

Upgrade Guide

Novell® ZENworks® 11

Support Pack 1

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www.novell.com



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1800 South Novell Place
Provo, UT 84606
U.S.A.
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Contents

About This Guide	7
1 What's New in ZENworks 11 SP1	9
1.1 General Product Enhancements	9
1.2 System Requirements	9
1.2.1 Primary Server and Managed Device Support	10
1.2.2 Inventoried-Only Device Support	10
1.2.3 Database Support	10
1.2.4 Administration Browser Support	10
1.3 Upgrading to ZENworks 11 SP1	10
1.3.1 Upgrading the Primary Server to ZENworks 11 SP1	10
1.3.2 Upgrading the Satellites and Managed Devices to ZENworks 11 SP1	11
1.4 Appliance Upgrade	11
1.5 Asset Management Report Rights	11
1.6 Bundle Management	11
1.7 Inventory Report Rights	12
1.8 Password Expiration Notification for eDirectory	12
1.9 Configuration Policy Management	12
1.10 Endpoint Security Management	12
1.11 Database Migration	12
1.12 Linux Package Management	13
1.13 Locations	13
1.13.1 Locations and Network Environments	13
1.13.2 Closest Server Default Rule	13
1.14 ZENworks Patch Management	13
1.14.1 Schedule Discover Applicable Update Bundles Install	14
1.14.2 Schedule Discover Applicable Update Bundles Distribution	14
2 Upgrading the Primary Servers to ZENworks 11 SP1	15
2.1 Understanding What the Upgrade Does	15
2.2 Database Considerations	16
2.3 Understanding the Upgrade Order	17
2.4 Prerequisites	18
2.4.1 Prerequisites for Performing the Upgrade for the First Time in the Management Zone	18
2.5 Upgrading the Remote OEM Sybase SQL Anywhere Database	20
2.6 Upgrading the Primary Servers	21
2.6.1 Using a GUI to Upgrade Linux and Windows Servers	21
2.6.2 Using a Command Line to Upgrade a Linux Server	30
2.7 Upgrading the ZENworks Reporting Server	32
2.7.1 Installing the ZENworks 11 SP1 Reporting Server on the Same Primary Server that has ZENworks 10 Configuration Management SP3 Reporting Server Installed	33
2.7.2 Installing the ZENworks 11 SP1 Reporting Server on the Same Primary Server that has ZENworks 11 Reporting Server Installed	33
2.7.3 Installing the ZENworks 11 SP1 Reporting Server on a Different Server	34
2.8 Known Issues	34

2.9	Troubleshooting	34
3	Upgrading Satellites and Managed Devices to ZENworks 11 SP1	39
3.1	Prerequisites for Upgrading Satellites or Managed Devices	39
3.2	Upgrading Satellites and Managed Devices	40
3.3	Known Limitations	40
4	Upgrading to ZENworks Virtual Appliance 11 SP1	43
4.1	Upgrading the ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1	43
4.1.1	Pre-Upgrade Tasks	44
4.1.2	Upgrading ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1	45
4.1.3	Post-Upgrade Tasks	47
4.2	Upgrading ZENworks Virtual Appliance 11 to ZENworks Virtual Appliance 11 SP1	47
5	Considerations for Managing ZENworks Configuration Management 10.2.x/10.3.x Managed Devices	49
5.1	Preparing the ZENworks 11 SP1 Server to Manage ZENworks Configuration Management 10.3.x Managed Devices	49
5.2	Creating and Managing Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices	50
5.2.1	Creating Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices	51
5.2.2	Backing Up Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices	60
5.3	Known Limitations	61
A	Documentation Updates	63
A.1	September 19, 2011: 11 SP1	63
A.2	August 08, 2011: 11 SP1	63

About This Guide

This guide includes information about new enhancements in Novell ZENworks 11 SP1 and information to help you successfully upgrade to this release.

The information in this guide is organized as follows:

- ♦ Chapter 1, “What’s New in ZENworks 11 SP1,” on page 9
- ♦ Chapter 2, “Upgrading the Primary Servers to ZENworks 11 SP1,” on page 15
- ♦ Chapter 3, “Upgrading Satellites and Managed Devices to ZENworks 11 SP1,” on page 39
- ♦ Chapter 4, “Upgrading to ZENworks Virtual Appliance 11 SP1,” on page 43
- ♦ Chapter 5, “Considerations for Managing ZENworks Configuration Management 10.2.x/10.3.x Managed Devices,” on page 49
- ♦ Appendix A, “Documentation Updates,” on page 63

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 SP1 documentation Web site \(http://www.novell.com/documentation/zenworks11\)](http://www.novell.com/documentation/zenworks11).

What's New in ZENworks 11 SP1

1

The following sections describe the new features and enhancements in Novell ZENworks 11 SP1:

- ♦ [Section 1.1, “General Product Enhancements,” on page 9](#)
- ♦ [Section 1.2, “System Requirements,” on page 9](#)
- ♦ [Section 1.3, “Upgrading to ZENworks 11 SP1,” on page 10](#)
- ♦ [Section 1.4, “Appliance Upgrade,” on page 11](#)
- ♦ [Section 1.5, “Asset Management Report Rights,” on page 11](#)
- ♦ [Section 1.6, “Bundle Management,” on page 11](#)
- ♦ [Section 1.7, “Inventory Report Rights,” on page 12](#)
- ♦ [Section 1.8, “Password Expiration Notification for eDirectory,” on page 12](#)
- ♦ [Section 1.9, “Configuration Policy Management,” on page 12](#)
- ♦ [Section 1.10, “Endpoint Security Management,” on page 12](#)
- ♦ [Section 1.11, “Database Migration,” on page 12](#)
- ♦ [Section 1.12, “Linux Package Management,” on page 13](#)
- ♦ [Section 1.13, “Locations,” on page 13](#)
- ♦ [Section 1.14, “ZENworks Patch Management,” on page 13](#)

1.1 General Product Enhancements

- ♦ You can now upload files by using the Novell File Upload Extension on Firefox 4.0 and 5.0.
- ♦ The ZENworks initialization status is now displayed during the device login process.
- ♦ The Asynchronous I/O operation has been enabled by default for the ZENworks SQLite database to improve the performance of the cache response on the managed devices. This also improves the response time with ZENworks Adaptive Agent refresh and with the deployment of policies and bundles in the terminal server environments.
- ♦ You can now specify the nested group levels within which the Active Directory group memberships should be searched.

1.2 System Requirements

Review the following sections:

- ♦ [Section 1.2.1, “Primary Server and Managed Device Support,” on page 10](#)
- ♦ [Section 1.2.2, “Inventoried-Only Device Support,” on page 10](#)
- ♦ [Section 1.2.3, “Database Support,” on page 10](#)
- ♦ [Section 1.2.4, “Administration Browser Support,” on page 10](#)

1.2.1 Primary Server and Managed Device Support

Support has been added for the following platforms:

- ♦ SUSE Linux Enterprise Server 10 (SLES 10) SP4.
- ♦ Red Hat Enterprise Linux 6.0.

SUSE Linux Enterprise Server 10 (SLES 10) SP2 is no longer supported

1.2.2 Inventoried-Only Device Support

The following platforms are now additionally supported:

- ♦ Windows Server 2008 R2 SP1 (Enterprise and Standard editions).
- ♦ Windows 7 SP1 x86, x86_64 (Professional, Ultimate, and Enterprise editions).

1.2.3 Database Support

Support has been added for the following databases:

- ♦ Microsoft SQL Server 2008 R2
- ♦ Oracle 11g R2
- ♦ Sybase SQL Anywhere 12

1.2.4 Administration Browser Support

Support has been added for the following browsers:

- ♦ Firefox version 4.0
- ♦ Firefox version 5.0

1.3 Upgrading to ZENworks 11 SP1

- ♦ [Section 1.3.1, “Upgrading the Primary Server to ZENworks 11 SP1,” on page 10](#)
- ♦ [Section 1.3.2, “Upgrading the Satellites and Managed Devices to ZENworks 11 SP1,” on page 11](#)

1.3.1 Upgrading the Primary Server to ZENworks 11 SP1

You can directly upgrade a Primary Server to ZENworks 11 SP1 if it has any of the following versions installed:

- ♦ ZENworks 10 Configuration Management SP3 (10.3)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.1)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.2)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.3)
- ♦ ZENworks 11

1.3.2 Upgrading the Satellites and Managed Devices to ZENworks 11 SP1

You can upgrade the managed devices and Satellites to ZENworks 11 SP1 if they have any of the following versions installed:

- ♦ ZENworks 10 Configuration Management SP2 (10.2.2)
- ♦ ZENworks 10 Configuration Management SP3 (10.3)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.1)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.2)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.3)
- ♦ ZENworks 11

For the upgrade details, see the [ZENworks 11 SP1 Upgrade Guide \(http://www.novell.com/documentation/zenworks11\)](http://www.novell.com/documentation/zenworks11).

1.4 Appliance Upgrade

ZENworks Virtual Appliance 11 can be upgraded to ZENworks Virtual Appliance SP1 by using the ZENworks Configuration Management installer.

1.5 Asset Management Report Rights

ZENworks 11 SP1 allows an administrator to configure the default rights settings that are applicable to the Asset Management reports by using the Asset Management Report Rights. The Report Rights setting controls the default rights that you can assign to a user. Changing this setting does not affect existing users whose default rights were already modified. By default, the View/Execute Rights setting is enabled.

1.6 Bundle Management

ZENworks 11 SP1 introduces Credential Vault support for actions such as Copy Files, Copy Directory, Create/Delete Directory, Install Files, Install Directory, Install MSI, and Launch Executable. If the file or directory specified in the action is a part of a password-protected UNC path or network share, then you must browse to and select a credential that has access to the network.

- ♦ **Blocking Bundles Assigned to a Device or User:** Lets you block a bundle from being executed on a device if a bundle has been assigned to a device or user, as a part of a direct assignment or inherited assignment.
- ♦ **Uninstalling a Blocked Bundle from a Device:** Lets you uninstall the blocked bundle from a device.
- ♦ **Unblocking a Bundle Blocked for a Device or User:** Lets you unblock a bundle that has been blocked for a device or user so that the bundle can be executed on the device.
- ♦ **Uploading Files as a Single Content:** Lets you use the Install Directory action to upload multiple files as a single content.

1.7 Inventory Report Rights

ZENworks 11 SP1 allows an administrator to configure the default rights settings that are applicable to the inventory reports by using the Inventory Report Rights. The Report Rights setting controls the default rights that you can assign to a user. Changing this setting does not affect existing users whose default rights were already modified. By default, the View/Execute Rights setting is enabled.

1.8 Password Expiration Notification for eDirectory

ZENworks 11 SP1 now notifies you about your eDirectory password expiration, and you can change the password during login.

1.9 Configuration Policy Management

ZENworks Configuration Policy Management includes the following enhancements:

- ♦ **Group Policy Helper 64-Bit Support:** You can now use the Group Policy Helper tool to configure the Group policy for a 64-bit version of the Windows Server 2003/2008/2008 R2, Windows Vista, and Windows 7 devices.
- ♦ **Battery Power Management Settings:** You can use the Power Management policy to manage the battery power settings on laptop devices.

1.10 Endpoint Security Management

ZENworks Endpoint Security Management includes the following enhancements:

- ♦ **Scripting Policy:** The new Scripting policy enables JScript or VBScript scripts to be run on a device through the Microsoft Windows Script Host. Scripts can be run in the user and system contexts and can be triggered by a variety of agent-detected events, location changes, or time intervals. For details, see “[Scripting Policy](#)” in the *[ZENworks 11 SP1 Endpoint Security Policies Reference](#)*.
- ♦ **File Decryption Utility:** The ZENworks File Decryption Utility has been enhanced to enable password encryption of files. This allows users (who are not located on a device that has the Endpoint Security Agent installed) to not only decrypt password-encrypted files, but to re-encrypt them or to encrypt new files. For details, see “[File Decryption Utility](#)” in the *[ZENworks 11 SP1 Endpoint Security Utilities Reference](#)*.

1.11 Database Migration

ZENworks 11 SP1 enables you to migrate data from an internal or external Sybase 12 database to Microsoft SQL Server 2008 R2 database. For more information, see *Database Management* in the *[ZENworks 11 SP1 System Administration Reference](#)*.

1.12 Linux Package Management

Linux Package Management includes the following enhancements:

- ♦ **Package Platform Association:** You can associate multiple targets with RPM packages while you create a Linux bundle or Linux Dependency bundle. For bundles created by subscription replication, the appropriate platforms are automatically associated to the RPM packages that are replicated.
- ♦ **Bundle Blocking:** You can block a bundle from being installed, launched, and verified. You can also uninstall a blocked bundle if it is already installed.
- ♦ **SSL Trust Manager:** While you create a subscription, if the connection to the remote server uses a secure connection but the remote server certificate is not trusted, you must use the remote server SSL certificate. You can import the certificate to the ZENworks Server. You can also update the existing imported certificate of the remote server, if any modifications are made to the certificate for the remote server.

