

ZENworks Adaptive Agent Guide

Novell® ZENworks 10 Configuration Management SP2

10.2

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www.novell.com



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About This Guide

This guide provides information about the Novell® ZENworks® Adaptive Agent, a component of Novell ZENworks 10 Configuration Management SP2. For additional information about ZENworks and other Novell products, visit www.novell.com (<http://www.novell.com/products/zenworks>).

The information in this guide is organized as follows:

- ♦ Chapter 1, “Overview,” on page 9
- ♦ Chapter 2, “Status,” on page 11
- ♦ Chapter 3, “Policies,” on page 13
- ♦ Chapter 4, “Bundles,” on page 15
- ♦ Chapter 5, “Inventory,” on page 21
- ♦ Chapter 6, “Remote Management,” on page 23
- ♦ Chapter 7, “Logging,” on page 27
- ♦ Chapter 8, “Satellite Roles,” on page 29
- ♦ Chapter 9, “Windows Proxy,” on page 35
- ♦ Chapter 10, “ZENworks Terminology,” on page 37

Audience

This guide is intended for ZENworks 10 Configuration Management end users (those with the ZENworks Adaptive Agent on their devices).

Feedback

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

Additional Documentation

ZENworks 10 Configuration Management is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the [ZENworks 10 Configuration Management documentation \(http://www.novell.com/documentation/zcm10/\)](http://www.novell.com/documentation/zcm10/).

Documentation Conventions

In Novell documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

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When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux or UNIX, should use forward slashes as required by your software.

Overview

1

The ZENworks® Adaptive Agent is a part of the Novell® ZENworks 10 Configuration Management software that lets your administrator manage **devices** over the network. The ZENworks Adaptive Agent, commonly referred to as the Adaptive Agent, provides services that help the administrator do the following without visiting your device:

- ♦ Manage policies that determine the behavior of your device.
- ♦ Deliver software, patches, and other files to your device.
- ♦ Take inventory of your device's hardware and software.
- ♦ Access your device from a remote location to troubleshoot and fix problems with hardware and software.

The administrator can also choose to use your device as:

- ♦ A **satellite**, which performs certain ZENworks Primary Server roles, to minimize WAN traffic in your ZENworks system. These roles include **Collection**, **Content**, and **Imaging**.
- ♦ A Windows Proxy, which performs discovery and deployment tasks that are Windows-based and cannot be performed by a ZENworks Linux Primary Server.

Each of these services is provided through the use of modules that plug in to the Adaptive Agent. The default modules included with the Adaptive Agent are the **Policies**, **Bundles**, **Inventory**, **Remote Management**, **Windows Proxy**, and **Satellite**.

Depending on the services implemented by the administrator, one or more of these modules might not be active on your device. For example, if your administrator does not intend to remotely access your workstation, the Remote Management module might not be installed on the device. Consequently, the Remote Management tab is not displayed in the ZENworks Adaptive Agent page on the device.

This guide provides information about all of the default modules. To view which modules are active on your device, see **Chapter 2, "Status," on page 11**.

Status

2

The ZENworks® Adaptive Agent provides status information such as the last time it contacted a ZENworks Server and whether or not the Agent Modules are running.

2.1 Viewing the Agent's Status


- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, click *Status*.

Status Field	Description
<i>Device Address</i>	The IP address of your device .
<i>Device Name</i>	The computer name for your device.
<i>Device State</i>	The device's state: managed, unmanaged, retired, or unknown. Unknown displays only if there is an error.
<i>Last Contact with Server</i>	The last time the Adaptive Agent had contact with the ZENworks Server listed in the <i>Server DNS</i> field.
<i>Next Contact with Server</i>	The next time the Adaptive Agent is scheduled to contact (or be contacted by) the ZENworks Server.
<i>Primary User</i>	The most frequent user of the device. Frequency is determined by number of logins, amount of time logged in, or designated user; your administrator determines the method used to calculate the primary user.
<i>ZENworks Adaptive Agent Version</i>	The version of the ZENworks Adaptive Agent.
<i>Management Zone</i>	The name of the ZENworks® Management Zone in which your device is located.
<i>Server DNS</i>	The DNS name of the ZENworks Server that your device's Adaptive Agent communicates with to send and receive ZENworks content and information.
<i>Server Address</i>	The IP address of the ZENworks Server listed in the <i>Server DNS</i> field.
<i>Registration Keys</i>	The alphanumeric strings supplied during registration of the device in the Management Zone. Registration keys, which are defined by your administrator, help determine bundle and policy assignments.
<i>Agent Status</i>	The status and versions of the Agent modules.

2.2 Registering with a Key

Your **device** must be registered in the Management Zone in order to be managed through ZENworks® Configuration Management. To facilitate this process, your administrator can create registration keys. A registration key is alphanumeric string that you optionally supply to the ZENworks Adaptive Agent during registration of the device in order to automatically be assigned bundles and policies associated with the key.

Your administrator might provide you with a key and ask you to register (or reregister) your device. To do so:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, click *Status*.
- 3 In the *Registration Keys* field, type the registration key, then click *Register*.

The Adaptive Agent registers the device using the key you supplied.

Registration keys are cumulative, which means that when you register with more than one key, the device receives the bundles, policies, and group assignments associated with each of the keys. Each key used for registration is added to the list for future reference.

If you add a registration key to a device that is already registered in the Management Zone with another key, and both keys specify a folder for the device, the new key does not move the device to the folder specified by the new key.


