Novell NetWare 6

www.novell.com

SUPPORT PACK 1 README



Novell®

Legal Notices

Novell, Inc. makes no representations or warranties with respect to the contents or use of this documentation, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. Further, Novell, Inc. reserves the right to revise this publication and to make changes to its content, at any time, without obligation to notify any person or entity of such revisions or changes.

Further, Novell, Inc. makes no representations or warranties with respect to any software, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. Further, Novell, Inc. reserves the right to make changes to any and all parts of Novell software, at any time, without any obligation to notify any person or entity of such changes.

This product may require export authorization from the U.S. Department of Commerce prior to exporting from the U.S. or Canada.

Copyright © 2002 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.

```
U.S. Patent No. 5,157,663; 5,349,642; 5,455,932; 5,553,139; 5,553,143; 5,572,528; 5,594,863; 5,608,903; 5,633,931; 5,652,859; 5,671,414; 5,677,851; 5,692,129; 5,701,459; 5,717,912; 5,758,069; 5,758,344; 5,781,724; 5,781,724; 5,781,733; 5,784,560; 5,787,439; 5,818,936; 5,828,882; 5,832,274; 5,832,275; 5,832,483; 5,832,487; 5,850,565; 5,859,978; 5,870,561; 5,870,739; 5,873,079; 5,878,415; 5,878,434; 5,884,304; 5,893,116; 5,893,118; 5,903,650; 5,903,720; 5,905,860; 5,910,803; 5,913,025; 5,913,209; 5,915,253; 5,925,108; 5,933,503; 5,933,826; 5,946,002; 5,946,467; 5,950,198; 5,956,718; 5,956,745; 5,964,872; 5,974,474; 5,983,223; 5,983,234; 5,987,471; 5,991,771; 5,991,810; 6,002,398; 6,014,667; 6,015,132; 6,016,499; 6,029,247; 6,047,289; 6,052,724; 6,061,743; 6,065,017; 6,094,672; 6,098,090; 6,105,062; 6,105,132; 6,115,039; 6,119,122; 6,144,959; 6,151,688; 6,157,925; 6,167,393; 6,173,289; 6,192,365; 6,216,123; 6,219,652; 6,229,809. Patents Pending.
```

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

www.novell.com

NetWare 6 Support Pack 1 Readme February 2002 103-000171-001

Online Documentation: To access the online documentation for this and other Novell products, and to get updates, see www.novell.com/documentation.

Novell Trademarks

AppNotes is a registered trademark of Novell, Inc. in the United States and other countries.

ConsoleOne is a registered trademark of Novell, Inc. in the United States and other countries.

eDirectory is a trademark of Novell, Inc.

GroupWise is a registered trademark of Novell, Inc. in the United States and other countries.

Internetwork Packet Exchange and IPX are trademarks of Novell, Inc.

NetWare is a registered trademark of Novell, Inc. in the United States and other countries.

NetWare Core Protocol and NCP are trademarks of Novell, Inc.

NetWare Loadable Module and NLM are trademarks of Novell, Inc.

Novell is a registered trademark of Novell, Inc. in the United States and other countries.

Novell Client is a trademark of Novell, Inc.

Novell Cluster Services is a trademark of Novell, Inc.

Novell Directory Services and NDS are registered trademarks of Novell, Inc. in the United States and other countries.

Novell iFolder is a trademark of Novell, Inc.

Storage Management Services and SMS are trademarks of Novell, Inc.

ZENworks is a registered trademark of Novell, Inc.in the United States and other countries.

Third-Party Trademarks

All third-party trademarks are the property of their respective owners.

Contents

	NetWare 6 Support Pack 1 Readme	7
1	Overview	9
2	Summary of Changes	11
3	Support Pack Installation	19
4	ConsoleOne 1.3	21
5	DNS/DHCP	23
6	iPrint/NDPS	25
7	NetWare Enterprise Web Server	27
8	NetWare FTP Server	29
9	NetWare Migration Wizard 6	31
10	NetWare Remote Manager	33
11	Novell Advanced Audit Service	35
12	Novell Client for Windows	39
13	Novell Cluster Services	41
14	Novell eDirectory for NetWare	45
15	Novell GroupWise	47
16	Novell iFolder	49
17	Novell iManager 1.0 and iMonitor 1.5 for Novell eDirectory 8.6	51
18	Novell Licensing	53
19	Novell Modular Authentication Service (NMAS)	55
20	Novell Native File Access for Macintosh (AFP)	57
21	Novell Native File Access for UNIX	61
22	Novell Native File Access for Windows (CIFS)	63
23	Novell NetDevice NAS	65

24	Novell NetStorage	67
25	Novell Storage Services	71
26	Novell TCP/IP	73
27	Scripting Products	75
28	Storage Management Services (SMS)	77
29	Time Management	79

NetWare 6 Support Pack 1 Readme

This document describes new features and known issues for NetWare[®] 6 Support Pack 1. It supplements the Readme provided with the initial release of NetWare 6 and the NetWare 6 documentation.

NOTE: For information about additional issues discovered after the Support Pack release, see the NetWare 6 Support Pack 1 Readme Addendum (http://support.novell.com/cgi-bin/search/searchtid.cgi?/10067742.htm) on the Novell Support Knowledgebase Web site.

Documentation Conventions

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

Also, a trademark symbol ($^{\mathbb{R}}$, $^{\text{TM}}$, etc.) denotes a Novell $^{\mathbb{R}}$ trademark. An asterisk (*) denotes a third-party trademark.

Overview

Welcome to NetWare[®] 6 Support Pack 1. This Support Pack provides a number of enhancements and fixes to the initial release of NetWare 6.

The Support Pack software is available for download from the Novell Support Web site at the following links:

- Operating System software (http://support.novell.com/cgi-bin/search/searchtid.cgi?/10067742.htm).
- ◆ Client software (http://download.novell.com/sdMain.jsp), including the latest Novell[®] Client[™] for Windows*, ConsoleOne[®] snap-ins, NMAS client, and NICI client. Scroll to the section titled NetWare 6 Support Pack Client Updates.

Instructions for installing the Support Pack are included with the download in the following files:

- NW6SP1.TXT: Main installation instructions
- NWOVLY.TXT: Instructions for creating an overlay installation
- ZFSSP.PDF: Instructions for using ZENworks[®] for Servers to distribute the Support Pack

A summary of enhancements for the various Support Pack components is available in Chapter 2, "Summary of Changes," on page 11.

A description of known issues for various Support Pack 1 components is located in the individual component chapters of this book.

HINT: For information about additional issues discovered after the Support Pack release, see the NetWare 6 Support Pack 1 Readme Addendum (http://support.novell.com/cgi-bin/search/searchtid.cgi?/10067742.htm) on the Novell Support Knowledgebase Web site.

A description of known issues for the initial release of NetWare 6 is located in the NetWare 6 Readme.

2 Summary of Changes

This chapter provides a description of new features or enhancements to components in NetWare® 6 Support Pack 1.

DNS/DHCP

The Novell® iManager browser-based DNS/DHCP management utility includes the following new features:

- Search feature for resource records
- Multiselect deletion of objects
- Pooled (Included) MAC address support
- Automatic deletion of an A-type resource record when the corresponding PTR-type resource record is deleted (and vice versa)
- Automatic update of the DHCP Server reference while importing the **DHCP** configuration

Documentation

- The online help has been updated in several modules to reflect software changes.
- Several manuals in the online documentation set have been updated to reflect software changes.