1.13 Locations

- ♦ [Section 1.13.1, “Locations and Network Environments,” on page 13](#)
- ♦ [Section 1.13.2, “Closest Server Default Rule,” on page 13](#)

1.13.1 Locations and Network Environments

You can now search for locations and network environments listed in the Locations and Network Environments panels in ZENworks Control Center. For more information about the Search functionality for locations, see *Creating and Managing Locations* in the [ZENworks 11 SP1 System Administration Reference](#). For more information about the Search functionality for network environments, see *Defining and Managing Network Environments* in the [ZENworks 11 SP1 System Administration Reference](#).

1.13.2 Closest Server Default Rule

You can now perform the following tasks in the Closest Server Default rule:

- ♦ Remove all the Satellites from all the server lists of the Closest Server Default rule.
- ♦ Add the entries of all Satellites to the server lists of the Closest Server Default rule, depending on the individual roles defined for each Satellite device.
- ♦ Verify whether all ZENworks Servers are contained in the server lists of the Closest Server Default rule.
- ♦ Configure the Closest Server Default rule to automatically add new Satellites to the server lists, then synchronize the settings of the existing Satellites with their corresponding entries in the Closest Server Default rule.

1.14 ZENworks Patch Management

ZENworks Patch Management includes the following new features:

- ♦ [Section 1.14.1, “Schedule Discover Applicable Update Bundles Install,” on page 14](#)
- ♦ [Section 1.14.2, “Schedule Discover Applicable Update Bundles Distribution,” on page 14](#)

1.14.1 Schedule Discover Applicable Update Bundles Install

This page allows you to configure Discover Applicable Update (DAU) schedules for all the devices connected to your network. It provides you the option to choose when you want to install the bundle content through DAU.

The ZENworks Patch Management Services offer two types of schedules, *Date specific* and *Recurring*, to determine when DAU and bundle installation should occur on the target device.

1.14.2 Schedule Discover Applicable Update Bundles Distribution

This page allows you to configure Discover Applicable Update (DAU) schedules for all the devices connected to your network. It provides you the option to choose when you want to distribute the bundle content through DAU.

The ZENworks Patch Management Services offer two types of schedules, *Date specific* and *Recurring*, to determine when DAU and bundle distribution should occur on the target device.

Upgrading the Primary Servers to ZENworks 11 SP1

2

Using the ZENworks 11 SP1 installation media, you can directly upgrade a Primary Server to ZENworks 11 SP1 if they have any of the following versions installed:

- ♦ ZENworks 10 Configuration Management SP3 (10.3)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.1)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.2)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.3)
- ♦ ZENworks 11

The following sections provide information to upgrade to ZENworks 11 SP1:

- ♦ [Section 2.1, “Understanding What the Upgrade Does,” on page 15](#)
- ♦ [Section 2.2, “Database Considerations,” on page 16](#)
- ♦ [Section 2.3, “Understanding the Upgrade Order,” on page 17](#)
- ♦ [Section 2.4, “Prerequisites,” on page 18](#)
- ♦ [Section 2.5, “Upgrading the Remote OEM Sybase SQL Anywhere Database,” on page 20](#)
- ♦ [Section 2.6, “Upgrading the Primary Servers,” on page 21](#)
- ♦ [Section 2.7, “Upgrading the ZENworks Reporting Server,” on page 32](#)
- ♦ [Section 2.8, “Known Issues,” on page 34](#)
- ♦ [Section 2.9, “Troubleshooting,” on page 34](#)

2.1 Understanding What the Upgrade Does

- ♦ Upgrades all ZENworks 10 or 11 Configuration Management components on the Primary Servers, including Configuration Management, Asset Management, Asset Inventory, and Patch Management.
- ♦ In the case of a ZENworks 10.3.x server, ZENworks Endpoint Security Management 11 SP1 will be installed.
- ♦ In the case of a ZENworks 11 server, ZENworks 11 Endpoint Security Management will be upgraded.
- ♦ Upgrades the ZENworks database. This is done when the first server is upgraded.
- ♦ After you upgrade the first server to ZENworks 11 SP1, the upgrade makes the System Update available for upgrading the ZENworks Configuration Management 10.2.x/10.3.x Satellites and managed devices to ZENworks 11 SP1.

For more information on how to upgrade the Satellites and managed devices to ZENworks 11 SP1, [Chapter 3, “Upgrading Satellites and Managed Devices to ZENworks 11 SP1,” on page 39](#).

- ♦ Migrates the Closest Server rules that are configured only at the Management Zone level. The rules are migrated to ZENworks 11 SP1 as locations or network environment according to the Rule Logic.

The Closest Server rules configured at the device and device folder levels are not migrated.

- ♦ Converts the Create-Delete and Modify Rights of bundles and policies as Publish rights and Author rights respectively.
- ♦ Converts the existing File and Directive bundles to a Windows bundle.

A Windows bundle supports all the categories that are supported by File and Directive Bundles except the Actions category.

For example, a Directive bundle that has a Store Personality category is migrated as a Windows bundle with the Store Personality category; but a Directive bundle that has an Actions category is migrated as a Windows bundle with an empty category.

2.2 Database Considerations

Before you perform the upgrade from ZENworks 10.x, or 11.x to ZENworks 11 SP1, please consider the following guidelines:

- ♦ If you are using an external database, you need to upgrade or migrate the database to the supported database version.

NOTE: If you have MS SQL 2008 R2 running in compatibility mode on the device, you need to manually turn off the compatibility mode before you upgrade to ZENworks 11 SP1.

For more information about the supported database versions, see “[Database Requirements](http://www.novell.com/documentation/zenworks11/)” in the [ZENworks 11 SP1 Installation Guide](http://www.novell.com/documentation/zenworks11/). (<http://www.novell.com/documentation/zenworks11/>)

- ♦ Ensure to make a note of the new database details as you will be prompted for this information during the ZENworks 11 SP1 upgrade.
- ♦ You can either upgrade the database on the same machine where it is running or you can migrate the database using a third-party upgrade tool.

If you are using an embedded Sybase database, the ZENworks Upgrade Installer will upgrade and rebuild the database.

NOTE: (Embedded Sybase) You need to ensure that you have the required free space, equal to the size of the database file.

- ♦ OEM Sybase SQL Anywhere 12 is supported by ZENworks 11 SP1. Hence, if you are using a remote OEM Sybase SQL Anywhere database, ensure that you upgrade it to OEM Sybase SQL Anywhere 12 on your remote database server.

For more information on how to upgrade the remote OEM Sybase SQL Anywhere database, see [Section 2.5, “Upgrading the Remote OEM Sybase SQL Anywhere Database,” on page 20](#).

- ♦ You can only upgrade to a higher version of the same database. You cannot migrate from one database to another using the Upgrade installer.
- ♦ For all external databases, stop the ZENworks services before performing the database upgrade.

2.3 Understanding the Upgrade Order

When you choose to perform the ZENworks 11 SP1 upgrade, you must perform the upgrade in the following order:

1. Upgrade the Operating System: If the Operating System installed on the device is not supported by ZENworks, upgrade the Operating System to the latest supported version.

For more information on the supported Operating Systems, see “[Operating System](#)” in the *ZENworks 11 SP1 Installation Guide*.

IMPORTANT: Before you perform the upgrade, make sure you backup the data and certificate information.

2. Upgrade the database: Based on the type of database installed on the device, perform the following steps:
 - ♦ (External Database or OEM Sybase) Upgrade the database to the latest supported version. For example, if you have Oracle 10 g database installed on the device, you need to upgrade the database to Oracle 11g. For information on how to upgrade the external database, refer to the third-party user documentation and to upgrade the OEM Sybase database, see [Section 2.5, “Upgrading the Remote OEM Sybase SQL Anywhere Database,”](#) on page 20
 - For more information about the supported database versions, see “[Database Requirements](#)” in the *ZENworks 11 SP1 Installation Guide*. (<http://www.novell.com/documentation/zenworks11/>)
 - ♦ (Embedded Sybase database) The ZENworks Upgrade Installer will upgrade and rebuild the database to the latest supported version.

NOTE: All connections to the database should be stopped before performing the database upgrade.

If OEM Sybase and ZENworks are installed on the same machine, you need to stop all the ZENworks services before performing the OEM Sybase upgrade. Restart the ZENworks services after you complete the database upgrade, before you perform the ZENworks upgrade.

3. Upgrade ZENworks: Upgrade ZENworks to the latest version.
 - ♦ The ZENworks 11 SP1 upgrade program can upgrade only the server on which you run it.
 - ♦ you can choose to upgrade Primary Servers in the Management Zone in any order. If you are using an embedded Sybase database, you need to first upgrade the device that hosts the database, else

NOTE: Once you upgrade the first Primary Server to Zenworks 11 SP1 all other servers need to be upgraded to ZENworks 11 SP1.

- ♦ When you choose to perform the upgrade for the first time in the Management Zone, you can run only one instance of the ZENworks 11 SP1 upgrade program to upgrade a Primary Server. Subsequently, you can run the upgrade program in parallel on multiple Primary Servers to upgrade them.

NOTE: The Schema and License information will be updated only during the first Primary Server upgrade, not during the subsequent server upgrades.

While upgrading the first Primary Server, you should stop the ZENworks services on all other servers and then restart the ZENworks services on each device, before you perform the upgrade on that device.

- ♦ You must upgrade all the Primary Servers in the zone, before you upgrade the agents.

2.4 Prerequisites

- ♦ [Section 2.4.1, “Prerequisites for Performing the Upgrade for the First Time in the Management Zone,” on page 18](#)

2.4.1 Prerequisites for Performing the Upgrade for the First Time in the Management Zone

When you choose to perform the ZENworks 11 SP1 upgrade for the first time in the Management Zone in order to upgrade a Primary Server from ZENworks Configuration Management 10.3.x to ZENworks 11 SP1, you must complete the following tasks before running the upgrade program:

- ♦ Ensure that the ZENworks Configuration Management 10.3.x Primary Server that you want to upgrade to ZENworks 11 SP1 meets all the ZENworks 11 SP1 system requirements.

For more information, see “[Primary Server Requirements](#)” in the *ZENworks 11 SP1 Installation Guide*.

- ♦ You must back up your ZENworks database.
- ♦ Stop all ZENworks services on any Primary Server that is not being upgraded to prevent the database from being accessed during the upgrade:
 - ♦ For information about stopping ZENworks services on a Windows Primary Server, see *Stopping the ZENworks Services* in the *ZENworks Services on a Windows Server* section in the *ZENworks 11 SP1 System Administration Reference*.
 - ♦ For information about stopping ZENworks services on a Linux Primary Server, see *Stopping the ZENworks Services* in the *ZENworks Services on a Linux Server* section in the *ZENworks 11 SP1 System Administration Reference*.

When you upgrade the first server, the upgrade makes the System Update available for upgrading the ZENworks Configuration Management 10.2.x/10.3.x Satellites and managed devices to ZENworks 11 SP1. This is accomplished by using the System Update feature.

- ♦ Make sure that the server hosting the database is running with its database active.
- ♦ (Conditional) If you plan to upgrade ZENworks Configuration Management 10.2.x/10.3.x to ZENworks 11 SP1 on a 64-bit Windows Server 2003/2008 or Windows Server 2003/2008 R2 device, the device must have Microsoft.NET 3.5 SP1 framework and all its latest updates installed. You can choose to install them before running the upgrade program or you can install them during the upgrade.
- ♦ Ensure that the Windows Primary Servers have Windows Installer 3.1 or later installed and running.

- ♦ (Conditional) If you have installed ZENworks Reporting Server in your zone, perform the following steps to upgrade from ZENworks Configuration Management 10.3.0/10.3.1 to ZENworks 11 SP1:
 1. Download and install the ZCM 10.3.0/10.3.1 - ZRS report backup patch. For more information about the patch, see TID 7007852 in the [Novell Support Knowledgebase](http://support.novell.com/search/kb_index.jsp) (http://support.novell.com/search/kb_index.jsp).
 2. Back up the reports and the reports data by running the `zman report-save` command.
For more information about the `zman` command, see the “[Report Commands](#)” in the *ZENworks 11 SP1 Command Line Utilities Reference*.
- ♦ If you obtained the ZENworks upgrade software as an ISO image download, do one of the following to create the upgrade DVD:
 - ♦ “[Using Windows to Create a ZENworks Installation DVD from an ISO Image](#)” on page 19
 - ♦ “[Using Linux to Create a ZENworks Installation DVD from an ISO Image](#)” on page 19

Using Windows to Create a ZENworks Installation DVD from an ISO Image

- 1 Download the ZENworks 11 SP1 upgrade ISO image from the [Novell Download Web site](http://download.novell.com/) (<http://download.novell.com/>) to a temporary location on your Windows device.
- 2 Burn the ISO image to a DVD.

IMPORTANT: You can also choose to extract the ISO image and use the extracted files to upgrade to ZENworks 11 SP1. However, if you download the ISO image using Internet Explorer and use WinZip to extract the files, you must first remove the blocked setting before you extract the files.