To move a device to another folder, in ZCC, click the *Devices* tab, click *Servers* or *Workstations*, click the check box next to the device that you want to move, click *Edit*, click *Move*, click the desired folder, then click *OK*. Moving a device by using the ZCC retains the device's existing assignments. You can also unregister then register the device, however, its existing assignments are removed.

The ZENworks® Adaptive Agent applies policies that your administrator defines. Policies are rules that control a range of hardware and software configuration settings. For example, your administrator can create policies that control the Adaptive Agent features you can use, the bookmarks available in your browser, the printers you can access, and the security and system configuration settings for your **device**.

You cannot change the policies applied by your administrator. However, it is helpful to understand the difference between user-assigned policies and device-assigned policies and how to see which policies are being applied.

3.1 User-Assigned Versus Device-Assigned Policies

Policies might be assigned to you or they might be assigned to your **device**. Policies assigned to you are referred to as user-assigned policies, and policies assigned to your device are referred to as device-assigned policies.

The ZENworks Adaptive Agent enforces your user-assigned policies only when you are logged in to your user directory (Microsoft* Active Directory* or Novell® eDirectory™). If you are not logged in, you can log in through the ZENworks Configuration Management login screen. To do so, right-click the  icon in the notification area, then click *Login*.

The Adaptive Agent always enforces the device-assigned policies regardless of whether or not you are logged in. Therefore, device-assigned policies are enforced for all users of the device.

3.2 Viewing Policies

To view the policies assigned to you and your device:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, click *Policies*.

Bundles

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Software applications and other files are distributed to your **device** as bundles. A bundle contains all of the content (files, etc.) and instructions (registry modifications, shortcut information, etc.) required to install the software on the device.


4.1 Bundles Versus Applications

Bundles are different than standard applications, such as Windows* Notepad, that already reside on your **device**. When you double-click a bundle to launch it, the ZENworks® Adaptive Agent might first complete a variety of distribution tasks before the application is launched, including installing the application files, running scripts, and changing the device's registry specific INI files, or environment variables. These tasks are all configured by your administrator to ensure that the application runs correctly on your device.

In some instances, a bundle's icon appears dimmed or grayed out. This indicates that your device does not meet the requirements that the administrator defined for the application, or the bundle is not scheduled to be available to you at that time. The Adaptive Agent does not distribute the application to your device until the requirements are met or the schedule is appropriate.

4.2 User-Assigned Versus Device-Assigned Bundles

The bundles that you see on your **device** might be assigned to you or they might be assigned to the device. Bundles assigned to you are referred to as user-assigned bundles, and bundles assigned to your device are referred to as device-assigned bundles.

The ZENworks Adaptive Agent displays your user-assigned bundles only when you are logged in to your user directory (Microsoft* Active Directory* or Novell® eDirectory™). If you are not logged in, you can log in through the ZENworks Configuration Management login screen. To do so, right-click the  icon in the notification area, then click *Login*.

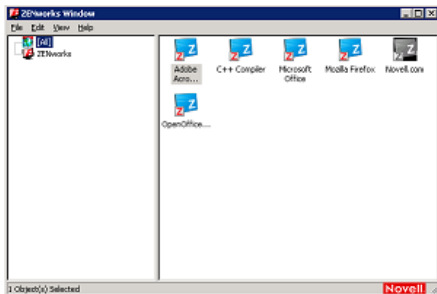
The Adaptive Agent always displays the device-assigned bundles regardless of whether or not you are logged in. Device-assigned bundles can be launched by anyone who uses your device.

4.3 Accessing Bundles

The ZENworks® Adaptive Agent provides three ways for you to access the bundles that are assigned to you: the ZENworks Window, ZENworks Explorer, and the ZENworks Icon.

4.3.1 ZENworks Window

The ZENworks Window is a standalone window that you can launch from the Start menu (*Start menu > Programs > Novell ZENworks > ZENworks Application Window*).



The ZENworks Window left pane displays the following:

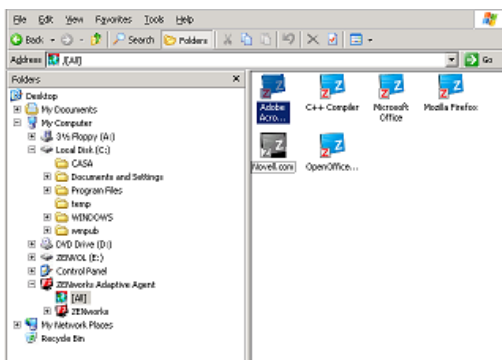
- ♦ **[All] folder:** Contains all bundles that have been distributed to you, regardless of the folder in which they are located.
- ♦ **ZENworks folder:** Contains all bundles that have not been assigned to a different folder. The ZENworks folder is the default folder for bundles; however, your administrator can create additional folders in which to organize bundles, and can even rename the ZENworks folder.

When you select a folder in the left pane, the right pane displays the bundles that are contained within the folder. You can:

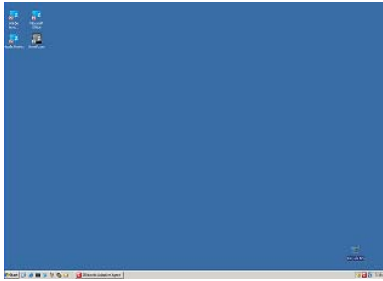
- ♦ Install a bundle or launch an application for an already installed bundle.
- ♦ View the properties of a bundle. The properties include a description of the bundle, information about people to contact for help with the bundle, the times when the bundle is available for use, and the system requirements established for the bundle.
- ♦ Repair an installed application.
- ♦ Uninstall an application. This is an administrator-controlled feature that might not be enabled.