NOTE: No changes have been made to the printed NetWare 6 Overview and Installation Guide or the NetWare 6 Documentation CD.

International Support

 This release includes improved support for extended single-byte and double-byte characters for filenames, folder names, and eDirectory™ objects.

iPrint/NDPS

- Novell iManager has links directly to Netware Remote Manager for printers and the print services manager.
- You can now edit the gateway load strings from Novell iManager.
- In Novell iManager, IPP is automatically enabled when you create a new printer.
- In Novell iManager, a tab for Windows XP drivers has been added to the Client Support page.
- You can now add print drivers for all platforms in Novell iManager.
- NetWare Remote Manager can now create reports about your print system.
- You can start and shut down printer agents from NetWare Remote Manager.
- Novell iPrint Map Designer has been enhanced to include the use of userdefined icons, font changes, and listing printers by container.
- The iPrint Client has been updated. Users are automatically prompted to install the new client.
- TTS is automatically enabled on NSS volumes where the Print Services Manager is located.
- The duplicate driver ID issue has been fixed.

NetWare FTP Server

- You can now log in from the FTP Client by giving the Fully Distinguished Name in the formats .cn=username.ou=ou1... or .username.ou1....
- The STRU R option has been implemented.
- IGNORE settings no longer conflict with home server settings.
- When administrating FTP Server from Web Manager, you can view the log files in non-English languages.

- Logging in from the FTP client by specifying the country and locality objects is now functional.
 - For example, cn= admin .o= novell .l= utah .c= usa
- The ABOR command is now functional.

NetWare Remote Manager

Several features have been added to NetWare Remote Manager that
increase the functionality of existing server diagnostics and management
features. For more information, see "New Features in NetWare 6, Support
Pack 1" in "Introducing NetWare Remote Manager" in the NetWare
Remote Manager Administration Guide.

NetWare Server Communication

- You can now use an NSSWITCH.CONF file to control how NetWare
 Loadable Module™ programs communicate with the network to resolve
 names. For more information, see "Managing Name Services Using
 NSSWITCH.CONF File" in the Managing chapter of the Server
 Communications Administration Guide.
- When troubleshooting DNS problems, you can now use NSLOOKUP.NLM to diagnose DNS network configuration problems.
 For more information, see "NSLOOKUP" in *Utilities Reference*.

NetWare WebAccess

Handheld PDA support has been added.

NetWare Web Search

• A search site is now referred to as a virtual search server. In previous versions of NetWare Web Search Server, the term search site was defined as a collection of one or more indexes and related configuration files. To avoid confusion with the term Web site, the term was changed wherever it appeared in the documentation and in the variables and parameters.

New variables and parameters that parallel the term *virtual search server* have been added.

Although the new variables and parameters function the same as those in previous releases and those variables and parameters can still be used, we recommend that you start using the newer variables and parameters in order to avoid confusion.

• The term *collection* has been changed to *index*.

- Web Search now returns information from <TITLE>, <AUTHOR>, and
 DESCRIPTION> tags found within XML documents.
- Web Search now includes improved support for PDF version 1.4.

Novell Advanced Audit Service (NAAS)

Four new events have been added for eDirectory Auditing:

- DSE CHANGE ACL is generated when an object's Trustee information is changed
- DSE ENABLE LOGIN is generated when a user account is enabled
- DSE DISABLE LOGIN is generated when a user account is disabled
- DSE DETECT INTRUDER is generated when a user account is disabled because of intruder detection

Novell Cluster Services

- Novell Cluster Services[™] now has improved integration with the NSS administration tools. This enables you to more easily and efficiently manage your shared storage.
- Cluster volumes and pools can now be automatically cluster enabled at the time they are created. This new feature can be implemented using additional functionality that is now in the NSS ConsoleOne[®] snap-in. The snap-in also provides support for automatically adding CIFS, AFP*, and NCPTM advertising commands to cluster volume resource scripts.
- Cluster-enabled volume resource scripts now update automatically when renaming or deleting pools or volumes.
- The ADMIN_SERVER volume directory object is no longer necessary to manage shared storage.
- The Cluster Volume Broker now includes a refresh feature and the ability to manage cluster volumes by right-clicking virtual servers to get the NSS Media tab.
- You can now create DFS junctions on cluster volumes. Also, better integration of clustering with DFS and CIFS is possible by including virtual server setup information in NDS[®].
- The eight-partition-per-device limit has been removed for the device containing the SBD partition.
- The Trustbar module can now back up trustees at the root of a volume.

Novell eDirectory

• Novell eDirectory is now version 8.6.2.

Novell iFolder

- iFolderTM applet additions:
 - An Explorer-like double-pane view of files/folders on server
 - The ability to create a new user account
 - The ability to handle large directories
- Improved proxy support in the iFolder client and applet.

Novell iManager

- Multiple select with mouse (Shift+click).
- Redesigned role-based administration pages.

Novell JVM for NetWare

- Novell JVM for NetWare is now version 1.3.1.
- You can now use the File Browser utility to set NetWare file attributes.
- This release is upgraded to version 6 of the accelerated graphics drivers and supports newer video graphics adapters.

Novell Licensing Service

- In Novell iManager you can now view license certificate and policy information.
- The NetWare Usage information in NetWare Remote Manager has been updated with an Advanced option.
- Basic licensing information is now provided through the VERSION command at the server console.

Novell Modular Authentication Service (NMAS)

• NMAS is now version 2.02.

Novell Native File Access for Macintosh (AFP)

• Improved performance.

Novell Native File Access for UNIX

- Performing a large file copy on a traditional volume no longer aborts when the Cache Aging Interval is set to 0.
- The Root access parameter in export options is now functional.
 - In order to give Modify and Root access to all clients, you need to explicitly add a trustee, enter an asterisk (*) in the Name field, and allow R/W or Root access using ConsoleOne.
- The objects domain U and domain G are now created only if the passwd and group map are selected during migration.
- NIS modules now refer to the Members attribute of the group. Using the SCHINST utility with the -n option moves the group's Group Membership list to the Members attribute. Also, for every user moved, it updates the user's Group Membership attribute and gives rights equivalent to that of the group.
- Makenis now adds users to the Members attribute, gives users the rights equivalent to that of the group, and updates its Group Membership attribute
- The command line option -i has been added to the NISINST utility to specify the IP address to be attached to the NISServ object. This option is useful in a cluster environment and for servers with multiple NIC cards.

Novell Native File Access for Windows (CIFS)

- CIFS now supports Master Browser.
- You can now access your DFS volumes through CIFS.

Novell NetStorage

- The Novell iFolder passphrase creation window is improved.
- Support is now available for handheld devices running Windows CE.
- The HTML interface supports right-clicking file and directory names.
- Menu items which are not applicable in the current reference are grayedout/disabled
- If a user tries to copy over an existing file or directory, a prompt for permission to do the overwrite now appears.

