle quick task ◆ Distribute Bundle Now quick task	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Manage Endpoint Security Settings and Task	◆ Clear ZESM User Defined Password quick task ◆ Clear ZESM Local Client Self Defense Settings quick task ◆ Clear ZESM Local Firewall Registration Settings quick task ◆ FDE – Decommission Full Disk Encryption quick task ◆ FDE – Enable Additive User Capturing quick task ◆ FDE – Force Device to Send ERI File to Server quick task ◆ FDE – Update PBA User quick task	
Inventory	◆ Inventory Scan quick task ◆ Inventory Wizard quick task	
Apply Image	◆ Apply Assigned Imaging Bundle (Action menu) ◆ Apply Rule-Based Imaging Bundle (Action menu)	
Take Image	◆ Take an image (Action menu)	

6.5.17 Remote Management Rights

The Remote Management Rights dialog box lets you control the operations that the selected administrator can perform on remote devices.

- "Contexts" on page 53
- "Privileges" on page 54

Contexts

Specify the Device folders or User folders (contexts) that you want the administrator's Remote Management rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the administrator rights to perform remote operations for devices and users located within the contexts (folders) you selected in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Remote Control	◆ Control a remote device	Setting the Remote Control right to Allow forces the Remote View and Transfer Files rights to Allow. This means that an administrator who can remotely control a device can also remotely view the device and transfer files to and from the device.
Remote View	◆ View a remote device's desktop	
Transfer Files	◆ Transfer files to/from a remote device ◆ Create folders on a remote device ◆ Create folders on a remote device ◆ Delete files and folders on a remote device	
Remote Execute	◆ Run executable files with system privileges on a remote device.	Granting Remote Execute rights allows an administrator to execute processes in the system space.
Remote Diagnostics	◆ Run the following diagnostic tools on a remote device: ◆ System Information (msinfo32.exe) ◆ Computer Management (compmgmt.msc) ◆ Services (services.msc) ◆ Registry Editor (regedit.exe) ◆ Run other administrator-configured diagnostic tools on a remote device	To configure other diagnostic tools to run on a remote device, an administrator must have the Zone Rights – Modify Rights setting.
Unblock Remote Management Service	◆ Reset (unblock) the remote management connection to a device	

6.5.18 Reporting Rights

The Reporting Rights dialog box lets you control the selected administrator's rights to create, delete, execute, or publish reports.

- "Contexts" on page 55
- "Privileges" on page 55

Contexts

Specify the Report folders (contexts) that you want the administrator's Reporting rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the administrator rights to work with reports associated with the contexts (folders) you selected in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Create/Delete Reports	◆ Create reports ◆ Delete reports ◆ Create report folders ◆ Delete report folders ◆ Modify reports ◆ Copy reports	Setting the Create/Delete Reports right to Allow forces the Execute/Publish Reports right to Allow. This means that an administrator who can create reports can also run the reports. To copy a report, an administrator must have Create/Delete Reports rights in the destination folder.
Execute/Publish Reports	◆ Run reports ◆ Schedule reports ◆ Manage historical report instances ◆ Save reports	

6.5.19 Subscription Rights

The Subscription Rights dialog box lets you control the selected administrator's rights to create and delete subscriptions.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Rename a subscription ◆ Enable a subscription ◆ Disable a subscription ◆ Edit all subscription details on the Summary page with the following exceptions: ◆ Cannot initiate (Run Now) a subscription replication ◆ Cannot change the subscription replication schedule ◆ Add and remove subscription catalogs ◆ Modify existing subscription catalogs	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Create/Delete	◆ Create a new subscription ◆ Delete a subscription ◆ Copy a subscription to create a new subscription ◆ Move a subscription to a different folder	Setting the Create/Delete right to Allow forces the Modify right to Allow. In other words, an administrator who creates a subscription automatically receives rights to modify it.
Modify Folders	◆ Rename a subscription folder ◆ Change a subscription folder's description	
Create/Delete Folders	◆ Create a subscription folder ◆ Delete a subscription folder ◆ Move a subscription folder	Setting the Create/Delete Folders right to Allow forces the Modify Folders right to Allow. In other words, an administrator who creates a folder automatically receives rights to modify it.
Run Now	◆ Initiate (Run Now) replication for a subscription ◆ Change the subscription replication schedule	The Run Now right allows an administrator to run a subscription. When the subscription runs, it can create bundles, bundle groups and bundle folders. The administrator does not require any separate bundle rights.
Modify Settings	◆ Edit settings on the subscription's Settings tab	

6.5.20 User Rights

The User Rights dialog box lets you control the operations that the selected administrator can perform on users.

- "Contexts" on page 56
- "Privileges" on page 57

Contexts

Specify the User folders (contexts) that you want the administrator's User rights to apply to. To select a folder, click *Add* to display the Contexts dialog box, browse for and select the folder (or multiple folders), then click *OK*. The rights also apply to the folder's subfolders.

Privileges

The Privileges section lets you grant the selected administrator rights to work with users and folders listed in the Contexts section.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify	◆ Rename a user container ◆ Change a user to a test user ◆ Change a test user to a non-test user	
Modify ZENworks Group Membership	◆ Add users to a ZENworks user group ◆ Remove users from a ZENworks user group	In addition to this right, an administrator must also have the ZENworks User Group Rights - Modify ZENworks Group Membership right for the ZENworks user group whose membership is being modified. For example, to add a user to ZENUSERGROUP1, an administrator must have these two rights: ◆ Modify ZENworks Group Membership (this right) ◆ ZENworks User Group Rights - Modify ZENworks Group Membership right for ZENUSERGROUP1
Assign Bundles	◆ Assign bundles to users, user groups, and user folders ◆ Assign bundle groups to users, user groups, and user folders ◆ Remove bundle assignments from users, user groups, and user folders ◆ Remove bundle group assignments from users, user groups, and user folders	To assign bundles to users, groups, and folders, an administrator needs this right and the Bundle Rights – Assign Bundles right. In other words, the administrator needs Assign Bundles rights for the bundle and the user to which the bundle is being assigned.

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Assign Policies	◆ Assign policies to users, user groups, and user folders ◆ Assign policy groups to users, user groups, and user folders ◆ Remove policy assignments from users, user groups, and user folders ◆ Remove policy group assignments from users, user groups, and user folders	To assign policies to users, groups, and folders, an administrator needs this right and the Policy Rights – Assign Policies right and the Policy Rights - Manage Configuration Policies or Policy Rights - Manage Security Policies right. For example, to assign a Security policy to a user, an administrator must have the following three rights: ◆ Assign Policies (this right) ◆ Policy Rights - Assign Policies ◆ Policy Rights - Manage Security Policies

6.5.21 ZENworks User Group Rights

The ZENworks User Group Rights dialog box lets you control the selected administrator's rights to create, delete, or modify ZENworks user groups.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify Groups	◆ Rename a ZENworks user group ◆ Change a ZENworks user group's description	
Create/Delete Groups	◆ Create a ZENworks user group ◆ Delete a ZENworks user group	Setting the Create/Delete Groups right to Allow forces the Modify Groups right to Allow. In other words, an administrator who creates a group automatically receives rights to modify it.

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify ZENworks Group Membership	◆ Add users to a ZENworks user group ◆ Remove users from a ZENworks user group	In addition to this right, an administrator must also have the User Rights - Modify ZENworks Group Membership right for the users being added to or removed from the group. For example, to add USER1 to ZENUSERGROUP1, an administrator must have these two rights: ◆ Modify ZENworks Group Membership (this right) for ZENUSERGROUP1 ◆ User Rights - Modify ZENworks Group Membership right for USER1
Assign Bundles	◆ Assign bundles to a ZENworks user group ◆ Assign bundle groups to a ZENworks user group ◆ Remove bundle assignments from a ZENworks user group ◆ Remove bundle group assignments from a ZENworks user group	To assign bundles to a ZENworks user group, an administrator needs this right and the Bundle Rights – Assign Bundles right. In other words, the administrator needs Assign Bundles rights for the bundle and the ZENworks user group to which the bundle is being assigned.
Assign Policies	◆ Assign policies to a ZENworks user group ◆ Assign policy groups to a ZENworks user group ◆ Remove policy assignments from a ZENworks user group ◆ Remove policy group assignments from a ZENworks user group	To assign policies to a ZENworks user group, an administrator needs this right and the Policy Rights – Assign Policies right and the Policy Rights - Manage Configuration Policies or Policy Rights - Manage Security Policies right. For example, to assign a Security policy to a ZENworks user group, an administrator must have the following three rights: ◆ Assign Policies (this right) ◆ Policy Rights - Assign Policies ◆ Policy Rights - Manage Security Policies

6.5.22 Zone Rights

The Zone Rights dialog box lets you control the administrator's rights to configure settings in your ZENworks Management Zone.

The following rights are available:

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Modify User Sources	◆ Change the following settings for a user source: ◆ Username and Password ◆ Authentication Mechanisms ◆ Use SSL ◆ Root Context ◆ Description ◆ Add a user container from a source ◆ Remove a user container from a source ◆ Rename a user container ◆ Replace a user container's context with another context from the user source ◆ Add a connection to a user source ◆ Edit a connection's details (name, address, port) ◆ Remove a connection to a user source	A user source is an LDAP directory that contains users that you want to reference in your ZENworks Management Zone. User containers are the LDAP contexts in which users are located.
Create/Delete User Sources	◆ Create a user source ◆ Delete a user source	Setting the Create/Delete User Sources right to Allow forces the Modify User Sources right to Allow. In other words, an administrator who creates a user source automatically receives rights to modify it.
Modify Settings	◆ Configure Management Zone settings (Configuration > Management Zone Settings)	
Modify Zone Infrastructure	◆ Specify what content is hosted on a device (ZENworks Primary Server or Satellite) ◆ Move a device in the server hierarchy ◆ Designate a workstation as a Satellite ◆ Configure a Satellite ◆ Remove a workstation as a Satellite	

RIGHT	OPERATIONS CONTROLLED BY THE RIGHT	NOTES
Configure Registration	◆ Create a registration key ◆ Edit a registration key ◆ Delete a registration key ◆ Rename a registration key ◆ Create folders for registration keys ◆ Move a registration key from one folder to another ◆ Copy a registration key to create a new registration key ◆ Create a registration rule ◆ Edit a registration rule ◆ Delete a registration rule	
Create/Delete Local Products	◆ Create local software product definitions from device inventory ◆ Add local software product definitions into the ZENworks Knowledgebase ◆ Delete local software product definitions ◆ Delete local software product definitions	
Manage FDE PBA Override	◆ Generate response sequences for overriding the ZENworks PBA used with ZENworks Full Disk Encryption	
Delete News Alerts	◆ Delete ZENworks news alerts	
Update News Alerts	◆ Generate response sequences for overriding the ZENworks PBA used with ZENworks Full Disk Encryption	

6.5.23 Inventory Report Rights

The Inventory Report Rights panel allows you to control an administrator's rights to edit and run the standard and custom inventory reports.

Each report folder has rights associated with it, governing all the reports within that folder. For example, if you have full rights to a report folder, you can edit a report; but with view/execute rights, you can only see the report and run it. With inventory report rights, you can limit who has access to certain reports and who can edit them. The report folder type, custom or standard, and the report name are listed along with the rights associated with the folder. The choices are *Remove All Rights*, *Assign View/Execute Rights*, and *Assign Full Rights*.

Available Tasks

You can perform the following tasks:

Task	Steps	Additional Details
Remove all rights	1. Select the report folder. 2. Click *Edit* > *Remove All Rights*.	This removes all rights to the folder, so the specified administrator cannot see it.
Assign view/execute rights	1. Select the report folder. 2. Click *Edit* > *Assign View/ Execute Rights.*	This allows the specified administrator to view and execute a report in the specified folder, but not to edit, move, or delete a report in that folder.
Assign full rights	1. Select the report folder. 2. Click *Edit* > *Assign Full Rights*.	This gives the specified administrator full rights to create, edit, move, and delete reports. For standard reports, this setting is the same as *View/Execute*, because you cannot alter a standard report.

For more information on Inventory Report Rights, see "Inventory Report Rights" in the Asset Inventory Reference.

6.5.24 Asset Management Report Rights

The Asset Management Report Rights panel allows you to control an administrator's rights to edit and run the standard and custom Asset Management reports.

Each report folder has rights associated with it, governing all the reports within that folder. For example, if you have full rights, you can edit a report; but with view/execute rights, you can only see the report and run it. With asset management report rights, you can limit who has access to certain reports and who can edit them. The report folder type, custom or standard, and the report name are listed along with the rights associated with the folder. The choices are *Remove All Rights*, *Assign View/ Execute Rights*, and *Assign Full Rights*.

Available Tasks

You can perform the following tasks:

Task	Steps	Additional Details
Remove all rights	1. Select the report folder. 2. Click *Edit* > *Remove All Rights*.	This removes all rights to the folder, so the specified administrator cannot see it.
Assign view/execute rights	1. Select the report folder. 2. Click *Edit* > *Assign View/ Execute Rights.*	This allows the specified administrator to view and execute a report in the specified folder, but not to edit, move, or delete a report in that folder.

Task	Steps	Additional Details
Assign full rights	1. Select the report folder. 2. Click *Edit* > *Assign Full Rights*.	This gives the specified administrator full rights to create, edit, move, and delete reports. For standard reports, this setting is the same as *View/Execute*, because you cannot alter a standard report.

For information on Configuring Asset Management Report Rights, see“Configuring Report Rights”in the Asset Management Reference.

6.6 Managing Administrator Roles

Perform the following tasks to manage administrator roles in the Management Zone:

- Section 6.6.1, “Understanding Administrator Roles,” on page 63
- Section 6.6.2, “Creating a Role,” on page 67
- Section 6.6.3, “Assigning Roles,” on page 68
- Section 6.6.4, “Editing a Role,” on page 72
- Section 6.6.5, “Renaming a Role,” on page 75
- Section 6.6.6, “Deleting a Role,” on page 75

6.6.1 Understanding Administrator Roles

The roles feature allows Super Administrator to specify rights that can be assigned as roles for ZENworks administrators. You can create a specialized role, then assign administrators to that role to allow or deny them the ZENworks Control Center rights that you specify for that role. For example, you could create a Help Desk role with the ZENworks Control Center rights that you want help desk operators to have.

You must be logged-in either as a Super Administrator or as an Administrator with grant rights to create and manage the roles.

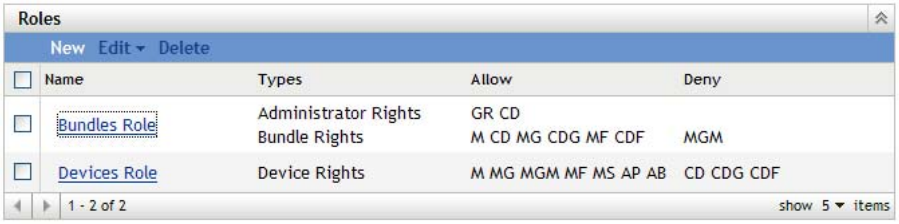
The following sections explain the different locations in ZENworks Control Center where you can manage roles:

- “Roles Panel” on page 64
- “Role Settings Page” on page 65
- “Administrator or Administrator Groups Settings Page” on page 66

Roles Panel

The Roles panel displays the following information:

Figure 6-1 *Roles Panel*



Roles

New Edit ▾ Delete

□ Name	Types	Allow	Deny
□ Bundles Role	Administrator Rights Bundle Rights	GR CD M CD MG CDG MF CDF	 MGM
□ Devices Role	Device Rights	M MG MGM MF MS AP AB	CD CDG CDF

1 - 2 of 2 show 5 ▾ items

- **Name:** You specified this when you created the role. You can rename the role here. You can also click a role name to edit its rights configuration.
- **Types:** Lists each ZENworks Control Center rights type that is configured for the role.
- **Allow:** For each type listed, abbreviations are displayed to indicate the rights that are allowed for that role.
- **Deny:** For each type listed, abbreviations are displayed to indicate the rights that are denied for that role.

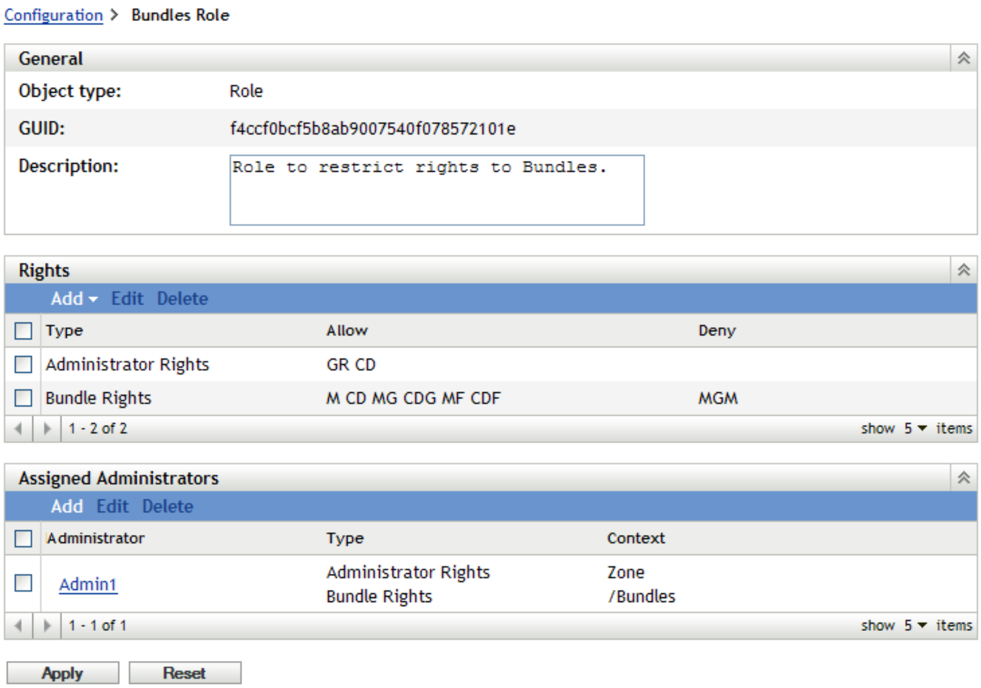
If a right is configured as *Unset*, its abbreviation is not listed in either the *Allow* or *Deny* column.

In the Roles panel, you can add, assign, edit, rename, and delete a role.

Role Settings Page

If you click a role in the *Name* column on the Roles panel, the Role Settings page is displayed with the following information:

Figure 6-2 *Role Settings Page*



Configuration > Bundles Role

General

Object type:	Role
GUID:	f4ccf0bcf5b8ab9007540f078572101e
Description:	Role to restrict rights to Bundles.

Rights

□	Type	Allow	Deny
□	Administrator Rights	GR CD	
□	Bundle Rights	M CD MG CDG MF CDF	MGM

1 - 2 of 2 show 5 items

Assigned Administrators

□	Administrator	Type	Context
□	Admin1	Administrator Rights Bundle Rights	Zone /Bundles

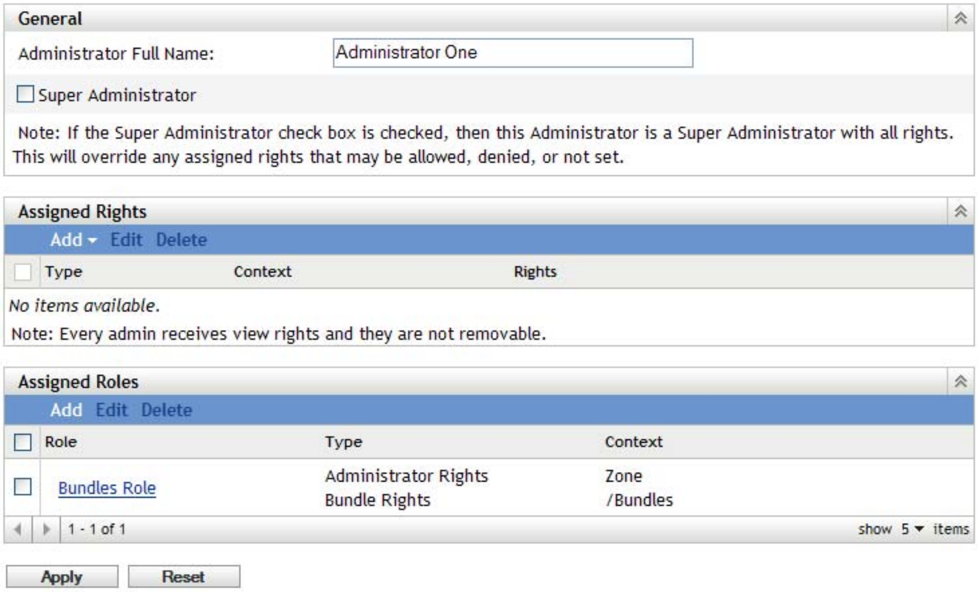
1 - 1 of 1 show 5 items

- **General panel:** Displays the ZENworks Control Center object type (Role), its GUID, and a description that you can edit here.
- **Rights panel:** Displays the ZENworks Control Center rights configured for the role. You can add, edit, and delete the rights in this panel.
- **Assigned Administrators panel:** Lists the administrators and administrator groups assigned to this role. You can add, edit, or delete the administrators in this panel.