4.3.2 ZENworks Explorer

ZENworks Explorer is an extension to Windows* Explorer that enables bundles to be displayed in Windows Explorer, on the desktop, on the Start menu, on the Quick Launch toolbar, and in the notification area. The following graphic shows bundles displayed in Windows Explorer.




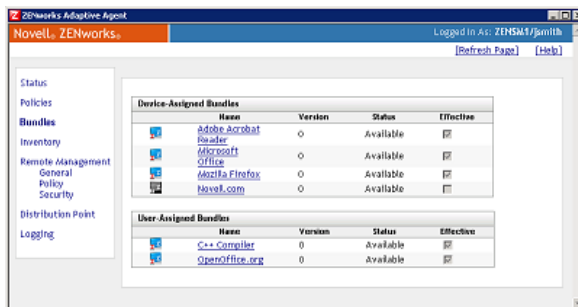
The following graphic shows bundles displayed on the desktop.



You can perform the same tasks on the bundles in the ZENworks Explorer as you can in the ZENworks Window.

4.3.3 ZENworks Icon

The ZENworks Icon  is located in the Windows notification area. You can double-click the icon to display the ZENworks Adaptive Agent properties. Located in the left navigation pane, the Bundles link lets you view the bundles that are assigned to you and to your **device**.




The bundle list includes the following information:

- ♦ **Name:** Displays the name of the bundle. Click the name to display the properties for the bundle, including such information as the version, folder and icon locations, help contacts, and the time schedules. Based on the configuration of the schedules for the bundle in ZENworks Control Center, the time schedules are as follows:



Time Schedule	Details
No Schedule / Default	No schedule is configured for the bundle
On a Specific Event	Runs the scheduled action when the specified event is triggered such as user login, user logout, or device boot
Relative	Runs the scheduled action relative to a specified number of days, hours, and minutes from when the device is refreshed
Daily	Runs the scheduled action daily at the specified time
Weekly	Runs the scheduled action on the selected day of the week
Monthly	Runs the scheduled action on the selected day of the month
Yearly	Runs the scheduled action on the selected day of the year
Specific Date and Time	Runs the scheduled action once on the date and time specified








Time Schedule	Details
Specific Time Interval	Repeatedly runs the scheduled action every xxx months, weeks, days, hours, and/or minutes from the start time
On Refresh	Runs the scheduled action on device refresh
Always	The scheduled action is always active.
Date Specific	Runs the scheduled action on the specified date
Day Range	Runs the scheduled action during the specified time interval

- ♦ **Status:** Displays the installation status for the bundle.
- ♦ **Effective:** Displays whether or not the bundle can be used on the device. If the *Effective* box is selected, the bundle meets all system requirements and schedule constraints to be used. You can click the bundle icon  to launch the bundle.

If the box is not selected, it cannot be used; to find out why, click the bundle name to display the system requirements and schedule properties.

4.4 Understanding Bundle Icons

A bundle icon changes to reflect the current status of the bundle. The following table shows the bundle icons using the default light blue background icon. Your administrator might choose to use a different background icon; however, the status icons such as  and , remain the same.

Icon	Status
	Available. You can launch the bundle.
	Unavailable. You cannot launch the bundle. Either the device does not meet the system requirements established for the bundle or the bundle is not scheduled to be available at the current time.
	Downloading. The bundle is downloading from the network location where it is stored.
	Installing. The bundle is installing to the device.
	Running. The bundle is currently running.
	Uninstalling. The bundle is being removed from the device.
	Not Installed. The bundle failed to install. Right-click the icon, then click <i>Verify</i> to repair the bundle.


4.5 Launching a Bundle

By default, the ZENworks® Adaptive Agent does not distribute (download and install) a bundle to your **device** until the first time you launch it. The distribution process might include installing the bundle's files, running scripts, and changing the device's registry, specific INI files, or environment variables. Or, the process might include nothing more than providing a shortcut to the application's executable file on your local device or a network server.

To launch a bundle:

- 1 Access the bundle in one of the following locations:

ZENworks Window: From the *Start* menu, click *Programs > Novell ZENworks > ZENworks Application Window*.

ZENworks Explorer: Open Windows* Explorer and find the  ZENworks Adaptive Agent entry. Depending on how your ZENworks administrator configured the bundle, the bundle icon might also be displayed on the desktop, Start menu, Quick Launch toolbar, or notification area.

- 2 Double-click the bundle icon.

If the bundle has an Install MSI or Install Network MSI action, you might be prompted to enter the password when the bundle is launched on the device. To launch the bundle, you must log in to the device by using an user account that has a password configured.


4.6 Postponing a Bundle Download

If, after you launch a bundle, it begins to download and you need to stop the download, you can postpone the download to a later time. When you resume the download, it continues from the point where it previously stopped.

To postpone a bundle download:

- 1 Access the bundle in one of the following locations:

ZENworks Window: From the *Start* menu, click *Programs > Novell ZENworks > ZENworks Application Window*.

ZENworks Explorer: Open Windows Explorer and find the  ZENworks® Adaptive Agent entry. Depending on how your ZENworks administrator configured the bundle, the bundle icon might also be displayed on the desktop, Start menu, Quick Launch toolbar, or notification area.