Novell Storage Services (NSS)

- Background checker: The backgound checker periodically scans the file system and checks the IDs (including trustees) in the file system to make sure they are consistent with the entries in eDirectory. It deletes any old IDs that it finds and also fixes any NDS naming problems.
- CIFS support for DFS: You can now access your DFS volumes through the CIFS protocol.
- Clustering NSS volumes and pools in NSS: In ConsoleOne, you can now cluster enable a volume or pool when you create it.
- DVD Support: You can now mount DVDs as NSS logical volumes.
- Junctions: Junctions are virtual directories or folders that point to the root of a volume, which can be located in a different place on the same server or on a different server. This makes the volume location transparent to the user. At this time, this functionality can be accessed only through the WebDAV or CIFS protocol.
- Multipath support: Multipath support is used to offline and reroute data
 paths in the event of a bad path or if maintenance is needed; this support
 is for multiple adapters on the same device. You manage this feature
 through NetWare Remote Manager.

Scripting

- Perl5.003 for NetWare has been upgraded to Perl5.6 for NetWare. Perl5.6 for NetWare is based on CPAN version Perl 5.6.1 and contains all the standard Perl extensions (Fcntl, IO, SDBM_File etc.). This also contains the Perl2UCS (formerly UCSExt) extension to access UCS components and CGI2perl for Web programming.
- The NSN console command parser is improved.

Storage Management Services (Backup and Restore)

◆ SMS[™] now supports backup of open files on NSS volumes.

TCP/IP

- This release includes configuration support in INETCFG for third-party vendor solutions for load balancing and fault tolerance at the NIC level.
- TCP/IP information that was previously available only through the TCPCON utility can now also be viewed through the Protocol Information and subsequent links in NetWare Remote Manager.

Support Pack Installation

Overwriting Files

During the Support Pack installation, newer files on the server are not overwritten. The installation program checks the version. If two files have the same version, the installation program then checks the date of each file. If the version and date are identical, the file is not overwritten.

Files contained in .ZIP files are copied to the server and not compared to existing files. Files that are in use by a client are not overwritten.

Overwriting Files with an Overlay Upgrade

When you are using the overlay installation to upgrade a server to NetWare[®] 6 and Support Pack 1 simultaneously, you should always overwrite newer files.

New Server Installation to an Existing NetWare 6 Tree Fails during Authentication

If the NCPTM Packet Signature option is set to 3 on a NetWare 6 Support Pack 1 server and that server holds the Master Root Replica, subsequent server installations into that tree might fail during authentication.

To resolve this, do the following:

- **1** On the server that holds the Master Root Replica, change the NCP Packet Signature option on the master server to 0 (zero), and then restart the master server for the change to take effect.
- **2** On the new server being installed, use the Back button in the installation program to return to the beginning and go through the installation screens again.

This should allow the installation to authenticate and complete successfully. After installation, you can reset the NCP Packet Signature option back to its original setting.

Adding a NetWare 6 Server to a Network Running NetWare 5.1 Support Pack 4 with eDirectory 8

To add a NetWare 6 server to a system running NetWare 5.1 Support Pack 4 with eDirectoryTM 8, do the following:

- **1** Download NetWare 6 Support Pack 1.
- **2** Create an overlay CD following the instructions in \TOOLS\NWOVL\NWOVL.TXT of the NetWare 6 Support Pack 1.
- **3** Use NWDeploy on the overlay CD to prepare your tree for the NetWare 6 server.

To Ensure Native File Access for UNIX Functionality, Upgrade Servers to the Latest Support Pack

In order for Native File Access for UNIX* to function correctly, you must upgrade all servers in the tree to the latest Support Pack. All NetWare 5.1 servers must be upgraded to Support Pack 4 and all NetWare 6 servers must be upgraded to Support Pack 1. Native File Access for UNIX services will be functional only after they are upgraded.

Prerequisite for Updating the NMAS Login Method

NetWare 6 Support Pack 1 includes a fix for the change password function in the NMAS login method for AFP (LSMAFP.NLM.LMO). In order to use this updated login method, you must remove the current login method and sequence *before* installing NetWare 6 Support Pack 1 software. For specific instructions, see Updating the NMAS Login Method in Chapter 20, "Novell Native File Access for Macintosh (AFP)," on page 57.

ConsoleOne 1.3

ConsoleOne Will Not Load on NetWare Server after Installing GroupWise 6 Support Pack 1

You might receive the following error when you start ConsoleOne[®] on a NetWare[®] server after installing GroupWise[®] 6 Support Pack 1 and the GroupWise snap-ins on the server:

ERROR: java.lang.NoClassDefFoundError: com/novell/gw/util/
 Resource

To resolve this error, remove the following GroupWise snap-ins directory from the server:

SYS:PUBLIC\MGMT\CONSOLEONE\1.2\SNAPINS\GROUPWISE

After you remove this directory, you will no longer be able to map a drive to the server and run ConsoleOne with the GroupWise snap-in. You will have to install ConsoleOne and the GroupWise snap-ins on a workstation in order to administer GroupWise. You will, however, be able to run ConsoleOne from the server without the GroupWise snap-in.

5 DNS/DHCP

Known Issues

- When you create resource records, do not use wildcard characters to specify the owner's name.
- The Novell® iManager browser-based DNS/DHCP management utility does not support Netscape*.

Special Instructions

- ◆ When you use the Object Selector to search for objects, ensure that the eDirectory[™] search context is correct by checking and, if necessary, changing the value in the Look In: field to reflect the correct context.
- While deleting RRSet and IP Address objects using the multiselect delete feature, limit the number of objects to not more than 5000. Deleting a large number of objects at one time might take a long time to complete.
- While creating a subnet, if you are selecting a default DHCP server, specify the eDirectory context of the subnet either using the Object Selector or by entering its Fully Distinguished Name. Do not use the typename format (for example, o=dnsdhcp.novell).

6 iPrint/NDPS

iPrint Client Error When Installing a Printer

After installing the Support Pack, users might receive the following error when they attempt to install a new iPrint printer.

```
Error message: iPrint Client - The print support
file/driver was not found.
```

Error group: iPrint Client

Error code: 1047

The error is caused by a change in the NDPS® Broker's Resource Manager. When the broker is loaded after the Support Pack installation, the Resource Manager checks the driver database for duplicate instances of identical drivers in NDPS\RESDIR and removes the duplicate drivers. If the printer agent references a driver that was deleted, the printer cannot be installed until a new driver is assigned to the printer agent

To resolve this issue, use Novell® iManager to assign a printer driver to the printer in question.

- **1** In Novell iManager, click iPrint Management > Manage Printer.
- **2** Select the printer you want to change the driver assignment for.
- **3** Click the Drivers tab and then the platform for the driver you need to install.

A driver will appear to be assigned to the printer, but the driver no longer exists in the database. You must reassign a driver anyway.

4 Select a driver other than the one you need from the list, click Apply, select the correct driver for the printer and click Apply or OK.

This will ensure that the correct driver is selected.

iPrint Port Conflicts with Web Servers

If you upgrade from NetWare [®] 5 to NetWare 6 using the overlay method, or if you installed NetWare 6 using the Express Install option and then added the iPrint product, iPrint might not be configured correctly with the Web server on the NetWare 6 server.