Administrator or Administrator Groups Settings Page

If you click an administrator in the *Administrator* column on the Roles Settings page and then click the *Rights* tab, the Administrator Settings page is displayed with the following information:

Figure 6-3 *Administrator Settings Page*



General

Administrator Full Name: Administrator One

□ Super Administrator

Note: If the Super Administrator check box is checked, then this Administrator is a Super Administrator with all rights. This will override any assigned rights that may be allowed, denied, or not set.

Assigned Rights

□	Type	Context	Rights

No items available.

Note: Every admin receives view rights and they are not removable.

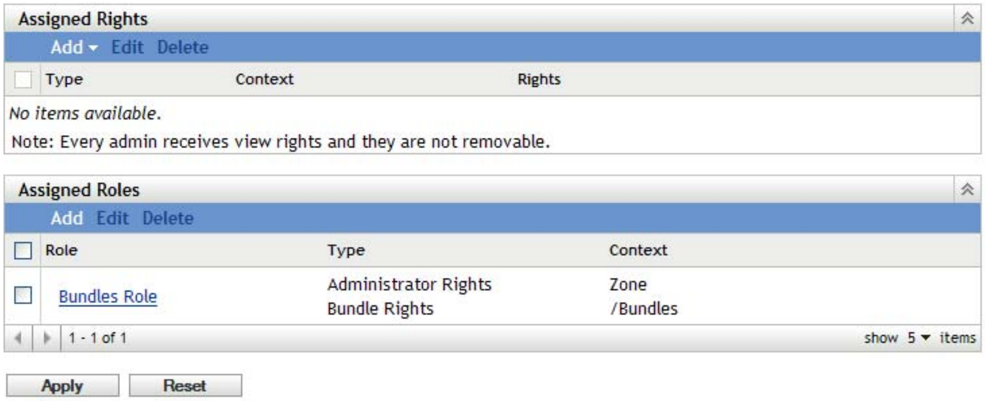
Assigned Roles

□	Role	Type	Context
□	Bundles Role	Administrator Rights Bundle Rights	Zone /Bundles

1 - 1 of 1 show 5 items

If you click an administrator group in the *Administrator* column on the Roles Settings page and then click the *Rights* tab, the Administrator Settings page is displayed with the following information:

Figure 6-4 *Administrator Groups Settings Page*



Assigned Rights

□	Type	Context	Rights

No items available.

Note: Every admin receives view rights and they are not removable.

Assigned Roles

□	Role	Type	Context
□	Bundles Role	Administrator Rights Bundle Rights	Zone /Bundles

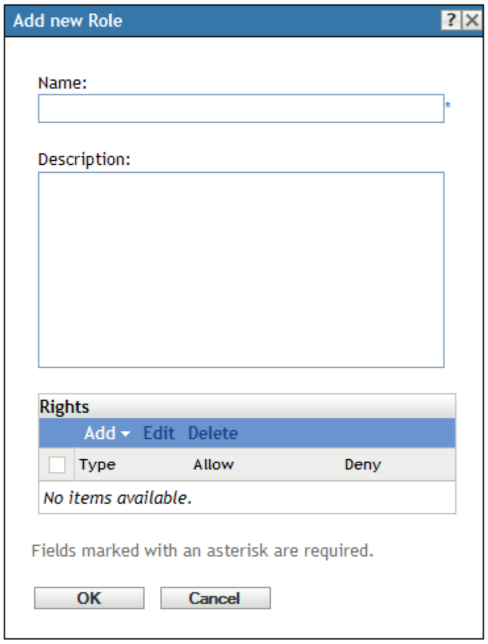
1 - 1 of 1 show 5 items

- **General panel:** This panel is not displayed for an administrator group. Displays the administrator’s full name and provides the option to specify the administrator as a Super Administrator, which grants all ZENworks Control Center rights to that administrator, regardless of what is configured for the role.
- **Assigned Rights panel:** Lists the rights that are assigned to the administrator, independent of rights granted or denied by any roles assigned to the administrator. The rights listed in this panel override any rights assigned by a role. You can add, edit, and delete rights in this panel.
- **Assigned Roles panel:** Lists the roles assigned to this administrator. You can add, edit, and delete roles in this panel.

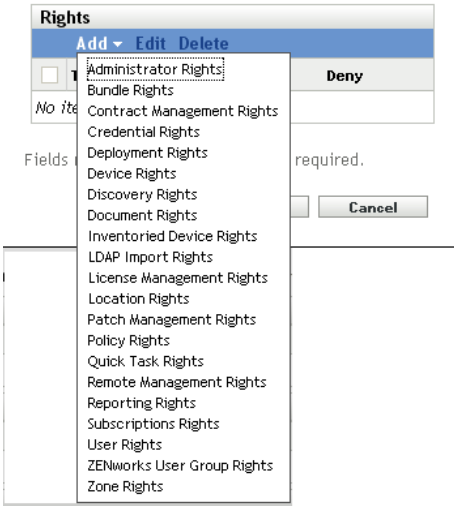
6.6.2 Creating a Role

A role can include one or more rights types. You can configure as many roles as you need. To configure the role's function:

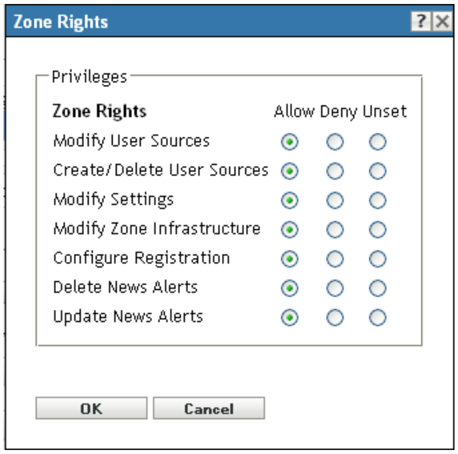
1. In ZENworks Control Center, click *Configuration* in the left pane.
2. In the Roles panel, click *New* to open the Add New Role dialog box:



3. Specify a name and description for the role.
4. To configure the rights for the role, click *Add* and select a rights type from the drop-down list:



5. In the following dialog box, select whether each privilege should be allowed, denied, or left unset.



Zone Rights	Allow	Deny	Unset
Modify User Sources	●	○	○
Create/Delete User Sources	●	○	○
Modify Settings	●	○	○
Modify Zone Infrastructure	●	○	○
Configure Registration	●	○	○
Delete News Alerts	●	○	○
Update News Alerts	●	○	○

The most restrictive right set in ZENworks prevails. If you select the *Deny* option, the right is denied for any administrator assigned to that role, even if the administrator is granted that right elsewhere in ZENworks.

If you select the *Allow* option and the right has not been denied elsewhere in ZENworks, the administrator has that right for the role.

If you select the *Unset* option, the administrator is not granted the right for the role unless it is granted elsewhere in ZENworks.

6 Click *OK* to continue.

7 To add another rights type to the role, repeat Step 4 through Step 6.

8 Click *OK* to exit the Add New Role dialog box.

The role is now displayed in the Roles panel. To assign it to administrators, see Section 6.6.3, "Assigning Roles," on page 68.

6.6.3 Assigning Roles

You can assign roles to administrators, or administrators to roles:

- "Assigning Roles to Administrators" on page 68
- "Assigning Administrators to Roles" on page 70

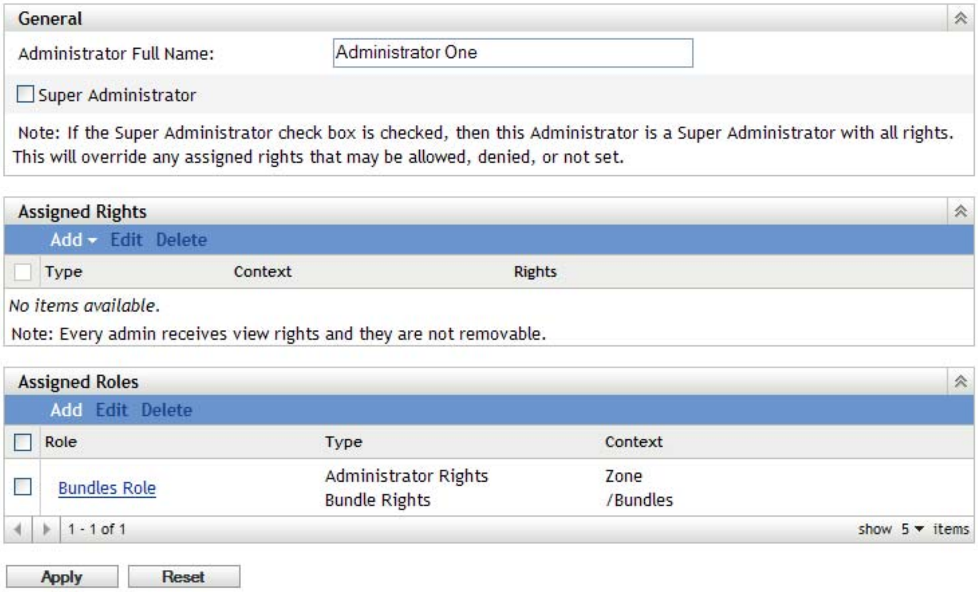
Assigning Roles to Administrators

Rights can be set in multiple locations in ZENworks Control Center, including for administrators. Administrators can be assigned to multiple roles.

If an administrator has rights conflicts because different conditions are set for a particular right in ZENworks Control Center, the *Deny* option is used if it is set anywhere for the administrator. In other words, *Deny* always supersedes *Allow* when there are rights conflicts.

To assign roles to an administrator:

1 In ZENworks Control Center, click *Configuration* in the left pane, click the *Configuration* tab, then in the Administrators panel, click an administrator name or an administrator group name in the *Name* column and then click the *Rights* tab to open the administrator's settings page:


General

Administrator Full Name: Administrator One

□ Super Administrator

Note: If the Super Administrator check box is checked, then this Administrator is a Super Administrator with all rights. This will override any assigned rights that may be allowed, denied, or not set.

Assigned Rights

□	Type	Context	Rights

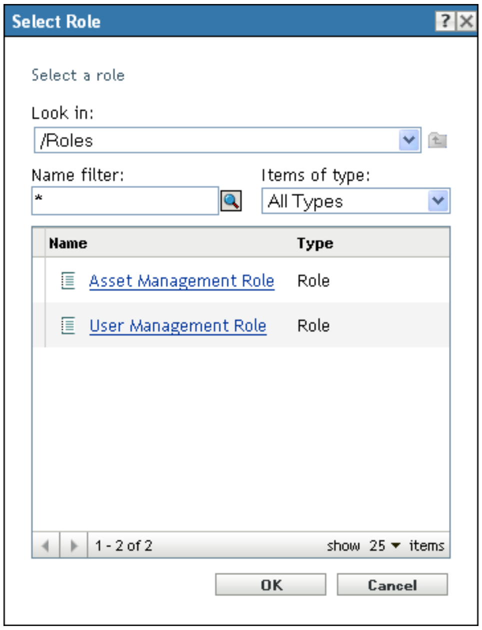
No items available.

Note: Every admin receives view rights and they are not removable.

Assigned Roles

□	Role	Type	Context
□	Bundles Role	Administrator Rights Bundle Rights	Zone /Bundles

2 In the Assigned Roles panel, click *Add* to display the Select Role dialog box.


Select Role

Select a role

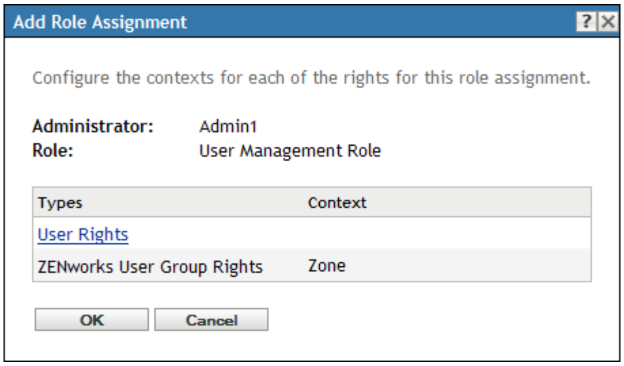
Look in: /Roles

Name filter: *

Items of type: All Types

Name	Type
Asset Management Role	Role
User Management Role	Role

3. Browse for and select the roles for the administrator, then click *OK* to display the Add Role Assignment dialog box:



Configure the contexts for each of the rights for this role assignment.

Administrator: Admin1
Role: User Management Role

Types	Context
User Rights	
ZENworks User Group Rights	Zone

The Add Role Assignment dialog box is displayed so that you can define the contexts for the role types included in the role. A context allows you to limit where granted rights can be used. For example, you can specify that the administrator's Quick Task Rights role is limited to the Devices folder in ZENworks Control Center.

Contexts are not required. However, if you do not specify a context, the right is not granted because it has no information about where it can be applied.

Rights that are global automatically display `Zone` as the context.

4. If necessary, assign contexts to role types where they are missing:

   4a In the *Types* column, click a role type.

   Role types that are designated with the Zone context are not clickable because they are generally available.

   4b In the subsequent Select Context dialog box, click *Add* and browse for a ZENworks Control Center context.

   While browsing, you can select multiple contexts in the Browse dialog box.

   4c When you are finished selecting the contexts for a particular role, click *OK* to close the Select Contexts dialog box.

   4d Repeat Step 4a through Step 4c as necessary to assign contexts to the roles.

   4e When you are finished, click *OK* to close the Add Role Assignment dialog box.

5. To add another administrator, repeat Step 2 and Step 4.

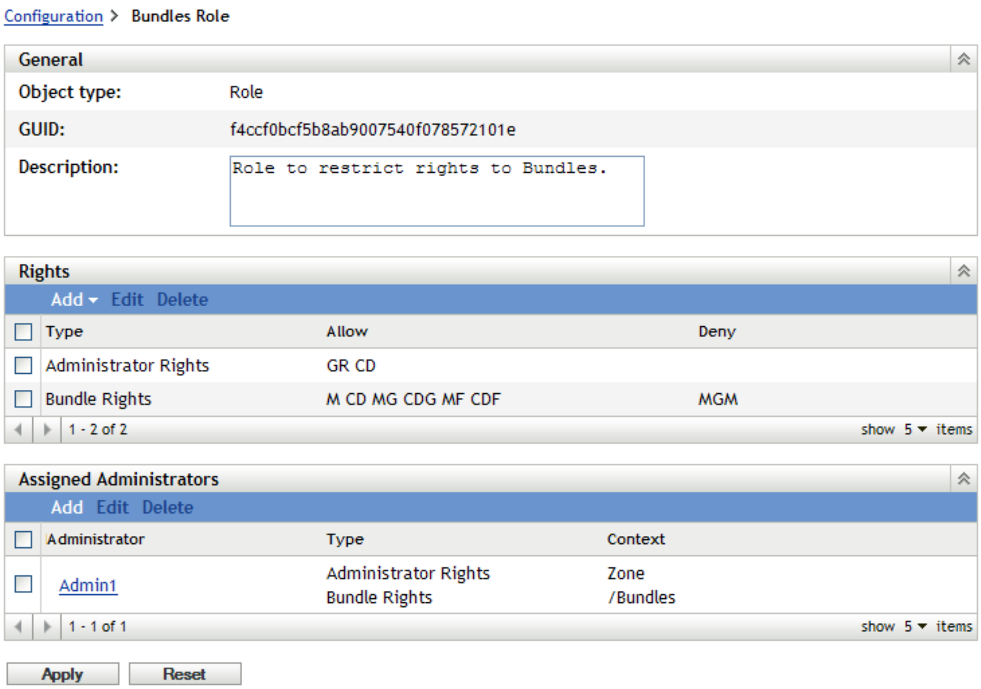
6. Click *Apply* to save the changes.

Assigning Administrators to Roles

Rights can be set in multiple locations in ZENworks Control Center. Administrators can be assigned to multiple roles.

If an administrator has rights conflicts because different conditions are set for a particular right in ZENworks Control Center, the *Deny* option is used if it is set anywhere for the administrator. In other words, *Deny* always supersedes *Allow* when there are rights conflicts.

1. In ZENworks Control Center, click *Configuration* in the left pane, click the *Configuration* tab, then in the Roles panel, click a role name in the *Name* column to open the role's settings page:



Configuration > Bundles Role

General

Object type:	Role
GUID:	f4ccf0bcf5b8ab9007540f078572101e
Description:	Role to restrict rights to Bundles.

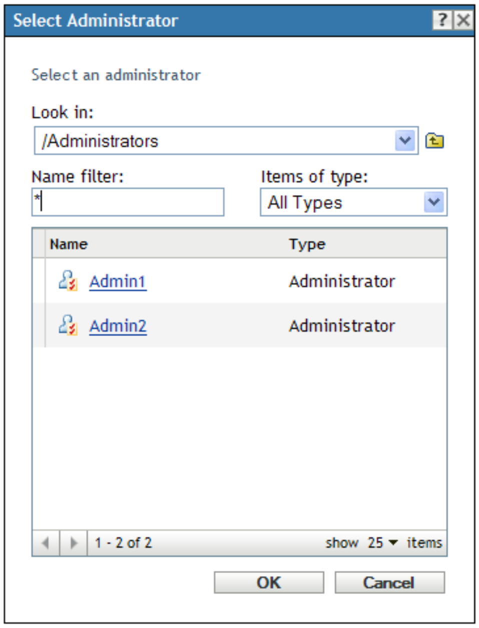
Rights

□	Type	Allow	Deny
□	Administrator Rights	GR CD	
□	Bundle Rights	M CD MG CDG MF CDF	MGM

Assigned Administrators

□	Administrator	Type	Context
□	Admin1	Administrator Rights Bundle Rights	Zone /Bundles

2 In the Assigned Administrators panel, click *Add* to display the Select Administrator dialog box:



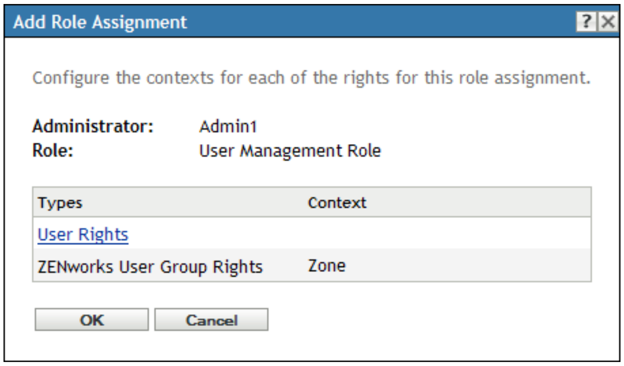
Look in: /Administrators

Name filter: *

Items of type: All Types

Name	Type
Admin1	Administrator
Admin2	Administrator

3 Browse for and select the administrators or administrator groups for the role, then click *OK* to display the Add Role Assignment dialog box:



Configure the contexts for each of the rights for this role assignment.

Administrator: Admin1
Role: User Management Role

Types	Context
User Rights	
ZENworks User Group Rights	Zone

The Add Role Assignment dialog box is displayed so that you can define the contexts for the role types included in the role. A context allows you to limit where granted rights can be used. For example, you can specify that the administrator's Quick Task Rights role is limited to the Devices folder in ZENworks Control Center.

Contexts are not required. However, if you do not specify a context, the right is not granted because it has no information about where it can be applied.

Rights that are global automatically display `Zone` as the context.

4 If necessary, assign contexts to role types where they are missing:

4a In the *Types* column, click a role type.

Role types that are designated with the Zone context are not clickable because they are generally available.

4b In the subsequent Select Context dialog box, click *Add* and browse for a ZENworks Control Center context.

While browsing, you can select multiple contexts in the Browse dialog box.

4c When you are finished selecting the contexts for a particular role, click *OK* to close the Select Contexts dialog box.

4d Repeat Step 4a through Step 4c as necessary to assign contexts to the roles.

4e When you are finished, click *OK* to close the Add Role Assignment dialog box.