- 2 Right-click the bundle icon, then click *Postpone*.


4.7 Verifying a Bundle

If an installed application is not functioning correctly or you think it might be outdated, you can verify that the application's bundle information is still correct. If it is not, the ZENworks Adaptive Agent reinstalls the bundle to your workstation.

To verify a bundle:

- 1 Access the bundle in one of the following locations:

ZENworks Window: From the *Start* menu, click *Programs > Novell ZENworks > ZENworks Application Window*.

ZENworks Explorer: Open Windows* Explorer and find the  ZENworks® Adaptive Agent entry. Depending on how your ZENworks administrator configured the bundle, the bundle icon might also be displayed on the desktop, Start menu, Quick Launch toolbar, or notification area.

- 2 Right-click the bundle icon, then click *Verify*.


4.8 Viewing a Bundle's Properties

You can view a bundle's properties to see its version number, current installation status, and help contacts. In addition, if the bundle is unavailable, you can see if it is unavailable because of system requirements or schedule restrictions.

To view a bundle's properties:

- 1 Access the bundle in one of the following locations:

ZENworks Window: From the *Start* menu, click *Programs > Novell ZENworks > ZENworks Application Window*.

ZENworks Explorer: Open Windows* Explorer and find the  ZENworks® Adaptive Agent entry. Depending on how your ZENworks administrator configured the bundle, the bundle icon might also be displayed on the desktop, Start menu, Quick Launch toolbar, or notification area.

- 2 Right-click the bundle icon, then click *Properties*.

4.9 Uninstalling a Bundle

Uninstall is an administrator-controlled feature. By default, uninstall is not enabled, which means that you can only uninstall bundles if your administrator has enabled the feature. Uninstall is enabled on a per-bundle basis. Depending on what your administrator enables, you might be able to uninstall some bundles but not others.


When you uninstall a bundle, the ZENworks® Adaptive Agent removes all files from your **device** and undoes all configuration settings made to your device during the bundle installation. Only files that the Adaptive Agent installs specifically for the bundle are removed. For example, the Adaptive Agent does not remove any shared files (files used by another application) or any user-created files such as word processing documents or spreadsheets.

After you uninstall a bundle, the bundle's icon remains on your device. This enables you to install the bundle again whenever necessary.

To uninstall a bundle:

- 1 Access the bundle in one of the following locations:

ZENworks Window: From the *Start* menu, click *Programs > Novell ZENworks > ZENworks Application Window*.

ZENworks Explorer: Open Windows* Explorer and find the  ZENworks® Adaptive Agent entry. Depending on how your ZENworks administrator configured the bundle, the bundle icon might also be displayed on the desktop, Start menu, Quick Launch toolbar, or notification area.

- 2 Right-click the bundle icon, then click *Uninstall*.

The ZENworks® Adaptive Agent scans your **device** for software and hardware information. This information is viewable by both you and your administrator.

5.1 What Is Inventory Information Used For?

The software and hardware inventory taken from your **device** might be used in a variety of ways. Your hardware information, for example, might be used by your administrator to see whether or not your device meets the system requirements for a bundle you need. Or, your software information might be used to validate compliance with company software standards.


You can use the inventory information to quickly find out details about your device, such as its asset tag number, IP address, total memory, and free disk space. You can view hardware details, such as the manufacturer and model of your hard drives, disk drives, and video card. You can also view software details, such as installed Windows* hot fixes and patches and the version numbers and locations of installed software products.

5.2 Scanning the Device

Unless your administrator has disabled the inventory scan schedule, the ZENworks® Adaptive Agent performs an inventory scan on your **device** on a regular basis. Your administrator determines the schedule; the default schedule is the first day of every month.

You can also initiate an inventory scan on your device, unless your administrator has disabled your ability to do so.

To initiate a scan:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, click *Inventory*.
- 3 Click *Scan Now*.

There is no indication that the scan is being performed. However, when you refresh the Inventory page, you know the scan occurred if the *Last Scan* field displays the current date and time. You can click *View Inventory Details* to see the results of the scan.

5.3 Viewing Inventory Information

You can use the inventory information to quickly find out details about your **device**, such as its asset tag number, IP address, total memory, and free disk space. You can view hardware details, such as the manufacturer and model of your hard drives, disk drives, and video card. You can also view software details, such as installed Windows* hot fixes and patches and the version numbers and locations of installed software products.


To view inventory information:

- 1 Double-click the  icon in the notification area.

- 2 In the left navigation pane, click *Inventory*.
- 3 Click *View Inventory Details*.

5.4 Completing a Collection Data Form

In addition to being able to schedule regular scans of your **device**, your administrator can create a collection data form to gather additional information from you. The information requested in the data form is determined by your administrator.

The collection data form appears as a dialog box on your desktop and remains until you submit the form. In addition, your administrator can configure the ZENworks[®] Adaptive Agent to display the form as an option when you right-click the  icon in the notification area. In this case, the option remains even after you submit it; this allows you to resubmit the form when any of the requested information changes.

Remote Management

6

The ZENworks® Adaptive Agent supports management of your **device** from a remote location. This enables your administrator or Help Desk personnel to remotely access or control your device in order to resolve problems with the device.

NOTE: If the device is connected through Remote Desktop Connection, the *Remote Management* tab is not displayed in the ZENworks Adaptive Agent page on the device because remote management of terminal sessions is not supported.