In NetWare 5.1, the Novell[®] Enterprise Web Server was installed by default and captures port 443. After upgrading to NetWare 6, port 443 is still assigned to Enterprise Web Server. When iPrint tries to use port 443 for secure printing, the HTTPSTK reports an error on the logger screen.

In NetWare 6, the Express Install option installs the Apache Web server, which captures port 443. When iPrint tries to use port 443 for secure printing, the HTTPSTK reports an error on the logger screen.

Users might see the following error message when they attempt to use a secure iPrint printer:

```
Error message: HTTP 500 - Internal server error. Error group: HTTP Error code: 500
```

To resolve this, reconfigure the ports for your Web server so that iPrint is assigned port 443. For more information on reassigning ports, see your Web server documentation or "How to Install and Configure NetWare Enterprise Web Server or Apache Web Server with Tomcat (http://developer.novell.com/research/appnotes/2001/November/05/a011105.htm)" in *Novell AppNotes*® (November 2001).

Another option is to install iPrint on a NetWare 6 server that does not require a Web server.

Driver Installation Issues

If you are experiencing problems installing printers, ensure that the latest Service Pack for the workstation operating system is installed. Some driver installation problems have been resolved by Microsoft* Service Packs.

Lost Trustee Assignment When Using Migration Wizard

When migrating to NetWare 6 from an earlier version of NetWare using the Migration Wizard, the trustee assignment to SYS:\LOGIN is lost for the Public object. Therefore, NetWare 6 users will not have access to the directory. However, iPrint requires users to have access to this directory.

To resolve this, assign Read and File Scan rights to SYS:\LOGIN for the Public object.

NetWare Enterprise Web Server

Setting Up Additional Document Directories on Remote Volumes

The Help topic for the Additional Document Directories screen shows the incorrect syntax for specifying a path to a remote volume.

You must use the following syntax in the Map to Directory field when setting up an additional document directory that is located on a remote volume in your network:

servername/SYS:SYSTEM

You can also use the following syntax:

servername/SYS:

NetWare FTP Server

Creating a File or Directory in a DOS Namespace on a Server with Double-Byte Characters

If you create a file or directory in a DOS namespace on a server with double-byte characters, the file or directory is created on that server with the name specified. However, the message to the FTP client might contain a different file or directory name. This happens in particular with the 0x8374 character in Shift_JIS, 30D5 in Unicode that gets converted to 0x8354 in Shift_JIS, 30B5 in Unicode.

NetWare Migration Wizard 6

The latest version of NetWare[®] Migration Wizard is not included with NetWare 6 Support Pack 1 but is available from the Novell[®] Download Site (http://download.novell.com).

10 NetWare Remote Manager

Disk Space Usage Limitation

With NetWare ® 6 Support Pack 1, NetWare Remote Manager includes a new feature that lets you view a summary of disk space usage for an entire volume. You access this feature via the Disk Space Usage button on the Volume Information page.

This feature currently has a known limitation. That is, if the volume being scanned contains directories more than 17 levels deep from the root, the scan operation fails and a buffer overrun occurs. When NetWare recovers from this abend by suspending the thread (httpexpThreadx, owned by HTTPSTK.NLM), the Server Health light turns yellow. (Abend Thread count moves from 0 to 1.)

To clear the suspended thread, restart the server.

This limitation will be addressed in the next NetWare 6 Support Pack. In the meantime, an interim fix will be made available.

Novell Advanced Audit Service

Prerequisite for NAAS Utility

In order for the NAAS utility to function properly, you must download Java* Secure Socket Extension (JSSE) 1.0.2 from the JSSE Software Web site (http://java.sun.com/products/jsse/index-102.html) and copy the files Jnet.JAR and JSSE.JAR to your *ConsoleOneHome*\ConsoleOneExt directory.

Excessive Memory Consumption

Using NAAS on a NetWare[®] 6 Support Pack 1 sever running on a Pervasive* database might cause the NetWare server that hosts the NAAS database to abend when there is excessive memory consumption.

To avoid this, do one of the following:

- Move the Pervasive database to a machine with 512 MB or more RAM.
- When the memory buildup occurs, restart the Pervasive database on the server.

View the Loaded Module screen in the Monitor screen of the NetWare server and verify whether there is a steady and excessively high increase in the memory consumption of NWSQLMGR.NLM and NWODBCELNLM.

If the memory is increasing, stop and restart the Pervasive database by using MGRSTOP and then MGRSTART at the server console. This refreshes the memory occupied by the Pervasive NLMTM programs; it does not disrupt auditing. The frequency of this start/stop can be determined by viewing the memory consumption behavior of the NLMs and NAAS configuration.

• Install Pervasive SQL 2000i SP4, the latest version of the Pervasive database. For more details, see the Pervasive Web site (http://www.pervasive.com).

 NAAS also works with the Oracle* database. As an alternate to the Pervasive database, Oracle 8i can be installed and configured on NetWare
 5.1 to be used as a NAAS database.

NAAS Components Fail to Come Up on a Nonreplica eDirectory Server

To resolve this, do one of the following:

• Load the NAAS Agent on the nonreplica server:

adagtset -nr username password

where the *username* is the dot-delimited Fully Distinguished Name for a user with the Supervisor right on the partition with the server.

• Load the NAAS server on the nonreplica server by entering the following at the server console:

adsrvset -nr username password

where *username* is the dot-delimited Fully Distinguished Name for a user with the Supervisor right on the partition with the server.

The NAAS components can then be loaded following the normal procedure.

Deploying NAAS in a Mixed Environment with NetWare 6 and NetWare 6 Support Pack 1 Servers

NOTE: If you are configuring and using NAAS for the first time after installing NetWare 6 with Support Pack 1 and do not have NAAS on any other NetWare 6 server, this issue isn't applicable to your setup.

Auditing eDirectory™ on NetWare 6 servers with Support Pack 1 installed uses a new eDirectory event template with Service Version 2.0, Service Identifier NDS®, and a new eDirectory event policy. The new eDirectory event template and eDirectory event policy are created as part of the default configuration of NAAS on NetWare 6 Support Pack 1.

Auditing eDirectory on NetWare 6 servers without Support Pack 1 continues to use the eDirectory template with Service Version 1.0, Service Identifier NDS, and the eDirectory event policy derived from it.

In order for eDirectory auditing to function on NetWare 6 Support Pack 1 servers, you must reconfigure the existing NAAS framework using the NAAS snap-ins that ship with Support Pack 1.

IMPORTANT: Only the administrator can reconfigure the existing NAAS configurations, using the NAAS default configuration utility.

To successfully audit eDirectory after installing NetWare 6 Support Pack 1, complete one of the following procedures.

If the Auditor has *not* manually created an eDirectory event policy template and an eDirectory event policy in the eDirectory partition (NAAS uses the DS Event policy template and DS Event Policy created by the NAAS default configuration utility on NetWare 6), complete the following steps:

- **1** Manually replicate the contents of the old eDirectory policy contents to the newly created eDirectory event policy.
- **2** Restart NetWare servers with Support Pack 1 after reconfiguring the NAAS framework.
- **3** To refresh templates and policies, restart ConsoleOne[®] after reconfiguring NAAS.