5 To add another role, repeat Step 2 and Step 4.

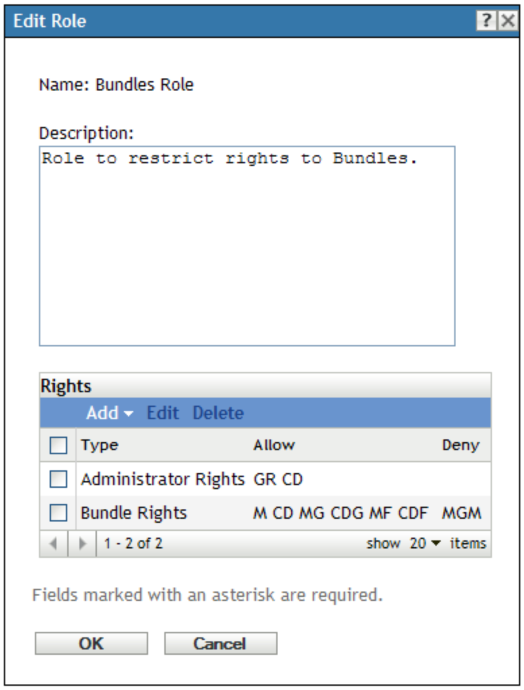
6 Click *Apply* to save the changes.

6.6.4 Editing a Role

You can edit a role's configuration at any time. After you apply the edited role, its changes are then effective for any assigned administrator.

1 In ZENworks Control Center, click *Configuration* in the left pane.

2 In the Roles panel, select the check box for the role to be edited and click *Edit* to open the Edit Role dialog box:



Edit Role

Name: Bundles Role

Description:

```
Role to restrict rights to Bundles.
```

Rights

□	Type	Allow	Deny
□	Administrator Rights	GR CD	
□	Bundle Rights	M CD MG CDG MF CDF	MGM

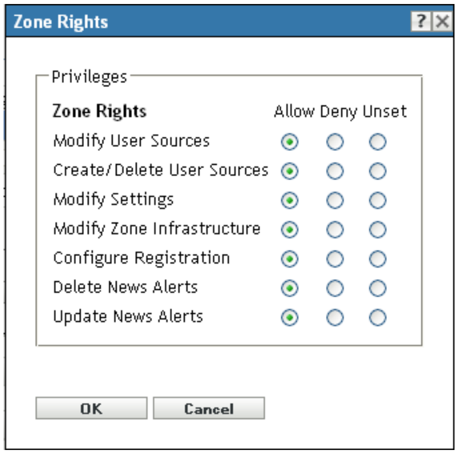
Fields marked with an asterisk are required.

3 To edit the description, make the changes directly in the *Description* field.

4 To edit existing rights, do the following:

4a In the Rights panel, select the check box for a rights type, then click *Edit* to open the Rights dialog box.

For example, select Zone Rights to display the following dialog box:



Zone Rights

Privileges

Zone Rights	Allow	Deny	Unset
Modify User Sources	●	○	○
Create/Delete User Sources	●	○	○
Modify Settings	●	○	○
Modify Zone Infrastructure	●	○	○
Configure Registration	●	○	○
Delete News Alerts	●	○	○
Update News Alerts	●	○	○

4b For each privilege, select whether it should be allowed, denied, or left unset.

The most restrictive right set in ZENworks prevails. If you select the *Deny* option, the right is denied for any administrator assigned to that role, even if the administrator is granted that right elsewhere in ZENworks.

If you select the *Allow* option and the right has not been denied elsewhere in ZENworks, the administrator has that right for the role.

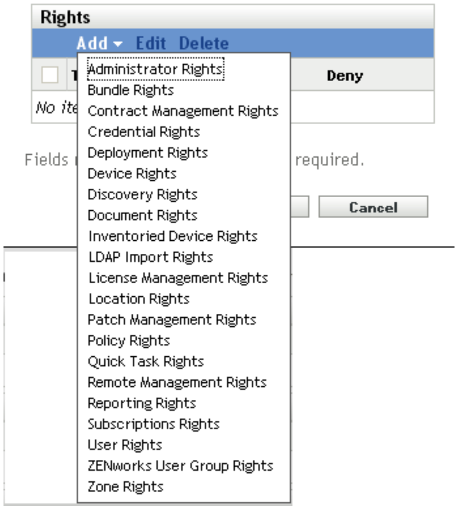
If you select the *Unset* option, the administrator is not granted the right for the role unless it is granted elsewhere in ZENworks.

4c Click *OK* to continue.

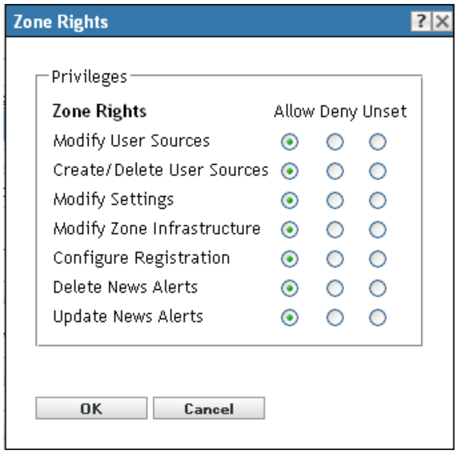
4d To edit another existing role, repeat Step 4a through Step 4c.

5 (Optional) To add new rights:

5a In the Rights panel, click *Add*, then select one of the rights types from the drop-down list:



5b In the Rights dialog box, select whether each privilege should be allowed, denied, or left unset.



Zone Rights	Allow	Deny	Unset
Modify User Sources	●	○	○
Create/Delete User Sources	●	○	○
Modify Settings	●	○	○
Modify Zone Infrastructure	●	○	○
Configure Registration	●	○	○
Delete News Alerts	●	○	○
Update News Alerts	●	○	○

The most restrictive right set in ZENworks prevails. If you select the *Deny* option, the right is denied for any administrator assigned to that role, even if the administrator is granted that right elsewhere in ZENworks.

If you select the *Allow* option and the right has not been denied elsewhere in ZENworks, the administrator has that right for the role.

If you select the *Unset* option, the administrator is not granted the right for the role unless it is granted elsewhere in ZENworks.

5c Click *OK* to continue.

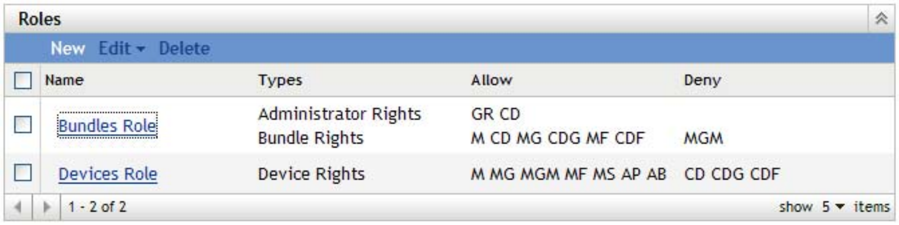
5d To add another rights type to the role, repeat Step 5a through Step 5c.

6 To exit the dialog box and save your changes to the role, click *OK*.

6.6.5 Renaming a Role

Role names can be changed at any time. The changed role name is automatically replicated wherever it is displayed in ZENworks Control Center.

1 In ZENworks Control Center, click *Configuration* in the left pane.



Roles

New Edit ▾ Delete

□	Name	Types	Allow	Deny
□	Bundles Role	Administrator Rights Bundle Rights	GR CD M CD MG CDG MF CDF	 MGM
□	Devices Role	Device Rights	M MG MGM MF MS AP AB	CD CDG CDF

1 - 2 of 2 show 5 ▾ items

2 In the Roles panel, select the check box for the role to be renamed.

3 Click *Edit* > *Rename* to open the Rename Role dialog box:

4 Specify the new role name, then click *OK*.

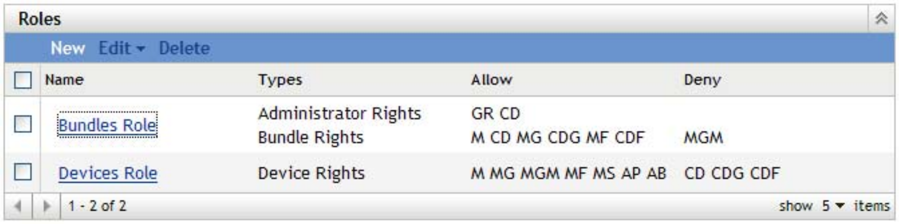
6.6.6 Deleting a Role

When you delete a role, its rights configurations are no longer applicable to any administrator that was assigned to the role.

Deleted roles cannot be recovered. You must re-create them.

1 In ZENworks Control Center, click *Configuration* in the left pane.

2 In the Roles panel, select the check box for the role to be deleted.



Roles

New Edit ▾ Delete

□	Name	Types	Allow	Deny
□	Bundles Role	Administrator Rights Bundle Rights	GR CD M CD MG CDG MF CDF	 MGM
□	Devices Role	Device Rights	M MG MGM MF MS AP AB	CD CDG CDF

1 - 2 of 2 show 5 ▾ items

3 Click *Delete*, then confirm that you want to delete the role.

7 Organizing Devices into 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 "Creating Registration Keys and Rules" in the *ZENworks 11 Discovery, Deployment, and Retirement Reference*).

- Section 7.1, "Folders," on page 77
- Section 7.2, "Groups," on page 79
- Section 7.3, "Assignment Inheritance for Folders and Groups," on page 82

7.1 Folders

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

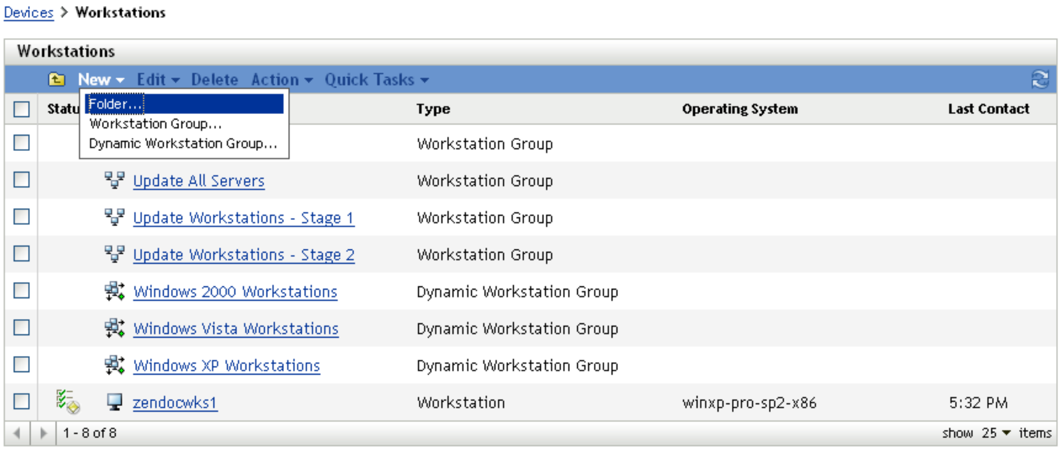
For best results, you should place devices with similar configuration setting requirements in the same folder. If all devices in the folder require the same content or tasks, you can also make content or task assignments on the folder. However, all devices in the folder might not have the same content and task requirements. Therefore, you can organize the devices into groups and assign the appropriate content and tasks to each groups (see "Groups" on page 79 below).

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.



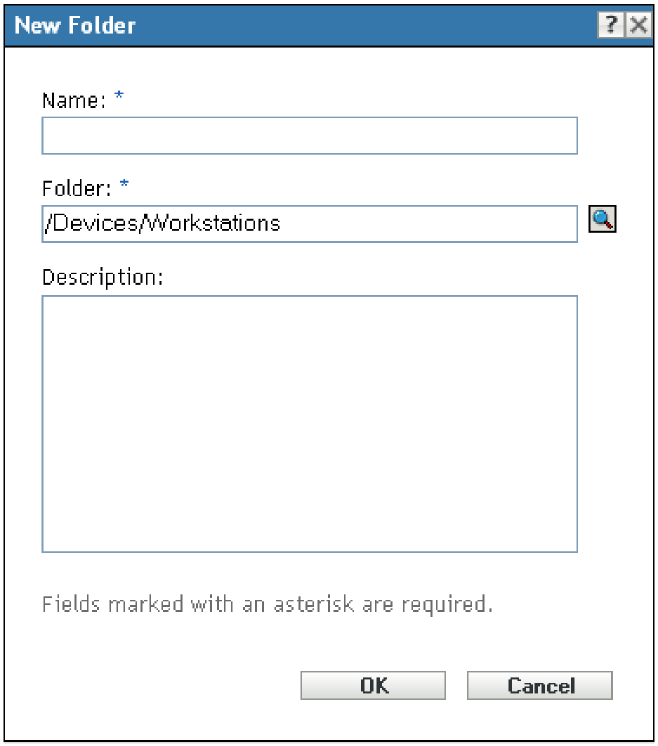
Devices > Workstations

Workstations

□	Statu		Type	Operating System	Last Contact
□			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* > *Folder* to display the New Folder dialog box.



New Folder

Name: *

Folder: * /Devices/Workstations

Description:

Fields marked with an asterisk are required.

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

When you name an object in the ZENworks Control Center (folders, groups, bundles, policies, 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 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 11 Command Line Utilities Reference*.

7.2 Groups

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

Groups provide an additional layer of flexibility for content assignments and tasks. In some cases, you might not want to assign the same content to and perform the same task on all devices in a folder. Or, you might want to assign the same content to and 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 assign the content to and perform the tasks on the group.

For example, let's revisit the example of the workstations at three different sites (see Section 7.1, "Folders," on page 77). Assume that some of the workstations at each site need the same accounting software. Because groups can be assigned software, you could create an Accounting group, add the target workstations to the group, and then assign the appropriate accounting software to the group. Likewise, you could use the groups to assign Windows configuration and security policies.

The advantage to making an assignment to a group is that all devices contained in that group receive the assignment, but you only need to make the assignment one time. In addition, a device can belong to any number of unique groups, and the assignments from multiple groups are additive. For example, if you assign a device to group A and B, it inherits the software assigned to both groups.

ZENworks provides both groups and dynamic groups. From the perspective of content assignments or 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 includes several predefined dynamic server groups for example, Windows 2000 Servers Windows 2003 Servers and SUSE Linux Enterprise Server.

ZENworks also includes dynamic workstation groups for example, Windows XP Workstation, Windows 2000 Workstation, Windows Vista Workstations and SUSE Linux Enterprise Desktop. Devices that have these operating systems are automatically added to the appropriate dynamic group.

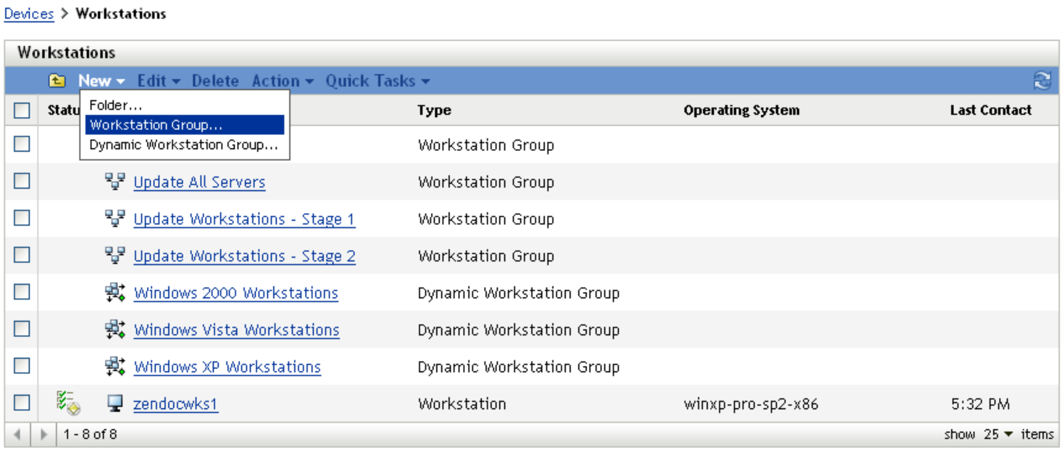
Creating a Group

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

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

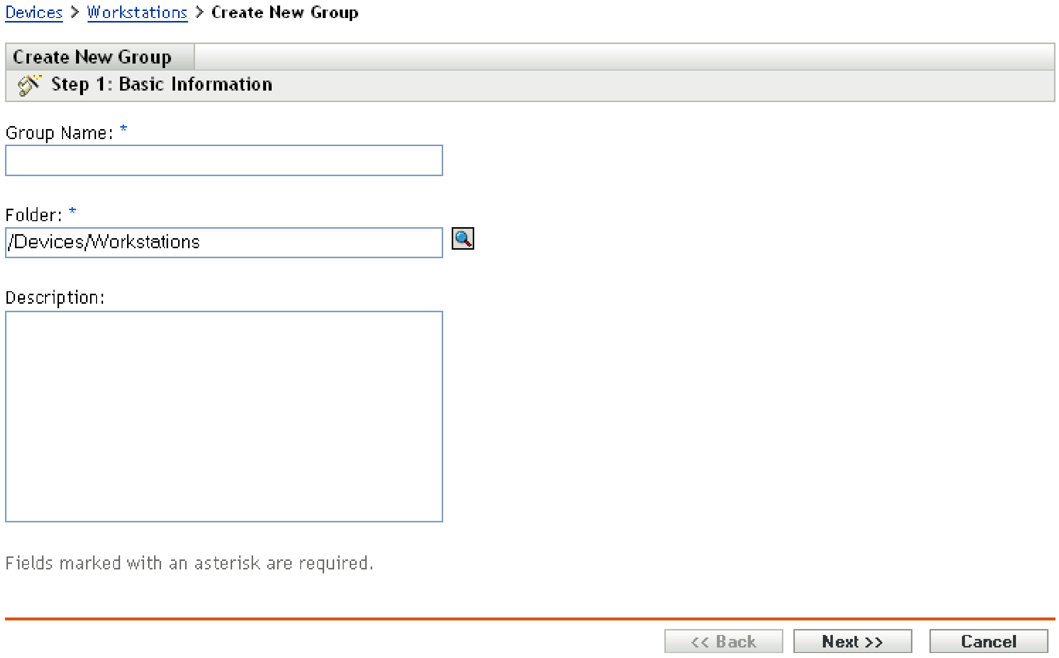
or

If you want to create a group for workstations, click the *Workstations* folder.



☐	Statu		Type	Operating System	Last Contact
☐			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

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
<< Back
Next >>
Cancel

Group Name: *

Folder: * /Devices/Workstations

Description:

Fields marked with an asterisk are required.

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 11 Command Line Utilities Reference*.

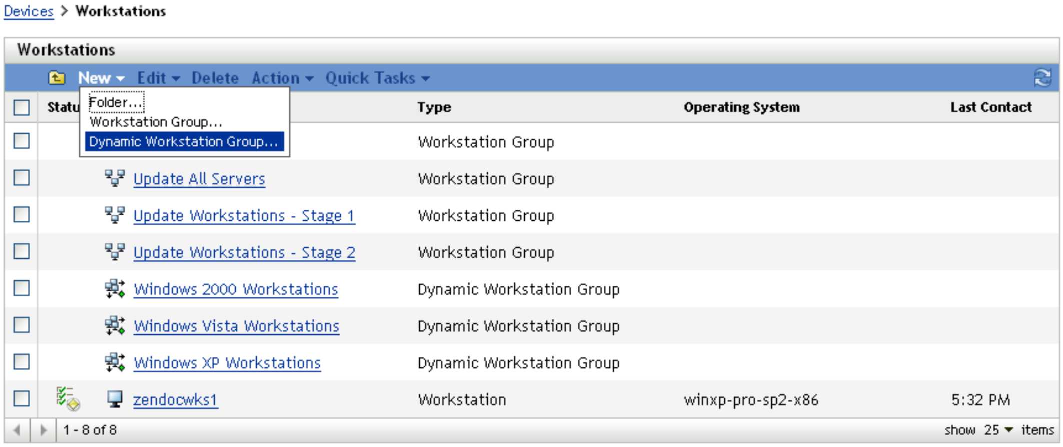
Creating a Dynamic Group

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.



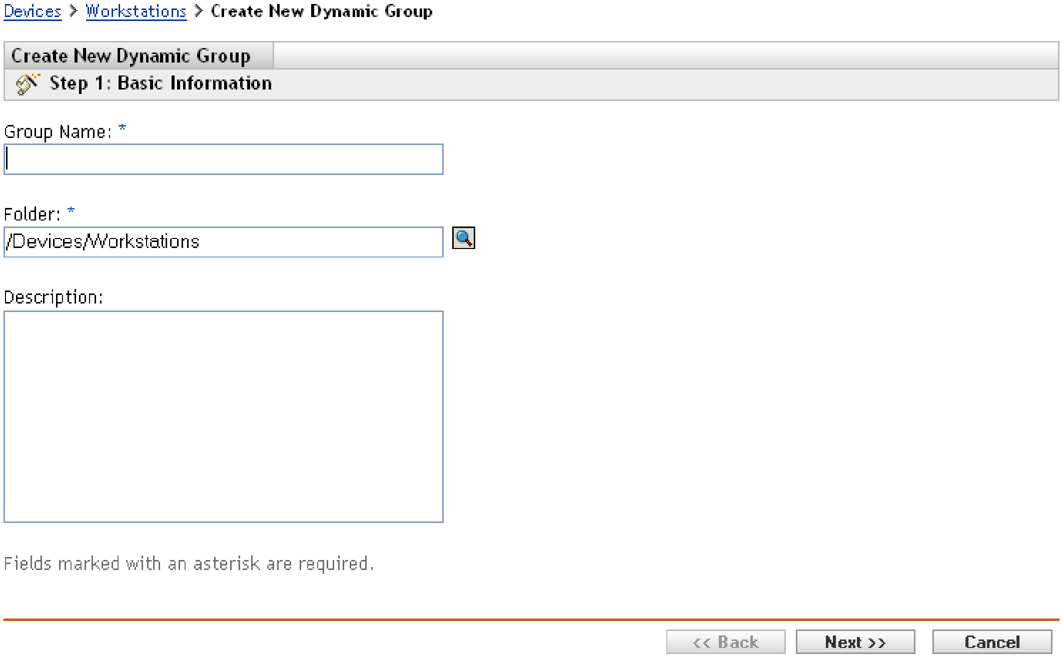
Devices > Workstations

Workstations

□	Statu		Type	Operating System	Last Contact
□			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.