6.1 Remote Management Operations

The ZENworks® Adaptive Agent supports the following Remote Management operations:


- ♦ **Remote Control:** Enables a remote operator (such as your administrator or a help desk operator) to control your **device**.
- ♦ **Remote View:** Enables a remote operator to view your device. This is a view-only mode; the operator cannot perform any actions on your device.
- ♦ **Remote Diagnostics:** Enables a remote operator to run specific administrative tools (such as Registry Editor, Computer Management, and Services) for diagnostic purposes.
- ♦ **File Transfer:** Enables a remote operator to transfer files to and from your device.
- ♦ **Remote Execute:** Enables a remote operator to run executables on your device.

The operations that are allowed on your device depend on which ones your administrator has enabled. For information about viewing which operations are available, see [Viewing the Remote Management Policy](#).

6.2 Requesting a Remote Management Session

In some situations, you might want to request a Remote Management session with a remote operator, or you might be requested by a remote operator to initiate a session.

To request a session:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, locate the *Remote Management* heading, then click *General*.
- 3 Click *Request Remote Management Session* to display the Request Session dialog box.

The ability to request a Remote Management session is controlled by your administrator, which means the option might be disabled, particularly if your company or department does not have dedicated help desk personnel to serve as on-call remote operators. If the *Request Remote Management Session* option is not displayed as linked text, the option is disabled.


- 4 In the *Listening Remote Operators* list, select the remote operator you want to open the remote session with.

or

If the remote operator is not listed, enter the operator's connection information in the *Request Connection* fields.

- 5 In the *Operation* field, select the type of operation (Remote Control, Remote View, Remote Diagnostics, File Transfer, or Remote Execute) you want to open. For information about each operation, see [Remote Management Operations](#).
- 6 Click *Request* to launch the session.


6.3 Viewing Currently Connected Remote Operators

- 1 Double-click the  icon in the notification area.
 - 2 In the left navigation pane, locate the *Remote Management* heading, then click *General*.
 - 3 Click *List Connected Remote Operators* to display the Request Operators dialog box.
- The ability to view connected remote operators is controlled by your administrator. If the *List Connected Remote Operators* option is not displayed as linked text, the option is disabled.

6.4 Viewing the Remote Management Policy

The Remote Management operations that are enabled on your device, and the settings that apply to those operations, are controlled by your administrator through the use of a Remote Management policy.


You can view the policy settings. However, you cannot change any of the settings. To view the settings:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, locate the *Remote Management* heading, then click *Policy*.
- 3 In the *Category* list, select the policy category you want to view: General, Remote Control, Remote View, Remote Execute, File Transfer, Remote Diagnostics, or Security.

6.5 Using the Security Settings

The Remote Management security settings let you control the password required to perform remote operations on your device, re-enable operations after they have been suspended because of a detected intruder, display information about the Remote Management operations performed on your device, and display information about the self-signed certificate used for remote operations.

The security settings are controlled by your administrator and might not be available for you to use.

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, locate the *Remote Management* heading, then click *Security*.
- 3 Click the security setting you want to use:

Set Password: You can set the password only if the *Allow user to set password on the managed device* option is enabled for the managed device. There are two types of password:

- ♦ **ZENworks® password:** This password is used in ZENworks password-based authentication. It can be up to 255 characters long.

- ♦ **VNC password:** This password is used in VNC password-based authentication. It can be up to 8 characters long.

The ZENworks password authentication is recommended because it is more secure than the VNC password-based authentication. Use the VNC password-based authentication for interoperability with open source VNC viewers.

Clear Password: Clears the selected password.

Enable Accepting Connections if Currently Blocked Due to Intruder Detection: If a remote operator's attempt to log in fails a certain number of times (the default is 5), remote connections are disabled. Connections are automatically allowed again after a specific amount of time (the default is 10 minutes); however, you can click this option to manually enable connections.

Display Audit Information: Displays the following information for the remote operations that have been performed on your device.

Field	Description
<i>ZENworks User</i>	Name of the ZENworks user logged in when the remote operation took place.
<i>Remote Operator</i>	Name of the remote operator who performed the operation.
<i>Console Machine</i>	Name of the device from which the remote operation was performed.
<i>Console IP</i>	IP address of the device from which the remote operation was performed.
<i>Operation</i>	The type of operation performed: Remote Control, Remote Execute, Remote View, Remote Diagnostics, File Transfer, or Security.
<i>Start Time</i>	The time when the remote operation began.
<i>End Time</i>	The time when the remote operation finished.
<i>Status</i>	The status of the remote operation: Success, Running, or Failure.


Display Fingerprint: Displays the fingerprint for the device's self-signed certificate. A remote operator might ask you for the fingerprint in order to validate the device's credentials before performing a remote operation on the device.

While performing tasks on your **device**, the ZENworks® Adaptive Agent generates messages to track its activity. Each message is assigned a severity level: information, warning, error, or debug.

7.1 Changing the Logging Severity Level

By default, your administrator controls which severity levels are recorded to the local log file. The *Managed Severity for Device* is field displays the effective severity level that is recorded. This level can be set for the entire ZENworks Zone or for an individual device. If your administrator needs to troubleshoot a ZENworks® Adaptive Agent issue on your **device**, he or she might direct you to change the severity setting so that additional information is logged. Otherwise, you probably never need to change the severity setting.