Using Linux to Create a ZENworks Installation DVD from an ISO Image

- 1 Download the ZENworks 11 SP1 upgrade ISO image from the [Novell Download Web site](http://www.novell.com/) (<http://www.novell.com/>) to a temporary location on your Linux device.
- 2 Mount the ISO image by using the following command:

```
mount -o loop /tempfolderpath/isoimagename.iso mountpoint
```

Replace *tempfolderpath* with the path to the temporary folder, replace *isoimagename* with the ZENworks ISO filename, and replace *mountpoint* with the path to the file system location where you want to mount the image. The path specified by *mountpoint* must already exist.

For example:

```
mount -o loop /zcm11/ZCM11upgr.iso /zcm11/upgrade
```

- 3 Burn the ISO image to a DVD.

2.5 Upgrading the Remote OEM Sybase SQL Anywhere Database

OEM Sybase SQL Anywhere 12 is supported by ZENworks 11 SP1. If you are using a remote OEM Sybase SQL Anywhere database, you need to upgrade it to OEM Sybase SQL Anywhere 12 on your remote database server.

Perform the following steps to upgrade the Sybase engine and then upgrade and rebuild the remote OEM Sybase SQL Anywhere database:

IMPORTANT: Before you upgrade the Remote OEM Sybase SQL Anywhere database, you need to backup the database files.

- 1 On a server that has remote OEM Sybase SQL Anywhere database installed, insert the Novell ZENworks 11 SP1 installation DVD and run one of the following commands:
 - ♦ On Windows, run the following command on the external database server:
`DVD_drive:\setup.exe --upgrade-oemdb`
or
`DVD_drive:\setup.exe -O`
“O” should be typed in uppercase.
 - ♦ On Linux, run the following command on the external database server:
`sh /media/cdrom/setup.sh --upgrade-oemdb`
or
`sh /media/cdrom/setup.sh -O`
“O” should be typed in uppercase.
- 2 On the Language Selection page, select the language in which you want to run the installer, then click *OK*.
- 3 On the Introduction page, click *Next* to proceed.
- 4 On the License Agreement page, click *Next*.
- 5 On the External Database Configuration page, specify the following details:
 - ♦ **Database Name:** Specify the name of the existing database.
 - ♦ **Username:** Specify the user who can modify the database. The user must have read/write permissions to modify the database.
 - ♦ **Password:** Specify the password of the user who has read/write permissions to the database.
 - ♦ **Database Server Name:** Specify the name of the OEM Sybase SQL Anywhere database server.
- 6 Click *Next*.
- 7 In the next screen, click *OK* to proceed with the upgrade.

If the database configuration details specified in [Step 5](#) are correct, the OEM Sybase SQL Anywhere database is upgraded and the Installation Complete page is displayed.

If the database configuration details are incorrect, an error message is displayed. To proceed with the upgrade you need to re-enter the correct details on the Database Configuration page.

8 Click *Next*.

9 On the Upgrade Completed Successfully page, click *Finish* to complete the upgrade.

NOTE: After the upgrade is completed, check for errors in the log file (ZENworks_OEM_Database_Upgrade_<timestamp>.log.xml) located in <Install_location>/Novell/ZENworks/logs on Windows or in /var/opt/novell/log/zenworks on Linux. If there are any errors, contact [Novell Support \(http://www.novell.com/support\)](http://www.novell.com/support) for assistance.

2.6 Upgrading the Primary Servers

You can upgrade by using a graphical user interface (GUI) program or a command line (Linux only).

- ♦ [Section 2.6.1, “Using a GUI to Upgrade Linux and Windows Servers,” on page 21](#)
- ♦ [Section 2.6.2, “Using a Command Line to Upgrade a Linux Server,” on page 30](#)

IMPORTANT: You must not use the ZENworks System Update to upgrade the Primary Servers to ZENworks 11 SP1.

Before upgrading the ZENworks server on a Windows device, you must run the Windows Update on the device to ensure that all the available updates are installed on the device. Subsequently, disable the Windows Update to ensure that there are no further updates on the device when you upgrade the ZENworks server on the device.

2.6.1 Using a GUI to Upgrade Linux and Windows Servers

Perform the following procedure on the Primary Server that you want to upgrade from ZENworks Configuration Management 10.3.x to ZENworks 11 SP1:

- 1 Ensure that you have fulfilled the upgrade prerequisites explained in [Section 2.4, “Prerequisites,” on page 18](#).
- 2 To start the ZENworks 11 SP1 upgrade program:
 - ♦ **Linux:** Open a Linux terminal, browse to the root of the ZENworks 11 SP1 installation media, then enter the `setup.sh` command.
 - ♦ **Windows:** Do one of the following:
 - ♦ Browse to the root of the ZENworks 11 SP1 installation media, then double-click `setup.exe`.
 - ♦ Open a DOS window, browse to the root of the ZENworks 11 SP1 installation media, then enter the `setup.exe` command.
- 3 During upgrading, refer to the information in [Table 2-1, “Upgrade Information,” on page 23](#) for details on the upgrade data that you need to know.

If you are using the GUI upgrade, you can also click the *Help* button for similar information.

4 Do one of the following on the Windows device:

- ♦ If you selected to reboot automatically (you selected the *Yes, restart the system* option during the upgrade; see “[Restarting the Server \(applicable only for Windows\)](#)” on [page 26](#)), continue with [Step 6](#) after the booting process has completed and the services have started.
- ♦ If you selected to reboot manually (you selected the *No, I will restart the system myself* option during the upgrade; see “[Restarting the Server \(applicable only for Windows\)](#)” on [page 26](#)), you must wait for the upgrade to complete and the services to start in order to verify it in [Step 5](#).

5 After the upgrade has completed and the ZENworks services have restarted, do any of the following to verify that ZENworks 11 SP1 is running:

- ♦ **Check the Windows services by using the GUI:**

On the server, click *Start*, select *Administrative Tools > Services*, then review the status of the *Novell ZENworks Loader* and *Novell ZENworks Server* services.

If the services not running, start them. Right-click the *Novell ZENworks Server* service, select *Start*, right-click the *Novell ZENworks Loader* service, then select *Start*.

Alternatively, you can use the *Restart* option for *Novell ZENworks Server* to stop all of the related services, which stops then starts each of them in their correct order, including *Novell ZENworks Loader*.

- ♦ **Run ZENworks Control Center:**

Use the following URL to open ZENworks Control Center in a Web browser on any device in your network:

`https://DNS_name_or_IP_address_of_Primary_Server:port_number/zenworks`

- ♦ **Check the Linux services by using the specific service command:**

On the server, run the following commands:

```
/etc/init.d/novell-zenserver status
```

```
/etc/init.d/novell-zenloader status
```

If the services are not running, run the following commands to start the ZENworks services:

```
/etc/init.d/novell-zenserver start
```

```
/etc/init.d/novell-zenloader start
```

- ♦ **Check the Linux services by using the configuration command:**

On the server, run the following command:

```
/opt/novell/zenworks/bin/novell-zenworks-configure -c SystemStatus
```

This lists all ZENworks services and their statuses.

To start the services, run the following command:

```
/opt/novell/zenworks/bin/novell-zenworks-configure -c Start
```

6 To upgrade another Primary Server, repeat from [Step 2](#).

IMPORTANT: Repeat these steps until all Primary Servers in the Management Zone have been upgraded. Other managed devices that have their ZENworks Adaptive Agents upgraded by System Update should not be allowed to contact a Primary Server that has not yet been upgraded.

In the following table, the upgrade information you need is listed in the order of the installation flow:

Table 2-1 *Upgrade Information*

Upgrade Information	Explanation
License agreement	If you do not accept the license agreement, the upgrade program quits.
ZENworks Prerequisites	<p>If the required prerequisites are not installed, you are not allowed to continue with the upgrade. The requirements that are not fulfilled are displayed (GUI) or listed (command line). For more information, see “System Requirements” in the ZENworks 11 SP1 Installation Guide</p> <p>If the .NET prerequisite is not fulfilled, you can click the ZENworks link in the description to install the runtime version that is bundled with ZENworks. Ensure that you install Microsoft .NET 3.5 SP1 framework and all its latest updates. After .NET is installed, the ZENworks upgrade proceeds.</p>
Upgrade Type	<p>Select “Yes” if this is the first Primary Server in the Management Zone to be upgraded, else select “No”.</p> <p>If you select “Yes” you will be prompted for the Database Details.</p> <p>OR</p> <p>If you select “No” perform the steps listed in Table 2-2, “Upgrade Information - Upgrade of additional Primary Servers,” on page 27.</p>
Database Details	Type the details of the database and press Enter.
Zone administrator information	<p>Specify the Management Zone administrator’s login name and password.</p> <p>If you selected “No” in the previous step, the device will try to connect to the database based on the server and zone credentials provided.</p>
ZENworks Diagnostic Center	<p>Verify the database using ZENworks Diagnostic Center. For more information see “Running ZENworks Diagnostic Center to verify the database” on page 29.</p> <hr/> <p>NOTE: You need to verify the database before you upgrade the first Primary Server to ZENworks 11 SP1. You do not need to verify the database for the subsequent server upgrades.</p> <hr/> <p>After you verify the database, select <i>Yes, I have verified the database schema using ZDC</i>. This option confirms that you have verified that the ZENworks database schema is proper by using the ZENworks Diagnostic Center.</p>

Upgrade Information	Explanation
ZENworks Licensing	<p>Configure the settings that automatically enable the Novell ZENworks 11 SP1 products after they have been upgraded or installed.</p> <hr/> <p>NOTE: The ZENworks 11 SP1 license keys are case sensitive. Do not change the case of the individual characters of the license key when you specify them during the Upgrade wizard.</p> <hr/> <p>This page is displayed only when you run the ZENworks 11 SP1 upgrade program for the first time in the zone or if the zone to be upgraded is ZENworks 10.3.x.</p> <p>Enabling the ZENworks 11 SP1 Products That Have Been Upgraded from ZENworks 10 Configuration Management SP3</p> <p>You can enable the ZENworks 11 SP1 products that have been upgraded from ZENworks 10 Configuration Management SP3, based on their ZENworks 10 Configuration Management SP3 license state.</p> <ul style="list-style-type: none"> ◆ ZENworks 11 SP1 Configuration Management, ZENworks 11 SP1 Asset Management, or ZENworks 11 SP1 Asset Inventory for UNIX/Linux can be enabled as either Evaluation or Active, depending on the license state prior to upgrading. <ul style="list-style-type: none"> ◆ The license state of the ZENworks 10.3 product is Evaluation: You can enable the ZENworks 11 SP1 license state of the product as either Evaluation or Active. To enable the Evaluation state for a product, select its <i>Evaluate</i> check box. To enable the Active state for a product, specify the license key that you obtained when you purchased the ZENworks 11 SP1 upgrade. The <i>Evaluate</i> check box is automatically deselected when you specify the license key. ◆ The license state of the ZENworks 10.3 product is Active: You can only enable the ZENworks 11 SP1 license state of the product as Active. Specify the license key that you obtained when you purchased the ZENworks 11 SP1 upgrade. The <i>Evaluate</i> check box is automatically deselected when you specify the license key. <hr/> <p>NOTE: If you select the <i>Evaluate</i> check box instead of specifying the ZENworks 11 SP1 license key, you cannot continue with the ZENworks 11 SP1 upgrade.</p> <hr/> <ul style="list-style-type: none"> ◆ The license state of ZENworks 10 Patch Management SP3 is automatically carried forward to ZENworks 11 SP1. You cannot change the license state by using the ZENworks 11 SP1 Upgrade. <ul style="list-style-type: none"> ◆ The license state of ZENworks 10 Patch Management SP3 is Evaluation or Active: The license state of ZENworks 11 SP1 Patch Management is automatically retained as Evaluation or Active. If the license state of ZENworks 10 Patch Management SP3 is Active, you can choose not to enable the Active state or the Evaluation state for the other ZENworks 11 SP1 products. ZENworks 11 SP1 Patch Management is activated even if ZENworks Configuration Management is not activated.

