

Installation Guide

Novell® ZENworks® 10 Configuration Management

10.1

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About This Guide

This *ZENworks Installation Guide* includes information to help you successfully install a Novell® ZENworks® 10 Configuration Management with SP1 (10.1) system. The information in this guide is organized as follows:

- ♦ Chapter 1, “Minimum Requirements,” on page 9
- ♦ Chapter 2, “Installing ZENworks 10 Configuration Management,” on page 23
- ♦ Chapter 3, “Uninstalling ZENworks 10 Configuration Management,” on page 47
- ♦ Appendix A, “Installation Executable Arguments,” on page 55
- ♦ Appendix B, “Documentation Updates,” on page 57

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, or go to the [Novell Documentation Feedback site \(http://www.novell.com/documentation/feedback.html\)](http://www.novell.com/documentation/feedback.html) and enter your comments there.

Additional Documentation

ZENworks 10 Configuration Management is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the [ZENworks 10 Configuration Management with SP1 \(10.1\) documentation \(http://www.novell.com/documentation/zcm10/index.html\)](http://www.novell.com/documentation/zcm10/index.html).

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

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

Minimum Requirements

1

The following sections provide the Novell® ZENworks® 10 Configuration Management minimum requirements for hardware and software:

- ♦ [Section 1.1, “Primary Server Requirements,” on page 9](#)
- ♦ [Section 1.2, “Management Zone Version Requirements,” on page 14](#)
- ♦ [Section 1.3, “Database Requirements,” on page 16](#)
- ♦ [Section 1.4, “LDAP Directory Requirements,” on page 16](#)
- ♦ [Section 1.5, “Managed Device Requirements,” on page 17](#)
- ♦ [Section 1.6, “Inventoried-Only Device Requirements,” on page 20](#)
- ♦ [Section 1.7, “Administration Browser Requirements,” on page 20](#)
- ♦ [Section 1.8, “Installation User Requirements,” on page 21](#)
- ♦ [Section 1.9, “Tested Primary Server and Managed Device Platforms,” on page 21](#)

IMPORTANT: All requirements listed in the following sections are minimums. Therefore, later support packs, interim releases, dot releases, and higher version numbers are assumed to be supported. For example, the minimum Primary Server operating system requirement on Windows Server 2003 is listed as SP1, but SP2 or later is also supported.

1.1 Primary Server Requirements

The network server where you install the Primary Server software must meet the following minimum requirements:

Table 1-1 *Primary Server Minimum Requirements*

Item	Minimum Requirement
Server Usage	<p>Your server might be capable of handling tasks in addition to the tasks a Primary Server performs for ZENworks 10 Configuration Management. However, we recommend that any server where you install the Primary Server software be used only for ZENworks 10 Configuration Management purposes. For example, you might not want the server to do the following:</p> <ul style="list-style-type: none">♦ Host Novell eDirectory™♦ Host Novell Client32™♦ Host Active Directory*♦ Be a terminal server <p>and so on.</p>

Item	Minimum Requirement
Operating System	<p>Windows:</p> <ul style="list-style-type: none"> ♦ Windows Server 2003 SP1 Ent x86, x86-64 ♦ Windows Server 2003 SP1 Std x86, x86-64 ♦ Windows Server 2008 Ent x86, x86-64 ♦ Windows Server 2008 Std x86, x86-64 <hr/> <p>IMPORTANT: Windows Server 2008 Core is not supported as a Primary Server platform because the .NET Framework is not supported on Windows Server 2008 Core.</p> <hr/> <p>Linux:</p> <ul style="list-style-type: none"> ♦ SUSE® Linux Enterprise Server 10 (SLES 10) on the 32-bit (x86) and 64-bit (x86-64) architectures (Intel* and AMD* Opteron* processors) ♦ Open Enterprise Server 2 (OES Linux) x86, x86-64 <hr/> <p>NOTE: OES 2 SP1 is not supported.</p> <hr/>
Hardware	<ul style="list-style-type: none"> ♦ Processor: Pentium* IV 2.8 GHz x86, or equivalent AMD or Intel processor <p>If the Primary Server is running Patch Management, we recommend a fast processor, such as the Intel Core* Duo processor.</p> <ul style="list-style-type: none"> ♦ RAM: 2 GB minimum; 4 GB recommended <p>If the Primary Server is running Patch Management, we recommend at least 4 GB of RAM. Running Patch Management is very processor and memory intensive.</p> <ul style="list-style-type: none"> ♦ Disk Space: 2 GB minimum for installing; 4 GB recommended for running. Depending on the amount of content you need to distribute, this number can vary greatly. <p>For Patch Management file storage, you need an additional 10 GB of free disk space.</p> <p>Because the ZENworks database file and ZENworks content repository can each become very large, you might want a separate partition or hard drive available.</p> <p>For information on changing the default content repository location on a Windows server, see “Content Repository” in the ZENworks 10 Configuration Management System Administration Reference.</p> <p>For Linux servers, you might want the <code>/var/opt</code> directory to be located on a large partition. This is where the database (if embedded) and content repository are stored.</p> <ul style="list-style-type: none"> ♦ Display resolution: 1024 × 768 with 256 colors <hr/>

Item	Minimum Requirement
Hostname Resolution	<p>The server must resolve device hostnames by using a method such as DNS (recommended).</p> <p>Server names must support DNS requirements, such as not having underscores in their names, or ZENworks login fails. Acceptable characters are the letters a-z (uppercase and lowercase), numbers, and the hyphen (-).</p> <p>If you use DNS, it must be properly set up, or some features in ZENworks might not work. For example, the ZENworks Control Center (ZCC) icon that is installed to the desktop on the server might fail to open ZCC in the browser.</p>
IP Address	<p>The server must have a static IP address or a permanently leased DHCP address.</p> <p>Also, an IP address must be bound to all NICs on your target server, because the installation hangs if it is trying to use a NIC that does not have an IP address bound to it.</p>

Item	Minimum Requirement
.NET 2.0	<ul style="list-style-type: none"> ♦ The Microsoft* .NET software and its latest updates must be installed and running on the Windows Primary Server in order to install ZENworks 10 Configuration Management. However, you are given the option to launch the .NET installation during installation of ZENworks. If you select the option, .NET 2.0 is installed. For better performance and stability, it is recommended to upgrade to the latest support packs and patches of .NET 2.0 through Windows Automatic Updates or Patch Management on the agent. <p>.NET 2.0 SP2 is the latest version supported by Microsoft on Windows Server 2003 and Windows Server 2008. On Windows Server 2003, you can directly download and install .NET 2.0 SP2 or upgrade to .NET 3.5 SP1 that includes .NET 2.0 SP2. On Windows Server 2008, you must upgrade to .NET 3.5 SP1 to get the .NET 2.0 SP2 update installed.</p> <ul style="list-style-type: none"> ♦ Mono[®] 1.2.4-3 must be installed on the Linux Primary Servers. <p>If Mono 1.2.4-3 is not installed prior to the ZENworks Configuration Management installation, you are prompted to install it during the ZENworks installation. You can choose to install Mono 1.2.4-3 that is bundled with ZENworks Configuration Management, or you can choose to install it from the Mono Web site (http://www.mono-project.com/). If you choose to install it from the Mono Web site, you must ensure that the following Mono 1.2.4-3 packages are installed:</p> <pre> bytefx-data-mysql compat-expat1.rpm ibm-data-db2 libgdiplus mono-basic mono-complete mono-core mono-data mono-data-firebird mono-data-oracle mono-data-postgresql mono-data-sqlite mono-data-sybase mono-devel mono-extras mono-jscript mono-locale-extras mono-nunit mono-web mono-winforms </pre>

Item	Minimum Requirement
TCP Ports	<p>The server must allow traffic on TCP ports 80, 443, 998, 1433, 1521, 2638, 2645, 5550, 5950, 7628, 8005, and 8009.</p> <p>Port 80 and 443 is for Tomcat non-secure and secure ports respectively.</p> <p>If the server is running other services on ports 80 and 443, such as Apache, or are used by OES2, the installation program asks you for new ports to use.</p> <hr/> <p>IMPORTANT: If you plan to use AdminStudio 8.5 ZENworks Edition, it requires that the Primary Server is using ports 80 and 443.</p> <hr/> <p>Port 998 is used by Preboot Server.</p> <p>Port 1433 is used by an MS SQL database server.</p> <p>Port 1521 is used by Oracle database server.</p> <p>Port 2638 is used when a Primary Server needs access to another Primary Server where the Sybase* database resides.</p> <p>Port 2645 is used for CASA authentication. Opening this port allows ZENworks Configuration Management to manage devices outside of the firewall. It is a good practice to ensure that the network is configured to always allow communication on this port between the ZENworks Server and ZENworks Agents on managed devices.</p> <p>For Remote Management where the ZENworks Adaptive Agent is running, the server listens on port 5950. If the Remote Management Listener is launched, it listens on port 5550 by default. You can change the port before launching it.</p> <p>Port 7628 is used by the Adaptive Agent.</p> <p>Port 8005 and 8009 is used by Tomcat.</p>
UDP Ports	<p>The server must allow traffic on UDP ports 67, 997, 4011.</p> <p>Port 67 is used by proxy DHCP when it is not running on the same device as the DHCP server.</p> <p>Port 997 is used by the Imaging Server for multicasting.</p> <p>Port 4011 is for proxy DHCP when it is running on the same device as the DHCP server. Ensure that the firewall is configured to allow the broadcast traffic to the proxy DHCP service.</p> <hr/> <p>NOTE: The Imaging TFTP and zmgpreboot policy listen on UDP ports 69 and 13331 respectively but will not work across firewall because they open random UDP ports for each PXE device.</p> <hr/>
Virtual Machine Environments	<p>ZENworks Configuration Management server software can be installed in VMware and XEN.</p> <hr/> <p>NOTE: When using a SLES 10 32-bit guest OS on VMware ESX 3.5, do not use the VMI kernel. For more information, see TID 7002789 in the Novell Support Knowledgebase (http://support.novell.com/search/kb_index.jsp).</p> <hr/>

1.2 Management Zone Version Requirements

If you are installing another Primary Server into an existing Management Zone, the product version of the installation media must be compatible with the product version of the Management Zone. For example:

Table 1-2 *Management Zone Version Compatibilities with Installation Media Versions*

Management Zone Product Version	Compatible Installation Media	Incompatible Installation Media
10.0.0: ZENworks 10 Configuration Management (initial release, electronic-only). The version is established by installing the first server in the Management Zone.	ZENworks 10 Configuration Management (10.0.0: initial release, electronic-only).	Any version of the product that is later than the Management Zone's version.
10.0.1: ZENworks 10 Configuration Management (media and electronic release). The version is established by installing the first server in the Management Zone.	ZENworks 10 Configuration Management (10.0.1: media and electronic release). or To perform an update from version 10.0.0, see TID 3407754 in the Novell Support Knowledgebase (http://support.novell.com/search/kb_index.jsp) .	ZENworks 10 Configuration Management (10.0.0: initial release, electronic-only). or Any version of the product that is later than the Management Zone's version.
10.0.2: Update for ZENworks 10 Configuration Management. The version is established by updating the ZENworks database in the Management Zone to version 10.0.2 using the System Update feature in ZENworks Control Center. This is done by the Primary Server that performs the update task. For more information on System Updates, see " ZENworks System Updates " in the ZENworks 10 Configuration Management System Administration Reference .	ZENworks 10 Configuration Management (10.0.1: media and electronic release). The newly installed server is automatically updated to version 10.0.2 under one of the following conditions: <ul style="list-style-type: none"> ♦ If only part of the zone has been updated, after the new server is installed it is automatically updated when the update moves to the remaining devices in the zone. ♦ If the configured update stages have all been completed, the new server is automatically updated after it is installed. ♦ If you have selected to bypass staging, the new server is automatically updated after it is installed. 	ZENworks 10 Configuration Management (10.0.0: initial release, electronic-only). or Any version of the product that is later than the Management Zone's version.