To change the severity level:

- 1 Double-click the  icon in the system tray.
- 2 In the left navigation pane, click *Logging*.
- 3 In the *Log Messages if Severity Is* field, select one of the following options:
 - ♦ **Managed: level:** Sets the logging severity level at the level defined in the ZENworks Zone by the administrator, where *level* represents the level (Info, Warning, Error, and Debug).
 - ♦ **Error:** Logs error messages only. Error messages are generated whenever the Adaptive Agent is unable to perform a requested task.
 - ♦ **Warning and Above:** Logs warning and error messages. Warning messages are generated whenever the Adaptive Agent encounters a problem that might result in failure of a task.
 - ♦ **Information and Above:** Logs informational, warning, and error messages. Informational messages are generated whenever the Adaptive Agent performs a normal task.
 - ♦ **Debug:** Logs all available messages to enable debug tracing of a problem. This level significantly increases the log file size and should be used only under the direction of your administrator.
- 4 Click *Set* to apply the new severity level.

7.2 Viewing the Local Log File

The local log file, `zmd-messages.log`, is stored in the `program files\novell\zenworks\logs\localstore` directory on the root of the system drive (for example, `c:\program files\novell\zenworks\logs\localstore\zmd-messages.log`). You can view the file with a text editor.

Each entry in the file contains multiple fields. Each field begins with [and ends with]. For example, [ERROR]. The following table describes the fields.

Field Number	Example	Description
1	ERROR	The severity level. Possible values are ERROR, WARNING, INFORMATION, and DEBUG.
2	3/14/2007 4:21:35 PM	The date and time the message was generated.
3	JSmith	The user.
4	PolicyManager	The Adaptive Agent module that generated the message.
5	launcher configuration policy	The ID assigned to the message.
6	PolicyModule: Registering for events.	The message.
7		Additional information. Usually empty.
8	workstation1	Any objects related to the message.

A Windows device or a Linux device with satellite roles can perform certain roles that a ZENworks® Primary Server normally performs. Any managed Windows device (server or workstation) can perform satellite roles. An unmanaged Linux device (server or workstation) can perform satellite roles. When the administrator configures the device, the administrator specifies the roles it performs. Satellite roles help to minimize WAN traffic in the ZENworks system.

Satellite roles include the following:

- ♦ **Collection:** To improve information roll-up access for a group of devices and to minimize traffic to the ZENworks Primary Server that is hosting the ZENworks database, the ZENworks administrator can enable the Collection role on a device and designate whether your device as a Collection Point.
- ♦ **Content:** ZENworks Configuration Management supports distributing bundles and policies from ZENworks Servers or from other devices that are designated as Distribution Points. Your administrator controls whether or not your device is a Distribution Point.
- ♦ **Imaging:** The Imaging role installs the Imaging services and adds the Imaging role to the device. With this role, the device can be used as an Imaging server to perform all Imaging operations, such as taking an image and applying the image within or across subnets by using unicast or multicast imaging. Your administrator controls whether or not your device has the imaging role.

The following sections contain more information:


- ♦ [Section 8.1, “General Satellite Role Information,” on page 29](#)
- ♦ [Section 8.2, “Collection,” on page 30](#)
- ♦ [Section 8.3, “Content,” on page 30](#)
- ♦ [Section 8.4, “Imaging,” on page 32](#)

8.1 General Satellite Role Information

You can view a device’s general properties, including its current status, port, content replication schedule, and role status.

If your ZENworks administrator has specified that this device performs a satellite role, the information on this page lets you view the device’s general information; however, you cannot edit the fields on this page.

To view general satellite role information:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, under *Satellite*, click *General*.

Field	Description
<i>Current Status</i>	Displays whether your device is currently configured to perform a satellite role.


Field	Description
<i>Port</i>	Displays the port that the device is using.
<i>Content Replication Schedule</i>	Displays how often the device's content is updated from the parent Primary Server. By default, a Content role device checks for new or removed content every 5 minutes. Your ZENworks administrator can change this schedule. For example, your administrator might want to increase the time between cycles if the ZENworks system is not adding content to your system very often or if the connection between the Content role device and its parent Primary Server is slow.
<i>Satellite Role Status</i>	Displays the roles that the device is performing (Collection, Content, and Imaging) and its current status (Active or Inactive).

8.2 Collection

You can view a device's collection role properties, including its current status, parent URLs, and collection schedule; however, you cannot edit the fields on this page.

ZENworks® Configuration Management lets your ZENworks administrator enable the Collection role on a device. This improves information roll-up access for a group of devices and minimizes traffic to the ZENworks Primary Server that is hosting the ZENworks database. The information that is rolled up includes device inventory information, messages (errors, warning, informational, and so forth), and policy and bundle statuses. Your administrator controls whether or not your device is a Collection Point.

To view collection role information:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, under *Satellite*, click *Collection*.


Field	Description
<i>Current Status</i>	Displays whether your device is currently configured to function as a Collection Point.
<i>Port</i>	Displays the URL for this device's parent ZENworks servers.
<i>Parent URLs</i>	Displays the URL for this device's parent ZENworks servers.
<i>Collection Schedule</i>	Displays how often the collected data is rolled up from the devices that use it as a collection device. Your ZENworks administrator can change this collection schedule.

8.3 Content

ZENworks® Configuration Management supports distributing bundles and policies from ZENworks Servers or from other **devices** that are designated as Distribution Points. Your administrator controls whether or not your device is a Distribution Point.

8.3.1 Viewing Distribution Point Information

If your **device** is serving as a Distribution Point, you can view statistical information about the number of times it has been accessed and the content (bundles and policies) that is stored on it.


- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, under *Satellite*, click *Distribution Point*.