Upgrade Information	Explanation
	<p>♦ The license state of ZENworks 10 Patch Management SP3 is Deactivated:</p> <p>If the license state of ZENworks 11 SP1 Patch Management is Deactivated and the product is not enabled, use the following procedure to enable ZENworks 11 SP1 Patch Management:</p> <ol style="list-style-type: none"> 1. Enable the Evaluation version or the Active version of one of the following ZENworks 11 SP1 products: <ul style="list-style-type: none"> ♦ ZENworks 11 SP1 Configuration Management ♦ ZENworks 11 SP1 Asset Management ♦ ZENworks 11 SP1 Endpoint Security Management 2. Enable ZENworks 11 SP1 Patch Management to either the Evaluation state or the Active state at a later time through the ZENworks Control Center. <p>For more information on how to activate the product, see ZENworks 11 Product Licensing in the ZENworks 11 SP1 System Administration Reference.</p>
	<p>Enabling ZENworks 11 SP1 Endpoint Security Management</p> <p>Do one of the following:</p> <ul style="list-style-type: none"> ♦ To enable the Evaluation state, select its <i>Evaluate</i> check box. <p>ZENworks 11 SP1 Endpoint Security Management is installed with a 60-day trial license.</p> <ul style="list-style-type: none"> ♦ To enable the Active state, specify the license key that you obtained when you purchased the ZENworks 11 SP1 upgrade. <p>The <i>Evaluate</i> check box is automatically deselected when you specify the license key.</p>
Pre-upgrade summary	<p>The following fields are displayed in the summary:</p> <p>ZENworks Home Directory: Displays the location on the Primary Server where the ZENworks software that is being upgraded is installed.</p> <p>Zone Name: Displays the name of the Management Zone to which this server belongs.</p> <p>Upgrade Database: Indicates whether the ZENworks database will be upgraded. Its status is automatically checked by the program to see whether it needs to be upgraded.</p> <p>To make changes to any information, click <i>Previous</i>.</p>
Upgrading process	<p>The upgrade process takes several minutes, depending on the capabilities of the hardware.</p> <p>If you are using embedded Sybase, then the upgrade might take longer, depending on the amount of data in the database.</p> <p>During upgrading, you can click <i>Cancel</i> to stop, which leaves changes in the files that were upgraded up to that point. For more information on what to do after canceling, contact Novell Support (http://www.novell.com/support/).</p>

Upgrade Information	Explanation
Upgrading errors	<p>If there are errors during upgrading, this page is displayed. For detailed information, see the log files located in:</p> <p>On Windows</p> <ul style="list-style-type: none"> ◆ %ZENWORKS_HOME%\logs <ul style="list-style-type: none"> ◆ %ZENWORKS_HOME%\logs\ZENworks_Upgrade_<TimeStamp>.log.xml ◆ %ZENWORKS_HOME%\logs\loader-messages.log ◆ %ZENWORKS_HOME%\logs\system-update-import.log ◆ %ZENWORKS_HOME%\logs\system-update\<Update GUID> ◆ %ZENWORKS_HOME%\logs\pre-global-actions.log <p>On Linux</p> <ul style="list-style-type: none"> ◆ /var/opt/novell/log/zenworks <ul style="list-style-type: none"> ◆ /var/opt/novell/log/zenworks/ ZENworks_Upgrade_<TimeStamp>.log.xml ◆ /var/opt/novell/log/zenworks/system-update/<Update GUID> ◆ /var/opt/novell/log/zenworks/loader-messages.log ◆ /var/opt/novell/log/zenworks/system-update-import.log ◆ /var/opt/novell/log/zenworks/pre-global-actions.log <p>You must resolve the errors and restart the upgrade.</p>
Post-upgrade actions	<p>You can choose to run the ZENworks System Status utility to launch a ZENworks services heartbeat check prior to closing the upgrade program. The results are posted in the installation log.</p>
Restarting the Server (applicable only for Windows)	<p>Upon a successful upgrade on a Windows Primary Server, you can select between rebooting immediately or later:</p> <ul style="list-style-type: none"> ◆ Yes, Restart the System: If you select this option, the server is rebooted to complete the upgrade process. ◆ No, I Will Restart the System Myself: If you select this option, the upgrade process finishes the next time you reboot the server. <hr/> <p>IMPORTANT: You must eventually reboot the server to complete the upgrade process.</p> <hr/>
Upgrade completion	<p>The actions you selected previously are performed, including:</p> <ul style="list-style-type: none"> ◆ Upgrading the ZENworks database (done when the first Primary Server is upgraded). ◆ Upgrading all ZENworks components installed on the Primary Server. ◆ Importing System Update into the zone so that you can upgrade the managed devices in the zone.

Table 2-2 *Upgrade Information - Upgrade of additional Primary Servers*

Installation Information	Explanation
Primary Server and Zone Credentials	You will be prompted for the details of the Primary Server that is already upgraded and the Zone credentials.
ZENworks Database Details	(Conditional) If the device cannot connect to the database via the Primary Server that is already upgraded, you will be prompted to enter the details to connect directly to the database.
Pre-upgrade summary	<p>The following fields are displayed in the summary:</p> <p>ZENworks Home Directory: Displays the location on the Primary Server where the ZENworks software that is being upgraded is installed.</p> <p>Zone Name: Displays the name of the Management Zone to which this server belongs.</p> <p>Upgrade Database: Indicates whether the ZENworks database will be upgraded. Its status is automatically checked by the program to see whether it needs to be upgraded.</p> <p>To make changes to any information, click <i>Previous</i>.</p>
Upgrading process	<p>The upgrade process takes several minutes, depending on the capabilities of the hardware.</p> <p>During upgrading, you can click <i>Cancel</i> to stop, which leaves changes in the files that were upgraded up to that point. For more information on what to do after canceling, contact Novell Support (http://www.novell.com/support/).</p>

Installation Information	Explanation
Upgrading errors	<p>If there are errors during upgrading, this page is displayed. For detailed information, see the log files located in:</p> <p>On Windows</p> <ul style="list-style-type: none"> ◆ %ZENWORKS_HOME%\logs <ul style="list-style-type: none"> ◆ %ZENWORKS_HOME%\logs\ZENworks_Upgrade_<TimeStamp>.log.xml ◆ %ZENWORKS_HOME%\logs\loader-messages.log ◆ %ZENWORKS_HOME%\logs\system-update-import.log ◆ %ZENWORKS_HOME%\logs\system-update\<Update GUID> ◆ %ZENWORKS_HOME%\logs\pre-global-actions.log <p>On Linux</p> <ul style="list-style-type: none"> ◆ /var/opt/novell/log/zenworks <ul style="list-style-type: none"> ◆ /var/opt/novell/log/zenworks/ ZENworks_Upgrade_<TimeStamp>.log.xml ◆ /var/opt/novell/log/zenworks/system-update/<Update GUID> ◆ /var/opt/novell/log/zenworks/loader-messages.log ◆ /var/opt/novell/log/zenworks/system-update-import.log ◆ /var/opt/novell/log/zenworks/pre-global-actions.log <p>You must resolve the errors and restart the upgrade.</p>
Post-upgrade actions	<p>You can choose to run the ZENworks System Status utility to launch a ZENworks services heartbeat check prior to closing the upgrade program. The results are posted in the installation log.</p>
Restarting the Server (applicable only for Windows)	<p>Upon a successful upgrade on a Windows Primary Server, you can select between rebooting immediately or later:</p> <ul style="list-style-type: none"> ◆ Yes, Restart the System: If you select this option, the server is rebooted to complete the upgrade process. ◆ No, I Will Restart the System Myself: If you select this option, the upgrade process finishes the next time you reboot the server. <hr/> <p>IMPORTANT: You must eventually reboot the server to complete the upgrade process.</p> <hr/>
Upgrade completion	<p>The actions you selected previously are performed, including:</p> <ul style="list-style-type: none"> ◆ Upgrading the ZENworks database (done when the first Primary Server is upgraded). ◆ Upgrading all ZENworks components installed on the Primary Server. ◆ Importing System Update into the zone so that you can upgrade the managed devices in the zone.

Running ZENworks Diagnostic Center to verify the database

The first time you upgrade any Primary Server to ZENworks 11 SP1 you need to verify the database. This procedure does not need to be performed for the subsequent server upgrades.

- ♦ [“Verifying an embedded Sybase or OEM Sybase database” on page 29](#)
- ♦ [“Verifying an external database” on page 29](#)

Verifying an embedded Sybase or OEM Sybase database

- 1 At the Primary Server’s console prompt, run the following commands:

- ♦ **On Windows**

```
cd to MEDIA_PATH/Common/tools/zdc
zdc_zen11.bat
```

- ♦ **On Linux**

```
cd to MEDIA_PATH/Common/tools/zdc
./zdc_zen11
```

ZENworks Diagnostic Center runs the diagnostic tests and generates reports in HTML format. The reports are stored in the %ZENWORKS_HOME%\logs\zdcreports\%SESSION% directory on a Windows Primary Server and in the /var/opt/novell/log/zenworks/zdcreports directory on a Linux Primary Server. To view the reports, open index.html, located in the report directory.

The complete log of the diagnostic tests is stored in the %ZENWORKS_HOME%\logs\zdcreports\zdc_zen11_verify_%SESSION%.log directory on a Windows Primary Server and in the /var/opt/novell/log/zenworks/zdcreports directory on a Linux Primary Server.

Verifying an external database

Perform the following steps to verify an external database such as external Sybase, MS SQL or Oracle:

- 1 At the Primary Server’s console prompt, run the following commands:

- ♦ **On Windows**

```
cd to MEDIA_PATH/Common/tools/zdc
zdc_zen11.bat -d check
```

- ♦ **On Linux**

```
cd to MEDIA_PATH/Common/tools/zdc
./zdc_zen11 -d check
```

- 2 Specify the type of database. Type the relevant number based on the database type:

- ♦ (1) Sybase
- ♦ (2) MS-SQL
- ♦ (3) Oracle

- 3 Specify the following database credentials:

- ♦ Database Server IP

- ♦ Port Number
- ♦ Database Access Username

NOTE: If you are using an MS SQL database, based on the type of authentication you choose to log in, enter the username in the relevant format:

- ♦ Windows Authentication: `<name>@<domain>`
 - ♦ SQL Server Authentication: `<name>`
-

- ♦ Database Access Password
- ♦ Database Name

4 (Conditional) If the database is Sybase, you are prompted whether it is an embedded Sybase database or not. Type the relevant number:

- ♦ (1) yes
- ♦ (2) no

5 (Conditional) If the database is not embedded Sybase, enter the Database Engine Name.

ZDC runs the diagnostic tests and generates the reports in the HTML format. The reports are stored in the `%ZENWORKS_HOME%\logs\zdcreports\%SESSION%` directory on a Windows Primary Server and in the `/var/opt/novell/log/zenworks/zdcreports` directory on a Linux Primary Server. To view the reports, open `index.html` that is located in the report directory.

The complete log of the diagnostic tests is stored in the `%ZENWORKS_HOME%\logs\zdcreports\zdc_zen11_verify_%SESSION%.log` directory on a Windows Primary Server and in the `/var/opt/novell/log/zenworks/zdcreports` directory on a Linux Primary Server.

2.6.2 Using a Command Line to Upgrade a Linux Server

Perform the following on the Primary Server that you want to upgrade from ZENworks Configuration Management 10.3.x to ZENworks 11 SP1:

- 1** Ensure that you have fulfilled the upgrade prerequisites explained in [Section 2.4](#), “Prerequisites,” on page 18.
- 2** Start the ZENworks 11 SP1 upgrade program, open a Linux terminal, browse to the root of the upgrade media, then enter the following command:

```
setup.sh --console
or
setup.sh -e
```

- 3** Review the introduction, then press Enter to continue.

TIP: You can type back and press Enter to return to a previous installation option to make changes.

- 4** To accept the license agreement, type 1 and press Enter.
English is the default language. Select the number corresponding to your language to continue.
If you disagree, the upgrade quits.
- 5** Type “Yes” if this is the Primary Server to be upgraded, else type “No” and press Enter.

- 6 (Conditional) If you typed "Yes" in the previous screen, you will be prompted for the Database Details. Enter the Database Details and press Enter. Continue with step 8.
- 7 (Conditional) If you typed "No" in the previous screen, you will be prompted for details of the Primary Server that has already been upgraded and the Zone Credentials. Enter the required details and press Enter.
 - ♦ (Conditional) If the device is able to connect to the Primary Server, continue with step 14.
 - ♦ (Conditional) If the device is not able to connect to the Primary Server, you will be prompted for the Database Details. Type the details and continue with step 14.
- 8 On the *Enter the zone administrative user's name* line, press Enter to accept the default (Administrator), or specify an administrator name, then press Enter.
- 9 Specify a password for the administrator, then press Enter.
- 10 If the device is able to connect to the database server, continue with step 11. If not, you will be prompted for the database details. Enter the database details and press Enter.
- 11 Run ZENworks Diagnostic Center to verify the database. For more information, see ["Running ZENworks Diagnostic Center to verify the database" on page 29](#).

NOTE: You need to verify the database before you upgrade the first Primary Server to ZENworks 11 SP1. You do not need to verify the database for the subsequent server upgrades.

- 12 Confirm that you have verified that the ZENworks database schema is proper by using the ZENworks Diagnostic Center.

If you do not confirm, you cannot proceed with the upgrade.
- 13 (First Primary Server upgrade or zone to be upgraded is ZENworks 10.3.x) Specify the license keys that you obtained for the upgrade, pressing Enter for each one.

NOTE: The ZENworks 11 SP1 license keys are case sensitive. Do not change the case of the individual characters of the license key when you specify them.

Where you don't specify a license key, just press Enter to continue.

- 14 To have ZENworks automatically stop the services on this server, press Enter; otherwise, type 2 and press Enter.

In preparing to upgrade, you should have already stopped the services on all Primary Servers in the Management Zone. Even if you stopped these services manually before starting the upgrade program, you can select 1 to make sure that you did not miss any.

Except for the database service, no ZENworks service can be running during the upgrade.

- 15 Review the pre-upgrade summary, then press Enter to continue.

If you are upgrading the other Primary Servers in the Management Zone, the upgrade starts when you press Enter for this step.
- 16 When *Installation Complete* is displayed, press Enter to continue.