Management Zone Product Version	Compatible Installation Media	Incompatible Installation Media
<p>10.0.3: Update for ZENworks 10 Configuration Management.</p> <p>The version is established by updating the ZENworks database in the Management Zone to version 10.0.3 by installing from the new installation media or by using the System Update feature.</p> <p>For more information on System Updates, see “ZENworks System Updates” in the ZENworks 10 Configuration Management System Administration Reference.</p>	<p>ZENworks 10 Configuration Management update (10.0.3: media and electronic release).</p> <p>The newly installed server is automatically updated to version 10.0.3 under one of the following conditions:</p> <ul style="list-style-type: none"> ♦ If only part of the zone has been updated, after the new server is installed it is automatically updated when the update moves to the remaining devices in the zone. ♦ If the configured update stages have all been completed, the new server is automatically updated after it is installed. ♦ If you have selected to bypass staging, the new server is automatically updated after it is installed. <p>If you try to use the install from a previous version’s media (prior to version 10.0.3), authentication to the zone fails and you receive the following error message:</p> <p>The credentials you entered cannot be validated on the specified primary server. Please verify your server address and credentials, and/or network connectivity and try again.</p>	<p>ZENworks 10 Configuration Management (10.0.0: initial release, electronic only).</p> <p>or</p> <p>ZENworks 10 Configuration Management (10.0.1: initial media release).</p> <p>or</p> <p>Any version of the product that is later than the Management Zone’s version.</p>

1.3 Database Requirements

If you choose to use a database for the ZENworks 10 Configuration Management database other than the embedded Sybase SQL Anywhere database that is available as the default for ZENworks 10 Configuration Management, the other database must meet the following minimum requirements:

Table 1-3 Database Minimum Requirements

Item	Minimum Requirement
Database Version	Sybase SQL Anywhere 10.0.1 Microsoft SQL Server 2005 (Enterprise and Standard editions are supported) Oracle 10g Standard - 10.2.0.1.0
Default Character Set	The UTF-8 character set is required.
TCP ports	The server must allow Primary Server communication on the database port. The default ports are: <ul style="list-style-type: none">♦ 1433 for MS SQL♦ 2638 for Sybase SQL♦ 1521 for Oracle
WAN/SQL consideration	Primary Servers and the SQL database must reside on the same network segment. Primary Servers cannot write across a WAN to the SQL database.

1.4 LDAP Directory Requirements

ZENworks 10 Configuration Management can use existing user sources for assigning content to them. LDAP (Lightweight Directory Access Protocol) is the protocol used by ZENworks with respect to interacting with users.

Table 1-4 LDAP Directory Minimum Requirements

Item	Minimum Requirement
LDAP version	LDAP v3 OPENLDAP is not supported. However, if you have eDirectory installed on a SUSE Linux server, you can use that as a user source. LDAP v3 can be used to access eDirectory on the Linux server using the alternate ports that you specified for eDirectory when installing it (because OPENLDAP might have been using the default ports).
Authoritative user source	<ul style="list-style-type: none">♦ Novell eDirectory™ 8.7.3 (on all supported platforms)♦ Microsoft Active Directory (as shipped with Windows 2000 SP4 or later)

Item	Minimum Requirement
LDAP user access	To be able to assign content to users, you must create a read-only connection to an LDAP directory that contains the users. This exposes the users in ZENworks Control Center and enables you to make the assignments. Your LDAP directory is not affected; ZENworks requires only read access to the LDAP directory and stores all assignment information in the ZENworks database. For more information, see “Connecting to User Sources” in the <i>ZENworks 10 Configuration Management Administration Quick Start</i> .

1.5 Managed Device Requirements

The ZENworks Adaptive Agent is the management software that is installed on all managed devices, including Primary Servers. Currently, Windows devices can be managed, but Linux devices cannot. However, when you install the Primary Server software on a Linux server, a portion of the Adaptive Agent is activated so that the System Updates feature can be used on your Linux Primary Servers.

Managed devices can be used as satellites, so make sure that when you use them for satellites they are capable of performing the satellite functions.

ZENworks 10 Configuration Management can manage any workstations and servers that meet the following minimum requirements:

Table 1-5 *Managed Device Minimum Requirements*

Item	Minimum Requirement
Operating System: Servers	<p>Windows servers:</p> <ul style="list-style-type: none"> ♦ Windows 2000 Server SP4 ♦ Windows Server 2003 SP1 Ent x86, x86-64 ♦ Windows Server 2003 SP1 Std x86, x86-64 ♦ Windows Server 2008 Ent x86, x86-64 ♦ Windows Server 2008 Std x86, x86-64 <p>IMPORTANT: Windows Server 2008 Core is not supported as a managed device platform because the .NET Framework is not supported on Windows Server 2008 Core.</p>
Operating System: Workstations	<p>Windows workstations:</p> <ul style="list-style-type: none"> ♦ Windows 2000 Professional SP4 x86 ♦ Windows Embedded XP SP2 ♦ Windows Embedded XP SP3 ♦ Windows Vista* x86, x86-64 (Business, Ultimate, and Enterprise versions only; Home versions are not supported) ♦ Windows Vista SP1 x86, x86-64 (Business, Ultimate, and Enterprise versions only; Home versions are not supported) ♦ Windows XP Professional SP2 x86 and SP3 x86 ♦ Windows XP Tablet PC Edition SP2

Item	Minimum Requirement
Operating System: Sessions	<p>Thin Client sessions:</p> <ul style="list-style-type: none"> ♦ Windows 2000 Server SP4 x86 ♦ Windows Server 2003 SP1 x86, x86-64 ♦ Windows Server 2008 Ent x86, x86-64 ♦ Windows Server 2008 Std x86, x86-64 <p>IMPORTANT: Windows Server 2008 Core is not supported as a managed device platform because the .NET Framework is not supported on Windows Server 2008 Core</p>
Hardware	<p>The following are minimum hardware requirements. Use these requirements or the hardware requirements provided with your operating system, whichever is greater.</p> <ul style="list-style-type: none"> ♦ Processor: Pentium III 700 MHz, or equivalent AMD or Intel ♦ RAM: 256 MB minimum; 512 MB recommended ♦ Display resolution: 1024 × 768 with 256 colors
Automatic ZENworks Adaptive Agent Deployment	<p>In order to automatically deploy the Adaptive Agent to your managed devices, the following are required:</p> <ul style="list-style-type: none"> ♦ Your firewall must allow file and print sharing ♦ On Windows XP devices, Simple File Sharing must be turned off ♦ Administrator credentials must be known for the devices in order to install to them ♦ Ensure that the date and time are correct on both the ZENworks Server and on managed devices <p>For more information, see “Prerequisites for Deploying to a Device” in the <i>ZENworks 10 Configuration Management Discovery, Deployment, and Retirement Reference</i>.</p>
.NET 2.0	<p>The Microsoft* .NET software and its latest updates must be installed and running on the Windows Primary Server in order to install ZENworks 10 Configuration Management. However, you are given the option to launch the .NET installation during installation of ZENworks. If you select the option, .NET 2.0 is installed. For better performance and stability, it is recommended to upgrade to the latest support packs and patches of .NET 2.0 through Windows Automatic Updates or Patch Management on the agent.</p> <p>.NET 2.0 SP1 is the latest version supported by Microsoft on Windows 2000. .NET 2.0 SP2 is the latest version of .NET 2.0 supported by Microsoft on Windows XP, Windows Server 2003, Windows Server 2008, and Windows Vista.</p> <p>On Windows XP and Windows Server 2003, you can directly download and install .NET 2.0 SP2 or upgrade to .NET 3.5 SP1 that includes .NET 2.0 SP2. On Windows Vista and Windows Server 2008, you must upgrade to .NET 3.5 SP1 to get the .NET 2.0 SP2 update installed.</p>

Item	Minimum Requirement
TCP Ports	<p>In order to view the status in ZENworks Control Center of the ZENworks Adaptive Agent for a managed device, ZENworks automatically opens port 7628 on the device if you are using the Windows firewall. However, if you are using a different firewall, you must open this port manually.</p> <p>Port 7628 must also be opened on the device if you want to send a QuickTask to the client from ZENworks Control Center.</p> <p>The port specified when a managed device (server or workstation) is promoted to Satellite with Content or Collection role is opened. By default, it is port 80.</p> <p>The following ports are opened when the device is promoted to Satellite with Imaging role:</p> <p>4011 (UDP) is for proxy DHCP when it is running on the same device as the DHCP server. Ensure that the firewall is configured to allow the broadcast traffic to the proxy DHCP service.</p> <p>998 (TCP) is used by Preboot Server.</p> <hr/> <p>NOTE: The Imaging TFTP and zmgpreboot policy listen on UDP ports 69 and 13331 respectively but will not work across firewall because they open random UDP ports for each PXE device.</p> <hr/> <p>For Remote Management where the ZENworks Adaptive Agent is running, the device listens on port 5950. You can change the port in ZENworks Control Center (<i>Configuration</i> tab > <i>Management Zone Settings</i> > <i>Device Management</i> > <i>Remote Management</i>).</p>
Virtual Machine Environments	<p>ZENworks Configuration Management managed device software can be installed in VMware and XEN.</p>

1.6 Inventoried-Only Device Requirements

You can use ZENworks 10 Configuration Management to inventory workstations and servers that cannot be managed by the ZENworks Adaptive Agent. These inventoried-only devices must meet the following minimum requirements:

Table 1-6 *Inventoried-Only Device Minimum Requirements*

Item	Minimum Requirement
Operating System: Servers	<ul style="list-style-type: none">♦ AIX 4.3-5.3 IBM pSeries (RS6000)♦ HP-UX 10.20-11.23 HP PA-RISC (HP9000)♦ NetWare® 5.1, 6, 6.5¹♦ OES (NetWare) ¹♦ Red Hat Enterprise Linux 2.1-4.x♦ Solaris 2.6–10 Sun SPARC (32 and 64-bit)♦ SUSE Linux Enterprise Server 8.0-10 (all editions)♦ Windows NT 4.0 <p>¹ Each NetWare operating system must have its latest Support Pack and the latest patch for <code>libc.nlm</code>.</p>
Operating System: Workstations	<ul style="list-style-type: none">♦ Mac OS* X 10.2.4 or later♦ Red Hat Linux 7.1-9♦ SUSE Linux Enterprise Desktop 8.0-10 (all editions)♦ Windows 95
Inventory Only Module	After installing ZENworks 10 Configuration Management to your network, you must install this module on the above-listed devices to inventory them. For more information, see “ Deploying the Inventory-Only Module ” in the <i>ZENworks 10 Configuration Management Discovery, Deployment, and Retirement Reference</i> .