Field	Description
<i>Current Status</i>	The status of the Distribution Point module. If the <i>Stopped</i> status is displayed, your device is currently not serving as a Distribution Point.
<i>Port</i>	The port being used by the device to perform its Distribution Point function.
<i>Synchronization Status</i>	The number and percentage of files synchronized.
<i>Repository Size</i>	The amount of disk space being used by the repository.
<i>Unique Device Accesses</i>	The number of different devices that have accessed content from the repository on your device. This number represents the total unique accesses since the last time the <i>Clear History</i> option was used to reset the number to 0.
<i>Number of Files Served</i>	The number of bundle and policy files delivered to other devices. This number represents the total number of files transferred since the last time the <i>Clear History</i> option was used to reset the number to 0.
<i>Size of Data Served</i>	The total amount of data delivered to other devices. This amount represents the total number of files transferred since the last time the <i>Clear History</i> option was used to reset the amount to 0.
<i>Number of Errors</i>	The total number of errors encountered while transferring files. Click the <i>Export History</i> option to export transactions to a comma-separated values (CSV) file that you can use to examine the errors.
<i>Actions</i>	Click <i>Export History</i> to export the information from the <i>Recent Access History</i> list to a CSV file. Click <i>Clear History</i> to clear the information from the list and to reset the <i>Unique Device Accesses</i> , <i>Number of Files Transferred</i> , <i>Amount of Data Transferred</i> , and <i>Number of Errors</i> fields to 0.
<i>Recent Access History</i>	A listing of the last 10 devices to access the repository. The list shows only the 10 most recent accesses. However, all entries are saved until the history is cleared. To analyze all of the entries, click <i>Export History</i> to create a CSV file.
<i>Content Repository Details</i>	A listing of the bundles and policies stored in the repository.

8.3.2 Exporting the Recent Access History

The Recent Access History displays information about the 10 most recent repository accesses. This includes information about the **device** that performed the access, the total number of downloads that occurred, the amount of data that was transferred, and whether or not any errors occurred.

The list shows only the 10 most recent accesses. However, all entries are saved until the history is cleared. To analyze all of the entries, you can export the history to a comma-separated values (CSV) file.

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, under *Satellite*, click *Content*.
- 3 Click *Export History*, specify a location and name for the CSV file, then click *Save*.
- 4 To view the history file, open it in a text editor.

The history file contains two sections: Distribution Point Access History and Distribution Point Error History.

Distribution Point Access History: Contains an entry for each transaction in the *Recent Access History* list. Each entry is formatted as follows:

IP Address,DNS Name,Number of Files Transferred,Bytes Transferred,Number of Errors,Last Access (UTC)

For example:

123.45.167.52,wks1.novell.com,3,544,0,3/20/2007 7:16:59 PM

Distribution Point Error History: Contains an entry for each transaction that included an error. Each entry is formatted as follows:


IP Address,DNS Name,Requested URI,Status Code,Access Time (UTC)

For example:

123.45.167.53,wks2.novell.com,/app.msi,404,3/22/2007 9:11:33 AM

8.3.3 Clearing the Recent Access History

You can clear the Recent Access History to remove all entries from the list and to reset the *Unique Device Accesses*, *Number of Files Transferred*, *Amount of Data Transferred*, and *Number of Errors* fields to 0.

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, under *Satellite*, click *Content*.
- 3 Click *Clear History*, then click *Yes* to confirm deletion of the history.

8.4 Imaging

You can view a device's imaging role properties, including its current status, PXE service status, image files, and imaging statistics; however, you cannot edit the fields on this page.

ZENworks® Configuration Management lets your ZENworks administrator enable the Imaging role on a device. With this role, the device can be used as an Imaging server to perform all Imaging operations, such as taking an image and applying the image within or across subnets by using unicast or multicast imaging. Your administrator controls whether or not your device has the Imaging role.

To view imaging role information:

- 1 Double-click the  icon in the notification area.

2 In the left navigation pane, under *Satellite*, click *Imaging*.

Field	Description
<i>Current Status</i>	Displays whether your device is currently configured to perform Imaging operations. The current status is <i>Active</i> when the device is promoted to a satellite with the Imaging role.
<i>PXE Service Status</i>	Displays whether the Proxy DHCP service is enabled on the device.
<i>View Image Files</i>	Displays the image files stored in the %ZENWORKS_HOME%\work\content-repo\images directory.
<i>Imaging Statistics</i>	Displays the following information: <ul style="list-style-type: none">♦ PXE Requests: The number of imaging requests of any kind that have been received by the Imaging Server since it was last started. This includes requests that failed, were denied, or were referred to other Imaging Servers. Information about each of these requests, such as the source, type, date/time, and results, is logged on the Imaging Server.♦ Images Sent: The number of images that the Imaging Server has sent to imaging clients since the Imaging Server was last started. This includes only images that were retrieved from this Imaging Server.♦ Images Received: The number of new images that have been received and stored on the Imaging Server since it was last started. This includes images that were received through client referrals.

The ZENworks® Adaptive Agent provides information on how your device performs the discovery and deployment activities when it acts as a Windows Proxy for the ZENworks Primary Server.