If errors are indicated, see the installation logs in `/var/opt/novell/log/zenworks` or `/var/opt/novell/log/zenworks/systemupdate/<Update GUID>`.
- 17 Do any of the following to verify that ZENworks 11 SP1 is running:
 - ♦ **Check the Linux services by using the specific service commands** On the server, run the following commands:

```
/etc/init.d/novell-zenserver status
```

```
/etc/init.d/novell-zenloader status
```

If the services are not running, run the following commands to start the ZENworks services:

```
/etc/init.d/novell-zenserver start
```

```
/etc/init.d/novell-zenloader start
```

- ♦ **Check the Linux services by using the configuration command** On the server, run the following command:

```
/opt/novell/zenworks/bin/novell-zenworks-configure -c SystemStatus
```

This lists all ZENworks services and their statuses.

To start the services, run the following command:

```
/opt/novell/zenworks/bin/novell-zenworks-configure -c Start
```

- ♦ **Run ZENworks Control Center** Use the following URL to open ZENworks Control Center in a Web browser on any device in your network:

https://DNS_name_or_IP_address_of_Primary_Server/zenworks

This can be done either on the server where you just installed ZENworks, or on a managed workstation.

18 To upgrade another Primary Server, repeat from [Step 2](#).

For information on the post-upgrade tasks, please see “[Post-Installation Tasks](#)” in the *ZENworks 11 SP1 Installation Guide*.

2.7 Upgrading the ZENworks Reporting Server

If you have ZENworks Reporting Server installed on a ZENworks 10 Configuration Management SP 3 or ZENworks 11 SP1 Primary Server, ZENworks Reporting Server ceases to work when you upgrade the server to ZENworks 11 SP1.

If you have a ZENworks 10.3 Reporting Server installed, you need to install a new instance of ZENworks 11 SP1 Reporting Server either on the same Primary Server or on a different Primary Server. If you have a ZENworks 11 Reporting Server installed, you can upgrade to ZENworks 11 SP1 Reporting Server or install ZENworks 11 SP1 Reporting Server on a different machine.

NOTE: Ensure you take a backup of the reports from your existing instance before beginning the new installation. This is because the new instance of ZENworks Reporting Server ceases to work after the new installation is complete, and you cannot retrieve any reports. You can restore the archived reports to the new instance of ZENworks Reporting Server. For more information, see the “[Performing a Backup of Reports before Decommissioning an Existing Instance of ZENworks Reporting Server](#)” in the *ZENworks 11 SP1 Reporting Server Installation Guide*

- ♦ [Section 2.7.1, “Installing the ZENworks 11 SP1 Reporting Server on the Same Primary Server that has ZENworks 10 Configuration Management SP3 Reporting Server Installed,” on page 33](#)
- ♦ [Section 2.7.2, “Installing the ZENworks 11 SP1 Reporting Server on the Same Primary Server that has ZENworks 11 Reporting Server Installed,” on page 33](#)
- ♦ [Section 2.7.3, “Installing the ZENworks 11 SP1 Reporting Server on a Different Server,” on page 34](#)

2.7.1 Installing the ZENworks 11 SP1 Reporting Server on the Same Primary Server that has ZENworks 10 Configuration Management SP3 Reporting Server Installed

- 1 Ensure that you have upgraded the Primary Servers as explained in [Chapter 2, “Upgrading the Primary Servers to ZENworks 11 SP1,”](#) on page 15.

- 2 Uninstall the existing instance of ZENworks Reporting Server.

The procedure to uninstall ZENworks 10 Configuration Management SP3 Reporting Server is the same the procedure that you use for ZENworks 11 Reporting Server. For more information on how to uninstall ZENworks Reporting Server, see “[Uninstalling ZENworks Reporting Server](#)” in the *ZENworks 11 SP1 Reporting Server Installation Guide*.

NOTE: While uninstalling ZENworks 10 Reporting Server SP3, the uninstallation wizard is incorrectly displayed as *Uninstall ZENworks 11 Reporting Server*. You can proceed with the wizard to uninstall ZENworks 10 Reporting Server SP3.

- 3 Install ZENworks Reporting Server.

For more information on how to install ZENworks Reporting Server, see the *ZENworks 11 SP1 Reporting Server Installation Guide*.

- 4 Run the following command to restore the reports and the report data that you backed up as explained in [Section 2.4.1, “Prerequisites for Performing the Upgrade for the First Time in the Management Zone,”](#) on page 18:

```
zman report-load (source folder)
```

The source folder is the location of the folder from which all the reports and reporting rights are uploaded.

For more information, see “[Report Commands](#)” in the *ZENworks 11 SP1 Command Line Utilities Reference*.

2.7.2 Installing the ZENworks 11 SP1 Reporting Server on the Same Primary Server that has ZENworks 11 Reporting Server Installed

- 1 Ensure that you have upgraded the Primary Servers as explained in [Section 2.6, “Upgrading the Primary Servers,”](#) on page 21.

- 2 Insert the ZENworks 11 SP1 Reporting Server Media Installer.

- 3 Select the language in which you want to upgrade and click *OK*.

- 4 Accept the License Agreement and click *Next*.

- 5 The installer will detect if ZENworks 11 Reporting Server is installed on the device or not. If ZENworks 11 Reporting is installed, you will be prompted if you want to upgrade to ZENworks 11 SP1 Reporting Server. Select Yes to upgrade.

- 6 Upgrade ZENworks 11 SP1 Reporting Server.

For more information on how to install ZENworks Reporting Server, see the *ZENworks 11 SP1 Reporting Server Installation Guide*.

2.7.3 Installing the ZENworks 11 SP1 Reporting Server on a Different Server

- 1 Ensure that you have upgraded the Primary Servers as explained in [Chapter 2, “Upgrading the Primary Servers to ZENworks 11 SP1,”](#) on page 15.

- 2 Install ZENworks Reporting Server.

For more information on how to install ZENworks Reporting Server, see the [ZENworks 11 SP1 Reporting Server Installation Guide](#).

- 3 Run the following command to restore the reports and the reports data that you backed up as explained in [Section 2.4.1, “Prerequisites for Performing the Upgrade for the First Time in the Management Zone,”](#) on page 18:

```
zman report-load (source folder)
```

The source folder is the location of the folder from which all the reports and reporting rights are uploaded.

For more information, see “[Report Commands](#)” in the [ZENworks 11 SP1 Command Line Utilities Reference](#).

NOTE: You can uninstall the prior instance of ZENworks Reporting Server in the zone at any point in time. However, leaving this instance installed does not affect the functioning of the currently installed ZENworks 11 SP1 Reporting Server.

2.8 Known Issues

During the upgrade of the Windows Primary Server, you might encounter the following, which you can ignore:

- ♦ The Windows Explorer automatically restarts a few times.
- ♦ The Command Prompt window with the following message is automatically launched:

```
For each prompt presented, press 'enter' to accept the <default> value,  
type 'back' to return to the previous action, or type 'quit' to exit.
```

2.9 Troubleshooting

The following sections provide solutions to the problems you might encounter while upgrading to ZENworks 11 SP1:

- ♦ “[ZENworks Diagnostic Center reports database schema mismatch error](#)” on page 34
- ♦ “[ZENworks Diagnostic Center reports a mismatch error in the database table structure](#)” on page 36
- ♦ “[Back up of ZENworks Reporting Server reports using the zman command \(zman rpsv\) fails](#)” on page 36
- ♦ “[An error message is displayed while upgrading to ZENworks 11 SP1 Reporting Server](#)” on page 37

ZENworks Diagnostic Center reports database schema mismatch error

Source: ZENworks 11 SP1; Upgrade.

Explanation: If you want to upgrade a Primary Server on which ZENworks 10 Configuration Management SP3 was freshly installed and you created the database schema before installing ZENworks 10 Configuration Management SP3, you encounter the following error when you run the ZENworks Diagnostic Center Database Schema Verifier:

```
Mismatch in table 'zInstallationPackage' structure.  
Object type: [Column] , Object name: [Platform]  
Expected: [Name: Platform, Size: 255, Type: VARCHAR,  
Nullable: true]  
Found: [Name: Platform, Size: 32, Type: VARCHAR, Nullable:  
true]
```

If you do not resolve the issue, you can still choose to upgrade to ZENworks 11 SP1 but ZENworks 11 SP1 Imaging operations will fail.

Possible Cause: The SQL sets contained in the database schema of ZENworks Diagnostic Center are different from the SQL sets contained in the database schema that is created during the installation of ZENworks 10 Configuration Management SP3.

Action: Before upgrading to ZENworks 11 SP1, do the following from any one of the ZENworks 10 Configuration Management SP3 Primary Server:

1 Connect to the ZENworks database by using appropriate utility.

For example, use the DBISQL utility to connect to the external Sybase database:

1a At the command prompt of the device that has the external Sybase database installed and running, go to the
%ZENWORKS_HOME%\share\ASA\win32 directory on Windows or to
the /opt/novell/zenworks/share/sybase/bin32s directory on
Linux.

1b Enter dbisql.

1c In the *Identification* tab, specify the database credentials.

1d Click the *Database* tab, then specify the name of database service that is currently running.

1e Click *OK*.

2 Run the appropriate query:

♦ For Sybase:

```
alter table zInstallationPackage modify Platform  
nvarchar(255);
```

♦ For Oracle:

```
alter table zInstallationPackage modify Platform  
varchar2(255 char);
```

♦ For MS SQL:

```
alter table zInstallationPackage alter column  
Platform nvarchar(255);
```

3 From the Primary Server's console prompt, run the following command:

```
novell-zenworks-configure -c  
ZoneConfigUpdateConfigureAction
```

ZENworks Diagnostic Center reports a mismatch error in the database table structure

Source: ZENworks 11 SP1; Upgrade.

Explanation: If your ZENworks 10 Configuration Management SP3 Primary Server resides in a zone configured to MS SQL Server database that was set up prior to ZENworks 10 Configuration Management SP2, you encounter the following error when you run the ZENworks Diagnostic Center Database Schema Verifier before upgrading the server to ZENworks 11 SP1:

```
Mismatch in table 'zPolicyDef' structure.  
Object type: [Column] , Object name: [ComponentName  
Expected: [Name: ComponentName, Size: 64, Type: VARCHAR,  
Nullable: true]  
Found: [Name: ComponentName, Size: 64, Type: VARCHAR,  
Nullable: false]
```

Possible Cause: The SQL sets contained in the database schema of a zone set up prior to ZENworks 10 Configuration Management SP2 are different from the SQL sets contained in the database schema of ZENworks Diagnostic Center.

Action: Before upgrading to ZENworks 11 SP1, do the following from any one of the ZENworks 10 Configuration Management SP3 Primary Server residing in the zone configured to MS SQL Server database that was set up prior to ZENworks 10 Configuration Management SP2:

- 1 Connect to the ZENworks database by using appropriate utility such as the Microsoft SQL Server Management Studio utility.
- 2 Run the following query:

```
alter table zPolicyDef alter column ComponentName  
nvarchar(64) null;
```

Back up of ZENworks Reporting Server reports using the zman command (zman rpsv) fails

Source: ZENworks 11 SP1; Upgrade.

Explanation: To upgrade the ZENworks Reporting Server from ZENworks Configuration Management 10.3.0/10.3.1 to ZENworks 11 SP1, you need to first back up all the reports. When you run the zman command (zman rpsv) to back up the reports and reports data, you receive an error.

Action: Before you upgrade from ZENworks Configuration Management 10.3.0/10.3.1 to ZENworks 11 SP1 perform the following steps:

1. Download and install the ZCM 10.3.0/10.3.1 - ZRS report backup patch. For more information about the patch, see TID 7007852 in the [Novell Support Knowledgebase \(http://support.novell.com/search/kb_index.jsp\)](http://support.novell.com/search/kb_index.jsp).
2. Back up the reports and the reports data by running the `zman report-save` command.

For more information about the zman command, see the “[Report Commands](#)” in the *ZENworks 11 SP1 Command Line Utilities Reference*.

An error message is displayed while upgrading to ZENworks 11 SP1 Reporting Server

Source: ZENworks 11SP1 Reporting Server; Upgrade.

Explanation: While upgrading the ZENworks Reporting Server, the following error message is displayed:

Reporting server already installed in local Machine, first
uninstall it to proceed with installation"

Action: After you upgrade to ZENworks 11 SP1, restart the server and then upgrade the ZENworks Reporting Server.

Upgrading Satellites and Managed Devices to ZENworks 11 SP1

3

You can upgrade the managed devices and Satellites to ZENworks 11 SP1 if they have any of the following versions installed:

- ♦ ZENworks 10 Configuration Management SP2 (10.2.2)
- ♦ ZENworks 10 Configuration Management SP3 (10.3)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.1)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.2)
- ♦ ZENworks 10 Configuration Management SP3 (10.3.3)
- ♦ ZENworks 11

You cannot upgrade a Windows 2000 managed device that has ZENworks Configuration Management 10.2.x/10.3.x installed because Windows 2000 is not a supported platform for a managed device in ZENworks 11 SP1. However, Windows 2000 managed devices that have ZENworks Configuration Management 10.2.x/10.3.x installed can still communicate with a ZENworks 11 SP1 Primary Server.