Devices > Workstations > Create New Dynamic Group

Create New Dynamic Group

Step 1: Basic Information

Group Name: *

Folder: * /Devices/Workstations

Description:

Fields marked with an asterisk are required.

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.

7.3 Assignment Inheritance for Folders and Groups

This section is applicable only for ZENworks Configuration Management. When you assign content to a folder, all objects (users, devices, subfolders) except groups that are located in the folder inherit the assignment. For example, if you assign BundleA and PolicyB to DeviceFolder1, all devices within the folder (including all devices in subfolders) inherit the two assignments. However, none of the device groups located in DeviceFolder1 inherit the assignments. Essentially, folder assignments do not flow down to groups located within the folder.

8 Using Message Logging

The Message Logger component of Novell ZENworks 11 lets the other ZENworks components such as zenloader, web services, ZENworks Management Daemon (ZMD), Remote Management, and Policy Enforcers log messages to different output targets. The output targets includes the system log, local log, database, SMTP, SNMP trap, and UDP.

The following sections provide additional information on the Message Logger component:

- Section 8.1, "Functionalities of Message Logger," on page 83
- Section 8.2, "Message Severity," on page 83
- Section 8.3, "Message Format," on page 84
- Section 8.4, "Configuring Message Logger Settings," on page 84
- Section 8.5, "Managing Messages," on page 88

8.1 Functionalities of Message Logger

Message Logger performs the following functions:

- Writes messages to local log files.
- Writes messages to a system log or event log.
- Writes messages to the Management console.
- Sends messages to the Management server.
- Sends messages as SMTP mail to SMTP servers from the Primary Server.
- Sends messages as SNMP traps to remote or local machines from the Primary Server.
- Sends messages as UDP packets to UDP destinations.
- Writes messages to the ZENworks database.
- Automatically purges database entries from the ZENworks database.
- Automatically acknowledges the messages in the ZENworks database.

8.2 Message Severity

A message is an event that is generated by different components and modules. These events can be exceptions such as errors, warnings, information to a user, or a debug statement to debug a module.

Messages are classified based on the following severity levels:

Error: Indicates that an action cannot be completed because of a user or system error. These messages are critical and require immediate attention from an administrator.

Warning: Indicates an exception condition. These messages might not be an error but can cause problems if not resolved. These messages do not require immediate attention from an administrator.

Information: Provides feedback about something that happened in the product or system that is important and informative for an administrator.

Debug: Provides debug information to troubleshoot and solve problems that might occur. The debug messages are stored only in the local file.

8.3 Message Format

Messages are logged in different formats depending on the output targets. For more information on message formats see, Section 8.5.1, "Understanding Message Formats," on page 89.

8.4 Configuring Message Logger Settings

The following sections provide information on configuring the settings of the Message Logger component of Novell ZENworks 11.

- Section 8.4.1, "Configuring the Message Logger Settings at the Zone Level," on page 84
- Section 8.4.2, "Configuring the Message Logger Settings at the Folder Level," on page 87
- Section 8.4.3, "Configuring the Message Logger Settings at the Device Level," on page 88
- Section 8.4.4, "Turning on the Debug Messages," on page 88

8.4.1 Configuring the Message Logger Settings at the Zone Level

The following sections contain information to help you configure the settings in the Management Zone to enable message logging:

- "Local Device Logging" on page 84
- "Centralized Message Logging" on page 85

Local Device Logging

In ZENworks Control Center, the Local Device Logging page lets you configure the message logging to a local drive and the system log file of the managed device.

1. In ZENworks Control Center, click *Configuration*.
2. In the Management Zone Settings panel, click *Device Management*, then click *Local Device Logging*.
3. Configure the following options in the Local File panel:

   Log Message to a Local File if Severity Is: Choose from one of the following:

   - **Error:** Stores messages with a severity of Error.
   - **Warning and Above:** Stores messages with a severity of Warning and Error.
   - **Information and Above:** Stores messages with a severity of Information, Warning, and Error.
   - **Debug and Above:** Stores messages with a severity of Debug, Information, Warning, and Error.

   If you need to troubleshoot a ZENworks Adaptive Agent issue on an individual device, you can change the severity setting so that additional information is logged. On the device, double-click the icon in the notification area, click *Logging* in the left navigation pane, then select an option from the *Log Messages if Severity Is* drop-down list.

Rolling Based on Size: Closes the current log file and starts a new file based on the file size:

- **Limit File Size to:** Specify the maximum size of the log file, in either kilobytes (KB) or megabytes (MB). The log file is closed after the size of the file reaches the specified limit and a new file is started.
- **Number of Backup Files:** Specify the number of closed files to be backed up. The maximum number of backup files is 13.

Rolling Based on Date: Closes the current log file and starts a new file based on the following schedules:

- **Daily Pattern:** Starts a new file daily.
- **Monthly Pattern:** Starts a new file monthly.

On a Windows managed device, the local files include the following:

- `zmd-messages.log` located in `\novell\zenworks\logs\localstore`
- `loader-messages.log` located in `\novell\zenworks\logs`
- `services-messages.log` located in `\novell\zenworks\logs`

On a Linux managed device, the local files include the following:

- `loader-messages.log` located in `/var/opt/novell/log/zenworks`
- `services-messages.log` located in `/var/opt/novell/log/zenworks`

4 Configure the following options in the System Log panel.

Send Message to Local System Log and Roll Up to Collection Server if Severity Is: Allows you to select the severity of the message to be sent to the local system log and rolled up to the Collection Server. Choose from one of the following:

- **Error:** Stores messages with severity of Error.
- **Warning and Above:** Stores messages with a severity of Warning and Error.
- **Information and Above:** Stores messages with a severity of Information, Warning, and Error.

This setting lets you determine the message types that are added to the local system log. The local system log is the `\var\log\messages` directory on Linux devices and the `zenworks/logs/centralstore` directory on Windows devices.

Messages added to this system log directory are sent to the ZENworks Server for viewing in ZENworks Control Center on the *Configuration* > *System Information* page or by viewing the Summary page for the server or workstation.

Centralized Message Logging

In ZENworks Control Center, the Centralized Message Logging page lets you configure the settings related to message logging performed by the Primary Server.

1 In ZENworks Control Center, click *Configuration*.

2 In the Management Zone Settings panel, click *Event and Messaging*, then click *Centralized Message Logging*.

3 In the Automatic Message Cleanup panel, configure the settings to automatically acknowledge or remove the logged messages from the ZENworks server:

Preferred Maintenance Server: Specify the IP address of the preferred server on which the Message Cleanup actions runs to acknowledge or delete the logged messages from database.

Information: Allows you to configure the following settings for the informational messages:

- **Auto acknowledge when older than [ ] days:** Allows you to automatically acknowledge the logged informational messages that are older than the number of days you specify. For example, if you specify 30 days, then all the informational messages logged before 30 days from the current date are acknowledged when the Message Cleanup activity is scheduled to run. If you specify zero, then the informational messages dated until today are acknowledged. By default, all the informational messages older than 60 days are automatically acknowledged.
- **Auto delete when older than [ ] days:** Allows you to automatically delete the logged informational messages that are older than the number of days you specify. For example, if you specify 30 days, then all the informational messages logged before 30 days from the current date are deleted when the Message Cleanup activity is scheduled to run. If you specify zero, then the informational messages dated until today are deleted. By default, all the informational messages older than 60 days are automatically deleted.

If you want to specify both the auto-acknowledge and auto-delete days, then the number of auto-acknowledge days should always be less than the number for auto-delete days.

Warnings: Allows you to configure the following settings for the warning messages:

- **Auto acknowledge when older than [ ] days:** Allows you to automatically acknowledge the logged warning messages that are older than the number of days you specify. For example, if you specify 30 days, then all the warning messages logged before 30 days from the current date are acknowledged when the Message Cleanup activity is scheduled to run. If you specify zero, then the warning messages dated until today are acknowledged. By default, all the warning messages older than 60 days are automatically acknowledged.
- **Auto delete when older than [ ] days:** Allows you to automatically delete the logged warning messages that are older than the number of days you specify. For example, if you specify 30 days, then all the warning messages logged before 30 days from the current date are deleted when the Message Cleanup activity is scheduled to run. If you specify zero, then the warning messages dated until today are deleted. By default, all the warning messages older than 60 days are automatically deleted.

If you want to specify both the auto-acknowledge and auto-delete days, then the number of auto-acknowledge days should always be less than the number for auto-delete days.

Errors: Allows you to configure the following settings for the error messages:

- **Auto acknowledge when older than [ ] days:** Allows you to automatically acknowledge the logged error messages that are older than the number of days you specify. For example, if you specify 30 days, then all the error messages logged before 30 days from the current date are acknowledged when the Message Cleanup activity is scheduled to run. If you specify zero, then the error messages dated until today are acknowledged. By default, all the error messages older than 60 days are automatically acknowledged.
- **Auto delete when older than [ ] days:** Allows you to automatically delete the logged error messages that are older than the number of days you specify. For example, if you specify 30 days, then all the error messages logged before 30 days from the current date are deleted when the Message Cleanup activity is scheduled to run. If you specify zero, then error messages dated until today are deleted. By default, all the error messages older than 60 days are automatically deleted.

If you want to specify both the auto-acknowledge and auto-delete days, then the number of auto-acknowledge days should always be less than the number for auto-delete days.

Select the Days of the Week and the Time to Perform the Message Cleanup: Allows you to specify the time and the days of the week to run the Message Cleanup action. The administrator can set a daily schedule for Message Cleanup action.

Use Coordinated Universal Time: Allows you to convert the specified time to UTC (GMT) time. By default, this option is selected.

4 In the E-mail Notification panel, configure the settings to send the error messages to the administrators through e-mail:

   Send Log Message via E-mail if Severity Is: Allows you to select the severity of the message to trigger sending the log messages through e-mail.

   From: Specify the sender's e-mail address.

   To: Specify the e-mail address of the recipients. You can specify more than one e-mail address by separating them with commas.

   Subject: Specify the subject to be included while sending the e-mail from the Primary Server. You can customize the *Subject* field with macro values. For more information on customizing the subject field, see "E-Mail Format" on page 89.

5 In the SNMP Traps panel, configure the SNMP traps on the ZENworks Server to send log messages:

   Send as SNMP Trap if Severity Is: Sends an SNMP trap if the logged message's severity is Error.

   Trap Target: Specify the IP address or DNS name of the SNMP server.

   Port: Specify the port number of the SNMP server configured for this operation. By default, the port number is 162.

   Community String: Specify the community string of the SNMP trap that is to be sent.

6 In the UDP Forwarder panel, configure the settings to send logged messages through the UDP services. The following table contains information on the options available:

   Send Message via UDP: Sends messages to the UDP destinations if the logged message's severity is Error.

   UDP Destinations: You can perform the following tasks with the *Add*, *Edit*, and *Remove* options:

   - **Add a Server**
     1. Click *Add* to display the Add UDP Destination Address dialog box.
     2. Specify the server name and the UDP port number configured for this operation.
     3. Click *OK*.
   - **Remove a Server**
     1. Select the check box next to the server (or servers).
     2. Click *Remove*.
   - **Edit Server Details**
     1. Select the check box next to the server.
     2. Click *Edit* to display the Edit UDP Destination dialog box.
     3. Modify the settings as desired, then click *OK*.

8.4.2 Configuring the Message Logger Settings at the Folder Level

By default, the Message Logger settings configured at the zone level are applied to all the managed devices. However, you can modify the Local Device Logging settings for all the devices within a folder:

1 In ZENworks Control Center, click *Devices*.

2 Click the *Folder (Details)* option for which you want to configure the Message Logger settings.

3. Click *Settings*, then click *Device Management* > *Local Device Logging*.
4. Click *Override*.
5. Edit the logging settings as required.
6. To apply the changes, click *Apply.*

   or

   To revert to the Local Device Logging settings configured at the zone level, click *Revert*.
7. Click *OK*.

8.4.3 Configuring the Message Logger Settings at the Device Level

By default, the Message Logger settings configured at the zone level are applied to all the managed devices. However, you can modify the Local Device Logging settings for the managed device:

1. In ZENworks Control Center, click *Devices*.
2. Click *Servers* or *Workstations* to display the list of managed devices.
3. Click the device for which you want to configure the Message Logger settings.
4. Click *Settings*, then click *Device Management* > *Local Device Logging*.
5. Click *Override*.
6. Edit the logging settings as required.
7. To apply the changes click *Apply.*

   or

   To revert to the Local Device Logging settings configured at the zone level, click *Revert*.
8. Click *OK*.

8.4.4 Turning on the Debug Messages

To turn on the logging of debug messages for all components:

1. In ZENworks Control Center, click *Configuration*.
2. In the Management Zone Settings panel, click *Device Management*, then click *Local Device Logging.*
3. In the local file panel, select the *Log message to a local file if severity is* option, then select the severity as *Debug and above*.
4. Click *Apply,* then click *OK*.

8.5 Managing Messages

The Message Logger component lets you manage the messages logged by the other components of Novell ZENworks 11.

- Section 8.5.1, "Understanding Message Formats," on page 89
- Section 8.5.2, "Viewing the Message Status," on page 91
- Section 8.5.3, "Viewing the Messages," on page 93
- Section 8.5.4, "Acknowledging Messages," on page 94
- Section 8.5.5, "Deleting Messages," on page 96
- Section 8.5.6, "Viewing the Predefined Reports," on page 98

8.5.1 Understanding Message Formats

Messages are logged in different formats depending on the output targets such as local log, e-mail notification, SNMP traps, and UDP notification.

All error messages log the component name on which the error is generated. To troubleshoot the error, refer to the component's Reference Guide.

Example 1: Error related to Policy Management.

```
[DEBUG] [7/22/2007 3:42:45 PM] [] [PolicyManager] [] [Name = RM_dev, Guid =
271414163524d000190dbc6fa94272aa, Type = remote management policy, Version = 2] []
[].
```

To troubleshoot this error, see the *ZENworks 11 Configuration Policies Reference*.

Example 2: Error related to Remote Management.

```
[ERROR] [15-07-2007 12:44:16] [] [Remote Management]
[RemoteManagement.VNCEVENT_CANNOT_OPEN_EVENT] [Unable to open the
<ZRMUserLoginEvent> event] [] [].
```

To troubleshoot this error, see the *ZENworks 11Remote Management Reference*.

Local Log File Format

Messages are logged on the managed device and ZENworks Server in the following format:

```
[severity] [loggingTime] [userGUID] [componentName] [MessageID] [MessageString]
[additionalInfo] [RelatedGUID].
```

For example, `[DEBUG] [1/22/2007 12:09:15 PM] [] [ZMD] [] [refreshing QuickTaskRefresh(GeneralRefresh)] [] [].`

E-Mail Format

An e-mail message consists of the message header and the message body:

Message Header

The subject field in the e-mail can be customized as required by using keyword substitution macros:

Macro	Value
%s	Severity of the message.
%c	Name of the component.
%d	ID of the device at which the message is generated.
%t	Time of the message generation.
%a	Alias name of the device where the message is generated.

For example, if you want the subject line to display as “ERROR occurred on device Testifies at 4/1/07 5:31:01 PM”, then specify “*%s* occurred on device *%a* at *%t*” in the *Subject* field.

Message Body

The message body consists of the following fields:

- **Device Alias:** Name of the device where the message is generated.
- **Device IP Address:** IP Address of the device where the message is generated.
- **Error:** [Date] Component name Message ID localized message string.
- **Additional Information:** (Optional) Any additional information.

SNMP Message Format

The SNMP messages consists of the following two parts:

- “SNMP Message Header” on page 90
- “Protocol Data Unit (PDU)” on page 90

SNMP Message Header

The following fields are contained in the header:

Version Number: Specifies the version of SNMP used. ZENworks 11 uses SNMPv1.

Community String: Defines an access environment for a group of network-management systems (NMS).

Protocol Data Unit (PDU)

The following fields are contained in the PDU:

Enterprise: Identifies the type of managed object generating the trap. ZENworks 11 uses 1.3.6.1.4.1.23.2.80.100.

Agent Address: Provides the IP address of the machine where the trap was generated.

GenerIc Trap Type: Contains the integer value 6. Type 6 is an enterprise-specific trap type, which has no standard interpretation in SNMP. The interpretation of the trap depends upon the value in the specific trap type field, which is defined by the Message Logger MIB.

Specific Trap Code: For enterprise-specific traps generated by ZENworks 11, the values in the specific trap type fields are as follows:

- For a severity level of MessageLogger.ERROR, the specific trap is 1.
- For a severity level of MessageLogger.WARN, the specific trap is 2.
- For a severity level of MessageLogger.INFO, the specific trap is 3.

Time Stamp: The time stamp indicating when the trap occurred.

Variable Bindings: Provides additional information pertaining to the trap. This field consists of the following name/value pairs:

- For trap ID 1.3.6.1.4.1.23.2.80.100.0.1, the value is the device GUID.
- For trap ID 1.3.6.1.4.1.23.2.80.100.0.2, the value is the device name.
- For trap ID 1.3.6.1.4.1.23.2.80.100.0.3, the value is the component name.
- For trap ID 1.3.6.1.4.1.23.2.80.100.0.4, the value is the time when the message was logged.
- For trap ID 1.3.6.1.4.1.23.2.80.100.0.5, the value is the message ID.
- For trap ID 1.3.6.1.4.1.23.2.80.100.0.6, the value is the probable cause.

UDP Payload Format

The payload is a byte array with null-terminated delimiters such as \0 or 0 x 00 (hexadecimal) for each element. Each element's data is presented as UTF-8 encoded strings and is explained below:

- The first element is the ZENworks version information. For example, 10.
- The second element is the value of severity of the message. The severity values are 4 for Informational, 6 for Warning, and 8 for Debug messages.
- The third element is the message date. The date is not locally specific and is represented as a UTF-8 string. For example, 09-Mar-2008 14:15:44.
- The fourth element is the user ID.
- The fifth element is the component name.
- The sixth element is the non-localized message ID.
- The seventh element is the localized message string.
- The eighth element is the additional information.
- The ninth element is the probable cause URL.
- The tenth element is the related GUID objects separated by commas.

NOTE: If the element does not have any data, it is represented as \0\0.

8.5.2 Viewing the Message Status

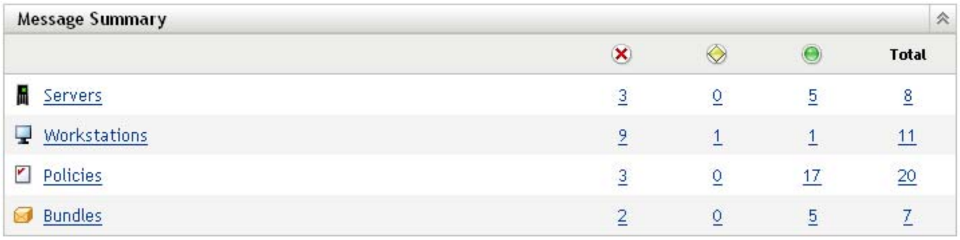
In ZENworks Control Center, you can view the status of the logged messages in the following panels on the home page.

- "Message Summary" on page 92
- "Device Hot List" on page 92

Message Summary

The Message Summary panel displays the number of critical, warning, and normal messages generated on the main objects in the Management Zone.

