Novell Small Business Suite

6.6 www.novell.com

June 27, 2005

QUICK START

Installing a New Server

This Quick Start provides basic information for setting up a new server to run products in the Novell Small Business Suite, including OES NetWare®, GroupWise® 6.5 with SP4, BorderManager® 3.8, and ZENworks® 6.5 Desktop Management.

- "Installing a New Server" on page 1
- "Installing Additional Products in the Suite" on page 7
- "Accessing Administration Utilities" on page 10
- "Small Business Server Configuration Worksheet" on page 12

PLAN DEPLOYMENT

This new server can be the first server in your network that you set up, or you can install it into an existing network. If you are upgrading the operating system or any of the other products in the suite from a previous version of Novell Small Business Suite, see "Upgrading the Server and Other Products in the Suite" in the Novell Small Business Suite 6.6 Overview and Installation Guide.

For complete instructions and known and interoperability issues, see the *Novell Small Business*Suite 6.6 Overview and Installation Guide and "Novell Small Business Suite 6.6 Readme" "Novell Small Business Suite 6.6 Readme".

You can set up a basic server for file, print, and collaboration fairly quickly on basic hardware. To set up a server that includes the full functionality provided by the suite requires additional planning and setup. For details, see "Planning Your Deployment" in the Novell Small Business Suite 6.6 Overview and Installation Guide.



MEET RECOMMEND SYSTEM REQUIREMENTS

Meet the system requirements for the products you want to deploy. To install all products included in the suite on a single server, make sure the server meets the following recommended requirements.

тои	TE: DirXML [®] Starter Pack and Novell [®] Cluster Services™ require more than one server.
	A server-class PC with two-way Pentium* III, Pentium III Xeon, Pentium4, or Intel* Xeon 700 MHz or higher processors.
	One or more network boards.
	A bootable CD drive that supports the El Torito specification.
	A USB or PS/2* mouse.
	A Super VGA or higher resolution display adapter.
	1 GB of RAM. If installing BorderManager Proxy Services, an additional 1 GB of RAM is recommended.
	A boot partition with 1 GB of available space.
	Disk Space:
	• 8 GB of available, unpartitioned disk space outside the DOS partition for volume sys:
	 2 GB for GroupWise (1 GB for the GroupWise file copy directories on volume sys: and 1 GB data volume or an additional 1 GB on volume sys: for user's Post Office directories)
	 2 GB minimum dedicated CACHE volume for BorderManager Proxy Services. This volume must be a Traditional volume.
MEE	T SOFTWARE AND OTHER REQUIREMENTS
	ending on the network configuration, you might need the following:
	Novell Small Business Suite Operating System and Products CDs and License diskette.
	Novell Client Software CD.
	Novell GroupWise Admin, Client, and Messenger CDs (required only when copying GroupWise files).
	Supervisor right at the [Root] of the eDirectory tree. User Admin or equivalent has this right.
	If connecting to the Internet: Contract services from an Internet Service Provider (ISP) and get the desired setup and IP information required. If the ISP requires PPPoE handshaking,

you need to set up a third-party gateway router.

For details, see the "Small Business Server Configuration Worksheet" on page 12 and "Setting Up Internet Connectivity" in the Novell Small Business Suite 6.6 Overview and Installation Guide.

the drivers are not included in the installation: Know the network board and storage	įе
evice properties, such as the interrupt and port address.	

☐ If the computer does not boot from CD: DOS and CD drivers

PREPARE THE NETWORK FOR THE SERVER

If installing into an existing network, prepare the network for the new server by running Novell Deployment Manager.

- 1 On a Windows* NT*/2000 or Windows XP Professional Edition workstation that has the latest Novell client installed on it, log in to your existing tree as a user with the Supervisor right to the tree.
- 2 Insert the *Novell Small Business Suite Operating System* CD and run Novell Deployment Manager (nwdeploy.exe) located at the root of the CD.
- 3 Complete all the relevant tasks in the Network Preparation section.

INSTALL SERVER SOFTWARE

- 1 Install computer and networking hardware.
- 2 Insert the Novell Small Business Suite Operating System CD into the computer and boot the computer.
- 3 Select the operating system settings and configuration options.
- 4 Select the installation type: Default or Manual.
 - Default: Automatically detects drivers and installs the NetWare 6.5 server with default settings. The settings include the following: 8 GB volume sys: with remaining disk space used for a Data volume, LAN and disk drivers auto-discovered and loaded, Video mode: SVGA Plug N Play, Mouse: Auto-discovered and loaded.
 - Manual: Lets you choose specific configuration options for your networking environment and lets you change any of the default settings.
- **5** Choose the server type you want to set up. The following pattern options are recommended.