To upgrade the managed devices and Satellites to ZENworks 11 SP1, review the following sections:

- ♦ [Section 3.1, “Prerequisites for Upgrading Satellites or Managed Devices,” on page 39](#)
- ♦ [Section 3.2, “Upgrading Satellites and Managed Devices,” on page 40](#)
- ♦ [Section 3.3, “Known Limitations,” on page 40](#)

3.1 Prerequisites for Upgrading Satellites or Managed Devices

Before upgrading a Satellite or managed device from ZENworks Configuration Management 10.2.x/10.3.x, or ZENworks 11 to ZENworks 11 SP1, you must complete the following tasks:

- ♦ Ensure that the device meets the minimum system requirements for ZENworks 11 SP1.
For more information, see [“Managed Device Requirements”](#) in the *ZENworks 11 SP1 Installation Guide*.
- ♦ Ensure that the Microsoft .NET 3.5 SP1 or later framework and its latest updates are installed and running on the device.
- ♦ Ensure that Windows Installer 3.1 or later is installed.
- ♦ (Conditional) If you are upgrading from ZENworks Configuration Management 10.2.x/10.3.x, to ZENworks 11 SP1, ensure that the ZENworks Endpoint Security Management client is not installed on the device. If the client has been installed on the device, you must uninstall it before upgrading the device to ZENworks 11 SP1.
- ♦ Ensure that all the Primary Servers in the zone have been upgraded to ZENworks 11 SP1.

- ♦ Ensure that your System Update deployment plan to upgrade Satellites and managed devices to ZENworks 11 SP1 does not include ZENworks Configuration Management 10.3.x Primary Servers.
- ♦ If you choose to deploy the System Update in stages, ensure that the stage that you create contains at least one stage member (an individual device and a group that contain devices).
- ♦ If you have a Windows Vista managed device that has ZENworks 10 Configuration Management SP3 (10.3.0) registered to a ZENworks 10 Configuration Management SP3 Primary Server, the managed device fails to contact the server after you upgrade the server to ZENworks 11 SP1. To reconnect the managed device with the ZENworks 11 SP1 Primary Server, do one of the following:
 - ♦ **Option 1:** Upgrade the managed device to 10.3.1, and then to ZENworks 11 SP1.
 - ♦ **Option 2:** If you choose not to upgrade the managed device to ZENworks 11 SP1, unregister the device from the ZENworks Configuration Management 10.3 zone and manually register it to the ZENworks 11 SP1 Primary Server by using the `zac reg` command.

3.2 Upgrading Satellites and Managed Devices

To upgrade Satellites or managed devices, use the System Update feature. For detailed information, see *ZENworks System Updates* in the [ZENworks 11 SP1 System Administration Reference](#).

If you encounter any issues while deploying the ZENworks 11 SP1 update on the managed devices, see the following log files:

Windows: `installation_path\novell\zenworks\logs\system-update\5011000000d18c113224186fa9b4e05c\system-update.log`

Linux: `/var/opt/novell/log/zenworks/system-update/5011000000d18c113224186fa9b4e05c/system-update.log`

In the upgrade log file path, 5011000000d18c113224186fa9b4e05c indicates the System Update GUID.

NOTE: After upgrading from an older version of ZENworks (10.3 or 11) with ZENworks Patch Management installed, DAU may fail on newly added devices until the next Patch Management subscription is updated.

Once the DAU bundle is updated by the subscription and the version is incremented by the same this issue will be resolved. This issue will not impact existing ZENworks 10.x or 11 agents as they already have the `analyze.exe` module installed on them. Hence, they will be able to continue to execute the old DAU and will receive an updated patch agent when the subscription service updates the DAU bundle.

3.3 Known Limitations

- ♦ Error messages or warnings might be incorrectly logged in ZENworks Control Center during the upgrade of a managed device from ZENworks Configuration Management 10.2.x/10.3.x to ZENworks 11 SP1 even if the upgrade is successful.

Action: Ignore the error messages and refresh the managed device.

Upgrading to ZENworks Virtual Appliance 11 SP1

4

- ♦ [Section 4.1, “Upgrading the ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1,” on page 43](#)
- ♦ [Section 4.2, “Upgrading ZENworks Virtual Appliance 11 to ZENworks Virtual Appliance 11 SP1,” on page 47](#)

4.1 Upgrading the ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1

There is no direct method for upgrading the ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1. To upgrade from the ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1, you need to first deploy ZENworks Virtual Appliance 11 SP1. You should perform this deployment on the same ESX server that hosts the ZENworks 10 Configuration Management SP3 Appliance. When you boot the ZENworks Virtual Appliance 11 SP1 for the first time, a configuration wizard is launched in which you need to provide the necessary network identity (IP address and DNS name) for the ZENworks Virtual Appliance 11 SP1. The IP address or DNS name of the ZENworks Virtual Appliance 11 SP1 is temporarily used for the upgrade and will not be required thereafter.

The migration wizard on the ZENworks Virtual Appliance 11 SP1 simultaneously upgrades the ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1, and migrates the data and settings from ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1. The time it takes to complete the migration depends on the network speed, bandwidth, and amount of data to be migrated.

IMPORTANT: ZENworks Virtual Appliance 11 SP1 acquires the network identity of the ZENworks 10 Configuration Management SP3 Appliance. After upgrading from ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1, ZENworks 10 Configuration Management SP3 Appliance is powered off and you must ensure that you do not use it in the Management Zone.

The following section provides information on how to upgrade ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1:

- ♦ [Section 4.1.1, “Pre-Upgrade Tasks,” on page 44](#)
- ♦ [Section 4.1.2, “Upgrading ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1,” on page 45](#)
- ♦ [Section 4.1.3, “Post-Upgrade Tasks,” on page 47](#)

4.1.1 Pre-Upgrade Tasks

Before you begin to upgrade ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1, perform the following tasks:

- ♦ Ensure that you have performed the tasks in the “[Upgrading the Primary Servers to ZENworks 11 SP1](#)” on page 15.
- ♦ Make a snapshot of the ZENworks 10 Configuration Management SP3 Appliance and its database.
- ♦ Backup your personal data, configuration settings, and automation scripts from ZENworks 10 Configuration Management SP3 Appliance.
- ♦ Take a back up of the ZENworks Primary Server. In case, you encounter any error you can restore the ZENworks Primary Server.

For more information on how to make a backup, see *Backing Up and Restoring the ZENworks Server and Certificate Authority* in the [ZENworks 11 SP1 System Administration Reference](#).

(Conditional) If you have ZENworks Reporting Server installed, take a reliable back-up of the reports by using the zman Report commands.

For detailed information about the zman Report Commands, view the zman man page (man zman) on the server or see “[zman\(1\)](#)” in [ZENworks 11 SP1 Command Line Utilities Reference](#).

- ♦ Verify the ZENworks database schema by using the ZENworks Diagnostic Center:
 1. Download the `zdc_zen11_prerequisite.zip` file from [Novell Download Website](http://download.novell.com/Download?buildid=E0b6x7KuGls~) (<http://download.novell.com/Download?buildid=E0b6x7KuGls~>) to a temporary location on your device.
 2. Copy the downloaded file to ZENworks 10 Configuration Management SP3 Appliance.
 3. Extract the ZIP file contents to a temporary location.
 4. From the console, go to the directory that contains the extracted ZENworks Diagnostic Center files.
 5. Run the following command:

```
/bin/sh zdc_zen11
```
 6. Download the `ZENworks11SP1a_Appliance-x86_64.ova` file, or download the multi-part ZENworks Appliance ZIP files and create the OVA file.

To download the multi-part ZENworks Appliance ZIP files, do the following:

- ♦ Download the following files on a temporary directory on your device:
 - `ZENworks11SP1a_Appliance-x86_64.zip.001`
 - `ZENowrks11SP1a_Appliance-x86_64.zip.002`
 - `ZENworks11SP1a_Appliance-x86_64.zip.003`
 - `ZENworks11SP1a_Appliance-x86_64.zip.004`
 - `ZENworks11SP1a_Appliance-x86_64.zip.005`
- ♦ Extract the `ZENworks11SP1a_Appliance-x86_64.zip.001` by using one of the following utilities:
 - ♦ 7-Zip version 4.65 or later

- ♦ WinZip 9.x or later

This automatically merges all the multi-part ZENworks Appliance ZIP files and creates the `ZENworks11SP1a_Appliance-x86_64.ova` file.

- ♦ Import the ZENworks Appliance OVA file and deploy it to a virtual infrastructure.
7. (Recommended) Deploy the ZENworks Virtual Appliance 11 SP1 on the same ESX server as the ZENworks 10 Configuration Management SP3 Appliance.

4.1.2 Upgrading ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1

The ZENworks Appliance image is bundled with all the three editions (Standard, Advanced, and Enterprise) of ZENworks 11 SP1.

- 1 Download the OVA file from the [ZENworks 11 SP1 Download Web site \(http://download.novell.com/index.jsp\)](http://download.novell.com/index.jsp), or download the multi-part ZENworks Appliance ZIP files and create the OVA file.

For detailed instructions, see the [ZENworks 11 SP1 Download and Installation page \(http://www.novell.com/documentation/zenworks11/\)](http://www.novell.com/documentation/zenworks11/)

- 2 Create a new virtual machine with the preinstalled ZENworks Appliance by importing the ZENworks Appliance image.

The ZENworks Appliance image is stored in an open virtualization archive format (`ZENworks11SP1a_Appliance-x86_64.ova`), and you can import it to the VMware infrastructure by using the VMware vSphere Client application.

2a Start the VMware vSphere Client application.

2b Click *File > Deploy OVF Template* to launch the Deploy OVF Template Wizard.

2c On the Source page, select one of the following options, then click *Next*.

- ♦ Click *Select from file* to browse for and select the `.ova` file that contains the ZENworks Appliance image.
- ♦ Click *Deploy from URL* to download the `.ova` file from the Web server.

2d Click *Next*.

2e Follow the prompts to complete the deployment of the `.ova` file.

2f After the deployment is complete, click *Done*.

- 3 (Optional) Take a snapshot of the virtual machine that you created in [Step 2](#).
- 4 Turn on the virtual machine on which you imported the ZENworks Appliance image.
The Configuration Wizard is launched automatically.
- 5 On the Language page of the Configuration Wizard, select the language in which you want the wizard to continue, then click *Next*.
- 6 On the License Agreement page, accept the End User License Agreement, then click *Next*.
- 7 On the Keyboard page, configure the keyboard layout, then click *Next*.
- 8 On the Timezone page, the time zone and clock settings to be used in your system must be the same as ZENworks 10 Configuration Management SP3 Appliance settings, then click *Next*.
- 9 On the Root Password page, specify the root password.

- 10** On the Network Configuration page, select *Network Interfaces > Ethernet Network Card > Edit*, then configure the following network information for ZENworks Appliance:

- ♦ Hostname and server name

The server must have a static IP address or a permanently leased DHCP address.

- ♦ IP address for your machine (for a static IP address)
- ♦ Subnet mask (for a static IP address)
- ♦ Default gateway (for a static IP address)

The IP address or DNS name of the appliance server to which you want to upgrade should be different from the older appliance server. The IP address or DNS name of the ZENworks Virtual Appliance 11 SP1 server is temporarily used for upgrade purpose.

- 11** Click *Finish*.

The ZENworks 11 SP1 Wizard is displayed. This wizard might take few seconds to launch.

- 12** In the ZENworks 11 SP1 Wizard, select the *Migrate Existing Appliance* option, then click *Next*.

- 13** In the *IP/DNS* field, specify the IP address or DNS name of the remote appliance server.

- 14** Click *Next*.

- 15** In the Root Password dialog box, specify the root password, then click *OK*.

- 16** Click *Next*.

You are prompted to provide the credentials of the zone administrator. Use the available credentials to authenticate to the Management Zone.

- 17** If you want to upgrade to the first Primary Server in the zone, continue with [Step 17a](#); otherwise skip to [Step 18](#).

17a On the Product Licensing page, specify the product license key, then click *Next*.

17b On the ZENworks Diagnostic Center page, select the *Yes, I have verified the database schema using ZDC* check box, then click *Next*.

17c On the Warning page, click *Next*.

- 18** On the Pre-Upgrade Summary page, click *Install*.

The Upgrade Installer copies the installation media from ZENworks 10 Configuration Management SP3 Appliance to ZENworks Virtual Appliance 11 SP1. After the upgrade is completed, the configuration files, content, database (if it is embedded Sybase), and network settings (including host name, IP address, time zone information and reports) are copied to ZENworks Virtual Appliance 11 SP1. The network settings of ZENworks 10 Configuration Management SP3 Appliance are disabled, and the device with ZENworks 10 Configuration Management SP3 Appliance is powered off.

You must eventually reboot the ZENworks Virtual Appliance 11 SP1 to complete the upgrade process.