Figure 8-1 *Message Summary*



Message Summary

	✖	◆	●	Total
Servers	3	0	5	8
Workstations	9	1	1	11
Policies	3	0	17	20
Bundles	2	0	5	7

In the Message Summary panel, you can do the following:

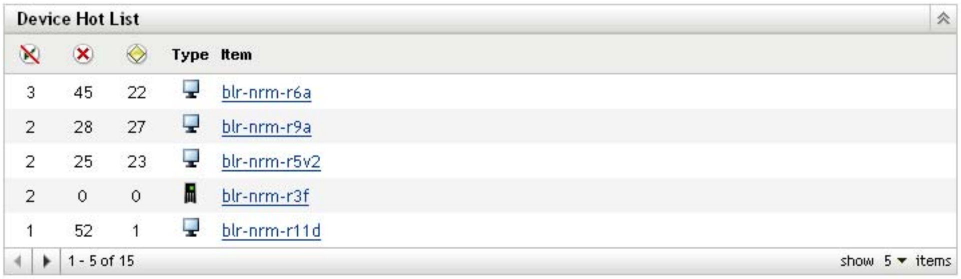
- Click an object type to display its root folder. For example, click *Servers* to display the Servers root folder.
- For any object type, click the number in one of its status columns (✖◆●) to display a listing of all the objects that currently have that status. For example, to see the list of servers that have a normal status, click the number in the column of the *Servers*.
- For any object type, click the number in the *Total* column to display all of the objects of that type having critical, warning, or normal messages. For example, click the Total count for *Servers* to display a list of all servers having messages logged.

Device Hot List

The Device Hot List displays a list of the devices that have a noncompliant ☒ status or have generated critical ✖ or warning ◆ messages. The device remains in the hot list until you resolve the compliancy problem and acknowledge the messages. You can use this list as a summary of problems that need attention on the device.

To view the Device Hot List:

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



Device Hot List

☒	✖	◆	Type	Item
3	45	22		blr-nrm-r6a
2	28	27		blr-nrm-r9a
2	25	23		blr-nrm-r5v2
2	0	0		blr-nrm-r3f
1	52	1		blr-nrm-r11d

- ☒ This column indicates the number of bundles or policies that could not be applied to the device because an error occurred. You must review the error and warning messages to discover the compliance problem. The noncompliant status applies only to ZENworks Configuration Management. ZENworks Asset Management does not use this status.

- ✖ This column indicates the number or unacknowledged error messages generated for the device. An error is any action that fails so the ZENworks Adaptive Agent cannot complete the action on the device.
- ◇ This column indicates the number of unacknowledged warning messages generated for the device. A warning is any action that encounters a problem; the problem might or might not result in the ZENworks Adaptive Agent completing the action on the device.

2 Click the device to display its message log.

8.5.3 Viewing the Messages

In the ZENworks Control Center, you can view the logged messages as follows:

- "Message Log" on page 93
- "System Message Log" on page 94

Message Log

The Message Log displays all unacknowledged messages generated for the object.

To view the message logs:

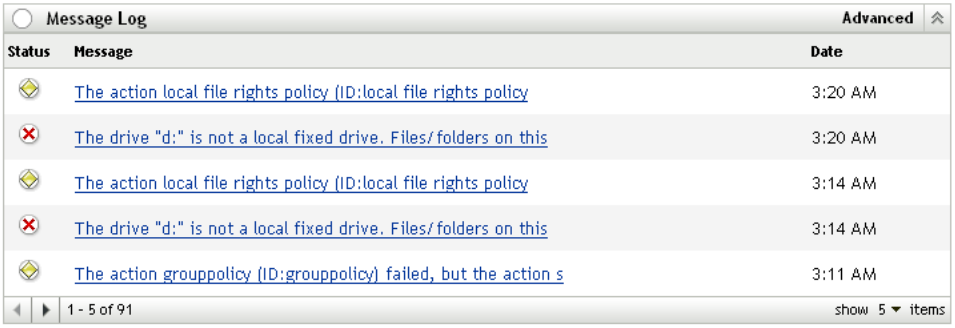
1 In ZENworks Control Center, click the *Device Hot List* on the home page, then click the device to view its message log.

You can also use the *Devices* menu to view the logs:

1 In ZENworks Control Center, click *Devices*.

2 Click *Servers* or *Workstations* to display the list of managed devices.

3 Click the name of a device, then click the *Summary* tab to display:



○ Message Log

Status	Message	Date
◇	The action local file rights policy (ID:local file rights policy	3:20 AM
✖	The drive "d:" is not a local fixed drive. Files/folders on this	3:20 AM
◇	The action local file rights policy (ID:local file rights policy	3:14 AM
✖	The drive "d:" is not a local fixed drive. Files/folders on this	3:14 AM
◇	The action grouppolicy (ID:grouppolicy) failed, but the action s	3:11 AM

Status: Displays an icon indicating the type of message:

✖ Critical Message

◇ Warning

● Normal

Message: Displays a brief description of the event that occurred.

Date: Displays the date and time the event occurred.

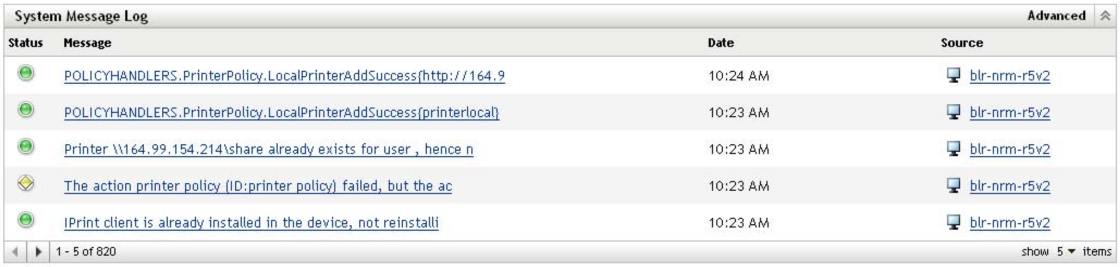
4 To view the log messages in the advanced view, click *Advanced* on the right corner of the Memory Log panel.

You can acknowledge or delete messages from the message log. For more information on acknowledging messages, see Section 8.5.4, "Acknowledging Messages," on page 94, and for information on deleting messages, see Section 8.5.5, "Deleting Messages," on page 96.

System Message Log

The System Message Log panel displays the unacknowledged messages generated by the ZENworks Servers and managed devices in the Management Zone.

1. In ZENworks Control Center, click *Configuration*.
2. Click *System Information* to display the System Message Log.



System Message Log

Status	Message	Date	Source
●	POLICYHANDLERS.PrinterPolicy.LocalPrinterAddSuccess{http://164.9	10:24 AM	blr-nrm-r5v2
●	POLICYHANDLERS.PrinterPolicy.LocalPrinterAddSuccess{printerlocal}	10:23 AM	blr-nrm-r5v2
●	Printer \\164.99.154.214\share already exists for user , hence n	10:23 AM	blr-nrm-r5v2
◇	The action printer policy (ID:printer policy) failed, but the ac	10:23 AM	blr-nrm-r5v2
●	IPrint client is already installed in the device, not reinstalli	10:23 AM	blr-nrm-r5v2

1 - 5 of 820

Status: Displays an icon indicating the type of message:

☒ Critical Message

◇ Warning

● Normal

Message: Displays a brief description of the event that occurred.

Date: Displays the date and time the event occurred.

3. To view the log messages in the advanced view, click *Advanced* on the right corner of the System Memory Log panel.

You can acknowledge or delete messages from the system message log. For more information on acknowledging messages, see Section 8.5.4, "Acknowledging Messages," on page 94, for information on deleting messages, see Section 8.5.5, "Deleting Messages," on page 96.

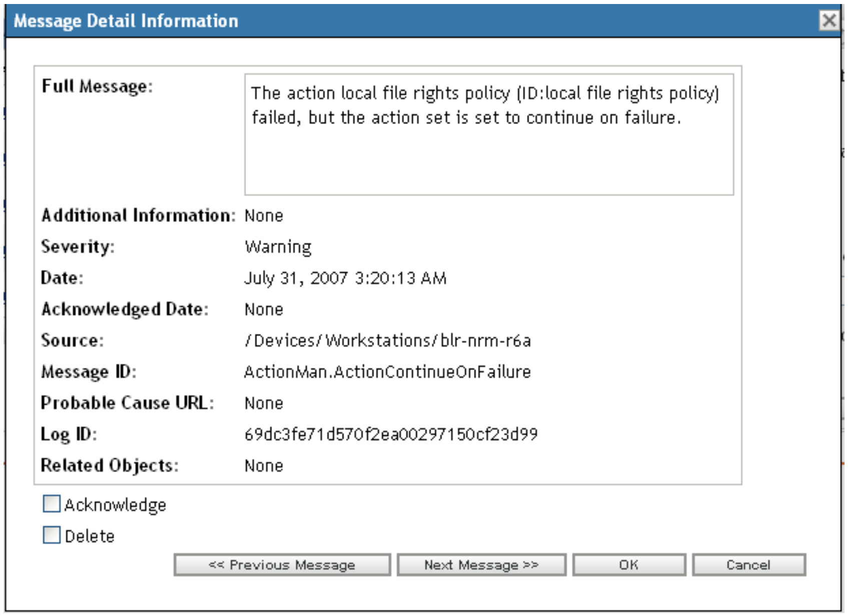
8.5.4 Acknowledging Messages

An acknowledged message is one that you have reviewed and marked as acknowledged (✓).

- "Acknowledging a Message" on page 94
- "Acknowledging Multiple Messages" on page 95
- "Acknowledging Messages Logged During a Specified Time" on page 95

Acknowledging a Message

1. In the Message Log panel or the System Message Log panel, click the message you want to acknowledge.
2. In the Message Detail Information dialog box, select the *Acknowledge* option, then click *OK*:



Full Message:	The action local file rights policy (ID:local file rights policy) failed, but the action set is set to continue on failure.
Additional Information:	None
Severity:	Warning
Date:	July 31, 2007 3:20:13 AM
Acknowledged Date:	None
Source:	/Devices/Workstations/blr-nrm-r6a
Message ID:	ActionMan.ActionContinueOnFailure
Probable Cause URL:	None
Log ID:	69dc3fe71d570f2ea00297150cf23d99
Related Objects:	None

☐ Acknowledge

☐ Delete

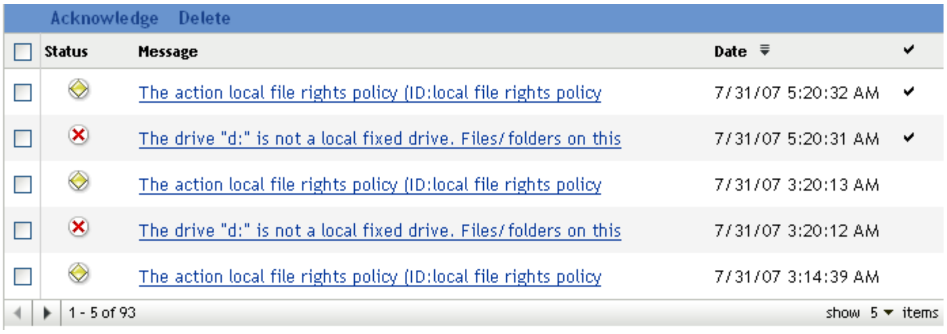
The acknowledged messages are removed from the Message Log panel or the System Message Log panel, depending on which panel you selected in Step 1.

The acknowledged messages continue to be listed in the Advanced view of these logs, marked with a check mark (✓).

Acknowledging Multiple Messages

1 In the Message Log panel or the System Message Log panel, click *Advanced* on the right corner of the panel.

2 Select the messages to acknowledge, then click *Acknowledge*:



☐	Status	Message	Date	✓
☐	◇	The action local file rights policy (ID:local file rights policy	7/31/07 5:20:32 AM	✓
☐	⊗	The drive "d:" is not a local fixed drive. Files/folders on this	7/31/07 5:20:31 AM	✓
☐	◇	The action local file rights policy (ID:local file rights policy	7/31/07 3:20:13 AM	
☐	⊗	The drive "d:" is not a local fixed drive. Files/folders on this	7/31/07 3:20:12 AM	
☐	◇	The action local file rights policy (ID:local file rights policy	7/31/07 3:14:39 AM	

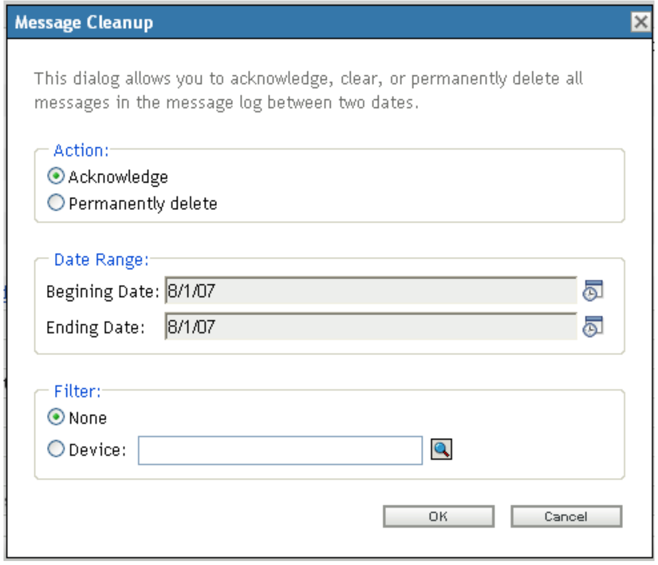
1 - 5 of 93 show 5 items

The acknowledged messages are marked with a check mark (✓).

Acknowledging Messages Logged During a Specified Time

1 In ZENworks Control Center, click *Configuration*.

2 In the *Configuration Tasks*, click *Message Cleanup* to display:



Message Cleanup

This dialog allows you to acknowledge, clear, or permanently delete all messages in the message log between two dates.

Action:
● Acknowledge
○ Permanently delete

Date Range:
Begining Date: 8/1/07
Ending Date: 8/1/07

Filter:
● None
○ Device:

3 In the Message Cleanup dialog box, select *Acknowledge*.

4 In the *Date Range* option, select the *Beginning Date* and the *Ending Date*.

5 Select the *Filter* option:

None: Cleans up the messages in selected date range from all the devices.

Device: Cleans up the messages in selected date range from the selected device.

6 Click *OK*.

A message cleanup action is initiated and a system message is logged after the cleanup action is completed. For more information on viewing system logs, see "System Message Log" on page 94.

8.5.5 Deleting Messages

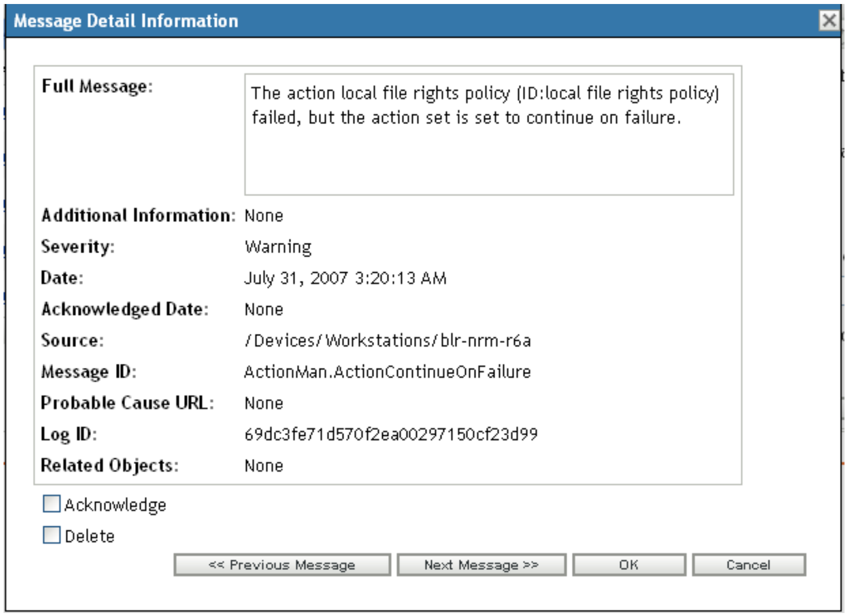
Deleting a message completely removes the message from your ZENworks system.

- "Deleting a Message" on page 97
- "Deleting Multiple Messages" on page 97
- "Deleting Messages Logged During a Specified Time" on page 97

Deleting a Message

1 In the Message Log panel or the System Message Log panel, click the message you want to delete.

2 In the Message Detail Information dialog box, select the *Delete* option, then click *OK*:



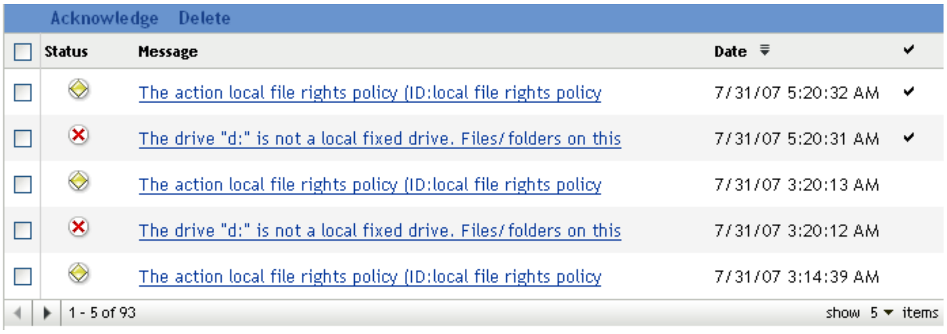
Full Message:	The action local file rights policy (ID:local file rights policy) failed, but the action set is set to continue on failure.
Additional Information:	None
Severity:	Warning
Date:	July 31, 2007 3:20:13 AM
Acknowledged Date:	None
Source:	/Devices/Workstations/blr-nrm-r6a
Message ID:	ActionMan.ActionContinueOnFailure
Probable Cause URL:	None
Log ID:	69dc3fe71d570f2ea00297150cf23d99
Related Objects:	None

□ Acknowledge

□ Delete

Deleting Multiple Messages

1 In the Message Log panel or the System Message Log panel, click *Advanced* on the right corner of the panel.



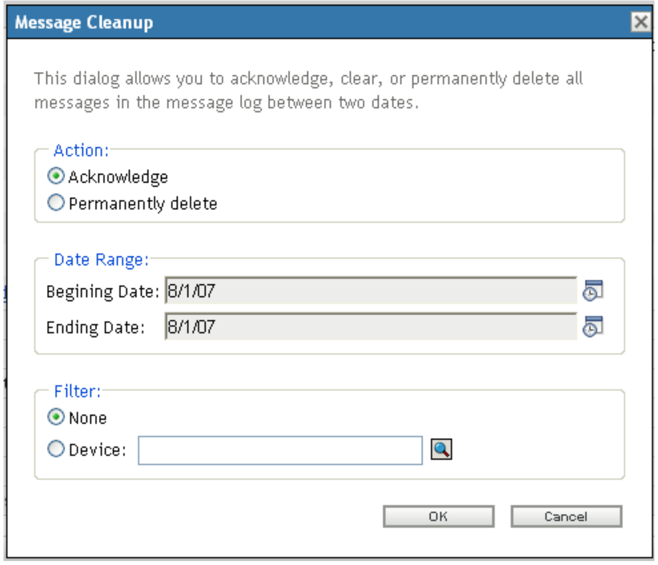
□	Status	Message	Date	✔
□	◇	The action local file rights policy (ID:local file rights policy	7/31/07 5:20:32 AM	✔
□	⊗	The drive "d:" is not a local fixed drive. Files/folders on this	7/31/07 5:20:31 AM	✔
□	◇	The action local file rights policy (ID:local file rights policy	7/31/07 3:20:13 AM	
□	⊗	The drive "d:" is not a local fixed drive. Files/folders on this	7/31/07 3:20:12 AM	
□	◇	The action local file rights policy (ID:local file rights policy	7/31/07 3:14:39 AM	

2 Select the messages to delete, then click *Delete*.

Deleting Messages Logged During a Specified Time

1 In ZENworks Control Center, click *Configuration*.

2 In the *Configuration Tasks*, click *Message Cleanup*.



Message Cleanup

This dialog allows you to acknowledge, clear, or permanently delete all messages in the message log between two dates.

Action:

● Acknowledge

○ Permanently delete

Date Range:

Begining Date: 8/1/07

Ending Date: 8/1/07

Filter:

● None

○ Device:

3 In the Message Cleanup dialog box, select *Permanently Delete*.

4 In the *Date Range* option, select the *Beginning Date* and the *Ending Date*.

5 Select the *Filter* option:

None: Cleans up the messages in selected date range from all the devices.

Device: Cleans up the messages in selected date range from the selected device.

6 Click *OK*.

7 In the Confirm Delete Dialog box, click *OK* to delete the message.

A system message is logged after the cleanup action is completed. For more information on viewing the system log see, "System Message Log" on page 94.

8.5.6 Viewing the Predefined Reports

You must have installed ZENworks Reporting Server to view the predefined reports. For more information on how to install ZENworks Reporting Server, see the *ZENworks 11 Server Installation Guide*.

To view the predefined reports for messages:

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

2 In the ZENworks Reporting Server Reporting panel, click *ZENworks Reporting Server InfoView* to launch the ZENworks Reporting Server InfoView.