If the Auditor *has* manually created new eDirectory event policy template or eDirectory event policy in the eDirectory partition (by creating new ones in addition to the DS event policy template and DS event policy created by the default configuration utility on NetWare 6), complete the following steps:

- **1** For every eDirectory event template and eDirectory event policy in the partition (other than DSEventPolicyV2 and DSEventPolicyTemplateV2 which are created by default), manually create a new eDirectory event template using the EVENTS.TXT file located in the SYS:\AUDIT\naasEvents folder on all NetWare 6 Support Pack1 servers and a new eDirectory event policy.
- **2** Manually replicate the contents of the old eDirectory policy contents to the newly created directory event policy.
- 3 Replicate associations to new event policies.
 For example, associate the new eDirectory event policies to wherever the old ones were associated.
- **4** After reconfiguring the NAAS framework, restart your NetWare 6 Support Pack 1 servers.
- **5** To refresh templates and policies, restart ConsoleOne after reconfiguring NAAS.

12 Novell Client for Windows

See the Novell® Client™ Readme (http://www.novell.com/documentation/lg/noclienu/index.html) for issues related to the latest release of the Novell Client for Windows 95/98 and Novell Client for Windows NT*/2000/XP.

13 Novell Cluster Services

Installation and Upgrade Issues

If you had a NetWare[®] 5.1 cluster installed and you performed an in-place upgrade on the servers in that cluster to NetWare 6, you must ensure the product entry for Novell Cluster Services[™] is the proper version before installing NetWare 6 Support Pack 1.

To check the Novell Cluster Services product entry version number, do the following:

- **1** At the server console, load NWCONFIG.NLM.
- **2** Select Product Options and then View/Configure/Remove Installed Products.
- **3** Find the NWCS product entry and ensure the version number is 1.6.0 or later.
- **4** Repeat the above steps at every server in the cluster.

If the product entry version is earlier than 1.6.0, you must apply a patch to update the Novell Cluster Services product entry. Cluster servers that do not have the proper product entry version will abend when you install NetWare 6 Support Pack 1.

To apply the patch, do the following:

- **1** Go to the Novell Support site (http://support.novell.com/search/kb index.jsp) and search for TID number 2960777.
- **2** Click the filename to download the patch and follow the instructions included in the TID to update the Novell Cluster Services product entry.
- **3** Apply the patch to each cluster server that requires an updated Novell Cluster Services product entry.

In all cases except the one described above, we recommend you create a new CD image that combines Netware 6 and NetWare 6 Support Pack 1 in order to install or upgrade Novell Cluster Services for NetWare 6 Support Pack 1.

Creating a New CD Image

Complete the following steps to create a new NetWare 6 and NetWare 6 Support Pack 1 combined CD image:

- **1** On a local drive or a NetWare server volume, create an NW60CD directory at the root level.
- **2** Copy the entire NetWare 6 CD image to the NW60CD directory.
- **3** On a local drive or a NetWare server volume, create an NW60SP directory.
- **4** Copy the entire NetWare 6 Support Pack 1 image to the NW60SP directory.
 - If you downloaded the Support Pack from the Novell Download Web site, extract the Support Pack to the NW60SP directory.
 - If you have the Support Pack on CD, copy the entire NetWare 6 Support Pack 1 CD image to the NW60SP directory.
- **5** Select all files and directories in the NW60SP directory and copy them to the NW60CD directory.
- **6** Delete the \SPACK.IPS file and the \SP and \TOOLS directories from the NW60CD directory.
 - The NW60CD directory now contains a combined image of NetWare 6 and NetWare 6 Support Pack 1.

Installing the NetWare 6/NetWare 6 Support Pack 1 Image

- If you do not have NetWare 6 and Novell Cluster Services installed, use the image in the NW60CD directory and follow the instructions in the NetWare 6 documentation for upgrading or installing a new NetWare 6 server and Novell Cluster Services.
- If you already have NetWare 6 installed but have not yet installed or configured Novell Cluster Services, install NetWare 6 Support Pack 1 as you normally would and then install Novell Cluster Services by running NWDEPLOY from the NW60CD directory.
 - During the Novell Cluster Services installation, uncheck the Skip File Copy check box to ensure the latest Novell Cluster Services files get copied to your servers.

- If you already have NetWare 6 and Novell Cluster Services installed, install NetWare 6 Support Pack 1 as you normally would.
 - The NetWare 6/NetWare 6 Support Pack 1 image is required only if you want to add new nodes to an existing cluster. To add new nodes, run NWDEPLOY from the NW60CD directory instead of from the NetWare 6 CD.
- If you want to do a one-step upgrade from NetWare 5.1 to NetWare 6 Support Pack 1 without having to go to NetWare 6 first, use the image in the NW60CD directory to perform the upgrade. Follow the instructions in the NetWare 6 documentation for upgrading a new NetWare 6 server and installing Novell Cluster Services.

NWDEPLOY Authentication Problems

Before running NWDEPLOY, delete the PROGRAM FILES\COMMON\FILES\NOVELL\NI directory.

NWDEPLOY might be unable to authenticate to a new node when you attempt to add that node to an existing cluster. This problem occurs more frequently when either SLP or DNS isn't configured properly on servers or clients.

This problem can be resolved by doing any of the following:

- Before running NWDEPLOY, manually map a drive from your client to volume SYS: on the new node.
- Add the server name and IP address of the new node to DNS.
- Add the server name and IP address of the new node to the Windows Hosts file on the client machine where you will run NWDEPLOY.
- Configure SLPDA to discover the server name of the new node.

1 4 Novell eDirectory for NetWare

The Novell LDAP Server Does Not Support Downgrades from **Support Packs**

If you install a Support Pack and then later remove it, you might find that the LDAP server no longer responds to client requests. To resolve this, use ConsoleOne® to manually create new LDAP Server and Group objects, reassociate the LDAP Server object with the NCPTM Server object, and remove the obsolete Server and Group objects.

- 1 Open a pre-Support Pack version of ConsoleOne that exactly matches the version of the LDAP server you want to run, and then log in with administrator privileges.
- **2** At the same tree location where the upgraded LDAP objects exist, create a new LDAP Server object and a new LDAP Group object.
 - These new objects contain the original defaults for the specific version of the LDAP server and group. Be aware that shared group objects are generally not compatible across multiple LDAP server versions. You need to restore any changes and associations that had been made to these objects prior to the installation of the Support Pack.
- **3** Review the properties of the NCP Server object associated with this Support Pack change.
 - **3a** Right-click the NCP Server object and then click Properties.
 - **3b** On the Other tab, replace the LDAP server name listed in the Attributes list with the new LDAP Server object name.
- **4** Delete the obsolete LDAP Server object.
- **5** Delete the obsolete LDAP Group object after it is not being shared among other LDAP Server objects.

Be sure to review the contexts of the LDAP Group and Server objects to ensure they refer to each other properly. Also make sure that security measures such as X.509 certificates are created and associated correctly and that SSL is configured accordingly.

15 Novell GroupWise

ConsoleOne Will Not Load on NetWare Server after Installing GroupWise 6 Support Pack 1

You might receive the following error when you start ConsoleOne[®] on a NetWare[®] server after installing GroupWise[®] 6 Support Pack 1 and the GroupWise snap-ins on the server:

ERROR: java.lang.NoClassDefFoundError: com/novell/gw/util/
 Resource

To resolve this error, remove the following GroupWise snap-ins directory from the server:

SYS:PUBLIC\MGMT\CONSOLEONE\1.2\SNAPINS\GROUPWISE

After you remove this directory, you can no longer map a drive to the server and run ConsoleOne with the GroupWise snap-in. You have to install ConsoleOne and the GroupWise snap-ins on a workstation in order to administer GroupWise. You can, however, run ConsoleOne from the server without the GroupWise snap-in.