The following sections contain more information:

- ♦ [Section 9.1, “Viewing the Discovery Results,” on page 35](#)
- ♦ [Section 9.2, “Viewing the Deployment Results,” on page 36](#)

9.1 Viewing the Discovery Results

You can view the results of the discovery activities performed on your device when it acts as a Windows Proxy for the ZENworks Primary Server. Your device can act as a Windows Proxy for:

- ♦ Linux Primary Servers that cannot perform discovery tasks by using Windows-specific technologies such as WMI, WinAPI, and SNMP
- ♦ Windows Primary Servers if the devices to be discovered are in a different subnet than the Primary Server

To view the discovery results:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, click *Discovery*.

The Discovery Results panel displays the following details:

Field	Description
<i>Discovery Task</i>	Displays the discovery task name created by the ZENworks Administrator.
<i>Discovery Target</i>	Displays the target device's hostname or IP address.
<i>Discovery Technologies</i>	Displays the name and status of each discovery technology (WMI, WinAPI, SNMP) used for the discovery process. For more information on each discovery technology, see “ IP Discovery Technologies ” in the <i>ZENworks 10 Configuration Management Discovery, Deployment, and Retirement Reference</i> .
<i>Last Time Stamp</i>	Displays the date and time when the discovery task was run.

- 3 (Optional) To remove all the discovery results from the Discovery Results panel, click *Clear Discovery Results*, then refresh the page.

9.2 Viewing the Deployment Results

You can view the results of the deployment activities performed on your device when it acts as a Windows Proxy for the ZENworks Primary Server. Your device can act as a Windows Proxy for:

- Linux Primary Servers that cannot perform deployment of ZENworks Adaptive Agent to Windows target devices
- Windows Primary Servers if the devices to be deployed are in a different subnet than the Primary Server

To view the deployment results:

- 1 Double-click the  icon in the notification area.
- 2 In the left navigation pane, click *Deployment*.

The Deployment Results panel displays the following details:

Field	Description
<i>Deployment Task</i>	Displays the deployment task name created by the ZENworks Administrator.
<i>Deployment Target</i>	Displays the target device's name or IP address.
<i>Deployment Status</i>	Displays the status of the deployment task.
<i>Last Time Stamp</i>	Displays the date and time when the deployment task was run.

- 3 (Optional) To remove all the deployment results from the Deployment Results panel, click *Clear Deployment Results*, then refresh the page.

ZENworks Terminology

10

The following terms are used throughout the ZENworks® Adaptive Agent Help.

bundle: The content and instructions required to install software on your device.

collection role: A role that a managed device can perform to improve information roll-up access for a group of devices and to minimize traffic to the ZENworks Primary Server that is hosting the ZENworks database.

content role: A role that a managed device can perform to help support distributing bundles and policies from ZENworks Servers or from other devices that are designated as Distribution Points.

device: A server or workstation.

device-assigned bundle or device-assigned policy: Bundles and policies that are assigned to a device so they are available to all users of the device.

Distribution Point: A device designated for the purpose of delivering bundles and policies to other devices.

imaging role: A role that installs the Imaging services and adds the Imaging role to a managed device. With this role, the device can be used as an Imaging server to perform all Imaging operations, such as taking an image and applying the image within or across subnets by using unicast or multicast imaging.

inventory: Data about your device's hardware and software.

Management Zone: A grouping of devices that belong to the same administrative domain.

policy: Rules that control a range of hardware and software configuration settings.

primary user: The most frequent user of the machine. Frequency is determined by number of logins, amount of time logged in, or designated user; your administrator determines the method used to calculate the primary user.

registration key: An alphanumeric string created by your administrator and used by the ZENworks Adaptive Agent to register your device in the Management Zone.


Remote Management: The ability to remotely access or control your device in order to resolve problems with the device. The following remote management operations are available: Remote Control, Remote View, Remote Diagnostics, File Transfer, and Remote Execute.

Satellite: A device with satellite roles can perform certain roles that a ZENworks Primary Server normally performs. Any managed Windows device (server or workstation) or an unmanaged Linux device (server or workstation) can perform satellite roles. When the administrator configures the device, the administrator specifies the roles it performs. Satellites help to minimize WAN traffic in the ZENworks system. Satellite roles include the following: Collection, Content, and Imaging.

remote operator: The person who is remotely accessing or controlling your device.

user-assigned bundle or user-assigned policy: Bundles and policies that are assigned to a user. They are available only when the assigned user is logged in.

ZENworks Explorer: An extension to Windows* Explorer that enables bundles to be displayed in Windows Explorer, on the desktop, on the Start menu, on the Quick Launch toolbar, and in the notification area.

ZENworks Icon: The  icon located in the Windows notification area. You can double-click the icon to display the ZENworks Adaptive Agent properties.

ZENworks Window: A standalone window that you can launch from the Start Menu (*Start Menu > Programs > Novell ZENworks > ZENworks Application Window*). The ZENworks Window displays all assigned bundles.

ZENworks Server: A server that your ZENworks Adaptive Agent contacts in order to send information to and retrieve information from your Management Zone.

Documentation Updates

A

This section contains information on documentation content changes that were made in this *ZENworks Adaptive Agent Guide* for Novell® ZENworks® 10 Configuration Management SP2.

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 documentation was updated on the following date:

- ♦ **Section A.1, “May 27, 2009: SP2 (10.2),” on page 39**

A.1 May 27, 2009: SP2 (10.2)

Updates were made to the following sections:

Location	Update
Chapter 1, “Overview,” on page 9	Updated this chapter to provide information on the Windows Proxy module.
Chapter 9, “Windows Proxy,” on page 35	Added this chapter to provide information on viewing the discovery and deployment activities performed on your device when it acts as a Windows Proxy for the ZENworks Primary Server.