1.7 Administration Browser Requirements

Make sure the workstation or server where you run ZENworks Control Center to administer your system meets the following minimum requirements:

Table 1-7 *Administration Browser Minimum Requirements*

Item	Minimum Requirement
Web Browser	<p>The administration device must have one of the following Web browsers installed:</p> <ul style="list-style-type: none">♦ Internet Explorer 7 on Windows Vista, Windows Server 2003, and Windows XP♦ Firefox* 2.0 (Windows only)

Item	Minimum Requirement
JRE 5.0	In order to run Image Explorer, version 1.5 of the Java* Virtual Machine* (JVM*) must be installed and running on the administration device.
TCP Ports	In order to fulfill a user's request for a remote session on a managed device, you must open port 5550 on the management console device in order to run Remote Management Listener.

1.8 Installation User Requirements

The user running the installation program must have administrator privileges on the device. For example:

- ♦ **Windows:** Log in as a Windows administrator.
- ♦ **Linux:** Log in as a non-root user, use the `sudo` command to elevate your privileges to root, then run the installation program.

1.9 Tested Primary Server and Managed Device Platforms

ZENworks Configuration Management has been extensively tested on the following server platforms where you install the Primary Server software:

- ♦ Windows Server 2003 SP2 Ent x86, x86-64
- ♦ Windows Server 2003 SP2 Std x86, x86-64
- ♦ Windows Server 2008 Ent x86, x86-64
- ♦ Windows Server 2008 Std x86, x86-64
- ♦ SLES 10 SP1/SP2 on the 32-bit (x86) and 64-bit (x86-64) architectures (Intel and AMD Opteron processors)
- ♦ OES 2 (Linux) x86, x86-64

ZENworks Configuration Management has been extensively tested to manage the following desktop platforms:

- ♦ Windows 2000 Professional SP4
- ♦ Windows 2000 Server SP4
- ♦ Windows XP Professional SP2 x86
- ♦ Windows XP Professional SP3 x86
- ♦ Windows Server 2003 SP2 x86, x86-64
- ♦ Windows Server 2008 Std x86, x86-64
- ♦ Windows Vista x86, x86-64
- ♦ Windows Vista SP1 x86, x86-64

Installing ZENworks 10 Configuration Management

2

Perform the tasks in the following sections to install ZENworks 10 Configuration Management:

- ♦ [Section 2.1, “Understanding What the ZENworks Installation Does,” on page 23](#)
- ♦ [Section 2.2, “Gathering Information for Installing ZENworks,” on page 24](#)
- ♦ [Section 2.3, “Preinstallation Tasks,” on page 25](#)
- ♦ [Section 2.4, “Installing ZENworks 10 Configuration Management,” on page 33](#)
- ♦ [Section 2.5, “Performing an Unattended Installation of ZENworks 10 Configuration Management,” on page 42](#)
- ♦ [Section 2.6, “Post-Installation Tasks,” on page 46](#)
- ♦ [Section 2.7, “Installing ZENworks Adaptive Agent,” on page 46](#)

WARNING: If you are only testing or reviewing the product, do not deploy ZENworks 10 Configuration Management into a production environment.

ZENworks 10 Configuration Management does not require Novell eDirectory™, but instead uses a Management Zone and its own ZENworks database, so you should install to a test server in your network that is not being used for production purposes.

If you want to test managed devices, be aware that installing the ZENworks Adaptive Agent automatically uninstalls the traditional ZENworks agent because a managed device cannot concurrently run different ZENworks agents. However, it does not uninstall the ZENworks 10 Patch Management Agent.

The ZENworks Patch Management Agent and ZENworks Adaptive Agent can coexist. You only need to remove the ZENworks Patch Management agent if you move the Patch Management duties to a ZENworks 10 Configuration Management server.

2.1 Understanding What the ZENworks Installation Does

ZENworks 10 Configuration Management is installed as a new product. You cannot upgrade to it from a previous version of ZENworks. However, you can migrate your traditional ZENworks data from Novell eDirectory to the new ZENworks 10 Configuration Management database. For more information, see the [ZENworks 10 Configuration Management ZENworks Migration Guide](#).

The first time you install ZENworks 10 Configuration Management, you establish the Management Zone with a Primary Server, which is the first server you install to. Other Primary Servers can then be installed into that Management Zone.

The ZENworks installation program does the following during installation of your first Primary Server:

- ♦ Creates the Management Zone

- ♦ Creates a password that you supply for the default ZENworks Administrator account
- ♦ Establishes and populates the ZENworks database

The ZENworks installation does the following during installation of any Primary Server:

- ♦ Installs the ZENworks Adaptive Agent (Windows servers only) so that it can be managed
- ♦ Installs ZENworks Control Center (ZCC)
- ♦ Installs the zman command line utility
- ♦ Installs and starts the ZENworks services

The Adaptive Agent is installed to managed workstations from files on the Primary Server. For more information, see “[ZENworks Adaptive Agent Deployment](#)” in the *ZENworks 10 Configuration Management Administration Quick Start*.

You have three installation methods:

- ♦ **Graphical User Interface:** A graphical user interface (GUI) installation program that works with both Windows and Linux servers is provided on the installation CD. For Linux servers, GUI capability must already be installed.
- ♦ **Command Line:** A command line installation is available, but only for Linux servers. The Windows and Linux installation executables can both be run from a command line for purposes of using installation arguments, but for Windows it only starts the GUI installation program.
- ♦ **Unattended:** You can use either installation method to create a response file for an unattended installation of ZENworks to other servers. For more information, see [Section 2.5, “Performing an Unattended Installation of ZENworks 10 Configuration Management,”](#) on page 42.

To learn what you need to know before installing ZENworks, continue with [Section 2.2, “Gathering Information for Installing ZENworks,”](#) on page 24.

2.2 Gathering Information for Installing ZENworks

During installation of ZENworks 10 Configuration Management, you need to know the following information:

- ♦ Which installation method to use (GUI, command line, or unattended)
- ♦ Installation path (for Windows only)
- ♦ Management Zone (zone name, username, password, and port)
- ♦ Database choice (embedded Sybase SQL, remote OEM Sybase SQL, external Sybase SQL, external Microsoft SQL, or Oracle 10g Standard database)

For more information, see [Section 2.3, “Preinstallation Tasks,”](#) on page 25.

- ♦ Database information (server name, port, database name, username, password, named instance, domain, and whether you are using Windows or SQL Server authentication)

For Oracle and MS SQL, ensure that the database username adheres to the following conventions:

- ♦ The name must begin with an alphabetic character.
- ♦ The following characters cannot be used: - (hyphen) or . (period). Additionally, @ cannot be used in username for Oracle.

- ♦ Certificate Authority information (internal, or signed certificate, private key, and public certificate) in DER format
- ♦ License keys (60-day trial options are available)

For more information on these items, see [Table 2-1, “Installation Information,” on page 35](#).

To start a ZENworks installation, continue with [Section 2.3, “Preinstallation Tasks,” on page 25](#).

2.3 Preinstallation Tasks

Perform the following applicable tasks, then continue with [Section 2.4, “Installing ZENworks 10 Configuration Management,” on page 33](#):

- ♦ [Section 2.3.1, “Verifying That the Minimum Requirements Have Been Met,” on page 25](#)
- ♦ [Section 2.3.2, “Creating an Installation DVD from the ISO Download,” on page 25](#)
- ♦ [Section 2.3.3, “Creating External Certificate Authority,” on page 26](#)
- ♦ [Section 2.3.4, “Installing an External ZENworks Database,” on page 26](#)

2.3.1 Verifying That the Minimum Requirements Have Been Met

Before you begin to install ZENworks Configuration Management, ensure that the device where you want to install the Primary Server software fulfills the necessary requirements. For more information, see [Chapter 1, “Minimum Requirements,” on page 9](#).

2.3.2 Creating an Installation DVD from the ISO Download

If you obtained the ZENworks 10 Configuration Management software as an ISO image download, do one of the following to create the installation DVD:

- ♦ [“Using Windows to Create a ZENworks Installation DVD from an ISO Image” on page 25](#)
- ♦ [“Using Linux to Create a ZENworks Installation DVD from an ISO Image” on page 25](#)

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

- 1 Download the ZENworks 10 Configuration Management with SP1 (10.1) installation ISO image from the [Novell Web site \(http://www.novell.com/\)](http://www.novell.com/) and copy it to a temporary location on your Windows device.
- 2 Burn the ISO image to a DVD.

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

Optionally, you can simply run the installation program from the ISO mount point, instead of burning the DVD:

- 1 Download the ZENworks 10 Configuration Management with SP1 (10.1) installation ISO image from the [Novell Web site \(http://www.novell.com/\)](http://www.novell.com/) and copy it to a temporary location on your Linux device.
- 2 Do one of the following:
 - ♦ 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 /zcm10/ZCM10.iso /zcm10/install
```

- ♦ Burn the ISO image to a DVD.

2.3.3 Creating External Certificate Authority

If you plan to use external Certificate Authorities (CAs), install openssl and do the following to create the certificate files:

- 1 To generate a private key that is needed to create a Certificate Signing Request (CSR), enter the following command:

```
openssl genrsa -out zcm.pem 1024
```

- 2 To create a CSR that can be signed by the external CA, enter the following command:

```
openssl req -new -key zcm.pem -out zcm.csr
```

When you are asked for “YOUR name,” enter the full DNS name assigned to the server where you are installing ZENworks 10 Configuration Management.

- 3 To convert the private key from PEM format to DER format, enter the following command:

```
openssl pkcs8 -topk8 -nocrypt -in zcm.pem -inform PEM -out zcm.der -outform DER
```

The private key must be in the PKCS8 DER format, and the signed certificate must be in the X.509 DER format. You can use the OpenSSL command line tool to convert your keys to the proper format. This tool can be obtained as part of the Cygwin toolkit, or as part of your Linux distribution.

- 4 Use the CSR and generate a certificate using ConsoleOne or a true external CA such as Verisign.
- 5 Using ConsoleOne, export your CA’s self-signed certificate.
- 6 To convert the signed certificate from PEM format to DER format, enter the following command:

```
openssl x509 -in cert.pem -inform PEM -out cert.der -outform DER
```

You should now have the three files that you need to install ZENworks using an external CA.

2.3.4 Installing an External ZENworks Database

During installation you have the following database options:

- ♦ Install to the embedded Sybase SQL Anywhere database that is provided by ZENworks
- ♦ Install to an existing remote OEM Sybase database
- ♦ Install to an existing Sybase SQL Anywhere external database
- ♦ Install to an existing Microsoft SQL Server external database

- ♦ Create a new Microsoft SQL Server external database
- ♦ Install to an existing Oracle 10g user schema
- ♦ Create a new Oracle 10g user schema

Some of these options require tasks for creating or setting up external databases before ZENworks can write to them during installation. The steps in this section show how to do that.

Regarding the different types of external databases:

- ♦ **Remote OEM Sybase:** Before installing ZENworks 10 Configuration Management to create the Management Zone, you must install the remote OEM Sybase database first on your remote database server so that it can be properly configured during installation of the Primary Server that hosts the database.

If the remote OEM Sybase server does not yet exist, you must create it first.

On a remote Sybase database, this utility must be run on the database server itself. Unless you select to install the *OEM Sybase Database*, you are also required to have the Sybase database created and the service running.

- ♦ **External Sybase SQL Anywhere:** You must set up this database so that it can be updated during installation of ZENworks 10 Configuration Management on the Primary Server.
- ♦ **Microsoft SQL Server:** You have two options:

- ♦ Set up the database during the Primary Server installation

This is the quickest and easiest method.

- ♦ Set up the database externally before installing the Primary Server

This option is especially useful if your DBA is not the same as your ZENworks administrator.

To use the database installation program, on the external database server, run:

Windows: `DVD_drive:\setup.exe -c`

Linux: `mounted_DVD_drive/setup.sh -c`

This provides additional options that you do not have when installing the Primary Server, especially if you wish to make your OEM database a remote database. You are able to view the SQL files generating the ZENworks database, create access users, view creation commands (OEM Sybase only), and so on.

To install the database on a device that has ZENworks 10 Configuration Management installed, run:

Windows: `DVD_drive:\setup.exe -c --zcminstall`

Linux: `mounted_DVD_drive/setup.sh -c --zcminstall`

- ♦ **Oracle:** You have two options:
 - ♦ **Create a new user schema:** If you choose to create a new user schema, ensure that the following requirements are met:
 - ♦ You must be aware of the database administrator credentials.

- ♦ A tablespace must already exist for associating to the Oracle access user.
- ♦ Ensure that the tablespace has sufficient space to create and store the ZENworks database schema. The tablespace requires a minimum of 100 MB to create ZENworks database schema without any data in it.
- ♦ **Use an existing user schema:** You can install to an existing Oracle user schema that resides on a server in your network in the following scenarios:
 - ♦ The database administrator creates a user schema with the necessary rights and you receive the credentials for that user schema from the database administrator. In this case, the database administrator credentials are not required to install to an existing Oracle user schema.
 - ♦ You create a user schema in the Oracle database and choose to use it during ZENworks Configuration Management installation.

If you choose to use an existing user schema, ensure that the following requirements are met:

- ♦ Ensure that the tablespace has sufficient space to create and store the ZENworks database schema. The tablespace requires a minimum of 100 MB to create ZENworks database schema without any data in it.
- ♦ Ensure that the quota for the user schema is set to Unlimited on the tablespace that you plan to configure during the installation.
- ♦ Ensure that the user schema has the following rights to create the database.

```
CREATE SESSION
CREATE TABLE
CREATE VIEW
CREATE PROCEDURE
CREATE SEQUENCE
CREATE TRIGGER
```

IMPORTANT: For Oracle databases, performance can be affected by whether you configure your database to use shared server or dedicated server processes. Each ZENworks Primary Server is configured with a database connection pool whose size fluctuates with the ZENworks system load, but that can grow at peak loads to a maximum of 100 concurrent database connections per Primary Server. If your Oracle database is configured to use dedicated server processes, it is possible that your database server resource usage can reach undesirable and performance-affecting levels when there are multiple Primary Servers in your zone. If you encounter this problem, consider changing your ZENworks database to use shared server processes.

Make sure that the server where you plan to install the external database fulfills the requirements in [Section 1.3, “Database Requirements,” on page 16](#).

1 To start the database installation program:

- 1a** On the server where you want to install the external database, insert the *Novell ZENworks 10 Configuration Management with SP1 (10.1)* installation DVD.

If the DVD autoruns the installation program, exit the program.

- 1b** For Windows, enter the following at the command prompt on the external database server:

```
DVD_drive:\setup.exe -c
```

To install the database on a device that has ZENworks 10 Configuration Management installed, run the following command:

```
DVD_drive:\setup.exe -c --zcminstall
```

- 1c** For Linux, run the following command on the external database server:

```
sh /media/cdrom/setup.sh -c
```

To install the database on a device that has ZENworks 10 Configuration Management installed, run the following command:

```
mounted_DVD_drive/setup.sh -c --zcminstall
```

Using the `sh` command resolves rights issues.

Only the GUI installation is available for installing a database.

- 2** On the Select ZENworks Database page, select one of the following, then click *Next*.

- ♦ **OEM Sybase SQL Anywhere:** Installs the default Sybase 10 database for ZENworks. It is configured as a service, the database user is created, and the required tables for the Primary Server are established.

If you select this option, you must use the `-o` (or `--sybase-oem`) parameter with the `setup.exe` installation executable when you install the Primary Server software in order to successfully install to the database. This parameter allows ZENworks to authenticate the database prior to performing any operations on it.

You should use the `-o` parameter only when you are using the Sybase installation that is provided on the *Novell ZENworks 10 Configuration Management with SP1 (10.1)* installation DVD.

You must also select the *Remote Sybase SQL Anywhere* option during installation of the Primary Server.

- ♦ **Sybase SQL Anywhere:** Sets up an existing Sybase database for writing ZENworks information to it.

The database user must have read/write permissions to create and modify the tables on the database server.

- ♦ **Microsoft SQL Server:** Creates a ZENworks database on a Microsoft SQL Server.

The Microsoft SQL Server software must already be installed on the database server in order for the ZENworks 10 Configuration Management installation program to create the new Microsoft SQL database. Refer to your Microsoft documentation for instructions on installing the Microsoft SQL Server software.

- ♦ **Oracle:** Specifies a user schema that you can use to set up an external Oracle 10g database schema for use with ZENworks. You can either create a new user schema or specify an existing one that resides on a server in your network.

IMPORTANT: For external databases, the server hosting the database must have time synchronization with each of the Primary Servers in the Management Zone.

- 3** During installation, refer to the following information for details on the installation data that you need to know (you can also click the *Help* button for similar information):

Installation Information	Explanation
Database paths	<p>For the <i>OEM Sybase SQL Anywhere</i> option, you need to provide the path to where you want the OEM copy of the Sybase SQL Anywhere database software installed. On the target Windows server, only the drives that are currently mapped on the server are available.</p> <p>The default path is <i>drive:\novell\zenworks</i>, which you can change. The installation program creates the <i>\novell\zenworks</i> directory for the installation of Sybase.</p> <p>You need to provide the path for where you want the ZENworks Sybase database file created. A <i>\database</i> directory is appended to the default of <i>drive:\novell\zenworks</i>.</p> <p>Paths are not required for installing the Oracle 10g database.</p> <p>If you need more disk space for your content repository than is in the Windows path that is available during installation, you can change the path to another location after completing the installation. For more information, see “Content Repository” in the <i>ZENworks 10 Configuration Management System Administration Reference</i>.</p>

Installation Information	Explanation
SQL database information	<p>For the external database options (<i>Remote Sybase SQL Anywhere</i>, <i>Microsoft SQL Server</i>, and <i>Oracle</i>), you need to know the information listed below.</p> <p>Defaults are provided for some of this information, which can be changed as necessary.</p> <ul style="list-style-type: none"> ♦ All Databases: The database server must have a Sybase SQL Anywhere, Microsoft SQL, or Oracle database installed. <ul style="list-style-type: none"> ♦ Server's name. We recommend that you identify the server by its DNS name rather than its IP address, to be in sync with certificates that are signed using DNS names. <hr/> <p>IMPORTANT: If you later change your database server's IP address or DNS name, make sure that your corporate DNS server is updated with this change to keep DNS for the database server in sync.</p> <hr/> ♦ Port used by the database server. <p>Port 2638 is the default for Sybase SQL Anywhere and port 1433 is the default for Microsoft SQL Server.</p> <p>Change the default port number if you have a conflict.</p> <ul style="list-style-type: none"> ♦ (Optional) SQL Server Only: Named instance, which is the name of the SQL server instance that is hosting the existing ZENworks database. You must specify the named instance if you want it to be something other than the default of <code>mssqlserver</code>. ♦ Oracle Only: Default Tablespace, which is the name of the tablespace where you want the database to be created. By default, it is <code>USERS</code>. ♦ New Database: <ul style="list-style-type: none"> ♦ The database administrator (<i>Username</i> field) must have read/write permissions in order to successfully perform the required operations on the database. ♦ The administrator's database password. ♦ SQL Server or New Database: <ul style="list-style-type: none"> ♦ If you are using Windows authentication, specify the Windows domain where the user you specified in the <i>Username</i> field exists. If you are not using a Windows domain, specify the server's short name. ♦ Whether to use Windows or SQL Server authentication. For Windows authentication, provide the credentials for a user on the current device or in the domain. For SQL authentication, provide credentials that match those of a valid SQL user. <p>It is important to know whether you installed the SQL Server by using SQL authentication, Windows authentication, or mixed. Be sure to select the option that coincides with your SQL Server options or the authentication will fail.</p>

Installation Information	Explanation
SQL database access	<p>For the external database options (<i>Remote Sybase SQL Anywhere</i>, <i>Microsoft SQL Server</i>, and <i>Oracle</i>), you need to know the information listed below.</p> <p>Defaults are provided for some of this information, which can be changed as necessary.</p> <ul style="list-style-type: none"> ♦ All Databases: This server must have a Sybase SQL Anywhere, Microsoft SQL, or Oracle database installed. <ul style="list-style-type: none"> ♦ Database name. Replace <i>zenworks_MY_ZONE</i> with either the desired database name, or an existing database name. ♦ Database username. This user must have read/write permissions to modify the database. <p>If Windows authentication is also selected, the specified user must already exist when you create a new SQL database. The user is granted login access to SQL Server and read/write access to the ZENworks database that is created.</p> <p>For an existing database, specify a user with sufficient permissions to the database.</p> ♦ Database password. For a new database, this password is automatically generated if SQL authentication is selected. For an existing database, specify the password of an existing user with read/write permissions to the database. ♦ Sybase Databases Only: The name of your Sybase SQL Anywhere database server. ♦ Oracle Databases Only: The name of the tablespace where you want the database to be created. By default, it is USERS. ♦ SQL Databases Only: <ul style="list-style-type: none"> ♦ If you are using Windows authentication, specify the Windows domain where the user you specified in the <i>Username</i> field exists. If you are not using a Windows domain, specify the server's short name. ♦ Whether to use Windows or SQL Server authentication. For Windows authentication, provide the credentials for a user on the current device or in the domain. For SQL authentication, provide credentials that match those of a valid SQL user. <p>It is important to know whether you installed the SQL Server by using SQL authentication, Windows authentication, or mixed. Be sure to select the option that coincides with your SQL Server options or the authentication will fail.</p>

- 4 Continue with [Section 2.4, “Installing ZENworks 10 Configuration Management,”](#) on page 33.

2.4 Installing ZENworks 10 Configuration Management

- 1 Start the ZENworks 10 Configuration Management installation program by using one of the following methods:

- ♦ **Graphical user interface (GUI) installation**

1. On the installation server, insert the *Novell ZENworks 10 Configuration Management with SPI (10.1)* installation DVD.

For Windows, the installation page where you can select the language is displayed. If it is not automatically displayed after inserting the DVD, run `setup.exe` from the root of the DVD.

For Linux, mount the DVD, then run `sh /media/cdrom/setup.sh`. Using the `sh` command resolves rights issues.

2. If you installed an external OEM Sybase server (see [Section 2.3.4, “Installing an External ZENworks Database,” on page 26](#)), you must run the executable manually with the following parameter in order for that database to be properly updated during this Primary Server installation:

```
DVD_drive\setup.exe -o
```

3. Continue with [Step 2](#).

- ♦ **Command line installation (Linux only)**

1. On the installation server, insert the *Novell ZENworks 10 Configuration Management with SPI (10.1)* installation DVD.
2. Mount the DVD.
3. To start a command line installation, do the following:

- a. To a directory where all (including “others”) have read and execute access, either mount the DVD or copy the DVD’s files.

This cannot be in `/root` or any directory under it.

If you copy the DVD’s files, make sure that all (including “others”) continue to have read and execute access to the destination directories.

- b. Run the following command:

```
/mount_location/setup.sh -e
```

For more information on installation arguments, see [Appendix A, “Installation Executable Arguments,” on page 55](#).

4. Continue with [Step 2](#).

- ♦ **Silent Installation**

To install using a response file, see [Section 2.5, “Performing an Unattended Installation of ZENworks 10 Configuration Management,” on page 42](#).

- 2 During installation, refer to the information in [Table 2-1, “Installation Information,” on page 35](#) for details on the installation data that you need to know.

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

For the command line method, you can type `back` and press Enter to return to a previous installation option to make changes.

3 Do one of the following on the Windows device:

- ♦ If you selected to reboot automatically (you selected the *Yes, restart the system* option during installation; see “**Rebooting (or not)**” on page 42), continue with **Step 4** 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 installation; see “**Rebooting (or not)**” on page 42), you must wait for the installation to complete and the services to start in order to verify it in **Step 4**.

NOTE: On Windows or Linux, part of completing the installation process is for the database to be updated and for the PRU to be downloaded and installed, both of which cause high CPU utilization during their processes. This can cause the services to start up slowly, which can also affect how long it takes for ZENworks Control Center to open.

4 After the installation has completed and the server has been rebooted, do any of the following to verify that ZENworks 10 Configuration Management is running:

♦ **Run ZCC**

If ZCC did not automatically start, use the following URL to open ZCC in a Web browser:

`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 **qualified workstation**.

If ZCC does not open, and you are using DNS, verify that DNS is set up correctly. It must be working properly in order for ZCC to open on the server. After you reconfigure DNS to work properly, then ZCC should be accessible from the desktop icon.

For the Oracle 10g database, any administrator name is case sensitive, including login names from user sources. The default ZENworks administrator account automatically created during installation uses an initial capital, so in order to log in to ZENworks Control Center, you must enter `Administrator`.

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

The *Restart* option stops all related services that are already running and starts each of them in their correct order, including *Novell ZENworks Loader*.

♦ **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
```