Running the GroupWise 5.5 Enhancement Pack SP4 MTA and POA in Protected Memory Space

During a failover/migration of a cluster volume running the GroupWise 5.5 Enhancement Pack SP4 MTA and POA in protected memory space, the Cluster Resource screen might prompt with the message Unload module anyway? Then the Cluster Resource Manager will report that the volume is in an Unloading state. It will remain in this state until you answer the prompt.

1 Answer N to place the migrating volume in a comatose state.

WARNING: If you Answer Y, the server will abend.

- **2** Use Cluster Resource Manager in ConsoleOne to offline the volume.
- **3** Immediately online the volume to return it to a running state.

If you receive the Unload module anyway? message while unloading the protected address space but are *not* on a cluster, answer N to the prompt to unload the protected memory. Answering Y will abend the server.

16 Novell iFolder

iFolder Is Not Automatically Restartable

The Novell[®] iFolder[™] NLM[™] runs in a protected address space on the server. This address space is not restartable via NetWare[®] Remote Manager or the protected address space server console commands.

This means that if the iFolder protected address space faults, the server memory management system will not automatically close the address space and clean up the resources or restart the address space and reload the iFolder modules. This must be done manually.

Using the iFolder Client When Internet Explorer Has Bypassed Local Addresses and Proxy Exception Server Settings

Logging in to a proxy server via the iFolder client might fail if Internet Explorer has one or both of the following proxy settings:

- Bypass Local Addresses for Proxy
 To view your proxy settings, go to Start > Settings > Control Panel > Internet Options > Connections > LAN Settings.
- Proxy Exception (Advanced button on the LAN Settings tab)

To correct this problem, upgrade the iFolder client to version 1.02.2 or later.

17

Novell iManager 1.0 and iMonitor 1.5 for Novell eDirectory 8.6

Novell iManager 1.0

- Selecting User Objects. If you perform an operation that requires you to select a User object, and the list of User objects that match your search criteria contains more than 15 to 20 objects, you will be able to select objects only from the first objects in the list. If you click to see more User objects, you will no longer be able to select any objects. As a workaround, refine your search to find fewer User objects. This issue will be resolved in a future of release of Novell® iManager.
- Using the Keyboard to Expand Roles. If you use the Tab key to move to a role in Novell iManager and then press Enter to expand the role and view the tasks assigned to that role, your browser will GPF. To prevent this from happening, use the mouse to expand roles.

iMonitor 1.5

• Restoring Custom Settings. Any custom settings you previously specified in the iMonitor configuration file are overwritten during the installation of NetWare[®] 6 Support Pack 1. To restore those settings, open NDSIMON.INI (located in the same directory as the iMonitor executable) and make the desired changes. To preserve your previous settings, you might want to manually copy them to another file before the installation.

18 Novell Licensing

Demo Licensed Expired

The initial release of NetWare[®] 6 included a demo license. The demo license contained a 90-day expiration and an internal time limit of December 31, 2001. This means that the license is already expired and is not usable.

In subsequent releases, like the international release of NetWare 6, the demo license was corrected to have a 90-day expiration and no internal time limit.

19

Novell Modular Authentication Service (NMAS)

When Upgrading to NMAS Enterprise Edition 2.0 Do Not Overwrite Newer NMAS Files

NetWare[®] 6 Support Pack 1 includes NMAS 2.03 Standard Edition and automatically installs it during the installation process.

Once you have installed this version of NMAS Standard Edition, if you want to upgrade it to NMAS 2.0 Enterprise Edition, you need to answer No during the Enterprise Edition installation when asked if you want to replace the newer NMAS Standard Edition files on your system with the older ones included in NMAS 2.0 Enterprise Edition. By answering No and not overwriting the newer files, the previously installed NMAS Standard Edition will be upgraded to a full Enterprise Edition with full functionality and bug fixes.

20

Novell Native File Access for Macintosh (AFP)

Mac OS X Issues

- When you drag nested folders to the Trash from a workstation running Mac* OS X, an error message says that the folder is in use. You should drag files as a group to the Trash and then drag the folder to the Trash.
- When you move or copy a file or folder to the same volume from a workstation running Mac OS X, the action is performed properly but you will see an error (-43 "File not found"). You can safely disregard this error message.

Copying Executable Files with Extended Characters to NSS Volumes

Copying an executable file that has an extended character (such as diacritical marks) in its name to an NSS volume will result in an error (-43 "File not found"). Rename the executable file without extended characters and then copy the file to the NSS volume.

Filename Character Limit

Version 2.2 of the Apple* Filing Protocol (AFP) limits filenames to a maximum of 31 characters while the Mac OS X implements AFP 3.0, which supports filenames longer than 31 characters. Because the AFPTCP NLMTM uses AFP 2.2, you should keep your filenames to no more than 31 characters to successfully copy and move files to an AFP volume.

Updating the NMAS Login Method

NetWare[®] 6 Support Pack 1 includes a fix for the change password function in the NMAS login method for AFP (LSMAFP.NLM.LMO). To implement

this change, you must first use ConsoleOne[®] from a Windows client and remove the current login method and sequence.

IMPORTANT: You should remove the current login method and sequence (as outlined below) *before* installing the NetWare 6 Support Pack 1 software. Otherwise, you will be required to add the new NMAS login method separately with ConsoleOne

1 Ensure the NICI (Novell International Cryptographic Infrastructure) client software installed on the Windows workstation is at least the same as the NICI version on your NetWare 6 server (NICI 2.0.x).

You can verify the NICI version on the server with the NWCONFIG utility and then compare it with the NICI version on the Windows workstation by doing the following:

- **1a** At the server console, load NWCONFIG.NLM.
- **1b** Select Product Options > View/Configure/Remove Installed Products.
- **1c** Locate the NICI entry and make sure the version number is 2.0.x.
- **1d** Check the NICI client version on the Windows workstation by opening Add/Remove Programs in the Control Panel and viewing the list of currently installed programs.

If the NICI version on the Windows workstation is not the same as or later than the version on the server, you will need to install the appropriate NICI client upgrade. You can download the NICI client software from the Novell download site (http://download.novell.com/sdMain.jsp). Scroll to NICI Encryption Modules and download the appropriate module for your OS.

- **2** Start ConsoleOne on the Windows workstation.
- **3** Click File > Authenticate.
- **4** Log in as an administrator user to the server where you want to replace the AFP login method.
- **5** Delete the existing login sequence.
 - **5a** Expand the tree to locate the Security object, right-click the object, and then double-click Login Policy.
 - **5b** Select LSMAFP from the Defined Login Sequence list and then click Delete Sequence.
 - **5c** Click OK

- **6** Delete the existing login method.
 - **6a** Click Authorized Login Methods located under the Security object.
 - **6b** Right-click the LSMAFP item at the right and then click Delete NDS Object.
- **7** Restart the server.