3 Navigate to the *Novell ZENworks Reports* folder > *Predefined Reports* > *ZENworks System* folder.

4 The following predefined report is included for Messages:

ZENworks Messages: Displays message details such as the log time and description for all the ZENworks System messages.

For more information on creating and managing reports, see the *ZENworks 11 System Reporting Reference* documentation.

9 Customizing ZENworks News Alerts

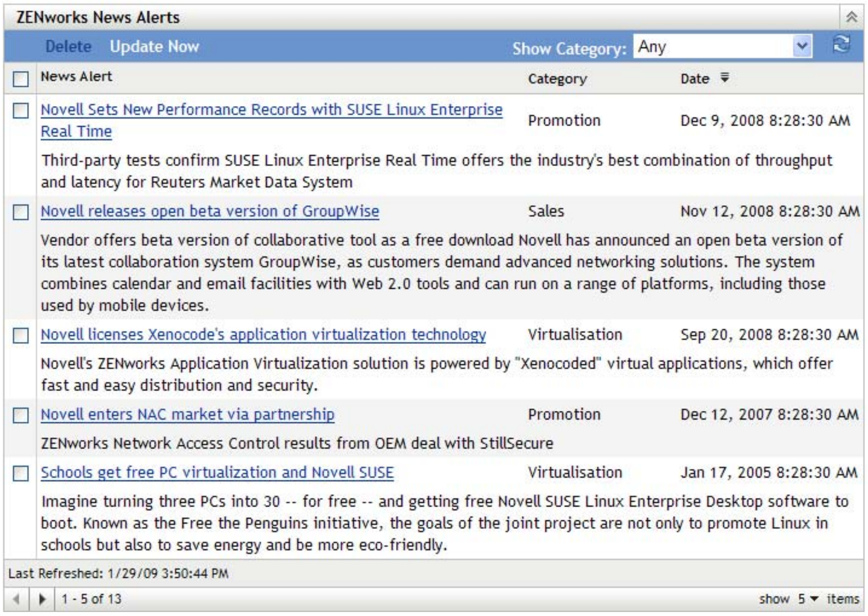
Novell ZENworks 11 displays information from Novell about current top issues, news updates, promotions, and so forth on the home page of ZENworks Control Center.

The following sections provide information on deleting, updating, and sorting the news alerts, and on viewing the news. You can also configure the server and the schedule for downloading the news.

- Section 9.1, “Managing ZENworks News Alerts,” on page 99
- Section 9.2, “Configuring ZENworks News Settings,” on page 100

9.1 Managing ZENworks News Alerts

Figure 9-1 *ZENworks News Alerts*



ZENworks News Alerts

Delete Update Now Show Category: Any

□	News Alert	Category	Date
□	Novell Sets New Performance Records with SUSE Linux Enterprise Real Time Third-party tests confirm SUSE Linux Enterprise Real Time offers the industry's best combination of throughput and latency for Reuters Market Data System	Promotion	Dec 9, 2008 8:28:30 AM
□	Novell releases open beta version of GroupWise Vendor offers beta version of collaborative tool as a free download Novell has announced an open beta version of its latest collaboration system GroupWise, as customers demand advanced networking solutions. The system combines calendar and email facilities with Web 2.0 tools and can run on a range of platforms, including those used by mobile devices.	Sales	Nov 12, 2008 8:28:30 AM
□	Novell licenses Xenocode's application virtualization technology Novell's ZENworks Application Virtualization solution is powered by "Xenocoded" virtual applications, which offer fast and easy distribution and security.	Virtualisation	Sep 20, 2008 8:28:30 AM
□	Novell enters NAC market via partnership ZENworks Network Access Control results from OEM deal with StillSecure	Promotion	Dec 12, 2007 8:28:30 AM
□	Schools get free PC virtualization and Novell SUSE Imagine turning three PCs into 30 -- for free -- and getting free Novell SUSE Linux Enterprise Desktop software to boot. Known as the Free the Penguins initiative, the goals of the joint project are not only to promote Linux in schools but also to save energy and be more eco-friendly.	Virtualisation	Jan 17, 2005 8:28:30 AM

Last Refreshed: 1/29/09 3:50:44 PM

1 - 5 of 13 show 5 items

Review the following sections to manage the ZENworks News Alerts:

- Section 9.1.1, “Deleting the News Alerts,” on page 100
- Section 9.1.2, “Updating the News Alerts,” on page 100
- Section 9.1.3, “Displaying the News Alerts Based on the Selected Category,” on page 100
- Section 9.1.4, “Viewing the News,” on page 100
- Section 9.1.5, “Sorting the News Alerts,” on page 100

9.1.1 Deleting the News Alerts

1. In ZENworks Control Center, click *Home*.
2. In ZENworks News Alerts panel, select the check box next to the news alerts you want to delete.
3. Click *Delete*.

9.1.2 Updating the News Alerts

1. In ZENworks Control Center, click *Home*.
2. In ZENworks News Alerts panel, click *Update Now.*

   The latest ZENworks news updates downloaded by the Primary Server are displayed in the ZENworks News Alerts panel. This might take some time.

9.1.3 Displaying the News Alerts Based on the Selected Category

1. In ZENworks Control Center, click *Home*.
2. In ZENworks News Alerts panel, select a category in the drop-down list next to *Show Category* to display all the news alerts based on the selected category.

9.1.4 Viewing the News

1. In ZENworks Control Center, click *Home*.
2. In ZENworks News Alerts panel, click the news alert to display the news in a new browser window.

9.1.5 Sorting the News Alerts

By default, the news alerts are sorted by the publication date. You can also sort the news alerts alphabetically by the title or category.

1. In ZENworks Control Center, click *Home*.
2. In ZENworks News Alerts panel, click *News Alert* to sort the news alerts alphabetically.

   or

   Click *Category* to sort the news alerts by category.

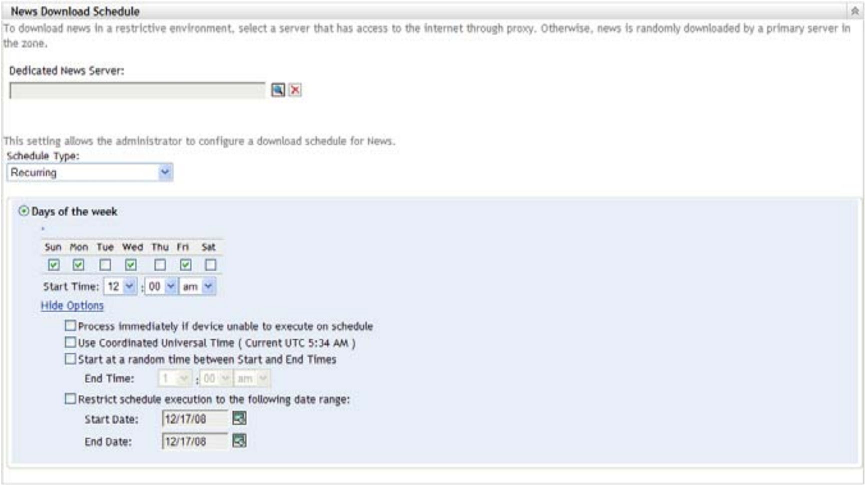
   or

   Click *Date* to sort the news alerts by date.

9.2 Configuring ZENworks News Settings

The ZENworks News Settings page lets you configure a dedicated news server and a schedule to download the ZENworks news. By default, the news is downloaded at midnight by the Primary Server of the Management Zone.

Figure 9-2 *News Download Schedule*



News Download Schedule

To download news in a restrictive environment, select a server that has access to the internet through proxy. Otherwise, news is randomly downloaded by a primary server in the zone.

Dedicated News Server:

This setting allows the administrator to configure a download schedule for News.

Schedule Type: Recurring

● Days of the week

Sun	Mon	Tue	Wed	Thu	Fri	Sat
☑	☑	□	☑	□	☑	□

Start Time: 12 : 00 am

Hide Options

□ Process immediately if device unable to execute on schedule

□ Use Coordinated Universal Time (Current UTC 5:34 AM)

□ Start at a random time between Start and End Times

End Time: 1 : 00 am

□ Restrict schedule execution to the following date range:

Start Date: 12/17/08

End Date: 12/17/08

Review the following sections to configure the settings to download the news:

- Section 9.2.1, “Dedicated News Server,” on page 101
- Section 9.2.2, “Schedule Type,” on page 102

9.2.1 Dedicated News Server

By default, any available server in the Management Zone can be used to download the news updates. However, you can specify one ZENworks Server to be dedicated to handle the news downloads. The server that you select should have access to the Internet, either directly or through a proxy server.

The following sections contain more information:

- “Specifying a Dedicated News Server” on page 101
- “Clearing a Dedicated News Server” on page 102

Specifying a Dedicated News Server

1. In ZENworks Control Center, click *Configuration* in the left pane.
2. On the *Configuration* tab, expand the *Management Zone Settings* section (if necessary), click *Infrastructure Management*, then click *ZENworks News Settings* to display the News Download Schedule panel.
3. In the *Dedicated News Server* field, browse for and select a server, then click *OK*.

   The server’s identification is displayed in the *Dedicated News Server* field.
4. (Conditional) If you need to revert to the last saved dedicated server setting, click *Reset*.

   This resets the dedicated server to the last saved setting, such as when you last clicked *Apply* or *OK*.
5. Click *Apply* to make the changes effective.
6. Either click *OK* to close the page, or continue with configuring the schedule type.

   If you did not click *Apply* to make your changes effective, clicking *OK* does so. Clicking *Cancel* also closes the page, but loses your unapplied changes.

Clearing a Dedicated News Server

Clearing a dedicated update server causes the news updates to be retrieved randomly from any server in the Management Zone.

1 In ZENworks Control Center, click *Configuration* in the left pane.

2 On the *Configuration* tab, expand the *Management Zone Settings* section (if necessary), click *Infrastructure Management*, then click *ZENworks News Settings* to display the News Download Schedule panel.

3 Click ❌ to remove the dedicated server from the *Dedicated News Server* field.

4 (Conditional) If you need to revert to the last saved dedicated server setting, click *Reset*.

   This resets the dedicated server to the last saved setting, such as when you last clicked *Apply* or *OK*.

5 Click *Apply* to make the change effective.

9.2.2 Schedule Type

You can configure the schedule for downloading the news:

1 In ZENworks Control Center, click *Configuration* in the left pane, then click the *Configuration* tab.

2 Click *Management Zone Settings* to expand its options, click *Infrastructure Management* to expand its options, then select *ZENworks News Settings*.

3 (Conditional) To exclude scheduled checking for news updates, click the down-arrow in the *Schedule Type* field, select *No Schedule*, click *Apply* to save the schedule change, then skip to Step 6.

   With this option selected, you must download the news updates manually. For more information, see "Updating the News Alerts" on page 100.

4 (Conditional) To set a recurring schedule for checking for the news updates, click the down-arrow in the *Schedule Type* field, then select *Recurring*.

5 Fill in the fields:

   5a Select one or more check boxes for the days of the week when you want to check for news updates.

   5b Use the *Start Time* box to specify the time of day for checking to occur.

   5c (Optional) Click *More Options*, then select the following options as necessary:

   - **Process Immediately if Device Unable to Execute on Schedule:** Causes checking for news updates to occur as soon as possible if the checking cannot be done according to schedule. For example, if a server is down at the scheduled time, checking for news updates occurs immediately after the server comes back online.
   - **Use Coordinated Universal Time:** Causes the schedule to interpret the times you specify as UTC instead of local time.
   - **Start at a Random Time Between Start and End Times:** Allows checking for news updates to occur at a random time between the time you specify here and the time you specified in Step 5b. Fill in the *End Time* fields.
   - **Restrict Schedule Execution to the Following Date Range:** In addition to the other options, you can specify a date range to check for the news updates.

   5d (Conditional) If you need to revert to the last saved schedule, click *Reset* at the bottom of the page.

This resets all data to the last saved state, such as when you last clicked *Apply* or *OK*.

5e When you have finished configuring the recurring schedule, click *Apply* to save the schedule change.

6 To exit this page, click *OK* when you are finished configuring the schedule.

If you did not click *Apply* to make your changes effective, clicking *OK* does so. Clicking *Cancel* also closes the page, but loses your unapplied changes.

10 Using the Credential Vault

The Credential Vault stores the credentials used by Novell ZENworks 11 actions and tasks that require authentication to access a particular resource.

For example, if you want to create a third-party Imaging bundle by using the image files stored in a shared-network image repository that requires authentication, you can add a credential that includes the login name and password for the repository in the credential vault. During the creation of the third-party Imaging bundle, you can specify the credential name to access the repository.

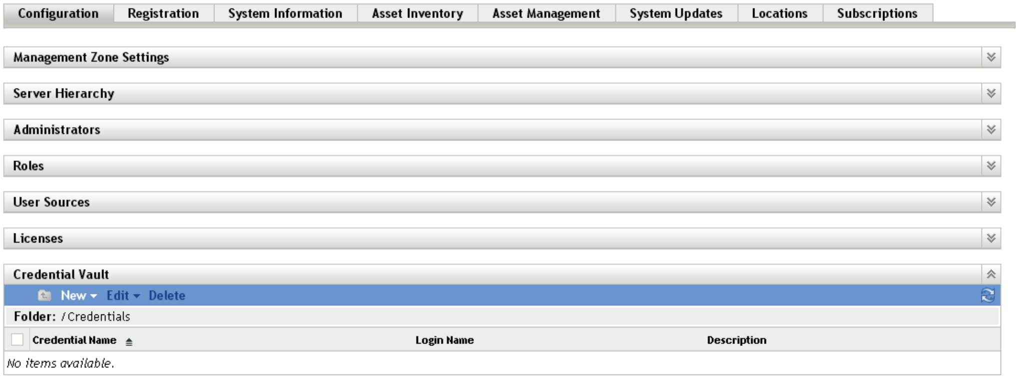
ZENworks features like Third-party imaging, Intel AMT provisioning, Subscriptions download, and actions such as Copy Directory uses credentials that are stored in the credential vault.

You can use ZENworks Control Center or the zman command line utility to manage credentials. The procedures in this section explain how to manage credentials by using ZENworks Control Center. If you prefer the zman command line utility, see “Credential Commands” in the *ZENworks 11 Command Line Utilities Reference*.

The following sections contain information to help you manage credentials:

10.1 Adding a Credential

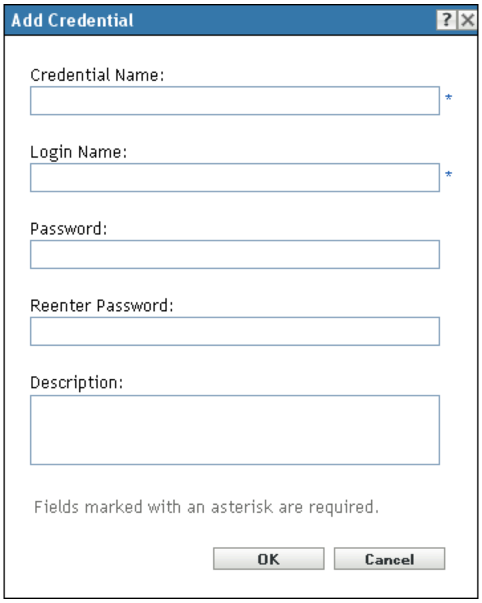
1 In ZENworks Control Center, click the *Configuration* tab.



Folder: /Credentials

Credential Name	Login Name	Description
No items available.		

2 In the *Credential Vault* panel, click *New* > *Credential* to display the Add Credential dialog box.



Fields marked with an asterisk are required.

3 Fill in the following fields.

- **Credential Name:** Specify the name of the credential. When an action or task that requires authentication is executed, ZENworks uses this name to access the credential vault to obtain the resource's credentials.
- **Description:** Provide an optional description of the credential.
- **Login Name** Specify the login name for the resource. For example, to access a resource on a network that requires authentication do one of the following:
  - **For Basic Authentication:** Specify the `username`.
  - **For Domain Authentication:** Specify the `domain\username`.
  - **For eDirectory Authentication:** Specify the Fully Qualified Distinguished Name in the following format:

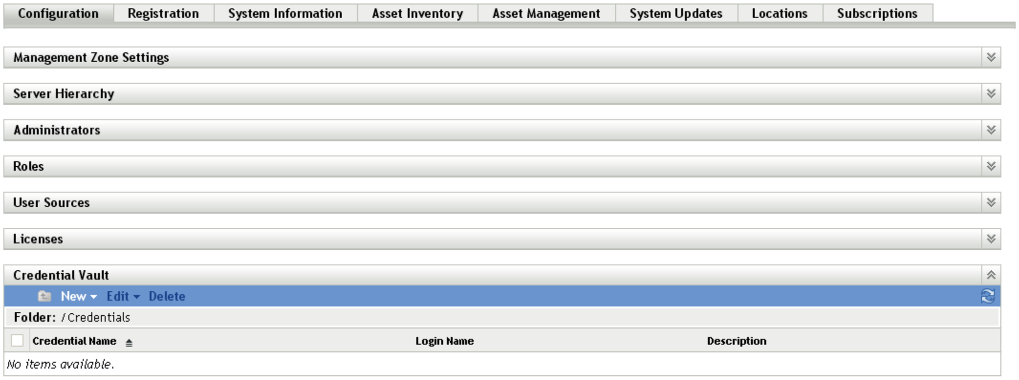
    `.username.ou.o`

    For example: `.jsmith.provo.novell`

    However, the format `cn=jsmith,ou=provo,o=novell` is not supported.
- **Password** Specify the password for the resource's login name that you specified in the *Login Name* field.
- **Reenter Password** Re-enter the password for the resource's login name.

10.2 Creating a Folder for Credentials

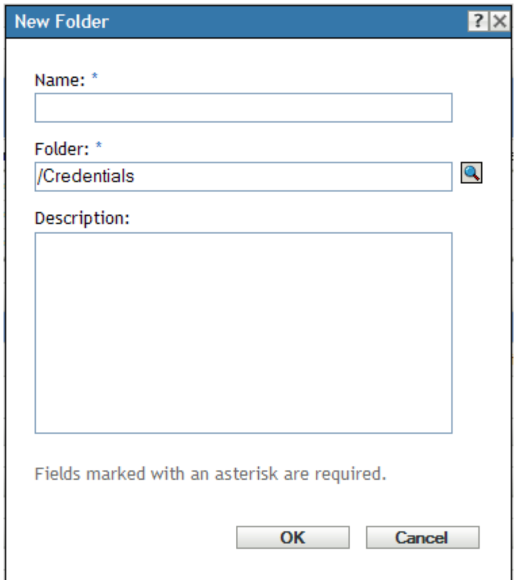
1 In ZENworks Control Center, click the *Configuration* tab.



Folder: /Credentials

No items available.

2 In the Credential Vault panel, click *New* > *Folder* to display the New Folder dialog box.



Folder: * /Credentials

3 In the *Name* field, specify a unique name for the folder.

The folder cannot have the same name as any folders or credentials that already exist in the folder where you are creating it.

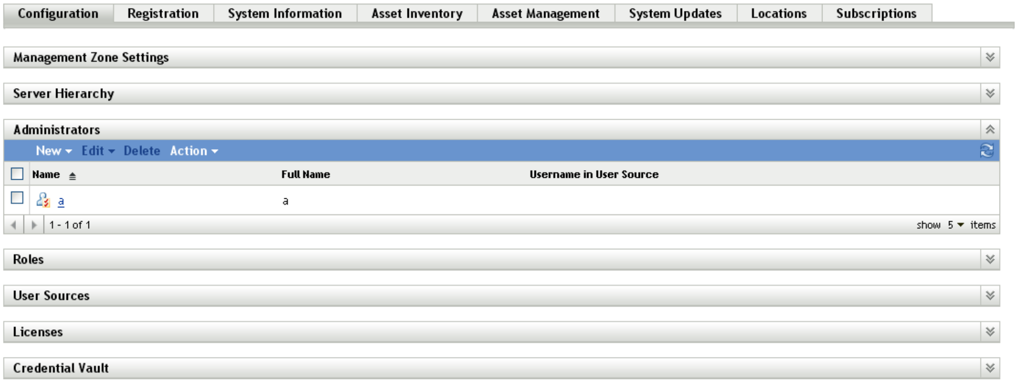
4 In the *Folder* field, click 🔍 to browse for and select the folder where you want the new folder created.

5 Type a description for the new folder, if desired.

6 Click *OK* to create the folder.

10.3 Assigning Credential Rights

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



Name	Full Name	Username in User Source
a	a	

2 In the *Administrators* section, click the underlined link for the administrator for which you want to change rights.

3 Click the *Rights* tab.

4 In the *Assigned Rights* section, click *Add* > *Credential Rights*.

5 Click *Add* to select folders containing credentials, then modify the rights associated with those folders.

If you need help, click the *Help* button.