TIP: To see the individual components selected in a pattern, select it and click Next. Then click Back and choose the Customize option. You will see all the products individually with the pattern defaults checked. However, if you want to install a pattern made sure you select the pattern option before proceding.

Novell Small Business Collaboration Server with Virtual Office (recommend): Installs
all components for setting up and managing a Novell Small Business server plus
components for GroupWise and Virtual Office.

This pattern allows both client-based and Web-based access to file, print, directory, and e-mail services. Local users can access collaboration services through GroupWise and Novell clients; remote users can access those same services through a Virtual Office Web interface.

After the server installation is complete, you can access the Small Business Setup Role in iManager to help you simplify your configuration of Internet Connectivity, GroupWise and Messenger, DNS/DHCP, and iPrint.

Small Business Server components include Novell iManager, Common Mailbox Forwarding, iPrint, Novell DNS/DHCP Services, Apache 2 Web Server and Tomcat 4 Servlet Container, WAN Connectivity, and Small Business specific and basic NetWare files.

The GroupWise and Messenger File Copy for a New GroupWise System component copies files necessary to install and configure a new GroupWise system and GroupWise Messenger.

The Virtual Office components include iPrint, Novell eGuide, Novell iFolder® Storage Services, Novell NetStorage, Novell Virtual Office Framework, QuickFinder Server, and Refresh Native File Access Login Methods (NFAP).

 Novell Small Business Collaboration Server: Installs all components for setting up and managing a Novell Small Business server with GroupWise.

This pattern allows GroupWise and Novell client-based access to files, printing, and e-mail (both local and Internet).

After the server installation is complete, you can access the Small Business Setup Role in iManager to help you simplify your configuration of Internet Connectivity, GroupWise and Messenger, DNS/DHCP, and iPrint.

Small Business Server components include Novell iManager, Common Mailbox Forwarding, iPrint, Novell DNS/DHCP Services, Apache 2 Web Server and Tomcat 4 Servlet Container, WAN Connectivity, and Small Business specific and basic NetWare files.

The GroupWise and Messenger File Copy for a New GroupWise System component copies files necessary to install and configure a new GroupWise system and GroupWise Messenger.

 Customized NetWare Server: Lets you customize the server to fit your needs. We recommend selecting the following components:

Apache2 Web Server and Tomcat 4 Servlet Container
GroupWise and Messenger File Copy for a New GroupWise System
iPrint
Novell iManager
QuickFinder Server
Novell DNS/DHCP Print Services
Novell eGuide
Novell iFolder Storage Services

Novell NetStorage Novell Virtual Office Framework Refresh Native File Access Login Methods TCP/IP Files for Enabling Novell BorderManager 3.8 VPN WAN Connectivity

- 6 Insert additional CDs when prompted and follow the onscreen prompts.
- 7 Complete the installation by rebooting and starting the server.

IMPORTANT: Make sure you reboot the server before starting the Small Business Setup configurations in iManager.

SET UP A WORKSTATION FOR ADMINISTRATION

1 Install the Novell Client™ software.

For setup and configuration information, see the Novell Client online documentation (http://www.novell.com/documentation/lg/noclienu/index.html).

2 Access iManager at the workstation by opening a Web browser and entering either the IP address or DNS name of the server, followed by /nps/iManager.html. For example:

```
http://172.16.135.150/nps/iManager.html
or
http://myserver.mycompany.com/nps/iManager.html
```

3 Set up access to ConsoleOne® from a workstation by mapping a drive letter to the Small Business server and run consoleone.exe stored in the volume:\public\mgmt\consoleone\1.2\bin directory.

COMPLETE THE SERVER SETUP

Use the tasks in the Small Business Setup role in iManager to quickly configure the following:

- Internet connectivity via broadband methods, phone dial-up, and ISDN
- Basic DNS
- DHCP
- A basic setup of e-mail, instant messaging, collaboration, and common mailbox forwarding (POP Forwarding Agent)
- Printing, including local printers

Using these tasks lets you get your network set up quickly and gives you the flexibility to perform more advanced configurations with the additional utilities provided in NetWare and GroupWise. For details, see the online help for each task and the applicable section of "Installing Novell Small Business Suite Components" in the Novell Small Business Suite 6.6 Overview and Installation Guide.