♦ **Check the Linux services by using the specific services' 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
```

- 5 (Optional) If you want to set certain configuration parameters for how ZENworks is run on this server, see [“Using the Config.xml File to Modify ZENworks Control Center Settings”](#) in the *ZENworks 10 Configuration Management System Administration Reference*.
- 6 Do any of the following that are applicable:
 - ♦ To create another Primary Server for the Management Zone using the same installation method that you just used, return to [Step 1](#).
 - ♦ If you created a [response file](#) in order to perform an unattended installation on other servers, continue with [Section 2.5.2, “Performing an Unattended Installation,”](#) on page 44.
- 7 Continue with [Section 2.6, “Post-Installation Tasks,”](#) on page 46.

2.4.1 Installation Information

The information you need is listed in the order of the installation flow.

Table 2-1 *Installation Information*

Installation Information	Explanation
Installation path (Windows only)	<p>The default is %ProgramFiles%. You can change it to any path currently available on the server. The installation program creates the Novell\ZENworks directory here for the installation of the ZENworks software files.</p> <p>If you need more disk space for your content repository than is in the Windows path that is available during installation, you can change the path to another location after completing the installation. For more information, see “Content Repository” in <i>ZENworks 10 Configuration Management System Administration Reference</i>.</p> <p>For Linux, several fixed installation paths are used:</p> <pre>/opt/novell/zenworks/ /etc/opt/novell/zenworks /var/opt/novell/zenworks /var/opt/novell/log/zenworks/</pre> <p>If you are concerned about disk space on the Linux server, the /var/opt directory is where the database and content repository reside. Make sure it is on a partition large enough for them.</p>

Installation Information	Explanation
Response file path (optional)	<p>If you started the installation executable with the <code>-s</code> parameter, you are required to provide a path for the file. The default path is <code>C:\Documents and Settings\Administrator\</code>, which you can change to any path available on the current server.</p> <p>The Primary Server software is not installed when you run the program to create a response file. It only displays the installation pages necessary to identify and create the response file.</p>
Prerequisites	<p>If the required prerequisites are not installed, you are not allowed to continue with the installation. The requirements that are not fulfilled are displayed (GUI) or listed (command line). For more information, see Section 1.1, "Primary Server Requirements," on page 9.</p> <p>If the .NET prerequisite is not fulfilled, you can click the <i>ZENworks</i> link in the description to install the runtime version that is bundled with ZENworks. After .NET is installed, the installation of ZENworks proceeds from where you left off.</p>
Management Zone	<p>New Zone: If you are installing to the first server in the zone, you need to know what name you want for the Management Zone and what you want to use for the zone's password, which is used for logging in to ZCC.</p> <p>The zone name has a 20-character limit and should be a unique name. The zone name can contain only the following special characters: - (dash) _ (underscore) . (period). The zone name cannot contain special characters such as ~ ` ! @ # % ^ & * + = () { } [] \ : ; " ' < > , ? /</p> <p>The zone password must contain at least six characters and is limited to a maximum of 255 characters.</p> <p>By default, the login username is <code>administrator</code>. After completing the installation, you can use ZCC to add other administrator names that can be used to log in to the Management Zone.</p> <p>If one or both of the default ZENworks 10 Configuration Management ports for ZCC is in use (HTTP = 80 or HTTPS = 443), such as by OES2, you will be asked to specify another port. Note which port you specify because you will need to use it in the URL for accessing ZCC.</p> <p>Existing Zone: If you are installing to an existing Management Zone, you need to know the following information:</p> <ul style="list-style-type: none"> ♦ Server identification (either the DNS name or IP address). This is any existing Primary Server in the zone. We recommend using the DNS name to provide ongoing synchronization with certificates that are signed with DNS names. ♦ Port used by the existing Primary Server in the Management Zone. If this Primary Server uses a different port than the default (443), specify that server's port. ♦ <i>Use SSL</i> check box: Specify whether the port you specified is secured. ♦ The username for logging in to ZCC. The default is <code>administrator</code>. After completing the installation, you can use ZCC to add other administrator names that can be used to log in to the Management Zone. ♦ The administrator's password. Specify the current password for the ZENworks administrative user specified in the <i>Username</i> field.

Installation Information	Explanation
Database options	<p>For ZENworks 10 Configuration Management, a database must be established. The database options are displayed only when the first server is installed to the zone. However, you can run the installation program specifically to install or repair a database (see Section 2.3.4, “Installing an External ZENworks Database,” on page 26).</p> <p>You have the following database options:</p> <ul style="list-style-type: none"> ♦ Embedded Sybase SQL Anywhere: Automatically installs the embedded database on the current server. If you select the embedded database option, no further database installation pages are shown. ♦ Remote Sybase SQL Anywhere: This database must already exist on a server in your network. It can be on the current server. To select this option, you should already have followed the steps in Section 2.3.4, “Installing an External ZENworks Database,” on page 26. ♦ Microsoft SQL Server: You can create a new SQL database or specify an existing database that resides on a server in your network. It can be on the current server. Creating a new SQL database at this time provides the same results as the steps in Section 2.3.4, “Installing an External ZENworks Database,” on page 26. ♦ Oracle: Specifies a user schema that you can use to set up an external Oracle 10g database schema for use with ZENworks. You can either create a new user schema or specify an existing one that resides on a server in your network. To select this option, you should already have followed the steps in Section 2.3.4, “Installing an External ZENworks Database,” on page 26. <p>IMPORTANT: For external databases, the server hosting the database must have time synchronization with each of the Primary Servers in the Management Zone.</p>

Installation Information	Explanation
Database information	<p>For the external database options (<i>Remote Sybase SQL Anywhere</i>, <i>Microsoft SQL Server</i>, and <i>Oracle</i>), you need to know the information listed below. Defaults are provided for some of this information, which can be changed as necessary.</p> <ul style="list-style-type: none"> ♦ All Databases: The database server must have a Sybase SQL Anywhere, Microsoft SQL, or Oracle database installed. <ul style="list-style-type: none"> ♦ Server's name. We recommend that you identify the server by its DNS name rather than its IP address, to be in sync with certificates that are signed with DNS names. <hr/> <p>IMPORTANT: If you later change your database server's IP address or DNS name, make sure that your corporate DNS server is updated with this change to keep DNS for the database server in sync.</p> <hr/> ♦ Port used by the database server. Port 2638 is the default for Sybase SQL Anywhere and port 1433 is the default for Microsoft SQL Server. Change the default port number if you have a conflict. ♦ (Optional) SQL Server Only: Named instance, which is the name of the SQL server instance that is hosting the existing ZENworks database. You must specify the named instance if you want it to be something other than the default of <code>mssqlserver</code>. ♦ Oracle Only: Default Tablespace, which is the name of the tablespace where you want the database to be created. By default, it is <code>USERS</code>. ♦ New Database: <ul style="list-style-type: none"> ♦ The database administrator (<i>Username</i> field) must have read/write permissions in order to successfully perform the required operations on the database. ♦ The administrator's database password. ♦ SQL Server or New Database: <ul style="list-style-type: none"> ♦ If you are using Windows authentication, specify the Windows domain where the user you specified in the <i>Username</i> field exists. If you are not using a Windows domain, specify the server's short name. ♦ Whether to use Windows or SQL Server authentication. For Windows authentication, provide the credentials for a user on the current device or in the domain. For SQL authentication, provide credentials that match those of a valid SQL user. <p>It is important to know whether you installed the SQL Server by using SQL authentication, Windows authentication, or mixed. Be sure to select the option that coincides with your SQL Server options or the authentication will fail.</p>

Installation Information	Explanation
Database access	<p>For the external database options (<i>Remote Sybase SQL Anywhere</i>, <i>Microsoft SQL Server</i>, and <i>Oracle</i>), you need to know the information listed below. Defaults are provided for some of this information, which can be changed as necessary.</p> <ul style="list-style-type: none"> ♦ All Databases: This server must have a Sybase SQL Anywhere, Microsoft SQL, or Oracle database installed. <ul style="list-style-type: none"> ♦ Database name. Replace <i>zenworks_MY_ZONE</i> with either the desired database name, or an existing database name. ♦ Database username. This user must have read/write permissions to modify the database. <p>If Windows authentication is also selected, the specified user must already exist when you create a new SQL database. The user is granted login access to SQL Server and read/write access to the ZENworks database that is created.</p> <p>For an existing database, specify a user with sufficient permissions to the database.</p> ♦ Database password. For a new database, this password is automatically generated if SQL authentication is selected. For an existing database, specify the password of an existing user with read/write permissions to the database. ♦ Sybase Databases Only: The name of your Sybase SQL Anywhere database server. ♦ Oracle Databases Only: The name of the tablespace where you want the database to be created. By default, it is USERS. ♦ SQL Databases Only: <ul style="list-style-type: none"> ♦ If you are using Windows authentication, specify the Windows domain where the user you specified in the <i>Username</i> field exists. If you are not using a Windows domain, specify the server's short name. ♦ Whether to use Windows or SQL Server authentication. For Windows authentication, provide the credentials for a user on the current device or in the domain. For SQL authentication, provide credentials that match those of a valid SQL user. <p>It is important to know whether you installed the SQL Server by using SQL authentication, Windows authentication, or mixed. Be sure to select the option that coincides with your SQL Server options or the authentication will fail.</p>
SSL configuration (shown only for first server installed in the Management Zone)	<p>In order to enable SSL communications, an SSL certificate must be added to the ZENworks server. Select whether to use an internal or external certificate authority (CA).</p> <p>For subsequent installations of Primary Servers to the Management Zone, the CA established by the first server's installation is used for the zone.</p> <hr/> <p>IMPORTANT: After you install ZENworks 10 Configuration Management, you cannot change the CA type.</p> <hr/> <p>The <i>Restore Default</i> buttons restore the paths to those that were displayed when you first accessed this page.</p>

Installation Information	Explanation
Signed SSL certificate and private key	<p>To enter a trusted CA-signed certificate and private key, click <i>Choose</i> to browse for and select the certificate and key files, or specify paths to the signed certificate to be used for this server (<i>Signed SSL Certificate</i>), and the private key associated with the signed certificate (<i>Private Key</i>).</p> <p>For subsequent installations of Primary Servers to the zone, the CA established for the zone by the first server's installation is used.</p> <p>For information on creating external certificates to select when installing to a Linux or Windows server, see Section 2.3.3, "Creating External Certificate Authority," on page 26.</p> <p>For information on creating external certificates for installing to a Linux server using a silent installation, see Step 4 in Section 2.5.1, "Creating Your Response File," on page 43.</p>
Root certificate (optional)	To enter a trusted CA root certificate, click <i>Choose</i> to browse for and select it, or specify the path to the CA's public X.509 certificate (<i>CA Root Certificate</i>).
Pre-installation summary	<p>GUI Installation: To make changes to any information entered up to this point, click <i>Previous</i>. After you click <i>Install</i>, the installation of the files begins. During installation, you can click <i>Cancel</i> to stop, which leaves the files on your server that were installed up to that point.</p> <p>Command Line Installation: If you want to make changes to any information entered up to this point, you can type <i>back</i> and press Enter as many times as necessary. As you progress forward through the commands again, press Enter to accept the decisions that you previously made.</p>
Installation complete (roll back option)	<p>If installation errors occurred, this page is displayed at this time; otherwise, it is displayed after the Post-Installation Actions page.</p> <p>Installation Recovery: For both the GUI and command line installations, if there are serious installation errors you can roll back the installation to return your server to its previous state. This option is provided on a different installation page. Otherwise, you have two options:</p> <ul style="list-style-type: none"> ♦ If a previous installation was cut short and you install again, you might be given the option to reset the installation, depending on how far you got in the canceled installation. If you select to reset, this overwrites any configuration that might have occurred during the canceled installation. ♦ To undo a successfully completed installation, follow the instructions in Chapter 3, "Uninstalling ZENworks 10 Configuration Management," on page 47. <p>If there were serious installation errors, select <i>Roll Back</i>, which returns your server to its previous state. Upon exiting the installation program, the server is not rebooted. However, to complete the installation, you must reboot the server so that the ZENworks database can be populated with the inventory data.</p> <p>To determine whether to continue the installation or roll it back, review the log file that lists the errors to determine if any installation failures were significant enough for your action. If you select to continue, resolve the issues that are noted in the log after you have rebooted the server and completed the installation process.</p> <p>To access the log file in the GUI installation, click <i>View Log</i>. In the command line installation, the path to the log file is displayed.</p>

Installation Information	Explanation
Post installation actions	<p>Options are presented for selecting actions to perform after installation of the software files has successfully completed:</p> <ul style="list-style-type: none"> ♦ For the GUI installation, a page displays the options listed below. Some items are selected by default. Click any check box to select or deselect the option, then click <i>Next</i> to continue. ♦ For a command line installation, the options are listed with option numbers. Select or deselect an option by typing its number to toggle its selection status. After configuring the selections, press Enter without typing a number to continue. <p>Select from the following possible actions:</p> <ul style="list-style-type: none"> ♦ Run ZENworks Control Center: (GUI installation only) Automatically opens ZCC in your default Web browser after rebooting (Windows only), or immediately if you select to reboot manually or you installed to a Linux server. For a Linux installation without a GUI, a GUI-enabled device must be used to run ZCC. <p>For the Oracle 10g database, the administrator names are case sensitive. The default ZENworks administrator account automatically created during installation uses an initial capital. In order to log in to ZENworks Control Center, you must enter <code>Administrator</code>.</p> <ul style="list-style-type: none"> ♦ Place a shortcut to ZENworks Control Center on the Desktop: (Windows only) Places the shortcut on your desktop. ♦ Place a shortcut to ZENworks Control Center in the Start Menu: (Windows only) Places the shortcut in your Start menu. ♦ View Readme file: For GUI installations, opens the ZENworks 10 Configuration Management Readme in your default browser after rebooting (Windows only), or immediately if you select to reboot manually or you installed to a Linux server. For a Linux command line installation, the URL to the Readme is listed. ♦ View Installation log: Displays the installation log in your default XML viewer (GUI installation) after rebooting, or immediately if you select to reboot manually. For a Linux command line installation, the information is simply listed.
ZENworks System Status Utility	Allows you to launch a ZENworks services heartbeat check prior to closing the installation program. Results are posted in the installation log.

Installation Information	Explanation
Rebooting (or not)	<p>Upon a successful installation, you can select between rebooting immediately or later:</p> <ul style="list-style-type: none"> ♦ Yes, Restart the System: If you select this option, log in to the server when prompted. The first time you log in to the server, it takes a few minutes because the database is being populated with inventory data. ♦ No, I Will Restart the System Myself: If you select this option, the database is immediately populated with inventory data. <hr/> <p>NOTE: This option is displayed only for Windows devices.</p> <hr/> <p>The process of populating the database can cause high CPU utilization during rebooting or immediately after the installation program closes if you select not to reboot. This database updating process can slow down the starting of the services and access to ZENworks Control Center</p> <p>The Patch Management downloads might also cause high CPU utilization, usually shortly after rebooting.</p>
Installation completion	<p>The actions you selected previously are performed after all of the files have been installed for ZENworks 10 Configuration Management (if selected). These include:</p> <ul style="list-style-type: none"> ♦ (Windows only) Creating the ZENworks Adaptive Agent icon in the notification area (system tray) ♦ (Windows only) Creating the ZCC icon on the desktop or Start menu ♦ Displaying the Readme ♦ Displaying the installation log file ♦ Opening ZCC <hr/> <p>IMPORTANT: If you installed to a Linux server using the command line, and if you plan to run any zman commands in the current session, you need to get the newly installed <code>/opt/novell/zenworks/bin</code> directory into your session's path. Log out of your session and log back in to reset the PATH variable.</p>

2.5 Performing an Unattended Installation of ZENworks 10 Configuration Management

You can use a response file to perform an unattended installation of ZENworks 10 Configuration Management. You can either edit the default response file (provided at `DVD_drive:\Disk1\InstData\silentinstall.properties`), or perform an installation to create your own version of the response file that contains the basic installation information and edit that copy as needed.

For an embedded Sybase database, you must create a response file to perform an unattended installation; you cannot reuse the response file generated for the external database.

Do the following to create the response file, then use it to perform an unattended installation:

- ♦ [Section 2.5.1, “Creating Your Response File,” on page 43](#)
- ♦ [Section 2.5.2, “Performing an Unattended Installation,” on page 44](#)

2.5.1 Creating Your Response File

- 1 Run the ZENworks 10 Configuration Management executable on a server by using one of the following methods:

- ♦ **Windows GUI:** `DVD_drive:\setup.exe -s`
- ♦ **Linux GUI:** `sh /media/cdrom/setup.sh -s`
Using the `sh` command resolves rights issues.
- ♦ **Linux command line:** `sh /media/cdrom/setup.sh -e -s`

For more information on the installation arguments, see [Appendix A, “Installation Executable Arguments,”](#) on page 55.

- 2 When prompted, provide a path for your custom response file.

When you use the `-s` argument by itself, the installation program prompts you for a path for the response file. The default filename is `silentinstall.properties`, which you can rename later (see [Step 3g](#)). The default response file is modified by the installation program to create your custom response file.

- 3 Add the Management Zone and external database passwords to your custom response file.

Because the external database password that you enter during custom response file creation is not saved in the response file, you must add the database and the Management Zone passwords in each copy of the response file in order for it to be correctly provided during an unattended installation.

Optionally, you can create an environment variable to pass the password into the unattended installation. Instructions for this are contained in the response file where the password information is stored.

While you are editing the response file, you can make any other changes necessary to customize it for your unattended installation. The response file contains instructions for its various sections.

To add the external database and Management Zone passwords into the response file:

- 3a Open the response file in a text editor.

Your custom response file is located where you specified in [Step 2](#).

If you are editing the default response file, it is located at
`DVD_drive:\Disk1\InstData\silentinstall.properties`.

- 3b Search for `ADMINISTRATOR_PASSWORD=` .

- 3c Replace `$lax.nl.env.ADMIN_PASSWORD$` with the actual password.

For example, if the password is `novell`, then the entry will be as follows:

```
ADMINISTRATOR_PASSWORD=novell
```

- 3d (Conditional) If you are using an external database, then search for the line, `DATABASE_ADMIN_PASSWORD=`, and replace `$lax.nl.env.ADMIN_PASSWORD$` with the actual password.

- 3e (Conditional) If you are using an external database, then search for the line, `DATABASE_ACCES_PASSWORD=`, and replace `$lax.nl.env.ADMIN_PASSWORD$` with the actual password.

- 3f Save the file and exit the editor.
- 3g Make as many differently named copies as you need for your various installation scenarios, modify each copy as necessary, then copy each one to the server where it will be used.
- 4 If you plan to use this response file to perform a silent installation to an Open Enterprise Server 2 (OES Linux) server, insert the following into the file:

```
PRIMARY_SERVER_ADDRESS=123.456.78.9
```

```
PRIMARY_SERVER_PORT=443
```

```
PRIMARY_SERVER_USE_SSL=true
```

```
PRIMARY_SERVER_CERT=-----BEGIN CERTIFICATE-----
MIID9DCCLotsOfEncryptedCharactersSja+bY05Y=-----END CERTIFICATE-----
```

where PRIMARY_SERVER_CERT= is the certificate you specified in the first Primary Server that you installed to. The above is just an example of the certificate information.

Optionally, you can set the PRIMARY_SERVER_USE_SSL= variable to false:

```
PRIMARY_SERVER_USE_SSL=false
```

This allows you to do a clear text installation so that you do not need to specify the Primary Server's certificate.

- 5 After you have completed modifications to your custom response file, copy it from the path that you specified in [Step 2](#) to a location on each server where you will use it for the unattended installation.
- 6 To use the updated response file, continue with [Section 2.5.2, "Performing an Unattended Installation,"](#) on page 44.

2.5.2 Performing an Unattended Installation

- 1 On the installation server where you will perform an unattended installation, insert the *Novell ZENworks 10 Configuration Management with SP1 (10.1)* installation DVD.
 - ♦ For Windows, if the installation page where you can select the language is displayed, click *Cancel* to exit the GUI installation.
 - ♦ For Linux, mount the installation DVD.
- 2 To start the unattended installation, use the `-f` option in the command:
 - ♦ For Windows, run `DVD_drive:\setup.exe -s -f path_to_file`.
 - ♦ For Linux, run `sh /media/cdrom/setup.sh -s -f path_to_file`.

where *path_to_file* is either the full path to the response file that you created in [Section 2.5.1, "Creating Your Response File,"](#) on page 43, or a directory containing the `silentinstall.properties` file (it must use that filename).

Using the `sh` command resolves rights issues.

If you renamed the updated response file, include its new name with the path.

If a filename is not given, or if either the path or file does not exist, the `-f` parameter is ignored and the default installation (GUI or command line) is run instead of an unattended installation.

- 3** (Conditional) On a Windows server, ensure that the *Yes, Generate the Response File with Restart Enabled* option is selected so that server is automatically rebooted after the silent installation has completed.

A silent installation does not provide an installation progress bar.

- 4** After the installation has completed and the server has been rebooted, do any of the following to verify that ZENworks 10 Configuration Management is running:

- ♦ **Run ZCC**

If ZCC did not automatically start, use the following URL to open ZCC in a Web browser:

`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 **qualified workstation**.

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

The *Restart* option stops all related services that are already running and starts each of them in their correct order, including *Novell ZENworks Loader*.

- ♦ **Check the Windows services by using a command line**

On the server, click *Start*, click *Run*, then run the following command:

```
ZENworks_installation_path\bin\novell-zenworks-configure -c SystemStatus
```

This lists all ZENworks services and their statuses.

To start the services, run the following command:

```
ZENworks_installation_path\bin\novell-zenworks-configure -c 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
```

- ♦ **Check the Linux services by using the specific services' 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
```

- 5 To create another Primary Server for the Management Zone by performing an unattended installation, return to [Step 1](#); otherwise, continue with [Step 6](#).
- 6 After the installation has completed, continue with [Section 2.6, “Post-Installation Tasks,”](#) on [page 46](#).

2.6 Post-Installation Tasks

After successfully installing ZENworks 10 Configuration Management , perform the following tasks:

- ♦ Take a reliable backup of the ZENworks database on a regular basis.

For more information on how to back up the ZENworks database, see “[Database Maintenance](#)” in the *ZENworks 10 Configuration Management System Administration Reference*.
- ♦ Take a reliable backup of the ZENworks Server (which only needs to be done one time).

For more information on how to back up the Certificate Authority, see “[Backing Up a ZENworks Server](#)” in the *ZENworks 10 Configuration Management System Administration Reference*.
- ♦ Take a reliable backup of the Certificate Authority.

For more information on how to back up the Certificate Authority, see “[Backing Up the Certificate Authority](#)” in the *ZENworks 10 Configuration Management System Administration Reference*.

Subsequently, continue with the *ZENworks 10 Configuration Management Administration Quick Start* for concepts and high-level instructions on how to further set up and use ZENworks 10 Configuration Management

2.7 Installing ZENworks Adaptive Agent

Any devices you want to manage through ZENworks must have the ZENworks Adaptive Agent deployed to them. The Adaptive Agent distributes software, enforces bundles, collects software and hardware inventory, and performs all other ZENworks management tasks on the managed device.

For detailed information on deploying the ZENworks Adaptive Agent, see “[ZENworks Adaptive Agent Deployment](#)” in the *ZENworks 10 Configuration Management Discovery, Deployment, and Retirement Reference*.

Uninstalling ZENworks 10 Configuration Management

3

You can uninstall Novell® ZENworks® 10 Configuration Management from a Primary Server, or uninstall the ZENworks Adaptive Agent from a managed device. If the ZENworks Reporting Server is installed on the Primary Server, it is automatically uninstalled when you uninstall ZENworks 10 Configuration Management from the device.

The embedded ZENworks database can only be uninstalled by uninstalling ZENworks 10 Configuration Management from the device hosting the Management Zone. If you are using an external database, the database remains intact after the uninstallation. To uninstall an external ZENworks database, see the instructions provided by the database manufacturer.

WARNING: If you uninstall on the first Primary Server where you installed an embedded ZENworks 10 Configuration Management database and established the Management Zone, all other Primary Servers in the Management Zone are orphaned because the Management Zone and database are no longer available. Therefore, to completely remove ZENworks 10 Configuration Management from your network, we recommend that you uninstall the software in the reverse order that you installed it. For example, 1) uninstall the Adaptive Agent from each managed device, 2) uninstall the other Primary Servers, then 3) uninstall the Primary Server hosting the Management Zone.

Review the following sections for more information:

- ♦ [Section 3.1, “Uninstalling ZENworks 10 Configuration Management on Windows,” on page 47](#)
- ♦ [Section 3.2, “Uninstalling ZENworks 10 Configuration Management on Linux Primary Server,” on page 51](#)
- ♦ [Section 3.3, “Task to be Performed After Uninstalling the Primary Server,” on page 53](#)

3.1 Uninstalling ZENworks 10 Configuration Management on Windows

- 1 On the server or managed device, run:

```
zenworks_installation_directory\novell\zenworks\bin\zenworksuninstall.exe
```

- 2 Refer to the information in the following table during uninstallation.

The information is listed in the order of the uninstallation flow.

Information	Explanation
Administrator Information of the zone to which the device is registered	<p>Configure the following settings:</p> <p>Primary Server: Specify the IP address of the Primary server in the following format:</p> <p><i>https:// IP_address or DNS_name_of_the_server:port_number</i></p> <hr/> <p>NOTE: You must specify the port number if you are not using the default port.</p> <hr/> <p>Username: Specify the username. By default, the username is <i>administrator</i>.</p> <p>Password: Specify the password for the ZENworks administrative user specified in the <i>Username</i> field.</p> <p>Local Uninstallation Only (Retain the Device in the Zone): Select this option if you only want to uninstall ZENworks 10 Configuration Management from the device. The device continues to be registered in the Management Zone.</p> <hr/> <p>NOTE: Ensure that you have the permission to uninstall the ZENworks Adaptive Agent. The <i>Allow Users to Uninstall Agent</i> option must be selected by the zone administrator in ZENworks Control Center (the <i>Configuration</i> tab > <i>Management Zone Settings</i> > <i>Device Management</i> > <i>ZENworks Agent</i> > <i>General</i>).</p> <hr/> <p>This option is useful if you don't have a connection with the Management Zone when you want to remove ZENworks from the device, or if the device's ZENworks installation is corrupted and needs to be reinstalled.</p> <p>If you select the <i>Local Uninstallation Only (Retain the Device in the Zone)</i> option, then click <i>Next</i>, the Components To Be Retained page is displayed.</p>

Information	Explanation
Operations To Perform	<p>Select an option:</p> <ul style="list-style-type: none"> ♦ Retire the Device from the Zone: Makes all ZENworks operations ineffective on the managed device. However, the ZENworks Adaptive Agent is not uninstalled and the device continues to be registered in the Management Zone. This option is available only for a managed device. ♦ Uninstall the ZENworks Agent and Unregister the Device from the Zone: Uninstalls ZENworks Adaptive Agent from the device and removes the device from the Management Zone. <hr/> <p>NOTE: Ensure that you have the permission to uninstall the ZENworks Adaptive Agent. The <i>Allow Users to Uninstall Agent</i> option must be selected by the zone administrator in ZENworks Control Center (the <i>Configuration</i> tab > <i>Management Zone Settings</i> > <i>Device Management</i> > <i>ZENworks Agent</i> > <i>General</i>).</p> <hr/> <ul style="list-style-type: none"> ♦ Uninstall the ZENworks Server and Unregister the Device from the Zone: Uninstalls the ZENworks Server from the device. It does not remove or unregister the device from the zone. However, the device object is moved to the <code>Delete Servers</code> folder in ZENworks Control Center. <hr/> <p>WARNING: If this device hosts the Management Zone, then the zone is also removed.</p> <hr/> <ul style="list-style-type: none"> ♦ Transfer the Device to Another Zone: Unregisters the managed device from the existing zone and reregisters it to the new Management Zone. This option is available only for the managed device. <p>If you select the <i>Transfer the Device to Another Zone</i> option, then the New Zone Information page is displayed.</p> <ul style="list-style-type: none"> ♦ Demote the Satellite Server: Demotes the Satellite to a managed device and removes all the roles assigned to the server. This option is available only for the Satellite.
New Zone Information	<p>This page is displayed only if the <i>Transfer the Device to Another Zone</i> option is selected in the Actions page.</p> <p>Configure the following settings:</p> <p>New Primary Server: Specify the IP address of the new Primary server in the following format:</p> <p><code>https:// IP_address or DNS_name_of_the_server:port_number</code></p> <hr/> <p>NOTE: You must specify the port number if you are not using the default port.</p> <hr/> <p>Username: Specify the username. By default, the username is <code>administrator</code>.</p> <p>Password: Specify the password for the ZENworks administrative user specified in the <i>Username</i> field.</p>

Information	Explanation
Components To Be Retained	<p>This page is displayed only if you chose to uninstall the Primary Server, have selected the <i>Local Uninstallation Only (Retain the Device in the Zone)</i> option, or have selected the <i>Demote the Satellite Server</i> option for the Satellite with the Imaging role.</p> <p>Select an option:</p> <ul style="list-style-type: none"> ♦ ZENworks Pre-Agent: Leaves the ZENworks Pre-Agent installed on the device, but removes all other ZENworks 10 Configuration Management software. By default, this is not selected. If the ZENworks Pre-Agent continues to remain on the device, then it responds to the Advertised discovery requests, and also to ZENworks Ping requests if an IP-based discovery is performed on the device. ♦ CASA: Leaves the CASA software installed. By default, this is selected because CASA can be used by other software programs. ♦ ZENworks Imaging Files: Leaves the ZENworks Imaging files on the device. By default, this is selected. <hr/> <p>NOTE: If you have selected the <i>Demote the Satellite Server</i> option and the device has the Imaging role configured, or if the device is a Primary Server, then only the <i>ZENworks Imaging Files</i> option is enabled.</p>
Uninstallation Summary	<p>Review the information and, if necessary, use the <i>Back</i> button to make changes to the information.</p> <hr/> <p>IMPORTANT: If you have selected either the <i>Local Uninstallation Only (Retain the Device in the Zone)</i> or the <i>Uninstall the ZENworks Agent and Unregister the Device</i> from the Zone option, and ZENworks Reporting Server is installed on the selected device, then ZENworks Reporting Server is automatically uninstalled if you click <i>Next</i>.</p>
Status	<p>Displays the status of uninstallation.</p> <p>By default, the <i>Restart Now</i> option is selected.</p> <p>Restarting completes the uninstallation process. Some files are not deleted until the device is restarted.</p>

3 Click *Finish* to complete the uninstallation.

If you selected *Restart Now*, the device is rebooted to complete the installation. If not, the uninstallation is not complete until you reboot.