10.4 Editing a Credential

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

2 In the Credential Vault panel, select the check box next to the credential.

3 Click *Edit*.

4 Edit the following fields.

- **Credential Name:** Specify the name of the credential. When an action or task that requires authentication is executed, ZENworks uses this name to access the credential vault to obtain the resource's credentials.
- **Description:** Provide an optional description of the credential.
- **Login Name** Specify the login name for the resource. For example, to access a resource on a network that requires authentication do one of the following:
  - **For Basic Authentication:** Specify the `username`.
  - **For Domain Authentication:** Specify the `domain\username`.
  - **For eDirectory Authentication:** Specify the Fully Qualified Distinguished Name in the following format:

    ```
    .username.ou.o
    ```

    For example: `.jsmith.provo.novell`

    However, the format `cn=jsmith,ou=provo,o=novell` is not supported.
- **Password** Specify the password for the resource's login name that you specified in the *Login Name* field.

- **Reenter Password** Re-enter the password for the resource's login name.

5 Click *OK*.

10.5 Renaming a Credential

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

2 In the Credential Vault panel, select the check box next to the credential.

3 Click *Edit* > *Rename*.

4 Type the new name for the credential.

5 Click *OK*.

10.6 Moving a Credential to Another Folder

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

2 In the Credential Vault panel, select the check box next to the credential.

3 Click *Edit* > *Move*.

4 In the *Folder* field, click 🔍 to browse for and select the folder where you want the credential moved.

5 Click *OK*.

10.7 Removing a Credential

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

2 In the Credential Vault panel, select the check box next to the credential.

3 Click *Delete*.

11 Using Quick Tasks

Quick Tasks are the tasks that you can quickly perform on one or more devices through ZENworks Control Center.

Review the following sections:

- Section 11.1, “Quick Tasks Types,” on page 111
- Section 11.2, “Initiating a Quick Task,” on page 113
- Section 11.3, “Cancelling, Stopping, or Hiding a Quick Task,” on page 115

11.1 Quick Tasks Types

There are various quick tasks that you can perform on devices. Not all tasks are available for all objects (device, device group, device folder); unavailable tasks are dimmed in the ZENworks Control Center

After the quick task is invoked, you are prompted to specify the Primary Server to send the quick task notification and specify the quick task notification and expiry options. The status of the quick task is also displayed. For more information on the initiating the quick task options and viewing the quick task status, see Section 11.2, “Initiating a Quick Task,” on page 113.

NOTE: The quick task options are not available for the Wake Up and Intel AMT Power Management quick task types.

The following list provides descriptions of the Quick Tasks you can perform:

- **Refresh Device:** Updates all information such as configuration settings, registration, and so forth) on the selected devices. In ZENworks Configuration, it updates the bundles and policies also.

  NOTE: A Refresh Device quick task cannot be created for a device when another Refresh Device quick task is already active on the device. A Refresh Device quick task that is created for a group of devices is not assigned to the devices within the group that already have a Refresh Device quick task active on them.

- **Refresh Policies:** Updates policy information on the selected devices. This quick task is applicable for ZENworks Endpoint Security Management and ZENworks Configuration Management.
- **Clear ZESM User Defined Password:** Clears the user-defined secondary decryption password and the user-defined encryption/decryption password for removable storage devices. This quick task is applicable only for ZENworks Endpoint Security Management.
- **Clear ZESM Local Client Self Defense Settings:** Resets the Endpoint Security Agent to use the Client Self Defense settings contained within the device’s effective Security Settings policy. This overrides any local changes made to the settings. This quick task is applicable only for ZENworks Endpoint Security Management.

- **Clear ZESM Local Firewall Registration Settings:** Resets the Endpoint Security Agent to use the firewall registration settings contained within the device's effective Firewall policy. This overrides any local changes made to the settings. This quick task is applicable only for ZENworks Endpoint Security Management.
- **FDE - Decommission Full Disk Encryption:** Prevents access to a device's encrypted data by decommissioning the device disk. You can temporarily decommission the drive, in which case encrypted data is recoverable with a HelpDesk file or Emergency Recovery Disk, or you can permanently decommission the disk by erasing it. This quick task is applicable only for ZENworks Full Disk Encryption.
- **FDE - Enable Additive User Capturing:** Enables one-time user capturing. After the device receives this task, the user capture occurs at the next reboot. Whichever user logs in at that reboot is added to the PBA. To avoid possible security breaches and ensure the correct user capture, coordinate with the intended user when initiating this task. This quick task is applicable only for ZENworks Full Disk Encryption.
- **FDE - Force Device to Send ERI File to Server:** Instructs the device to send its Emergency Recovery Information (ERI) file to the ZENworks Server. This file is required to recover any temporarily decommissioned disk. This quick task is applicable only for ZENworks Full Disk Encryption.
- **FDE - Update PBA Password Settings:** Updates an existing user's PBA password or adds a new user (and password) to the PBA. This quick task is applicable only for ZENworks Full Disk Encryption.
- **Inventory Scan:** Initiates an inventory scan of the selected devices. For each device, the inventory scan uses the Scan Now settings defined for the device (*device* view > *Settings* tab > *Inventory*) to determine what information the scan collects.
- **Inventory Wizard:** Sends the inventory data collection form to the selected devices. For each device, the Inventory Collection Wizard uses the data collection form defined for the device (*device* view > *Settings* tab > *Inventory*).
- **Install Bundle:** Installs one or more bundles on the selected devices. This quick task is applicable only for ZENworks Configuration Management.
- **Uninstall Bundle:** Uninstalls one or more bundles on the selected devices. This quick task is applicable only for ZENworks Configuration Management.
- **Launch Bundle:** Launches one or more bundles on the selected devices. This quick task is applicable only for ZENworks Configuration Management.
- **Wake Up:** Uses Wake on LAN (WOL) technology to start a device that is shut down. The device must support WOL.
- **Intel AMT Power Management:** Allows you to change the power state of a device.
- **Reboot/Shutdown Devices:** Depending on your choice, shuts down or reboots the selected devices. You can include a warning message to be displayed on the devices. You can also specify a delay period for the reboot or shutdown.
- **Launch Application:** Launches an executable on the selected devices. The executable must be available to the devices either locally or in an accessible network location.
- **Run Script:** Runs a script on the selected devices. You can run a script that resides on the devices, resides on the your local drive, or that you intend to create. The script engine must be available to the devices either locally or in an accessible network location.
- **Launch Java Application:** Runs a Java application on the selected devices.
- **Retire Device Now:** Immediately retires the selected device from your ZENworks system. To retire a device at its next refresh, use the Retire Device action. 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. In ZENworks Configuration Management, all policy and bundle assignments are also removed. If you unretire the device in the future, its assignments are restored.

- **Unretire Device Now:** Immediately reactivates the selected device. In ZENworks Configuration Management, it reapplies all policy and bundle assignments that the device previously had. To unretire a device at its next refresh, use the Unretire Device action.

11.2 Initiating a Quick Task

Quick Tasks are available for the Devices, Bundles, and Policies lists in ZENworks Control Center. The following procedure provides an example of how to initiate a Quick Task from the Device list. The procedures for applying a Quick Task from the Bundles or Policies list is similar.

1. In ZENworks Control Center, click *Devices*, then locate the device to which you want to apply a Quick Task.
2. Select the check box next to the device, click *Quick Tasks*, then click *Refresh Policies* (or if you want to initiate a different Quick Task, click that task).
3. Configure the Quick Task options:

Option	Steps
Select the Primary Server to send the QuickTask notification	Depending on the Primary Server that you want to send the quick task notification, do one of the following: ◆ **Current primary server:** Select this option to enable the Primary Server of the ZENworks Control Center that you are accessing to send the quick task notification. ◆ **Any primary server:** Select this option to enable any Primary Server in the Management Zone to send the quick task notification. For example, you might want to use this option when the current Primary Server is busy performing other tasks. ◆ **Select one or more primary servers:** Select this option to choose one or more Primary Servers in the Management Zone to send the quick task notification. For example, if you choose to use a single Primary Server to send the quick task notification to many devices, the workload on the server might increase because it must send the notification to all the devices. You can select multiple Primary Servers so that the load of notifying many devices is distributed among the servers. Click *Add* to select and add the Primary Servers. Click *Remove* to remove any previously added Primary Server.

Option	Steps
QuickTask Notification Options	Select one of the following: - **Notify all the devices immediately:** Select this option to send the quick task notification to all the devices immediately. For example, you might want to select this option when the quick task notification is sent to a smaller number of devices and the Primary Server can handle all the quick task requests from all the devices at the same time. - **Notify all the devices within _ mins:** Select this option to send the quick task notification to all the devices within the specified time. By default, the notification time is set to 5 minutes. You can choose to specify the notification time according to your requirements. For example, you might want to select this option when the quick task notification is sent to a larger number of devices and the Primary Server might not be able to handle all the quick task requests from all the devices at the same time.
QuickTask Expiry Option	Select one of the following: - **Expires immediately when failed to notify the device:** Select this option to immediately expire the quick task when the quick task notification to the devices fails. For example, you might want to select this option to send a *Reboot/Shut Down Devices* quick task for rebooting or shutting down a device. If the device is already shut down, you don't want to execute the quick task on the device when the device restarts. - **Never Expires:** Select this option if you never want the quick task to expire. For example, you might want to select this option when you send an *Install Bundle* quick task to install an application on a device that might not be running at that time. - **Expires after _ mins of the quick task creation:** Select this option to expire the quick task a certain amount of time after it is created. By default, the expiry time is set to 5 minutes. You can choose to specify the expiration time according to your requirement. For example, you might want to select this option when you need to launch an application on multiple devices that are either in the process of booting up or are likely to be started within the stipulated time.

4 Click *Start* to initiate the notification of the quick task.

5 Click the QuickTask Status tab to monitor the status of the task.

Status	Description
New	The Primary Server has not started the process of notifying the device.
Connecting	The Primary Server is attempting to connect to the device.
Connected	The Primary Server is connected to the device.
Connection Failed	The Primary Server is unable to connect to the device.
Connection Failed (Expired)	The Primary Server is unable to connect to the device and the quick task assignment has expired.
Stopped	The quick task notification was stopped before it was sent to the device. You can do this only if the quick task has not yet been assigned to the device.
Assigned	The quick task has been assigned to the device.
Done	The quick task has been executed on the device.

11.3 Cancelling, Stopping, or Hiding a Quick Task

- To stop the quick task on a managed device, select the device on which you want to stop the quick task and click *Stop*. You can do this only if the quick task has not yet been assigned to the device.
- To hide the quick task dialog box, click *Hide*. The quick task is listed in the Quick Tasks list in the left navigation pane, and you can click the quick task to check the status again.
- To cancel the quick task, click *Cancel*.

12 Using System Variables

System variables let you define variables that can be used to replace paths, names, and so forth as you enter information in ZENworks Control Center.

You can define system variables at three levels:

- **Management Zone:** The system variables are inherited by all device folders, devices, and bundles.
- **Device Folder:** The system variables are inherited by all devices contained within the folder or its subfolders.
- **Device or Bundle:** The system variables apply only to the device or bundle for which they are configured.

The following sections contain more information:

- Section 12.1, "Understanding System Variables," on page 117
- Section 12.2, "Adding System Variables," on page 118
- Section 12.3, "Removing System Variables," on page 119
- Section 12.4, "Editing System Variables," on page 119
- Section 12.5, "Using System Variables," on page 119

12.1 Understanding System Variables

The following examples illustrate some uses of system variables:

- **Specifying Paths and Filenames in Actions:** When you create an Edit INI File action, for example, you specify a `.ini` file and configure the changes to be performed on that file. During the creation process, you can specify the full path to the file (for example, `C:\Program Files\OpenOffice.org 2.0\program\setup.ini`).

  Instead of specifying the entire path and filename, you can create a system variable. For example, the name of the variable can be OpenOffice INI and the value can be the full path to the file. Now, instead of specifying the full path and filename when you create the action, you can type `${OpenOffice INI}` in the *Filename* field.

  An advantage of using a system variable rather than typing the full path and filename is that you can specify this particular `.ini` file in many different types of actions. Suppose that the location of the `.ini` file changes. Instead of editing the path in each action, you can edit the path in the system variable and all the actions still point to the correct path.

  You can generalize the path even more by creating a system variable named ProgramFiles with the value of `C:\program files`. In the future, when you specify a path, you can type `${ProgramFiles}` and then specify the remaining path to the specific file. For example,

`${ProgramFiles}\OpenOffice 2.0\program\setup.ini`. Again, if the path to the `C:\program files` directory changes in the future, you only need to change the path in the system variable, rather than in each bundle that uses that location in a path.

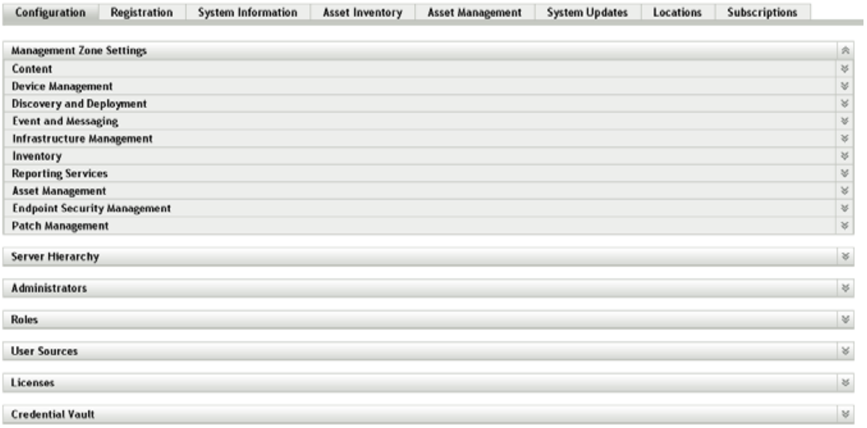
- **Overriding Inherited Settings:** When configuring system variables for a folder, device, or bundle, you can override an inherited variable by defining a new variable with the same name but a different value. For example, if `ProgramFiles=C:\` is defined at the Management Zone, you can override it by defining `ProgramFiles=D:\` at the device folder level or at the device or bundle.

  You can use a system variable when creating a bundle. Depending on the location of the targeted device object in the folder hierarchy, the value can be different.

  For example, suppose that all of your applications are installed in `C:\program files` except for specific applications used by the accounting department, which are installed in `D:\program files`. You define the ProgramFiles variable at the Management Zone level to point to `C:\program files`. For the accounting applications, you create a device folder called `Accounting Department` to contain the devices in the accounting department. You can set the value for the ProgramFiles variable to `D:\program files` on the Accounting Department device folder level. When the same bundle is applied to devices, the path to the program files directory is on the `C:\` drive for all targeted devices except for those contained in the Accounting Department device folder. For those devices, the program files directory points to the `D:\` drive.

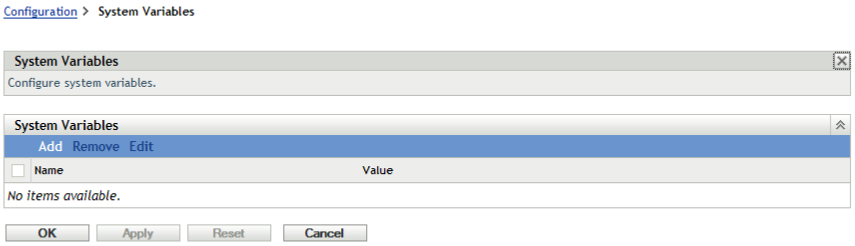
12.2 Adding System Variables

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



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

3 Click *System Variables*.



Configure system variables.

No items available.

4 Click *Add*, provide the name and value for the variable, then click *OK*.

When configuring system variables for a folder, device, or bundle, you can override an inherited variable by defining a new variable with the same name but a different value. For example, if `Var1=c:\` is inherited, you can override it by defining `Var1=d:\`.

Variable names cannot include spaces and must be unique at the level where they are defined. For example, you cannot have two variables named Var1 defined at the device level (unless one is inherited, in which case the device-level variable overrides the inherited variable).

Variable values cannot include the characters & and <.

5 Click *Apply*.

12.3 Removing System Variables

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

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

3 Click *System Variables*.

4 Select the check box next to the variable (or variables).

5 Click *Remove*.

6 Click *Apply*.

12.4 Editing System Variables

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

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

3 Click *System Variables*.

4 Select the check box next to the variable, then click *Edit*.

5 Modify the *Name* and *Value* fields as desired, then click *OK*.

6 Click *Apply*.

12.5 Using System Variables

1 Use the following syntax:

```
${VAR_NAME}
```

Replace *`VAR_NAME`* with the name of the variable.

13 Using Special System Variables

The following sections contain information on the special system variables supported in Novell ZENworks Configuration Management:

13.1 Windows Special System Variables

A Windows special system variable is one that defines the Windows directories. The typical paths listed below are based on default installations and might not match your specific setup.

Suppose that you have installed Windows to drive D: (for example, `D:\WINDOWS`). However, an application installation expects Windows to be on drive C: (for example, `C:\WINDOWS`). You can use the WinDisk system variable to substitute drive D: for the files that require it.

NOTE: For compatibility with traditional ZENworks, the system variable can also be specified in one of the following formats:

- %*system_variable*%

  For example, %ProgramFiles%
- %**system_variable*%

  For example, %*ProgramFiles%
- ${*system_variable*}

  For example, ${ProgramFiles}

Table 13-1 *Windows System Variables*

Macro	Description
${AdminTools}	File system directory that contains the administrative tools that appear in the Control Panel when a specific user logs on to the device. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\`*`Username`*`\Start Menu\Programs\Administrative Tools`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\`*`Username`*`\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Administrative Tools`.
${AllUsersProfile}	File system directory that contains common profile for all the users. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData`.
${AppData}	File system directory that serves as a common repository for application-specific data. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\`*`Username`*`\Application Data`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\`*`Username`*`\AppData\Roaming`.
${CommonDesktop}	File system directory that contains files and folders that appear on the desktop for all users. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Desktop`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\Public\Desktop`.
${CommonPrograms}	File system directory that contains the directories for the common program groups that appear on the Start menu for all users. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Start Menu\Programs`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData\Microsoft\Windows\Start Menu\Programs`.
${CommonStartMenu}	File system directory that contains the programs and folders that appear on the Start menu for all users. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Start Menu`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData\Microsoft\Windows\Start Menu`.

Macro	Description
${CommonStartup}	File system directory that contains the programs that appear in the Startup folder for all users. The system starts these programs whenever any user logs on. On a Windows Server 2003 or Windows XP device, typically this directory is `C:\Documents and Settings\All Users\Start Menu\Programs\Startup`. On a Windows Server 2008, Windows Vista, or Windows 7 device, typically this directory is `C:\ProgramData\Microsoft\Windows\Start Menu\Programs`/Startup.
${CommonAdminTools}	File system directory that contains the administrative tools that appear in the Control Panel for all users who logs in to the device. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Start Menu\Programs\Administrative Tools`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Administrative Tools`.
${CommonAppData}	File system directory that contains the application-specific data for all users who logs in to the device. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Application Data`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData`.
${CommonDocuments}	File system directory that contains the documents shared by all users who log in to the device. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Documents`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\Public\Documents`.
${CommonProgramFiles}	File system directory that contains the program files shared by multiple applications. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Program Files\Common Files`.
${CommonTemplates}	File system directory that contains the document templates shared by all users who log in to the device. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\All Users\Templates`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData\Microsoft\Windows\Templates`.

Macro	Description
${Cookies}	Files system directory that contains the user's cookies. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\Cookies. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\AppData\Roaming\Microsoft\Windows\Cookies.
${Desktop}	File system directory used to physically store file objects on the desktop (not the desktop folder itself). On a Windows Server 2003 or Windows XP device, typically this directory is C:\Documents and Settings*Username*\Desktop. On a Windows Server 2008, Windows Vista, or Windows 7 device, typically this directory is C:\Users\Username\Desktop.
${Favorites}	File system directory that serves as a common repository for the user's favorite items. On a Windows Server 2003 or Windows XP device, typically this directory is C:\Documents and Settings*Username*\Favorites. On a Windows Server 2008, Windows Vista, or Windows 7 device, typically this directory is C:\Users\Username\Favorites.
${Fonts}	Virtual folder containing fonts. Typically C:\Windows\Fonts.
${History}	File system directory that contains the user's history of visited Internet addresses. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\Local Settings\History. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\AppData\Local\Microsoft\Windows\History.
${LocalAppData}	File system directory that serves as a common repository for application-specific data. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically, C:\Users\Username\AppData\Local.
${MyPictures}	File system directory that contains a specific user's graphics files. On a Windows Server 2003 or Windows XP device, it is typically c:\Documents and Settings*Username*\My Documents\My Pictures. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically c:\Users\Username\Pictures.
${NetHood}	File system directory containing objects that appear in the network neighborhood. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\NetHood. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\Roaming\Microsoft\Windows\Network Shortcuts.