If you installed the Novell Small Business Collaboration Server with Virtual Office, access the Virtual Office Web page from a browser to complete the final steps for setting up Virtual Office. To access it, open a browser and enter http://server_ip_address or DNS_name in the Address field.

SETTING UP ADDITIONAL WORKSTATIONS

Workstations can connect to the server using Novell Client software, Novell Native File Access Protocols, or remotely from the Internet using Virtual Private Networking.

For more information, see the Novell Client online documentation (http://www.novell.com/documentation/noclienu/index.html).

For more information about the Novell Native File Access Protocols, see the *OES Native File Access Protocols Guide* (http://www.novell.com/documentation/oes/native/data/h9izvdye.html#bktitle).

For more information about the Virtual Private Networking, see "Virtual Private Networks Client" in the *Novell BorderManager 3.8 Installation and Administration Guide* (http://www.novell.com/documentation/nbm38/inst_admin/data/front.html).

Installing Additional Products in the Suite

INSTALLING GROUPWISE

We have provided an integrated method and the traditional method for installing GroupWise to the server. For the integrated method, select one of the Novell Small Business Collaboration Server options or select the required components in the Customized NetWare Server option.

After the server installation is complete, access Novell iManager. Click Novell Small Business Setup Role > Setup GroupWise and Messenger, then follow the on screen prompts.

For complete instructions, see the *Novell Small Business Suite 6.6 Overview and Installation Guide*.

The integrated method can only be used for new installations. If you need to update GroupWise from a previous installation, you must use the traditional method and instructions provided in the Update section of the *GroupWise 6.5 Installation Guide* (http://www.novell.com/documentation/gw65/gw65_install/data/a8t9nzp.html).

INSTALLING BORDERMANAGER

Novell BorderManager 3.8 includes a premier firewall, VPN, and proxy caching technologies that safeguard your network and help you build a secure identity management solution. With the powerful directory-integrated features in Novell BorderManager, you can monitor users' Internet activities and control their remote access to corporate resources.

The BorderManager online documentation refers to a Web download to obtain the installation software. The *Novell BorderManager 3.8* CD provided in the suite contains all the software required for an initial installation of BorderManager 3.8.

System requirements and installation instructions are in "Installing BorderManager" in the *Novell Small Business Suite 6.6 Overview and Installation Guide*.

If you need some help understanding BorderManager and some tips and tricks for installation in addition to the Installation Guide, *A Beginner's Guide to BorderManager 3.8*, *Lite Version* is also available in the documents\craig johnson directory of the *Novell BorderManager 3.8* CD.

For complete information about setting up and managing these services, see the BorderManager 3.8 online documentation (http://www.novell.com/documentation/lnbm38/treetitl.html).

INSTALLING ZENWORKS 6.5 DESKTOP MANAGEMENT

ZENworks 6.5 Desktop Management software as shipped in Novell Small Business Suite 6.6 includes five CDs that contains the image for these CDs: Desktop Mangement, Companion CD1, Companion CD2, Personality Migration, and Software Packaging. For descriptions of the contents of these CDs, see "ZENworks CD Organization" in the ZENworks 6.5 Gettting Started Guide (http://www.novell.com/documentation/zenworks65/gettingstarted/data/al14dig,html#al14dig)

For information about installing, configuring, and testing ZENworks 6.5 Desktop Management in a Novell Cluster Services environment, see "Installing in a Novell Cluster Services Environment" in the ZENworks 6.5 Desktop Management Installation Guide (http://www.novell.com/documentation/zenworks65/dminstall/data/bq7do8t.html#bq7do8t).

For comprehensive, conceptual information that you can use as you configure and use ZENworks 6.5 Desktop Management components, see the ZENworks 6.5 Desktop Management Installation Guide (http://www.novell.com/documentation/zenworks65/dminstall/data/bol64uc.html#bol64uc).

For troubleshooting strategies that you can use and error messages that might be displayed for problems that could occur as you use ZENworks 6.5 Desktop Management in your production environment, see the ZENworks 6.5 Desktop Management Troubleshooting Guide (http://www.novell.com/documentation/zenworks65/dmtrouble/data/a20gkue.html).