4 If there are any files in the following locations after the device has rebooted, you can delete them manually:

- ♦ **CASA:** If you select to retain CASA during the uninstallation, and want to remove it later, you can do it from Windows Add/Remove Programs. If the folder exists even after you select to uninstall CASA, you can manually delete it.
- ♦ **ZENworks:** Log files are purposely left here for your review. You can manually delete the ZENworks directory at any time.

5 For Windows, if the ZENworks Control Center icon remains on the desktop, you can manually delete it.

3.2 Uninstalling ZENworks 10 Configuration Management on Linux Primary Server

You can perform the following types of ZENworks Configuration Management uninstallation on Linux:

- [Section 3.2.1, “Uninstalling ZENworks 10 Configuration Management on a Linux Primary Server and Removing the Device from the Zone,” on page 51](#)
- [Section 3.2.2, “Locally Uninstalling ZENworks 10 Configuration Management on a Linux Primary Server,” on page 52](#)

3.2.1 Uninstalling ZENworks 10 Configuration Management on a Linux Primary Server and Removing the Device from the Zone

To uninstall ZENworks 10 Configuration Management from the Linux Primary Server and remove the device from the Management Zone, enter the following command at the server console prompt:

```
mono /opt/novell/zenworks/bin/ZENworksUninstall.exe -x -s http://  
IPaddress_of_the_server:port_number -u username -p password  
[options]
```

Where,

-x, --remove = Uninstalls ZENworks 10 Configuration Management from the device and removes the device from the zone

-s = IP address of the Primary Server and the port number on which the server is running. The IP address and port number must be specified in the following format:
`http://IPaddress_of_the_server:port_number.`

NOTE: If the Primary Server is running on the default ports, 80 or 443, you need not specify the **-s** argument. However, you must specify the argument with the port number if the Primary Server is not running on the default ports.

-u = Management Zone administrator’s username.

-p = Password of the Zone administrator.

The command accepts the following options:

Table 3-1 *Uninstallation Options*

Option	Functionality
-z, --zone	Name of the device's current zone.
-g, --guid	Device's GUID.
-l, --list	An ordered list of packages to uninstall, delimited by semicolons.
-L, --leave-packages	Retains the third-party packages. You must specify at least the first three characters of the package name to be retained. You can also specify more than one package name by separating them with a comma (,).

Option	Functionality
-c, --local-only	Uninstalls ZENworks 10 Configuration Management from the device but does not remove the device from the zone.
-o, --oem	Do not uninstall the ZENworks Adaptive Agent packages.
-i, --delete-images	Deletes the ZENworks Imaging files from the specified device.
-a, --remove-auth	Uninstalls the authentication software (CASA), which is installed by ZENworks 10 Configuration Management or is directly downloaded and installed from the Novell Support Web sites. If you do not specify the -a option, the CASA packages are retained.
-d, --remove-log-dir	Removes the logs directory.
-q, --quiet	Performs a silent uninstallation.
-h, --help	Displays the message and exit.

3.2.2 Locally Uninstalling ZENworks 10 Configuration Management on a Linux Primary Server

To locally uninstall ZENworks 10 Configuration Management from the Linux Primary Server, enter the following command at the server console prompt:

```
mono /opt/novell/zenworks/bin/ZENworksUninstall.exe -c -a
```

The command accepts the following options:

Table 3-2 *Uninstallation Options*

Option	Functionality
-c, --local-only	Uninstalls ZENworks 10 Configuration Management from the device but does not remove the device from the zone.
-a, --remove-auth	Uninstalls the authentication software (CASA), which is installed by ZENworks 10 Configuration Management or is directly downloaded and installed from the Novell Support Web sites. If you do not specify the -a option, the CASA packages are retained.
-h, --help	Displays the message and exit.

This command does not remove the device from the Management zone.

3.3 Task to be Performed After Uninstalling the Primary Server

If you uninstall a Primary Server:

- ♦ The server object is moved into the *Deleted Servers* folder in *ZENworks Control Center > Devices > Servers*. However, the status of the server object in the *Deleted Servers* folder is displayed as *Active*.
- ♦ The server object is still displayed in the *Server Hierarchy* panel of the *Configuration* tab.

Consequently, you must retire the Primary Server by running the following command at the console prompt of the Primary Server after uninstalling the server:

```
zman zsd "/Devices/Servers/Deleted Servers/  
DNS_name_of_the_Primary_Server"
```

For example, if the Primary Server with the DNS name of `Primary_Server_2` has been uninstalled, then enter the following command:

```
zman zsd "/Devices/Servers/Deleted Servers/Primary_Server_2"
```

The command retires the Primary Server and deactivates the server from the zone. Also, it removes the server object from the *Server Hierarchy* panel and changes the server status to *Retired* in the *Deleted Servers* folder in *ZENworks Control Center*. For more information about the `zman` commands, see “[zman\(1\)](#)” in the *ZENworks 10 Configuration Management Command Line Utilities Reference*.

NOTE: You cannot retire a Primary Server if:

- ♦ It is the last server left in the Management Zone
 - ♦ It hosts the zone’s database
 - ♦ It has Satellite Server children
-

Installation Executable Arguments

A

To install Novell® ZENworks® 10 Configuration Management, the following arguments can be used with the `setup.exe` and `setup.sh` executable files that are located at the root of the installation DVD. You can run these files from a command line.

You should use the `sh` command with `setup.sh` in order to prevent rights issues.

Table A-1 *Installation Executable Arguments*

Argument	Long Form	Explanation
-e	--console	(Linux only) Forces a command line installation.
-l	--database-location	Specifies a custom OEM (embedded) database directory.
-c	--create-db	Launches a database administration tool. It cannot be used at the same time as the -o argument.
-o	--sysbase-oem	Authenticates to an OEM database that is not set up by the installation program. This causes the installation program to present you with only the necessary database options for an external database, instead of the usual database options. It cannot be used at the same time as the -c argument.
-s	--silent	If this is not used with the -f argument, it causes the installation that you are performing to create a response file (with a <code>.properties</code> filename extension) that you can edit, rename, and use for an unattended installation to another server. If this is used with the -f argument, an unattended installation on the server is started, using the response file that you specify with the -f argument.
-f [path to file]	--property-file [path to file]	Used with the -s argument, performs an unattended (silent) installation using the response file that you specify. If you do not specify a response file, or if the path or filename is incorrect, the default non-silent GUI or command line installation is used instead.

Some examples:

- ♦ To perform a command line installation on a Linux server:

```
sh unzip_location/Disk1/setup.sh -e
```

- ♦ To specify a database directory:

```
unzip_location\disk1\setup.exe -l d:\databases\sybase
```

- ♦ To create a response file:

```
unzip_location\disk1\setup.exe -s
```

- ♦ To perform an unattended installation:

```
unzip_location\disk1\setup.exe -s -f c:\temp\myinstall_1.properties
```


Documentation Updates

B

This section contains information on documentation content changes that were made in this *Installation Guide* after the initial release of Novell® ZENworks® 10 Configuration Management. The information can help you to keep current on updates to the documentation.

The documentation is provided on the Web in two formats: HTML and PDF. The HTML and PDF documentation are both kept up-to-date with the documentation changes listed in this section.

If you need to know whether a copy of the PDF documentation you are using is the most recent, the PDF document contains its publish date on the front title page.

The documentation was updated on the following dates:

- ♦ [Section B.1, “March 13, 2009,” on page 57](#)
- ♦ [Section B.2, “February 18, 2009: 10.1.3,” on page 57](#)
- ♦ [Section B.3, “November 20, 2008,” on page 58](#)
- ♦ [Section B.4, “October 22, 2008,” on page 58](#)
- ♦ [Section B.5, “September 1, 2008,” on page 58](#)
- ♦ [Section B.6, “August 6, 2008: SP1 \(10.1\),” on page 58](#)
- ♦ [Section B.7, “May 16, 2008: 10.0.3,” on page 59](#)

B.1 March 13, 2009

Updates were made to the following sections:

Location	Change
Section 1.1, “Primary Server Requirements,” on page 9	Updated this section with the recommended version of the Microsoft® .NET software.
Section 1.5, “Managed Device Requirements,” on page 17	Updated this section with the recommended version of the Microsoft® .NET software.
Section 2.6, “Post-Installation Tasks,” on page 46	Newly added this section.

B.2 February 18, 2009: 10.1.3

Updates were made to the following section:

Location	Change
Section 1.6, “Inventoried-Only Device Requirements,” on page 20	Updated this section to add information on the supported Windows platforms.

B.3 November 20, 2008

Updates were made to the following section. The changes are explained below.

Location	Change
Section 1.3, "Database Requirements," on page 16	Rectified the supported version of Sybase SQL Anywhere.

B.4 October 22, 2008

Updates were made to the following section. The changes are explained below.

Location	Change
Section 1.9, "Tested Primary Server and Managed Device Platforms," on page 21	Newly added this section.

B.5 September 1, 2008

Updates were made to the following sections. The changes are explained below.

Location	Change
Section 1.1, "Primary Server Requirements," on page 9	Added support to the XEN Virtual machine environment.
Section 1.5, "Managed Device Requirements," on page 17	Added support to the XEN Virtual machine environment. Added paragraphs concerning Satellite Servers, which are managed devices that are not Primary Servers.

B.6 August 6, 2008: SP1 (10.1)

Updates were made to the following sections. The changes are explained below.

- ♦ Section B.6.1, "Minimum Requirements," on page 58
- ♦ Section B.6.2, "Installing ZENworks 10 Configuration Management," on page 59
- ♦ Section B.6.3, "Uninstalling ZENworks 10 Configuration Management," on page 59

B.6.1 Minimum Requirements

The following changes were made in this section:

Location	Change
Section 1.1, "Primary Server Requirements," on page 9	<ol style="list-style-type: none"> Added support for the following platforms: <ul style="list-style-type: none"> Windows Server 2008 Ent (x86, x86-64) Windows Server 2008 Std (x86, x86-64) Added TCP port 1521 used by the Oracle database server.
Section 1.3, "Database Requirements," on page 16	Added support for the Oracle 10g database.
Section 1.5, "Managed Device Requirements," on page 17	<ol style="list-style-type: none"> Added support for the following platforms: <ul style="list-style-type: none"> Windows Server 2008 Ent (x86, x86-64) Windows Server 2008 Std (x86, x86-64) Windows Embedded XP SP3 Added the list of ports that are opened when the device is promoted as Satellite Server.

B.6.2 Installing ZENworks 10 Configuration Management

Chapter 2, "Installing ZENworks 10 Configuration Management," on page 23 has been updated with information related to ZENworks 10 Configuration Management (10.1).

B.6.3 Uninstalling ZENworks 10 Configuration Management

Chapter 3, "Uninstalling ZENworks 10 Configuration Management," on page 47 has been updated with information related to ZENworks 10 Configuration Management (10.1).

B.7 May 16, 2008: 10.0.3

Updates were made to the following sections:

Location	Change
Section 1.1, "Primary Server Requirements," on page 9	<ol style="list-style-type: none"> Increased the RAM to 2 GB minimum; 4 GB recommended. Added the following TCP ports: <ul style="list-style-type: none"> Port 2645 is used for CASA authentication. Port 8005 and 8009 is used by Tomcat.
Section 1.5, "Managed Device Requirements," on page 17	<p>Added support for the following platforms:</p> <ul style="list-style-type: none"> Windows Vista SP1 x86, x86-64 and Windows XP SP3 Windows XP Professional SP3 x86