- 19** (Conditional) If ZENworks 10 Configuration Management SP3 Appliance was configured to use ZENworks Reporting Server, the ZENworks Reporting Server Wizard is automatically launched when you log in for the first time to ZENworks Virtual Appliance 11 SP1. After the ZENworks Reporting Server configuration is finished, the reports are imported to ZENworks 11 SP1 Reporting Server.

For more information on how to configure ZENworks Reporting Server, see “[Configuring the Preinstalled ZENworks SP1 Reporting Server](#)” in the [ZENworks Virtual Appliance 11 SP1 Deployment and Administration Reference](#).

- 20** (Conditional) If ZENworks 10 Configuration Management SP3 Appliance was configured to use the Oracle database, cancel the ZENworks Reporting Server Wizard, then install the Oracle Client in ZENworks Virtual Appliance 11 SP1.

After you install Oracle Client, log out, log in, and manually launch the ZENworks Reporting Server Wizard by using the following command:

```
/var/adm/zenworks/launchZRS.sh
```

For more information on how to manually launch the ZENworks Reporting Server Wizard and configure the ZENworks Reporting Server, see “[Manually Launching the ZENworks Reporting Server Wizard](#)” in the *[ZENworks Virtual Appliance 11 SP1 Deployment and Administration Reference](#)*.

4.1.3 Post-Upgrade Tasks

If ZENworks 10 Configuration Management SP3 Appliance that you upgraded to ZENworks Virtual Appliance 11 SP1 is configured to use a dynamic IP address, you need to manually update the DHCP configuration for the new server before you start using this server.

4.2 Upgrading ZENworks Virtual Appliance 11 to ZENworks Virtual Appliance 11 SP1

ZENworks Virtual Appliance 11 can be upgraded to ZENworks Virtual Appliance 11 SP1 by using the ZENworks Configuration Management installer. For more information on upgrading servers to ZENworks 11 SP1, see [Chapter 2, “Upgrading the Primary Servers to ZENworks 11 SP1,” on page 15](#).

Considerations for Managing ZENworks Configuration Management 10.2.x/10.3.x Managed Devices

ZENworks 11 SP1 allows you to manage ZENworks Configuration Management 10.2.x/10.3.x managed devices from ZENworks 11 SP1 Primary Servers. Review the following sections to understand the considerations for managing ZENworks Configuration Management 10.2.x/10.3.x managed devices from the ZENworks 11 SP1 Primary Servers:

- ♦ [Section 5.1, “Preparing the ZENworks 11 SP1 Server to Manage ZENworks Configuration Management 10.3.x Managed Devices,” on page 49](#)
- ♦ [Section 5.2, “Creating and Managing Closest Server Rules for ZENworks Configuration Management 10.2.x/10.3.x Devices,” on page 50](#)
- ♦ [Section 5.3, “Known Limitations,” on page 61](#)

5.1 Preparing the ZENworks 11 SP1 Server to Manage ZENworks Configuration Management 10.3.x Managed Devices

ZENworks 11 SP1 server is compatible with ZENworks Configuration Management 10.3.x managed devices, however, a freshly installed ZENworks 11 SP1 server in a 10.3.x zone or a mixed zone (10.3.x and 11.0 managed devices) cannot provide component management functionality to 10.3.x managed devices communicating with it unless these steps are taken.

Copy the following files from a 10.3.x server or a system updated 11.0 server in the zone and replace them at the respective location of the newly installed ZENworks 11 SP1 server.

On Linux:

```
/opt/novell/zenworks/install/downloads/novell-*.msi
/opt/novell/zenworks/install/downloads/novell-*.msi.superceded
```

On Windows:

```
%ZENWORKS_HOME%\install\downloads\novell-*.msi
%ZENWORKS_HOME%\install\downloads\novell-*.msi.superceded
```

Location where the files must be copied on the newly installed ZENworks 11 SP1 server:

On Linux:

```
/opt/novell/zenworks/install/downloads/
/opt/novell/zenworks/install/downloads/
```

On Windows:

```
%ZENWORKS_HOME%\install\downloads\
```

```
%ZENWORKS_HOME%\install\downloads\
```

NOTE: On Linux, ensure all the copied files have `zenworks:zenworks` ownership. To set the appropriate ownership of these files use the following commands:

```
chown zenworks:zenworks /opt/novell/zenworks/install/downloads/novell-*.msi
```

```
chown zenworks:zenworks /opt/novell/zenworks/install/downloads/novell-  
*.msi.superceded
```

5.2 Creating and Managing Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices

When your ZENworks Management Zone includes more than one server (Primary Servers and Satellites), devices need to know which server to contact. The Closest Server Rules panel lets you create rules to determine which servers a device contacts. With respect to Closest Server rules, devices that are configured as Satellites are considered as servers.

There following are basic functions for which devices contact a server:

- ♦ **Collection:** Inventory and message log information is collected from each device, to be viewed in ZENworks Control Center and output to reports. Each ZENworks Primary Server and any Satellite can act as a collection server.
- ♦ **Content:** Content is provided to managed devices. Each ZENworks Primary Server and any Satellite can act as a content server.
- ♦ **Configuration:** Configuration settings and registration information are applied to devices. Only ZENworks Primary Servers can act as configuration servers.
- ♦ **Authentication:** Managed devices contact a ZENworks Server to authenticate to the Management Zone. Each ZENworks Primary Server and any Satellite can act as an authentication server.

A device can contact the same server for all functions, or it can contact different servers for each function. Each device can have only one Closest Server rule applied to it. A device's effective rule is determined as follows:

1. **Device Settings:** Evaluate all rules that are set on the device. If the device meets a rule's criteria, that rule becomes the device's effective rule.
2. **Folder settings:** If no device rule applies, evaluate all rules that are set on the device's parent folder. If the device meets a rule's criteria, that rule becomes the device's effective rule. If not, evaluate the rules on the next folder up in the hierarchy.
3. **Management Zone:** If no folder rule applies, evaluate all rules that are set in the Management Zone. If the device meets a rule's criteria, that rule becomes the device's effective rule. If not, apply the Default Rule to the device.

4. **Default Rule:** If no device, folder, or Management Zone rule applies, apply the default rule to the device. The Default rule is simply a listing of all content servers in the order you want devices to contact them.

The Closest Server Default rule is applicable for ZENworks Configuration Management 10.2.x/10.3.x and ZENworks 11 SP1 devices. If you do not want the Closest Server Default Rule to be used to determine the closest servers for devices, you can create customized Closest Server rules. You can create the Closest Server rules for ZENworks Configuration 10.2.x/10.3.x devices at three levels: Management zone, device folder, and device. These settings are disabled when you baseline your Management Zone to ZENworks 11 SP1. To create a customized Closest Server rule for ZENworks Configuration Management 10.2.x/10.3.x devices, see [Section 5.2.1, “Creating Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices,” on page 51](#). For a ZENworks 11 SP1 device, the customized closest servers are configured on locations. For detailed information, see [ZENworks 11 SP1 System Administration Reference](#).

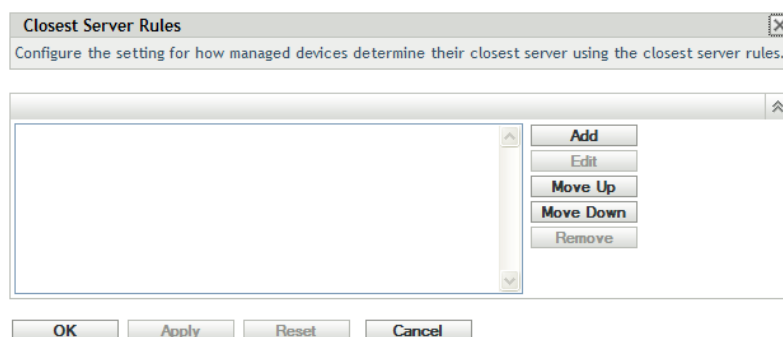
Refer to the following sections:

- ♦ [Section 5.2.1, “Creating Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices,” on page 51](#)
- ♦ [Section 5.2.2, “Backing Up Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices,” on page 60](#)

5.2.1 Creating Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices

- 1 Launch ZENworks Control Center.
- 2 Do one of the following:
 - ♦ To create a Closest Server rule for your Management Zone, click the *Configuration* tab, then click *Infrastructure Management* (in the Management Zone Settings panel) > *Closest Server Rules*.
 - ♦ To create a Closest Server rule for a device folder, open the folder’s details page, then click *Settings* > *Infrastructure Management* (in the Settings panel) > *Closest Server Rules*.
 - ♦ To create a Closest Server rule for a device, open the device’s details page, then click *Settings* > *Infrastructure Management* (in the Settings panel) > *Closest Server Rules*.

[Configuration](#) > Closest Server Rules



- 3 Conditional: If you are creating Closest Server rules on a device or device folder, click *Override settings* to activate the Closest Server Rules panel.

The *Override* option (not depicted) displays only at the device and device folder levels.

- 4 Click *Add* to display the Rule Construction dialog box:

Rule Construction

Rule Name: *

☐ Exclude the Closest Server Default Rule

Rule Logic: *

Add Filter Add Filter Set Insert Filter Delete

Combine Filters using: and

☐ --Select--

Collection Servers:

Move Up Move Down Add Remove Groups L4 Switch

Name

Content Servers:

Move Up Move Down Add Remove Groups L4 Switch

Name

Configuration Servers:

Move Up Move Down Add Remove Groups L4 Switch

Name

Authentication Servers:

Move Up Move Down Add Remove Groups L4 Switch

Name

* Fields marked with an asterisk are required.

OK Cancel

- 5 In the *Rule Name* field, specify a name for the rule.

The name displays in the Closest Server Rules listing in ZENworks Control Center. To access this listing, click *Configuration* in the left pane, click the *Configuration* tab, click the *Management Zone Settings* panel to open it, click the *Infrastructure Management* section to open it, then click *Closest Server Rules*. All defined rules for the current level are displayed there.

- 6 If you do not want to append the Closest Server Default rule to the servers you are listing in this Closest Server rule, select the *Exclude the Closest Server Default Rule* check box.

The Closest Server rules feature first uses the servers specified in the rule, then proceeds to any other servers listed in the Closest Server Default rule if the specified servers are not available to the managed device. Therefore, to obtain content only from the servers specified in the rule, select this check box to exclude all other servers.

- 7 Use the *Rule Logic* fields to create the rule expression.

An expression consists of a criteria option, operator, and value. For example:

DNS Name Filter equal to *.novell.com

DNS Name Filter is the criteria option, equal to is the operator, and *.novell.com is the value. In the above example, the Closest Server rule is applied only to devices whose DNS name ends with .novell.com.

If necessary, you can use NOT to perform a logical negation of the expression. For example:

NOT DNS Name Filter equal to *.novell.com

In the above example, the Closest Server rule is applied only to devices whose DNS name does not end with .novell.com.

You can use more than one expression for the rule. For example:

DNS Name Filter equal to provo.novell.com or IP Address equal to 192.168.67.12/24

You can use the following criteria:

Option	Explanation
DNS Name Filter	<p>Matches DNS names that meet the filter criteria. You can specify an exact filter or use a question mark (?) or an asterisk (*) as a wildcard to match one or more characters in the DNS name. A ? matches one character and an * matches one or more characters. Examples:</p> <p>provo.novell.com: Matches all devices in the provo subdomain of the novell.com top-level domain.</p> <p>*.novell.com: Matches all devices in the novell.com top-level domain, including any devices in subdomains.</p> <p>provo?.novell.com: Matches all devices in the provo1 and provo 2 subdomains of the novell.com top-level domain; does not match devices in the provo12 subdomain.</p>
IP Address /n	<p>Matches IP addresses that fall within the specified CIDR (Classless Inter-Domain Routing) block. With CIDR, the dotted decimal portion of the IP address is interpreted as a 32-bit binary number that has been broken into four 8-bit bytes. The number following the slash (/n) is the prefix length, which is the number of shared initial bits, counting from the left side of the address. The /n number can range from 0 to 32, with 8, 16, 24, and 32 being commonly used numbers. Examples:</p> <p>192.168.67.12/16: Matches all IP addresses that start with 192.168.</p> <p>192.168.67.12/24: Matches all IP addresses that start with 192.168.67.</p>

8 To configure the servers listed in any section, do any of the following:

- 8a** (Conditional) You can perform the following tasks to manage individual servers in any of the server lists (Collection, Content, Configuration, and Authentication):

Task	Steps	Additional Details
Add a server to a list	<ol style="list-style-type: none"> 1. In the desired server list (Collection, Content, Configuration, or Authentication), click <i>Add</i>. 2. Browse for and select one or more ZENworks Servers or Satellites. 3. Click <i>OK</i> to add the selected servers to the list. 	<p>By default, ZENworks Servers support all functions (Collection, Content, Configuration, and Authentication). Therefore, all ZENworks Servers are available for selection in any of the server lists.</p> <p>Satellites, however, can be configured for specific roles (Collection, Content, Imaging, and Authentication). This has the following implications:</p> <ul style="list-style-type: none"> ◆ When selecting Satellites for the Collection Server list, only those Satellites that are assigned the Collection role are available for selection. ◆ When selecting Satellites for the Authentication Server list, only those Satellites that are assigned the Authentication role are available for selection. ◆ When selecting Satellites for the Content Server list, only those Satellites that are assigned the Content role or Imaging role are available for selection. ◆ Satellites do not fulfill the Configuration role. Therefore, they cannot be added to the Configuration Server list. <p>Satellite roles are configured in the Server Hierarchy panel on the Configuration tab.</p>

Task	Steps	Additional Details
Reorder the list	<ol style="list-style-type: none"> 1. In the desired server list, select the check box for the server, group, or L4 switch you want to move. 2. Click <i>Move Up</i> or <i>Move Down</i> as necessary to change its order in the list. 3. Repeat as necessary to order the list. 	<p>Placement in the list determines the order in which servers are contacted. The first list item (server, group, or L4 switch) is contacted first, then the second, and so forth.</p> <p>You can order the items in the lists differently. This allows you to spread the workload initiated by devices by placing different servers higher in one list than in the other lists. For example:</p> <ul style="list-style-type: none"> ♦ Collection Servers: Server1, Group1, Server3, L4Switch5 ♦ Content Servers: L4Switch5 ♦ Configuration Servers: Server3, Server2, Group1 ♦ Authentication Servers: Server1, Server2
Remove a server from a list	<ol style="list-style-type: none"> 1. In the server list, select the check box for the server you want to remove. 2. Click <i>Remove</i>. 	