SETTING UP CLUSTERING

Novell Small Business Suite includes a two-node version of Novell Cluster Services. For complete information about setting up and configuring additional resources to work with clustering, see the OES Novell Cluster Services 1.8 Administration Guide for NetWare (http://www.novell.com/documentation/oes/cluster_admin/data/h4hgu4hs.html).

INSTALLING DIRXML STARTER PACK

The DirXML solution included with Novell Small Business Suite 6.6 provides licensed synchronization of information held in NT Domains, Active Directory, and eDirectory.

Evaluation drivers for several other systems (including PeopleSoft*, GroupWise, and Lotus* Notes are included to allow you to explore data synchronization for your other systems.

Documentation for installing the DirXML Starter Pack software is located in the DirXML StarterPack online documentation (http://www.novell.com/documentation/dirxmlstarterpack/treetitl.html). This documentation set includes the following guides:

- DirXML Starter Pack Installation Guide for NetWare 6.5
- DirXML Starter Pack Lab Guide for Novell Nterprise Linux Services

You can use either guide. The instructions in the *Lab Guide for Novell Nterprise Linux Services* are more recent and contain more generic examples that might help you with your deployment.

Both guides reference procedures for activation; however, the DirXML software included with Novell Small Business Suite 6.6 (on *ZENworks 6.5 Companion CD 2*) contains the credentials for activation and does not require you to perform these steps. You need to perform activation steps only when you purchase additional evaluation drivers.

Accessing Administration Utilities

Novell Small Business Suite includes several administration utilities that let you manage everything in your network from configuring and managing eDirectory to setting up network services and open source software. The following table shows includes a list of some of the most common utilities that you might need to access. For additional details, see "Administration Utilities Overview" in the Novell Small Business Suite 6.6 Overview and Installation Guide.

Utility	Description	How to Access
iManager	Browser-based network management application for managing the server and network services, eDirectory tree and eDirectory objects.	Open a Web browser and enter:
		http:// server_ip_address or DNS_name/nps/iManager.html
Welcome Web	Browser-based application for	Open a Web browser and enter:
Site	accessing information about products distributed with NetWare 6.5 and launching installed applications.	https://server_ip_address or DNS_name:2200
Novell Remote	Browser-based application for	Open a Web browser and enter:
Manager	managing NetWare servers from a workstation or a the server console.	https://server_ip_address or DNS_name:8009
ConsoleOne	Java*-based application for managing the network and its resources, eDirectory tree and eDirectory objects.	At a workstation, map a drive letter to the server and run consoleone.exe from sys:\public\mgmt\consoleone\1.2\bin directory.
NetWare Administrator	Windows-based application for managing the network and its resources, eDirectory tree, and eDirectory objects. This utility is required only when managing Proxy Caching services in BorderManager 3.8	At a Windows workstation, map a drive to sys:public and run sys\public\win32\ nwadmn32.exe
RConsoleJ	Java-based application for accessing the server remotely and running utilities from a workstation or the server console.	At a workstation, map a drive letter to the server and run rconj.exe from sys:\public\mgmt\consoleone\1.2 directory.

Utility	Description	How to Access
OpenSSH client such a PuTTy, MineTerm, Absolute Telnet, Red- Hat* Linux	OpenSource shell used to access the server and run ssh commands to access files, or access the server and run commands remotely. Can run from the server console to access other servers or run from a workstation to access other servers or workstations.	Product must be installed on the server, then load sshd.nlm on the server. Download client application. Change the Window Row setting from the default to greater than 25. Connect to the server based on the client downloaded.
Apache Manager	Browser-based application used for configuring the Apache Web server. It provides a graphical user interface to most of the Apache directives, making it easier to quickly (and more accurately) configure and manage Apache's behavior and performance. Apache Manager also lets you manage multiple installations of Apache in your network, regardless of what other platforms they are running on.	 Open a Web browser and enter: http://server_ip_address or DNS_name:2200 When prompted, enter the username and password for user Admin and Login. In the left frame of the Welcome Web site home page, click the +icon next to Open Source. Click Apache 2.0. Under Apache 2.0 Links, click either Administer Single Apache Server or Administer Multiple Apache Servers, as applicable.
Internetworking Configuration	Server console application used to manage network and server TCP/IP communications, manage IP addresses, and bind boards.	Load inetcfg.nlm at the System Console prompt, access the server console, then toggle to the screen.
NSS Management Utility	Server console application used to manage the logical file system.	Load nssmu.nlm at the System Console prompt, access the server console, then toggle to the screen
NetWare Configuration	Server console application used to install or upgrade products to the server.	Load nwconfig.nlm at the System Console prompt, access the server console, toggle to the screen.