21

Novell Native File Access for UNIX

Downgrade Not Supported

Downgrading Native File Access for UNIX to the previous release is not supported.

Error 9600

When NDSILIB is autoloaded during some operations, it might not load and will return Error 9600. To continue the operation, perform NFSSTOP and then execute the operation again.

If the Server IP Address Changes

If the server's IP address changes, you must use ConsoleOne[®] to remove the old IP address and add the new IP address to the address restrictions list for the NFAUUser object.

Makenis Issues

 Upon executing makenis in a server with no replica when the Master replica is down, instead of displaying a DS error, a series of messages similar to the following are displayed erroneously:

Nullpointer passed to routine Kmutex

• Do not use makenis to delete users and groups. Use ConsoleOne instead.

Pkernel Messages

If the pkernel screen displays messages similar to the following after executing yppush, you can ignore them (they do not affect functionality in any way):

Out of memory, cannot create UDP Client handle.

Novell Native File Access for Windows

Certain Double-Byte Characters Not Supported in File and Directory **Names**

CIFS does not currently support certain double-byte characters used in file and directory names. Specifically, the double-byte backslash (\) and the doublebyte dash (-) characters do not work. (The Unicode value for the double-byte backslash is 0xFF3C; the Unicode value for the double-byte dash is 0x817C.) We recommend that you use the single-byte backslash and dash characters in file and directory names.

Double-Byte Characters in Usernames

You must use ConsoleOne® to manage CIFS passwords for users who have double-byte characters in their username.

Use ConsoleOne to Configure Your Windows/CIFS Network **Environment**

Once you have installed the NetWare 6 Support Pack 1 software, you should configure your Windows/CIFS network environment with ConsoleOne. Previously, CIFS parameters were configured by manually editing the CIFS.CFG file. That file now contains a note telling you to use ConsoleOne for CIFS configuration.

If eDirectoryTM is reinstalled on a server running CIFS with NetWare 6 Support Pack 1, ConsoleOne CIFS management does not automatically reimport the CIFS.CFG configuration into ConsoleOne. To reimport the configuration, remove the comment lines starting with ### from SYS:ETC\CIFS.CFG and then run CIFSSTOP and CIFSSTRT.

Enable Unicode on a CIFS Server with DFS Junctions

Unicode must be enabled on a CIFS server in order for DFS junctions to work. You can enable Unicode in the following ways:

- During the Installation: Make sure the Enable Unicode check box is checked on the first Server Properties screen.
- After the Installation Using ConsoleOne: Right-click the Server object in ConsoleOne and then click Properties > CIFS > Config. Make sure the Unicode check box is checked and then restart CIFS by running CIFSSTOP and CIFSSTRT.

Domain Import Function

A new CIFS.NLM corrects a problem with the domain import function. For more information, see TID #2960727 on the Novell Support Knowledgebase (http://support.novell.com/search/kb_index.jsp).

CIFS Server Selected as a Master Browser in Domain Mode

In Domain mode, when the CIFS server is selected as a master browser, it maintains a list of servers in the domain only on the local subnet. Subsequently, servers in the domain that are located on other subnets will not appear in Network Neighborhood.

23 Novell NetDevice NAS

Joining a NetDevice NAS Appliance into a NetWare 6 eDirectory Tree

NetWare[®] 6 Support Pack 1 includes fixes to eDirectory[™] for NetWare 6 that allow a Novell[®] NetDevice NAS appliance to join a NetWare 6 eDirectory tree.

If you are planning to deploy a NetDevice NAS appliance into a NetWare 6 eDirectory tree, you must make sure that the NetWare 6 server in the replica ring that holds the partition which the NetDevice NAS appliance is targeted to join is running NetWare 6 Support Pack 1 or later.

24 Novell NetStorage

Setting the NetStorage/iFolder Passphrase

The NetStorage\iFolder™ passphrase is stored in the eDirectory™ User object. A dialog to change the passphrase automatically appears when you select iFolder. The passphrase can also be set by editing the PASSPHRASE.HTM file that is included in the \iFolder directory.

Register All User Contexts for iFolder

All user contexts must be registered in the Xtier\Configuration\Xsrv\Authentication Domains registry area *and* must be set in the iFolder configuration. You can use the NSAdmin utility to change NetStorage-specific registry settings.

You can check the iFolder configuration at https:// hostname:iFolder_SecurePort/. iFolderServerMultiple trees are not currently supported. That is, users of multiple trees cannot access iFolder from NetStorage; each tree should have its own NetStorage server/admin.

Ensure Admin Proxy User Is Logged In and Has Rights to All Contexts (iFolder)

Make sure the admin proxy user is always logged in and has rights to all contexts. You can check this by adding oneNet/SESSIONS to the end of the NetStorage URL. NetStorage uses the proxy user to set the encrypted passphrase in the User object.

Using ConsoleOne[®], click the Other tab on the User Properties page to see the xtier-ifolderpassphrase string (encrypted). The admin proxy user is configured during the NetStorage installation and can be changed after the installation by clicking the General link in the NSAdmin utility.

Entering an Invalid Passphrase (iFolder)

If users enter an invalid passphrase that doesn't match the current iFolder passphrase, the PASSPHRASE.HTM file will continue to appear.

Ensure PASSPHRASE.HTM Is Posting the Correct URL (iFolder)

Make sure the PASSPHRASE.HTM form is posting to the correct URL. Open the PASSPHRASE.HTM form and then right-click and select View Source. Search for the word *action* and check the URL. The URL is in the form *PROTOCOL://HOSTNAME:SECUREPORT/*oneNet/iFolder/pph. Make sure the protocol is HTPS and the port is the correct secure port. Also make sure the hostname is correct. You can change the protocol, port, and hostname using the NSAdmin utility.

Changing eDirectory Password Invalidates iFolder Passphrase

If you change your eDirectory password, your iFolder passphrase becomes invalid. If this happens, reset your passphrase by re-entering the original passphrase that was created when your iFolder account was created. If you are using a browser to access NetStorage, you will automatically be prompted to reset your passphrase. If you are using Web Folders to access NetStorage, you must access the PASSPHRASE.HTM file in the iFolder directory to reset your passphrase.

Resetting the Passphrase

The user's passphrase can also be reset at any time at the following URL where NetStorage is running: http://NetStorage Server/oneNet/iFolder/pph.

HTTP Errors When Submitting Passphrase

Context configuration problems, port/protocol, and invalid DNS addresses usually cause HTTP errors when attempting to submit the passphrase form.

Port Conflicts or Invalid Port Settings

During the NetWare [®] 6 Support Pack 1 installation and configuration process, an administrator might inadvertently set the port number used by NetStorage to the same port number used by NetWare Enterprise Server. Manually changing the NetStorage port number after the installation also might cause a port conflict or an invalid port setting.

NetStorage requires the Apache Web Server and must use the same port number as the Apache Web Server. The default port number for NetWare Enterprise Server is 80 for HTTP and 443 for HTTPS. If you have NetWare Enterprise Server installed, by default the Apache Web Server will get port 51080 for HTTP and 51443 for HTTPS. If the NetWare Enterprise Server is not installed, the default port number for Apache (and NetStorage) is 80 for HTTP and 443 for HTTPS. Be sure that NetStorage in configured to the same port numbers as Apache.