8b (Conditional) You can use a group to randomize connections to servers. Each time the server list is sent to a device, it is randomized so that not all devices receive the same ordered list.

For example, assume the server list contains the following:

- ♦ Server 1
- ♦ Group 1 (Server 2, Server 3, Server 4)
- ♦ Server 5

One device might receive the following list: Server 1, Server 3, Server 2, Server 4, Server 5.

Another device might receive a different list: Server 1, Server 4, Server 3, Server 2, Server 5.

In all cases, Server 1 is listed first and Server 5 is listed last, but the order of the servers in Group 1 is randomized.

You can perform the following tasks to manage server groups in any of the server lists (Collection, Content, Configuration, and Authentication):

Task	Steps	Additional Details
Create a server group	<ol style="list-style-type: none"> 1. In the desired server list, select the check boxes for the servers you want to include in the group, then click <i>Groups > Create Group from Selection</i>. or If you want to create an empty group, click <i>Groups > Create Empty Group</i>. You can add servers to the empty group later using the <i>Groups > Add to Group</i> option. 2. Specify a name for the group, then click <i>OK</i> to add the group to the list. 3. Click <i>Apply</i> to make the change effective. 	
Add servers to a group	<ol style="list-style-type: none"> 1. In the desired server list, select the check boxes for the servers you want to add to the group. 2. Click <i>Groups > Add to Group</i>. 3. Do one of the following: <ul style="list-style-type: none"> ♦ To add the selected servers to a new group, select <i>Create New</i>, specify a group name, then click <i>OK</i>. ♦ To add the selected servers to an existing group, select a group from the list in the <i>Select Existing</i> field, then click <i>OK</i>. 4. Click <i>Apply</i> to make the change effective. 	

Task	Steps	Additional Details
Reorder the list	<ol style="list-style-type: none"> 1. In the server list, select the check box for the server, group, or L4 switch you want to move. 2. Click <i>Move Up</i> or <i>Move Down</i> as necessary to change its order in the list. 3. Repeat as necessary to order the list. 	<p>Placement in the list determines the order in which servers are contacted. The first list item (server, group, or L4 switch) is contacted first, then the second, and so forth.</p> <p>You can order the items in the lists differently. This allows you to spread the workload initiated by devices by placing different servers higher in one list than in the other lists. For example:</p> <ul style="list-style-type: none"> ♦ Collection Servers: Server1, Group1, Server3, L4Switch5 ♦ Content Servers: L4Switch5, Server2, Server3, Server1 ♦ Configuration Servers: Server3, Server2, Group1 ♦ Authentication Servers: Group1, L4Switch5, Server1, Server2
Copy a group from one list to another list	<ol style="list-style-type: none"> 1. In the server list to which you want to copy a group, click <i>Groups > Copy Existing Group</i>. For example, to copy a group from the Collection Servers list to the Content Servers list, click <i>Groups > Copy Existing Group</i> in the Content Servers list. 2. Select the desired group from the list, then click <i>OK</i> to copy the group. 3. Click <i>Apply</i> to make the change effective. 	<p>If you copy a group to a list that does not already contain the group's servers, the unlisted servers are removed from the group. For example, if Group1 includes Server1 and Server2 and you copy Group1 to a list that does not include Server1, Server1 is removed from the group.</p>
Remove servers from a group	<ol style="list-style-type: none"> 1. In the server list, expand the group to display its servers. 2. Select the check boxes for the servers that you want to remove from the group. 3. Click <i>Groups > Remove from Group</i>, then click <i>OK</i>. 4. Click <i>Apply</i> to make the change effective. 	<p>The servers are not removed from the server list, only from the group.</p>

Task	Steps	Additional Details
Remove a group	<ol style="list-style-type: none"> 1. In the server list, select the check box for the group you want to remove. 2. Click <i>Groups > Remove Group</i>, then click <i>OK</i>. 3. Click <i>Apply</i> to make the change effective. 	The group's servers are not removed, only the group.

8c (Conditional) If you have ZENworks Servers or Satellites that are clustered behind an L4 switch, you can define the L4 switch and add the servers to the definition. This enables the L4 switch to continue to balance the traffic among those servers.

Task	Steps	Additional Details
Create an L4 switch definition	<ol style="list-style-type: none"> 1. In the server list, select the check boxes for the servers to include in the L4 switch definition, then click <i>L4 Switch > Create L4 Switch Definition from Selection</i>. or If you want to create an empty L4 switch definition, click <i>L4 Switch > Create Empty</i>. You can add servers to the empty definition later using the <i>L4 Switch > Add to L4 Switch Definition</i> option. 2. Specify the DNS name or the IP address of the L4 switch, then click <i>OK</i> to add the L4 switch to the list. 3. Click <i>Apply</i> to make the change effective. 	

Task	Steps	Additional Details
Add servers to an L4 switch definition	<ol style="list-style-type: none"> 1. In the server list, select the check boxes for the servers you want to add to the L4 switch definition. 2. Click <i>L4 Switch > Add to L4 Switch Definition</i>. 3. Do one of the following: <ul style="list-style-type: none"> ♦ To add the selected servers to a new L4 switch definition, select <i>Create New</i> and specify the DNS name or IP address of the L4 switch, then click <i>OK</i>. ♦ To add the selected servers to an existing L4 switch definition, select an L4 switch definition from the list in the <i>Select Existing</i> field, then click <i>OK</i>. 4. Click <i>Apply</i> to make the change effective. 	
Reorder the list	<ol style="list-style-type: none"> 1. In the desired server list, select the check box for the server, group, or L4 switch you want to move. 2. Click <i>Move Up</i> or <i>Move Down</i> as necessary to change its order in the list. 3. Repeat as necessary to order the list. 	<p>Placement in the list determines the order in which servers are contacted. The first list item (server, group, or L4 switch) is contacted first, then the second, and so forth.</p> <p>You can order the items in the lists differently. This allows you to spread the workload initiated by devices by placing different servers higher in one list than in the other lists. For example:</p> <ul style="list-style-type: none"> ♦ Collection Servers: Server1, Group1, Server3, L4Switch5 ♦ Content Servers: L4Switch5, Server2, Server3, Server1 ♦ Configuration Servers: Server3, Server2, Group1 ♦ Authentication Servers: Group1, L4Switch5, Server1, Server2

Task	Steps	Additional Details
Remove servers from an L4 switch definition	<ol style="list-style-type: none"> 1. In the server list, expand the L4 switch definition to display its servers. 2. Select the check boxes for the servers that you want to remove from the L4 switch definition. 3. Click <i>L4 Switch > Remove from L4 Switch Definition</i>, then click <i>OK</i>. 4. Click <i>Apply</i> to make the change effective. 	The servers are not removed from the server list, only from the L4 switch definition.
Remove an L4 switch definition	<ol style="list-style-type: none"> 1. In the server list, click <i>L4 Switch > Remove L4 Switch Definition</i>, then click <i>OK</i>. 2. Click <i>Apply</i> to make the change effective. 	The L4 switch definition's servers are not removed, only the definition.

9 Specify the number of ZENworks servers whose data must be sent to the managed devices at a time. The available options are:

- ♦ **Unlimited:** By default, the contact information about all servers listed in the effective rule's lists are sent to the managed devices. In addition, unless excluded in the effective rule, the servers listed in the default rule are appended to the servers listed in the effective rule.
- ♦ **Limit to <number> Servers per list:** If you want to conserve bandwidth between the server and the managed devices, specify the number of servers whose data must be sent to the managed devices at a time.

NOTE: You can also configure the *Limit Servers Returned to Agent* setting in the Closest Server Default rule. The limit that you set in the Closest Server rule overrides the limit that you set in the Closest Server Default rule.

10 When you are finished, click *OK* to add the rule to the *Closest Server Rules* list.

11 Repeat [Step 2](#) through [Step 10](#) to create additional rules.

12 If necessary, when you are finished creating rules, do the following:

- ♦ Use the *Move Up* and *Move Down* buttons to reorder the rules in the *Closest Server Rules* list.
The rules are evaluated in the order they are listed. You should place the rules in the order you want them evaluated.
- ♦ To modify the settings of a rule, select the desired rule, then click *Edit*.

5.2.2 Backing Up Closest Server Rules for ZENworks Configuration 10.2.x/10.3.x Devices

If your ZENworks Management Zone has complex Closest Server rules configured, you might want to export these rules as part of your backup procedure.

The following zman commands are useful when backing up Closest Server rules:

- ♦ **location-copy-rules (loccp):** Copies Closest Server rules data from a source device or device folder to one or more destination devices or device folders.
- ♦ **location-export-rules-to-file (loctf):** Exports Closest Server rules data (in XML format) to a file. The XML file can be used as input for creating or appending to the Closest Server rules.
- ♦ **location-import-rules-from-file (locff):** Imports Closest Server rules data (in XML format) from a file.

For more information about these commands and their usage, see “[Location Rules Commands](#)” in the *[ZENworks 11 SP1 Command Line Utilities Reference](#)*. The commands are no longer valid after you baseline your zone to ZENworks 11 SP1.

5.3 Known Limitations

- ♦ After upgrading a Primary Server from ZENworks Configuration Management 10.2.x/10.3.x to ZENworks 11 SP1, the following are not supported:
 - ♦ Promoting the managed devices that have a previous version of ZENworks Adaptive Agent (version 10.2.x or 10.3.x) installed as a Satellite.
 - ♦ Modifying the Satellite roles and settings for the existing 10.2.x or 10.3.x Satellites
- ♦ If a sandbox-only bundle or policy is assigned to a test user and this user logs in to a 10.2.x or a 10.3.x managed device that is a part of ZENworks 11 SP1 Management Zone, none of the bundle or policy user assignments flows to the device.
- ♦ The behavior of the Install action set of a bundle on a managed device has changed in ZENworks 11 SP1 because of the introduction of Bundle Change Management. To understand the behavior, see “[Behavior of Install Action Set](#)” in the *[ZENworks 11 SP1 Software Distribution Reference](#)*.

To comply with the ZENworks 11 SP1 Install action set behavior, the execution of the Install action set on a 10.2.x managed device that is in a ZENworks 11 SP1 Management Zone requires a patch to be applied to the device. For more information on the patch, see the [Novell Downloads Web site \(http://download.novell.com/Download?buildid=CCdDG4BfuJs~\)](http://download.novell.com/Download?buildid=CCdDG4BfuJs~).

Documentation Updates

A

This section contains information on documentation content changes that were made in this Upgrade Guide after the initial release of Novell ZENworks 11. The changes are listed according to the date they were published.

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, “September 19, 2011: 11 SP1,” on page 63](#)
- ♦ [Section A.2, “August 08, 2011: 11 SP1,” on page 63](#)

A.1 September 19, 2011: 11 SP1

Updates were made to the following section:

Location	Updates
Section 4.1.1, “Pre-Upgrade Tasks,” on page 44	Updated the file names for ZENworks Virtual Appliance upgrade.
Section 2.9, “Troubleshooting,” on page 34	Added the following scenario to this section: <i>An error message is displayed while upgrading to ZENworks 11 SP1 Reporting Server.</i>

A.2 August 08, 2011: 11 SP1

Updates were made to the following sections:

Location	Updates
Chapter 2, “Upgrading the Primary Servers to ZENworks 11 SP1,” on page 15.	Added Section 2.5, “Upgrading the Remote OEM Sybase SQL Anywhere Database,” on page 20 Updated the following section with additional information: Section 2.3, “Understanding the Upgrade Order,” on page 17
Chapter 4, “Upgrading to ZENworks Virtual Appliance 11 SP1,” on page 43.	Added Section 4.2, “Upgrading ZENworks Virtual Appliance 11 to ZENworks Virtual Appliance 11 SP1,” on page 47.