Small Business Server Configuration Worksheet

Print the PDF version of this worksheet and use it to gather information that you might need as you perform each of these setups.

SERVER INSTALLATION

Network Board 1 Properties (Needed only if drivers are not included in the installation)	
Name:	
Interrupt:	
Port address:	
Network Board 2 Properties (Installing a second board is optional)	
Name:	
Interrupt:	
Port address:	
Server name:	
IP Protocol Information	
IP address:	
Subnet mask:	
Router (gateway):	
DNS Host name:	
Domain name:	
Name server address 1:	
Name server address 2:	
Name server address 3:	
Tree name: (If creating a new tree)	
Context for Server object:	
Name for Admin user (default Admin):	

Context for user Admin: (defaulted to the same context for the server)	
Password for Admin user:	
LDAP Ports (can only change defaults using Manual installation)	
Clear Text Port (default 389):	
SSL/TLS Port (default 636):	
DNS/DHCP (will use defaults from previous entries)	
DNS/DHCP Locator Object NDS Context:	
DNS/DHCP Group Object NDS Context:	
RootSrvr Zone NDS Context:	
iFolder Server Options (required only when installing iFolder, will use defaults from previous entries)	
LDAP host name or IP address:	
LDAP Port 389 Clear Text, 636 (SSL):	
LDAP context for admins:	
iFolder server host name or IP address:	
iFolder Admin names (admin):	
User database path (sys: is default; a volume other than sys: is recommended):	
MySQL Database Options (required only when installing MySQL)	
Data directory: (default sys:/mysql/data)	
Root password:	
exteNd Application Server Details (required only when installing exteNd)	
Admin name:	
Admin password:	
HTTP Port (default 83):	
	<u> </u>

exteNd Application Server Database Options (required only when installing exteNd)	
MySQL Database Host (default, localhost):	
Admin password:	
Port (default 3306):	
DB Username (default, appserver):	
DB Password:	
SilverMaster Name (default SilverMaster50):	
Novell Nsure Audit Component Selections (required only when installing Nsure)	
Secure logging server Address (default, localhost):	
Novell Nsure Audit Component Database Options (required only when installing Nsure)	
MySQL Database Host (default, localhost):	
Admin password:	
Port (default 3306):	
DB Username (default, audituser):	
DB Password (default, audituser):	
Database name (default, naudit):	
Table name (default, log)	
NetStorage Install (required only when installing NetStorage)	
DNS name or IP address of Primary eDirectory Server and Context:	
DNS name or IP address of Alternate eDirectory Server and Context (optional):	
DNS name or IP address of Alternate eDirectory Server and Context (optional):	
DNS name or IP address of iFolder server (optional):	
iFolder port (default 80):	
	I .

DIAL-UP INTERNET CONNECTIVITY

Modem type (Hayes will fit a large number of compatible modems):	
Telephone number:	
Username:	
Password:	
IP address/mask (if static):	
Default domain name:	
Name server address 1:	
Name server address 2 (optional):	
Name server address 3 (optional):	
Device type:	
Protocol (if applicable):	
ISDN and SPID phone number 1 (if applicable):	
NOTE: A SPID (Service Profile Identifier) is a number assigned by a phone company to a terminal on an ISDN B-Channel.	
ISDN and SPID phone number 2 (if applicable):	
Telephone number:	
Username:	
Password:	
IP address/mask (if static):	
Default domain name:	
Name server address 1:	
Name server address 2 (optional):	
Name server address 3 (optional):	

DSL/CABLE/OTHER INTERNET CONNECTIVITY

A modem/router that converts to Ethernet:	
Ethernet interface in the server connected to the modem/router to the Internet:	
Know which card/board interface:	
IP address must be static, but possibly non-public:	
IP address/mask:	
Default gateway:	
Default domain name:	
Name server address 1:	
Name server address 2 (optional):	
Name server address 3 (optional):	
DNS	
TIP: If you run connectivity first, almost everything else is defaulted.	
Internet domain name:	
Other internal names of your server:	
Name server address 1:	
Name server address 2 (optional):	
Name server address 3 (optional):	