Macro	Description
${Personal}	File system directory that serves as a common repository for documents. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\`*`Username`*`\My Documents`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\`*`Username`*`\Documents`.
${PrintHood}	File system directory that serves as a common repository for printer links. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\`*`Username`*`\PrintHood`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\`*`Username`*`\AppData\Roaming\Microsoft\Windows\Printer Shortcuts`.
${Programs}	File system directory that contains the user’s program groups, which are also file system directories. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\`*`Username`*`\Start Menu\Programs.` On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\`*`Username`*`\AppData\Roaming\Microsoft\Windows\Start Menu\Programs.`
${ProgramData}	File system directory that contains the user’s program groups, which are also file system directories. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\ProgramData.`
${ProgramFiles}	File system directory that contains the user’s program files on a 32-bit device or the user’s 64-bit program files on a 64-bit device. Typically `C:\Program Files.`
${ProgramFiles32}	File system directory that contains the user’s 32-bit program files on a 64-bit device. Typically `C:\Program Files(x86).` On 32-bit devices, this file system directory returns the same as ${ProgramFiles}, so that you can use it to point to 32-bit programs irrespective of the platform.
${ProgramFilesCommon}	File system directory that contains the program files shared by multiple applications. Typically `C:\Program Files\Common Files`.
${Public}	File system directory that has public access to all the users on the network. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\Public`.
${Recent}	File system directory that contains the user’s most recently used documents. On a Windows Server 2003 or Windows XP device, it is typically `C:\Documents and Settings\`*`Username`*`\Recent`. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically `C:\Users\`*`Username`*`\AppData\Roaming\Microsoft\Windows\Recent`

Macro	Description
${SendTo}	File system directory that contains Send To menu items. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\SendTo. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\username\AppData\Roaming\Microsoft\Windows\SendTo
${StartMenu}	File system directory containing *Start* menu items. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\Start Menu. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\AppData\Roaming\Microsoft\Windows\Start Menu.
${Startup}	File system directory that corresponds to the user’s Startup program group. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\Start Menu\Programs\Startup. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\AppData\Roaming\Microsoft\Windows\Startup.
${TempDir}	Windows temporary directory. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\Local Settings\Temp. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\AppData\Local\Temp.
${Templates}	File system directory that serves as a common repository for document templates. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*\Templates. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\AppData\Roaming\Microsoft\Windows\Templates.
${UserProfile}	File system directory that contains the logged-in user’s profile. On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings*Username*. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username.
${WinDesktop}	Windows desktop directory On a Windows Server 2003 or Windows XP device, it is typically C:\Documents and Settings\Username\Desktop. On a Windows Server 2008, Windows Vista, or Windows 7 device, it is typically C:\Users\Username\Desktop.
${WinDir}	Windows directory. Typically C:\WINDOWS.
${WinDisk}	Drive letter (plus colon) for the Windows directory. Typically C:.

Macro	Description
${WinSysDir}	Windows system directory. Typically `C:\WINDOWS\system32`.
${WinSysDisk}	Drive letter (plus colon) for the Windows system directory. Typically `C:`.

NOTE: The values of PATH variable alone will be appended from both the user environment and the system variable. If values of variables other than PATH are defined in volatile, user environment and system variable, then the values in the volatile environment takes precedence over that of the system variable and the user variable.

If values of variables other than PATH are not defined in volatile environment variable, the values in the user environment variable take precedence over that of the system variable.

13.2 Login Script Special System Variables

NOTE: For compatibility with traditional ZENworks, the system variable can also be specified in one of the following formats:

- %*system_variable*%

  For example, %MONTH%
- %**system_variable*%

  For example, %*MONTH%
- ${*system_variable*}

  For example, ${MONTH}

The following table lists the supported login script special system variables:

Table 13-2 *Supported Login Script Special System Variables*

Macro	Description
${COMPUTER_NAME}	The name of the computer. For example: work_pc.
${DAY}	Numeric day of the month. For example: 01, 10, 15.
${HOUR24}	Time of the day according to a 24-hour clock. For example: 02, 05, 14, 22.
${HOUR}	Hour of the day. For example: 0 = 12, 13 = 1.
${LAST_NAME}	Last name of the current user (also known as the user’s eDirectory Surname attribute). For example: Jones.
${MINUTE}	Current minute. For example: 02, 59.
${MONTH}	Current month number. For example: 01 for January.
${NDAY_OF_WEEK}	Numeric day of the week. For example: 1 for Sunday, 2 for Monday.
${NETWORK}	Workstation network address. For example: 101.10.101.101
${OS_VERSION}	Version of the OS. For example: v5.00.
${OS}	OS type. For example: MSDOS, WIN98, WINNT, WIN2000, WINXP.

Macro	Description
${PLATFORM}	Platform running. For example: WIN32NT.
${PHYSICAL_STATION}	MAC address. For example: 0000C04FD92ECA.
${SECOND}	Number of seconds. For example: 03, 54.
${SHORT_YEAR}	Short year number. For example: 97, 00.
${WINVER}	Windows version. For example: v3.11, v4.00.
${YEAR}	Full year number. For example: 2008.

13.3 Novell eDirectory Attribute Special System Variables

The ZENworks Application Window supports system variables that pull information from the attributes of the currently logged-in user.

The following sections explain the system variable syntax and provide examples:

- Section 13.3.1, "Syntax," on page 128
- Section 13.3.2, "Examples," on page 129
- Section 13.3.3, "Configuring the eDirectory Attribute Special System Variables," on page 129

13.3.1 Syntax

eDirectory attribute system variables use the following syntax:

`%`*`eDirectory_attribute`*`%`

Table 13-3 *Special System Variable Syntax*

Element	Description
`%`	Flags the text as a system variable. The entire system variable must be enclosed in% characters.
eDirectory_attribute	Defines the attribute to be read. You can use the ConsoleOne Schema Manager (available from the Tools menu) to view an eDirectory object's available attributes.

NOTE: For compatibility with traditional ZENworks, the special system variables can also be specified in one of the following formats:

- %system_variable%

  For example, %CN%
- %**system_variable*%

  For example, %*CN%

13.3.2 Examples

The following table provides examples of eDirectory attribute system variables.

Table 13-4 *Special System Variable Examples*

Macro	Description
`%CN%`	Returns the common name of the currently logged-in user.
`%DN%`	Returns the distinguished name of the currently logged-in user.
`%Full Name%`	Returns the full name of the currently logged-in user. This is the name defined in User object > General tab > Identification page > Full Name field.
`%Given Name%`	Returns the first name of the currently logged-in user. This is the name defined in User object > General tab > Identification page > Given Name field.
`%Surname%`	Returns the last name of the currently logged-in user. This is the name defined in the User object > General tab > Identification page > Last Name field.

The remaining system variables that are predefined by ZENworks are available in the following locations:

- **On Windows:** `*ZENworks_Home*/novell/zenworks/datamodel/authsource/edirectory-users.zls.xml`
- **On Linux:** `/etc/opt/novell/zenworks/datamodel/authsource/edirectory-users.zls.xml`

13.3.3 Configuring the eDirectory Attribute Special System Variables

To use eDirectory attributes as a reference in the bundle system variables, use the following procedures:

On the eDirectory Server

Define a name mapping between LDAP attribute types and eDirectory attribute definitions. You can log in to Novell iManager and click *Attribute Map* to do the mapping. For example, you can choose to map an eDirectory attribute named `GWMailID`, which stores the user e-mail id, to a Primary LDAP Attribute named `Mail`.

Only User attributes are supported.

For information on mapping the LDAP attribute types and eDirectory attribute, see Novell eDirectory Administration guide at the Novell Documentation Website (http://www.novell.com/documentation/).

On the ZENworks Server

1. Edit the sample file to create a file that contains the attribute that you want to use with ZENworks:
   - **On Windows:** *ZENworks_Home*/novell/zenworks/datamodel/authsource/edirectory-users-additional.zls.xml.sample
   - **On Linux:** /etc/opt/novell/zenworks/datamodel/authsource/edirectory-users-additional.zls.xml.sample
2. Add an entry for the attribute that you want to use with ZENworks. For example:

   ```
   <attribute name="ZEN" ldapName="Mail"
   builder="com.novell.zenworks.datamodel.session.jndi.builder.StringAttributeBui
   lder" />
   ```

   Replace `ZEN` with the attribute that you want to use with ZENworks and replace `Mail` with the Primary LDAP Attribute that you mapped with the eDirectory attribute named `GWMailID`.

   You must use the right builder, depending on whether the syntax is a string, integer, or Boolean. The `edirectory-users-additional.zls.xml.sample` file lists the different type of builders.
3. Save the sample file as `edirectory-users-additional.zls.xml`.
4. Replace the `edirectory-users-additional.zls.xml` file on all the Primary Servers in the Management Zone.
5. Restart the zenserver service.

Sample Scenario

Create a bundle with an action that references the macro and that runs in the user impersonation mode. For example:

1. Create a bundle with a Run Script action that references the special system variable, `${ZEN}` and has the executable security level set to `Run as logged in user`.
2. Perform the bundle assignment.

   When the action is executed on the managed device, the value of the LDAP attribute is substituted for the special system variable.

In the example, the email id stored in the `GWMailID` attribute is substituted for the special system variable, `${ZEN}`. Consequently, when the action is executed on the managed device, the e-mail ID stored in the `GWMailID` attribute is displayed on the device.

13.4 Microsoft Active Directory Attribute Special System Variables

The ZENworks Application Window supports special system variables that pull information from the attributes of the currently logged-in user.

The following sections explain the system variable syntax and provide examples:

- Section 13.4.1, “Syntax,” on page 131
- Section 13.4.2, “Examples,” on page 131
- Section 13.4.3, “Configuring the Active Directory Attribute Special System Variables,” on page 132

13.4.1 Syntax

Active Directory attribute special system variables use the following syntax:

`%`*`active-directory_attribute`*`%`

Table 13-5 *Special System Variable Syntax*

Element	Description
`%`	Flags the text as a system variable. The entire system variable must be enclosed in% characters.
active-directory_attribute	Defines the attribute to be read.

NOTE: For compatibility with traditional ZENworks, the special system variables can also be specified in one of the following formats:

- %system_variable%

  For example, %Street%
- %**system_variable*%

  For example, %*Street%

13.4.2 Examples

The following table provides examples of Active Directory attribute system variables.

Table 13-6 *Special System Variable Examples*

Special System Variables	Description
`%CN%`	Returns the common name of the currently logged-in user.
`%OU%`	Returns the organizational unit name for the currently logged-in user.
`%Full Name%`	Returns the full name of the currently logged-in user.
`%Surname%`	Returns the last name of the currently logged-in user.
`%Street%`	Returns the street address of the currently logged-in user.

The remaining special system variables that are predefined by ZENworks are available in the following locations:

- **On Windows:** *`ZENworks_Home`*`/novell/zenworks/datamodel/authsource/active-directory-users.zls.xml`
- **On Linux:** `/etc/opt/novell/zenworks/datamodel/authsource/active-directory-users.zls.xml`

13.4.3 Configuring the Active Directory Attribute Special System Variables

To use Active Directory attributes as a reference in the special system variables, use the following procedures:

On the Active Directory Server

To map existing or new attributes defined in the Active Directory schema, see the Microsoft TechNet Library (http://technet.microsoft.com/en-us/library/cc961581.aspx).

On the ZENworks Server

1 Edit the sample file to create a file that contains the attribute that you want to use with ZENworks:

- **On Windows:** *ZENworks_Home*/novell/zenworks/datamodel/authsource/active-directory-users-additional.zls.xml.sample
- **On Linux:** /etc/opt/novell/zenworks/datamodel/authsource/active-directory-users-additional.zls.xml.sample

2 Add an entry for the attribute that you want to use with ZENworks. For example:

```
<attribute name="ZEN" ldapName="employeeID"
builder="com.novell.zenworks.datamodel.session.jndi.builder.StringAttributeBui
lder" />
```

Replace ZEN with the attribute that you want to use with ZENworks and replace EmployeeID with the LDAP Display Name in Active Directory. If the Active Directory common name for this attribute is defined as Employee-ID, ZEN now maps to the attribute Employee-ID.

You must use the right builder, depending on whether the syntax is a string, integer, or Boolean. The active-directory-users-additional.zls.xml.sample file lists the different type of builders.

3 Save the sample file as active-directory-users-additional.zls.xml.

4 Replace the active-directory-users-additional.zls.xml file on all the Primary Servers in the Management Zone.

5 Restart the zenserver service.

Sample Scenario

Create a bundle with an action that references the special system variable and that runs in the user impersonation mode. For example:

1. Create a bundle with a Run Script action that references the special system variable ${ZEN} and has the executable security level set to Run as logged in user.
2. Perform the bundle assignment.

   When the action is executed on the managed device, the value of the LDAP attribute is substituted for the special system variable.

In the example, the employee id stored in the Employee-ID attribute is substituted for the special system variable, ${ZEN}. Consequently, when the action is executed on the managed device, the employee ID stored in the Employee-ID attribute is displayed on the device.

13.5 Language Variable Special System Variables

To minimize the number of Application objects required to distribute the same application in different languages, you can use language variables to represent language-related information in MSI Application objects.

NOTE: For compatibility with traditional ZENworks, the special system variables can also be specified in one of the following formats:

- %system_variable%

  For example, %LOCALE_USER_LANG%
- %**system_variable*%

  For example, %*LOCALE_USER_LANG%

The following table describes the available language variables:

Table 13-7 *Language Variable Special System Variables*

Language Variable	Description
`%LOCALE_SYS_DEFAULT_ANSI_CP%`	Retrieves the American National Standards Institute (ANSI) code page associated with the system locale. If the locale does not use an ANSI code page, the value is 0. Example: 1252
`%LOCALE_SYS_DEFAULT_OEM_CP%`	Retrieves the original equipment manufacturer (OEM) code page associated with the system locale. If the locale does not use an OEM code page, the value is 1. Example: 437
`%LOCALE_SYS_LANGID%`	Retrieves the language identifier for the system locale. The language identifier is a standard international numeric abbreviation for the language in a country or geographical region. Example: 0409
`%LOCALE_SYS_ABBR_LANG%`	Specifies the abbreviated name of the system language. In most cases, it is created by taking the two-letter language abbreviation from the International Organization for Standardization (ISO) Standard 639 and adding a third letter, as appropriate, to indicate the sub language. Example: ENU
`%LOCALE_SYS_ENG_LANG%`	Specifies the full English name of the system language from ISO Standard 639. This is always restricted to characters that can be mapped into the ASCII 127-character subset. Example: English

Language Variable	Description
%LOCALE_SYS_LANG%	Specifies the full localized name of the system language. This name is based on the localization of the product and might vary for each localized version. Example: English (United States)
%LOCALE_SYS_ISO639_LANG%	Specifies the abbreviated name of the system language based only on ISO Standard 639. Example: en
%LOCALE_SYS_NATIVE_LANG%	Specifies the native name of the system language. Example: English
%LOCALE_USER_DEFAULT_ANSI_CP%	Retrieves the American National Standards Institute (ANSI) code page associated with the user locale. If the locale does not use an ANSI code page, the value is 0. Example: 1252
%LOCALE_USER_DEFAULT_OEM_CP%	Retrieves the original equipment manufacturer (OEM) code page associated with the user locale. If the locale does not use an OEM code page, the value is 1. Example: 850
%LOCALE_USER_LANGID%	Retrieves the language identifier for the user locale. The language identifier is a standard international numeric abbreviation for the language in a country or geographical region. Example: 0c09
%LOCALE_USER_ENG_LANG%	Specifies the full English name of the user language from ISO Standard 639. This is always restricted to characters that can be mapped into the ASCII 127-character subset. Example: English
%LOCALE_USER_LANG%	Specifies the full localized name of the user language. This name is based on the localization of the product and might vary for each localized version. Example: English (Australia)
%LOCALE_USER_ISO639_LANG%	Specifies the abbreviated name of the user language based only on ISO Standard 639. Example: en
%LOCALE_USER_NATIVE_LANG%	Specifies the native name of the user language. Example: English

14 Troubleshooting ZENworks Control Center

An HTTP request is not redirected to HTTPS if IIS is running on the Primary Server

Source: ZENworks 11; ZENworks Control Center.

Explanation: During installation, the setup checks to see if the default HTTP port (80) and HTTPS port (443) are in use. If the ports are in use by another application (such as IIS), you are prompted to use alternative ports. In this case, you must access ZENworks Control Center via the port it is using and not access IIS.

Action: Although http://*Primary_Server_IP_address* works if ZENworks Control Center is using port 80, http://*Primary_Server_IP_address*:### (where ### is the port Tomcat is using) always works.

ZENworks Control Center throws a java.lang.NoClassDefFoundError Exception

Source: ZENworks 11; ZENworks Control Center.

Explanation: When you use ZENworks Control Center to perform an operation, you might encounter a `java.lang.NoClassDefFoundError` exception.

Action: Restart the Novell ZENworks Server service:

On Windows: Do the following:

1. On the Windows desktop, click *Start* > *Settings* > *Control Panel*.
2. Double-click *Administrative Tools* > *Services*.
3. Restart *Novell ZENworks Server*.

On Linux: At the console prompt, enter `/etc/init.d/novell-zenserver restart`.

Opening links in a new tab or new window of ZENworks Control Center might fail to display the page

Source: ZENworks 11; ZENworks Control Center.

Explanation: While browsing ZENworks Control Center, if you choose to open a link in a new tab or a new window, the page might fail to display.

Action: Open the link in the same window.

Logging in to ZENworks Control Center or navigating within ZENworks Control Center by using Firefox 3.*x* might display a blank page

Source: ZENworks 11; ZENworks Control Center.

Explanation: If you are accessing ZENworks Control Center across the network by using Firefox 3.*x*, you might see a blank page when you log in to ZENworks Control Center or navigate within ZENworks Control Center.

Action: Do one of the following:

- Use the Firefox Web browser to open `about:config`, then change the value of *browser.cache.memory.enable* to *False*.
- Refresh the Web browser to reload the ZENworks Control Center page every time ZCC displays a blank page.
- Use any other ZENworks 11 supported Web browser to access ZENworks Control Center.

  For more information about the supported Web browsers, see "Administration Browser Requirements" in the *ZENworks 11 Server Installation Guide*.

ZENworks Control Center displays a warning message indicating that some of the ZENworks features might behave incorrectly

Source: ZENworks 11; ZENworks Control Center.

Explanation: When you deploy ZENworks 11 with an external database, if the Primary Server time is not synchronized with the ZENworks database server time, you might see the following warning message on the ZENworks Control Center Login page:

```
Some of the ZENworks features might behave incorrectly because the
time of the current Primary Server and the time of the ZENworks
database server are not in sync.
```

Action: Synchronize the Primary Server time with that of the Database Server.

The Nessus scan report for ZENworks Control Center shows that the site is vulnerable to cross-site scripting attacks

Source: ZENworks 11; ZENworks Control Center.

Explanation: If you run a Nessus scan for the ZENworks Control Center, the report shows that the site is vulnerable to cross-site scripting attacks. This issue is addressed by the ZENworks Control Center and there is no actual vulnerability.

Action: Ignore this message. For more information, see "User Source Authentication" in the *ZENworks 11 User Source and Authentication Reference*.

A Documentation Updates

This section contains information on documentation content changes that were made in this *ZENworks Control Center Reference* for Novell ZENworks11 release. The information can help you to keep current on updates to the documentation.

The documentation for this product is provided on the Web in two formats: HTML and PDF. The HTML and PDF documentation are both kept up-to-date with the changes listed in this section.

If you need to know whether a copy of the PDF documentation that you are using is the most recent, the PDF document includes a publication date on the title page.

The following updates were made to the document:

- Section A.1, “October 2013: 11SP2 (11.2.4),” on page 139
- Section A.2, “March 2013: Update to ZENworks 11 SP2 (11.2.3),” on page 139

A.1 October 2013: 11SP2 (11.2.4)

Updates were made to the following sections:

Location	Update
Chapter 13, “Using Special System Variables,” on page 121.	Description added for ${ProgramFiles32}in the following section: “Windows Special System Variables” on page 121.
Chapter 13, “Using Special System Variables,” on page 121	Included a note on variables at the end of the following: Table 13-1 on page 122.

A.2 March 2013: Update to ZENworks 11 SP2 (11.2.3)

Updates were made to the following sections:

Location	Update
Chapter 1, “Accessing ZENworks Control Center,” on page 9	Added the following section: Section 1.2, “Restricting Access to ZENworks Control Center,” on page 10.

Location	Update
Chapter 6, "Managing Administrators and Administrator Groups," on page 23.	Added two cross references in the following sections: ◆ Section 6.5.23, "Inventory Report Rights," on page 61, ◆ Section 6.5.24, "Asset Management Report Rights," on page 62.
Section 6.5, "Rights Descriptions," on page 32	Added more detailed information about which ZENworks Control Center operations are controlled by each administrator right.