NetStorage port conflicts and invalid port settings cause HTTP Forbidden errors when users attempt to create new folders in home directories and on mapped drives. These errors are characterized by Connection Refused IO errors and new folders not appearing after they are created.

Servers configured to use multiple IP addresses are less likely to have port conflict problems because each service can generally use its default port assignment.

To correct NetStorage port number conflicts or invalid port settings, edit the SETTINGS.PROPERTIES file in the

SYS:\WEBAPPS\NETSTORAGE\WEB-INF\CLASSES directory. Change the port number to match the one that is listed in the

SYS:\APACHE\CONF\ADMINSERV.CONF file. This port number can be found in the # Start Apache Services Port Configuration section of the file.

You can also edit the port number by clicking the WebDav Server link in the NSAdmin utility.

Downloading Folders Using a Browser Is Not Supported

The Novell NetStorage documentation indicates that you can download folders using a browser with NetStorage. This is incorrect. You can download individual files using a browser with NetStorage, but downloading folders is not currently supported.

You can create new folders or you can copy, delete, rename, or move existing files and folders by right-clicking the file or folder and then selecting the option you want.

Problems with Extended Characters in Text View

You might encounter problems viewing extended characters using the NetStorage Text View feature. Also, folders containing extended characters that are created using the Text View feature might not display correctly in either the Text View or the Folder View. This problem can be avoided by creating folders with extended characters or viewing extended characters using the NetStorage Folder View.

LDAP Clear Text Passwords Are Required for Contextless Login

If you want to provide contextless login for users through NetStorage, you must enable LDAP Clear Text passwords. Contextless login lets users log in without specifying their entire User object context.

You can enable LDAP clear text passwords during the NetWare 6 installation or after the NetWare 6 installation using ConsoleOne.

25 Novell Storage Services

Failure to List Resources

NWBACK32 fails to list resources for backup on Windows 2000 and NT workstations with SLP as the discovery mechanism.

Logging In with a Windows Client

If you are trying to access a junction and you get an error that says Bad user name or password, this means that you used a different username and password to log in to your workstation and the network.

DFS requires that you use the same common name and password for workstation and network login, otherwise login will fail.

Windows Client Limitation with DFS Junction Levels

Due to a limitation in Windows 95/98/ME/XP clients, if you create a junction that points to a volume that contains another junction, your second junction might fail because these clients don't support multilevel junctioning (that is, having more than one junction in a path). Multilevel junctions *are* supported on Windows NT 4 and Windows 2000 clients.

DFS Requires Unicode Support

Unicode must be enabled on a CIFS server in order for DFS junctions to work. You can enable Unicode in the following ways:

- During the Installation: Make sure the Enable Unicode check box is checked on the first Server Properties screen.
- After the Installation Using ConsoleOne[®]: Right-click the Server object in ConsoleOne and then click Properties > CIFS > Config. Make sure the Unicode check box is checked and then restart CIFS by running CIFSSTOP and CIFSSTRT.

Using MONITOR.NLM to Set NSS Startup Parameters

The file that you need to modify to set NSS startup parameters at the server console is documented incorrectly in MONITOR.NLM. Whenever you are instructed to modify the STARTUP.NCF file, modify the NSSSTART.CFG file instead.

26 Novell TCP/IP

Configuration through INETCFG

• If the NETINFO.CFG file is corrupted and upon loading INETCFG you get a message asking you to reconfigure, delete the TCPIP.CFG file.

HINT: Once the network configuration of the server is complete, we recommend that you back up the NETINFO.CFG, NETINFO.CHK, and TCPIP.CFG files. Then, in case of corruption, you can restore from the backed-up configuration.

• In machines with multiple NICs, if already-in-use IP addresses are selected for binding, an ARP conflict error message is displayed (in the logger screen) for each binding. The system should automatically trigger unbinding of the IP addresses. If the binding persists, manually delete the bindings and reinitialize the system.

IP Trace

- A blank space is not permitted between the command arguments and the equal sign (=) following them.
- Source option is not supported in this release.
- In some destination addresses, the utility stops at the hop before the target.

NIC Teaming

• Currently, only one user-specified protocol is supported.

27 Scripting Products

Perl Issues

- Failure of UCX methods is indicated by an unknown error. The error description given by the UCX call is currently not available for the Perl script
- If a script has just use Perl2UCS or require Perl2UCS and no object instantiation through Perl2UCS->new(...), the script will abend.
- Complex scripts running from the console might give the message Process did not relinquish control frequently.
- Scripts that contain an infinite loop can be terminated by Ctrl+Z, but not Ctrl+C. When Ctrl+Z is pressed, it breaks the loop and expects any key to be pressed (which will be indicated on the Perl output screen) before the Perl output screen can be exited.
- Press Ctrl+Z after pressing Enter to execute the next command in the Perl debugger.
- When multiple CGI scripts (more than about 40) each doing complex operations are run simultaneously, the Web server will hang or abend.
- The following Perl functions are either not yet implemented in NetWare or are not applicable in the NetWare environment:

alarm	chown	chroot
endgrent	endpwent	fork
getgrent	getgrgid	getgrnam
getpgrp	getppid	getpriority

getpwent	getpwnam	getpwuid
link	rewinddir	setgrent
setpgrp	setpriority	setpwent
symlink	syscall	telldir
times		

- The truncate built-in procedure does not function reliably.
- The readlink built-in procedure always returns an undefined value. According to Perl's definition of the function, this is the correct behavior on a system such as NetWare[®] that does not support symbolic links.
- The system built-in procedure is supported. However, the shell it invokes is the standard NetWare console. Note that the console does not support I/O redirection, pipes, variable expansion, or filename globbing. This is a port of Perl, not UNIX.

28 Storage Management Services (SMS)

- NWBACK32 fails to list the NetWare® servers in Windows 2000 and Windows NT workstations when SLP is used and the Novell[®] Client™ is installed with only IP. To resolve this, enable the Active and Static discovery properties in the Novell Client.
- Pressing F1 to access the context-sensitive help file for W32SMDR is currently not supported. Click the Help button in the GUI to view the help.

29 Time Management

If your server is not in sync, it could be due to one of the following:

- You do not have configured sources set to On even though the source is specified in the configured sources list.
- Your source server is IP only and your configured source is the IPXTM server name. You need to specify the IP address or DNS long name in the configured source list.
- You have multiple NICs in the server and you are specifying an IP or NTP source. (This is a timing issue and doesn't occur in all multiple-NIC environments.)

For environments with multiple NICs (such as NetWare[®] routers and multiple-NIC cluster environments) that experience problems, insert the following at the end of your AUTOEXEC.NCF file:

unload timesync

load timesync

This allows the TCP/IP stack to finish coming up, to bind and initialize to all the interfaces, and to then restart Timesync.

 Directory Tree Mode (default configuration): In order for Timesync to function in Directory tree mode, it uses SLP. In some mixed SLP/tree configurations, the secondary server doesn't find the Single/Reference server with the Timesync service via SLP.

If you experience issues in your environment after having the Single/Reference and Secondary servers all contact the Same Directory Agent, set your configured sources to On and contact your Single, Reference, Primary, or NTP source via the IP address or DNS long name.