DHCP

TIP: If you run DNS first, almost everything else is defaulted.	
Ethernet interface (subnet) that corresponds to the workstations:	
Subnet address, mask:	
Range of address you want workstation to use:	
Default gateway:	
Other internal names of your server:	
Name server address 1:	
Name server address 2 (optional):	
Name server address 3 (optional):	
eDirectory tree where GroupWise objects will be created (provided by default):	
(provided by default): eDirectory admin username and password for creating and	
editing GroupWise objects:	
Server and volume where GroupWise domain and post office will be created (defaults to volume Data):	
Internet domain name for your system (if you are installing the Internet Agent):	
Printing	
Printer attached to the server parallel port or a network-attached printer:	
Printer's IP address (if network-attached printers):	
Printer model to associate the correct print drivers:	
Trincer model to associate the correct print drivers.	

BORDERMANAGER

Location of license diskettes or path to the license file:	
Public and private interfaces and their IP address bindings:	
Domain Name System (DNS) domain name:	
IP addresses for up to three DNS name servers on the network:	
Domain name for Mail Proxy and whether you want to proxy internal mail server or external mail server or both:	
Server certificates (if secure LDAP is to be used for schema extension):	
Default gateway:	
If installing VPN Services:	
Server certificate to be used for the VPN server:	
Trusted Root Certificate name:	
Trusted Root Object names:	

Technical Support

Technical support for Novell Small Business Suite 6.6 includes five free incidents valid for 60 calendar days. This free support is available to both Novell customers and Novell resellers during normal business hours. The 60-day timer starts from the first support call. Any incidents of the five not used within the 60 days will expire. The incidents are intended to cover general installation and configuration issues for all the products and components included in the suite.

Support beyond the levels indicated above will incur support charges. For information on technical support options with Novell including Premium Service, visit the Novell Support Web site (http://support.novell.com).

When you call for this technical support, you need to provide your product serial number. This number is printed on the *License* diskette; or if downloaded, it is the license filename.

This support applies only to Novell Small Business Suite 6.6 and the Novell Small Business Suite 6.6 Expansion Pack. It does not apply to the Novell Small Business Suite Starter Pack.

Contact Novell Technical Support:

U.S. and Canada: 1-800-858-4000

Latin America

Argentina: 0-800-888-668355 (0-800-888-novell), 800-228-8478, and by e-mail soporte@novell.com

• Belize: 800-321-2356

• Bolivia: 800-321-2296

Brazil: 800-858-4000

Chile: 800-858-4000

Columbia: 800-858-4000

• Costa Rica: 800-858-4000

Ecuador: 800-321-2297

• El Salvador: 800-633-4175

Guatemala: 800-858-4000

Guyana: 800-321-2364

+ Honduras: 800-321-2312

• Mexico: 800-858-4000

Nicaragua: 800-321-2317

• Paraguay: 800-228-2832

• Peru: 800-633-4179

Uruguay: 800-633-4185

All other Spanish-speaking countries 1-800-858-4000 or USA Direct 801-861-4000

APAC:

Novell Premium and Channel partners: use your assigned toll numbers

All others: + 61 2 9925-3133

• Europe:

Austria +49 211 5632 1800

• Belgium +31 10 286 47 41

• Denmark +31 10 286 47 42

• France +31 10 286 47 43

• Germany +49 211 5632 1800

• Italy +31 10 286 47 44

• Netherlands +31 10 286 47 41

Norway +31 10 286 47 42

• Sweden +31 10 286 47 42

• Switzerland +49 211 5632 1800

• Spain +31 10 286 47 45

• U.K. +31 10 286 47 46

• For any country not listed above, call the U.K. number

• Fax +31 10 286 43 33

Copyright © 2004-2005 Novell, Inc. All rights reserved. No part of this publication may be reproduced, photocopied, stored on a retrieval system, or transmitted without the express written consent of the publisher. BorderManager, Consoleone, DirkML, iFolder, GroupWise, NetWare, Novell, and ZENworks are registered trademark of Novell, Inc. in the United States and other countries. eDirectory, Novel Application Launcher, Novell Client, and Novell Cluster Services are registered trademark of Novell, Inc. All third-party trademarks are the property of their respective owners. A trademark symbol ([®], TM, etc.) denotes a Novell trademark; an asterisk (*) denotes a third-party trademark trademark.